



# Saline Valley Warm Springs Final Management Plan and Environmental Impact Statement

Estimated Agency Total Costs  
Associated with Developing  
and Producing This EIS

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May 2019







**UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE  
DEATH VALLEY NATIONAL PARK  
SALINE VALLEY WARM SPRINGS FINAL MANAGEMENT PLAN AND  
ENVIRONMENTAL IMPACT STATEMENT**

**Lead Agency:** National Park Service, US Department of the Interior

**Cooperating Agencies:** Timbisha Shoshone Tribe, Inyo County Board of Supervisors, Bureau of Land Management Ridgecrest Field Office

This Saline Valley Warm Springs Final Management Plan and Environmental Impact Statement (plan/EIS) assesses strategies for managing the future use of the Saline Valley Warm Springs Area. When completed, this plan will provide an administrative and management framework for the Saline Valley Warm Springs Area that promotes partnership with the Timbisha Shoshone Tribe and stakeholders.

This final plan/EIS evaluates five alternatives. Alternative 1 (No-Action Alternative) would continue current management with no changes. Alternative 2 (Regulatory Compliance Alternative) would retain much of the existing use of the Saline Valley Warm Springs Area but would bring the actions and conditions into compliance with applicable regulations. Alternative 3 (Community Engagement Alternative), would involve user groups in the management of the Saline Valley Warm Springs Area to protect park resources, ensure compliance with applicable regulations, and provide visitors with the types of experiences they currently value. Alternative 4 (Restoration Alternative) would restore the Saline Valley Warm Springs Area, as closely as possible, to natural conditions with minimal or no development. Alternative 5 (Preferred Alternative) would allow for continued recreational visitor use while protecting park resources, incorporating Tribal knowledge into decisions made for the Saline Valley Warm Springs Area, and allowing the user groups to participate in the management of the Saline Valley Warm Springs Area. The final plan/EIS analyzes the potential consequences of these five alternatives on the following resources: soils, vegetation, wetlands, wildlife, archeological resources, historical resources, ethnographic resources, wilderness character, visitor use and experience, and human health and safety.

The final plan/EIS is available on the National Park Service Planning, Environment, and Public Comment (PEPC) website at <http://parkplanning.nps.gov/SalineValleyWarmSprings>. A 30-day “no-action” period will begin on the date the US Environmental Protection Agency publishes a Notice of Availability of the final plan/EIS in the Federal Register. Following the 30-day period, the alternative or actions constituting the approved plan will be documented in a Record of Decision that will be signed by the Pacific West Regional Director. For further information regarding this document, please visit <http://parkplanning.nps.gov/SalineValleyWarmSprings> or contact the Superintendent at the address below.

Superintendent  
Death Valley National Park  
Attn: Saline Valley Management Plan Comments  
PO Box 579  
Death Valley, CA 92328







National Park Service  
US Department of the Interior

Death Valley National Park  
California

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# **SALINE VALLEY WARM SPRINGS FINAL MANAGEMENT PLAN AND ENVIRONMENTAL IMPACT STATEMENT**

**DEATH VALLEY NATIONAL PARK**

**MAY 2019**







## **EXECUTIVE SUMMARY**

This Saline Valley Warm Springs Final Management Plan and Environmental Impact Statement (plan/EIS) provides direction for the National Park Service to make decisions regarding the future use of the Saline Valley Warm Springs Area, which is located in the northwestern portion of Death Valley National Park (the park). The plan/EIS analyzes the impacts of management of the developed features, the natural and cultural resources, and the diverse uses of the Saline Valley Warm Springs Area. This plan/EIS has been prepared in accordance with the National Environmental Policy Act of 1969, as amended (NEPA), the Wilderness Act, the Timbisha Shoshone Homeland Act of 2000, and other legal mandates governing decision making by the National Park Service.

### **PURPOSE OF ACTION**

The purpose of the federal action is to develop a management strategy for the Saline Valley Warm Springs Area that will supplement the Death Valley National Park General Management Plan (GMP). The purpose of the plan/EIS is to:

- Provide a framework for the management of natural and cultural resources and visitor use at the Saline Valley Warm Springs Area.
- Provide a framework for administration and operations at the Saline Valley Warm Springs Area.
- Provide guidance for park managers as they work with the various stakeholders of the Saline Valley Warm Springs Area.
- Promote the partnership between the National Park Service and the Timbisha Shoshone Tribe (the Tribe) to ensure the Saline Valley Warm Springs Area is protected and enhanced by cooperative activities.

### **NEED FOR ACTION**

The federal action is needed to supplement the GMP and address visitor use and development at the Saline Valley Warm Springs Area. Past visitors of the Saline Valley Warm Springs Area have altered the natural aspect of the area through diversion of water from the natural source springs and through construction of soaking tubs and other amenities. People who seek this type of recreational experience continue to visit the Saline Valley Warm Springs Area, and during certain holiday weekends, visitation can be concentrated. However, the Saline Valley Warm Springs Area is also part of the Timbisha Shoshone Natural and Cultural Preservation Area, and the ethnographic uses by the Tribe and recreational uses by other visitors can be in conflict. This plan/EIS has several goals:

- Fulfill the direction of the 2002 GMP, which calls for a site management plan for the Saline Valley Warm Springs Area as a planning need.
- Ensure cooperation and coordination with the Tribe to understand existing issues and future planning opportunities in accordance with the Timbisha Shoshone Homeland Act of 2000.
- Create a management strategy for park resources and maintenance requirements.
- Evaluate visitor use and experience and provide a basis from which to respond to future conditions at the Saline Valley Warm Springs Area.
- Provide for public health and safety at the Saline Valley Warm Springs Area.

## COOPERATING AGENCIES

- Timbisha Shoshone Tribe
- Inyo County Board of Supervisors
- Bureau of Land Management Ridgecrest Field Office

## ALTERNATIVES CONSIDERED

This plan/EIS considers five alternatives for the management of the Saline Valley Warm Springs Area. A summary of the alternatives is presented in this section, and the details of the alternatives are presented in table 1 in the “Alternatives” chapter.

### Elements Common to All Alternatives

Several elements are common to all alternatives, as they relate to the management of Death Valley National Park but also apply to use of the Saline Valley Warm Springs Area. These elements are listed here, and additional details can be found in the “Alternatives” chapter.

- Cooperative agreement with the Tribe
- Superintendent’s Compendium
- Park entrance fees
- Length of stay
- Off-road driving
- Leave No Trace© camping practices
- Low-impact development (would not apply to alternative 4)
- Nonnative vegetation
- Feral burro and wild horse management
- Damage by natural events

### Alternative 1: No-Action Alternative

Under the no-action alternative, use of the Saline Valley Warm Springs Area would continue under the current management with no changes. The users, with help from the volunteer camp hosts, would continue to informally oversee the recreational uses of the Saline Valley Warm Springs Area. Visitors would continue to be able to use the tubs and associated facilities, including showers, dishwashing stations, and user-created fire rings. Camping would be dispersed with car camping in backcountry areas, and camping areas would not be designated by the National Park Service. The camp host would be able to assist visitors with vehicle issues due to presence of the vehicle support facility and supplies at Lower Spring. Visitors with small aircraft would continue to be able to land at the Chicken Strip airstrip and camp with their aircraft, special regulation pending. All elements of the no-action alternative are presented in table 1 in the “Alternatives” chapter.

Natural and cultural resources would not receive any further protection under the no-action alternative. There would be minimal control of nonnative vegetation through trimming and minor removal efforts by

the camp host. Feral burro control would include the existing fencing at Lower Spring and education by the volunteer camp host to prevent feeding of wildlife. Visitors could continue to create new artwork throughout the Saline Valley Warm Springs Area that may disturb archeological and ethnographic resources.

The no-action alternative could result in noncompliance with federal and state regulations for human health and safety due to the recreational use of water without water quality monitoring and unregulated storage and use of hazardous materials, such as bleach and automotive supplies. Due to this noncompliance, the no-action alternative cannot be selected as the preferred alternative.

## **Alternative 2: Regulatory Compliance Alternative**

The Saline Valley Warm Springs Area has been used for decades for soaking and camping by a number of deeply committed users. The National Park Service developed the regulatory compliance alternative, which retains much of the existing use of the Saline Valley Warm Springs Area but brings the actions and conditions into compliance with National Park Service (NPS), state, and federal regulations.

In an effort to protect the health and safety of visitors, the regulatory compliance alternative would require the National Park Service to consult with the NPS Office of Public Health to develop an approach for water quality monitoring, add signs at the sinks to inform visitors of nonpotable water, add filtration systems for discharged water at the dishwashing stations, and make the tubs accessible, to the extent possible, as defined by the 2010 *Americans with Disabilities Act Standards for Accessible Design*. Further actions to protect public health would include fencing the source springs at Lower and Palm Springs to prevent access to water sources by feral burros, fencing the settling pond, and proper storage of hazardous materials. The vehicle support facility would be removed, and emergency vehicle assistance should not be expected by the visiting public; this matches policy throughout the park. Visitors with small aircraft would continue to be able to land at the Chicken Strip airstrip (special regulation pending) and camp with their aircraft.

The National Park Service would work to limit visitor impacts by creating a no-cost permit system for all overnight guests, prohibiting the manipulation of natural or cultural resources for the purpose of art, and removing all non-historic art from wilderness. This would include all artwork with the exception of the lower peace sign.

Alternative 2 would also take steps to improve and restore the natural and cultural environments by controlling nonnative plant species, removing user-created fire rings, requiring visitors to haul out ash and charcoal, encouraging visitors at the campgrounds—but requiring campers at the Chicken Strip—to pack out their waste, encouraging the use of NPS-provided firepans at the campsites, and treating the Saline Valley Warm Springs Area as areas of ethnographic and historic significance for the Tribe and recreational users, respectively. Finally, visitor education would increase under alternative 2 to include regulatory, health and safety, and compliance information. All elements of the regulatory compliance alternative are presented in table 1 in the “Alternatives” chapter.

## **Alternative 3: Community Engagement Alternative**

The community engagement alternative aims to involve user groups in the protection of park resources and to ensure compliance with applicable NPS, state, and federal regulations, while providing visitors with the types of experiences they currently value. The user groups would be engaged through agreements to identify and carry out many of the actions needed to protect natural and cultural resources, protect human health and safety, and identify roles and responsibilities for protecting resources and maintaining visitor facilities. The user groups would be engaged in the accomplishment of many of the actions needed to



protect human health and park resources through memoranda of understanding (MOUs) that could identify responsibilities for maintenance of facilities, maintenance of the airstrip, and protection of natural and cultural resources.

The community engagement alternative would employ the same measures to protect the health and safety of visitors as alternative 2; however, instead of fencing just the source springs, this alternative would install artistic wooden fencing to enclose the soaking tubs, source springs, and riparian areas at Lower Spring and Palm Spring to prevent access to water sources by feral burros.

Increased resource protection would be incorporated into alternative 3, including additional nonnative vegetation control, the potential use of food storage boxes, a monitoring and response program, and establishment of thresholds for overuse of the resources. This alternative includes restoration measures, such as removing the diversion piping from Burro Spring.

Efforts to limit visitor impacts and improve and restore natural and cultural environments under alternative 3 would be similar to those described for alternative 2. However, camping would be restricted to designated camping areas with designated overflow walk-in camping areas and associated defined parking areas; no camping would be allowed within 200 feet of the source springs. Visitors with small aircraft would continue to be able to land at the Chicken Strip airstrip (special regulation pending) but would not be able to camp with their aircraft. Alternative 3 would expand education to include additional signs on campground boards and engagement by the volunteer camp host, and tribes would be engaged to incorporate traditional ecological knowledge. All elements of the community engagement alternative are presented in table 1 in the “Alternatives” chapter.

## **Alternative 4: Restoration Alternative**

The goal of the restoration alternative is to restore the Saline Valley Warm Springs Area, as closely as possible, to natural conditions with minimal or no development. The tubs and associated infrastructure would be removed, as would the dishwashing stations, showers, vehicle support facility, airstrip, the vault toilets, and all artwork. Dispersed camping would continue to be permitted but would be more restrictive, as visitors would be required to camp at least 200 feet from all water sources. Park staff would develop and implement a habitat restoration plan to remove nonnative plants and restore native habitats. The National Park Service and the Tribe would work to restore the Saline Valley Warm Springs Area to its natural and ethnographic landscape. Prior to removal of the tubs and infrastructure, the National Park Service would properly document the proposed Saline Valley Warm Springs Historic Site, including drawings, photographs, and other materials. This alternative would require extensive park law enforcement and resource staff support during implementation for education, enforcement, and restoration activities. All elements of the restoration alternative are presented in table 1 in the “Alternatives” chapter.

## **Alternative 5: Preferred Alternative**

In June 2016, the interdisciplinary team met to discuss the alternatives and to recommend a preferred alternative for the management of the Saline Valley Warm Springs Area. The preferred alternative was developed by examining the elements of action alternatives 2, 3, and 4 and creating a new alternative that allowed for continued recreational visitor use, while protecting the natural and cultural resources of the site. The preferred alternative incorporates community engagement in the management of the site through MOUs with interested organized groups. The preferred alternative was further revised by the interdisciplinary team in September 2018 after assessing public comments received during the review period for the draft plan/EIS. Alternative 5, the preferred alternative, is similar to alternative 3, except as explained in the following paragraphs.

Under alternative 5, the National Park Service would not require permits for camping at the Saline Valley Warm Springs Area. The National Park Service would instead gather data on visitor use patterns through formal visitor use studies, which could include ways to count visitors during high- and low-use periods. These data would help the National Park Service understand current visitor use trends and impacts. If overnight camping fees or permits are implemented in the future for developed backcountry campgrounds throughout the park, they would also apply at the Saline Valley Warm Springs Area.

Three distinct camping zones would be established: designated dispersed camping (with car camping), overflow walk-in camping with a separate designated parking area, and no camping areas. Visitors would be unable to camp within 100 feet of the source springs. Under alternative 5, visitors with small aircraft would continue to be able to land at the Chicken Strip airstrip (special regulation pending); camping would be allowed at the Chicken Strip airstrip and additional tie-downs could be added. Visitors that camp at the airstrip would be required to pack out their waste, unlike alternative 3.

Managing and protecting natural resources through onsite monitoring while maintaining the historic values of the Saline Valley Warm Springs Area is an NPS priority for this site. The lawn at Lower Spring would be allowed to remain but only within its current footprint; expansion would not be allowed. Existing mature palm trees would remain at the site and would only be removed after they die naturally. Young palm trees would be removed, and native species would be planted while the existing mature palm trees are still alive to allow the native trees time to mature and provide shade. Unlike alternative 3, which proposes to install artistic wood fencing to enclose the soaking tubs, the source springs, and the riparian areas, alternative 5 would install fencing around the source springs only, as described for alternative 2, to prevent feral burro access to water sources. All fencing would be dependent on archeological surveys and additional consultation with the State Historic Preservation Officer (SHPO). Alternative 5 would also replace the fencing at Upper Spring and would expand the fenced area to incorporate the warm and cold source springs. The preferred alternative would remove non-historic art from wilderness but would allow art to remain in non-wilderness areas. New art would be allowed in the non-wilderness areas, provided that natural and cultural resources are not manipulated, the art is not a permanent fixture, and the art is removed from the site when the visitor creating the art leaves the site. The National Park Service would install a subterranean system for treating wastewater generated at the site. Finally, the Saline Valley Warm Springs Area would be made accessible to the extent practical while preserving potential significant historical features. All elements of the preferred alternative are presented in table 1 in the “Alternatives” chapter.

## **ENVIRONMENTAL CONSEQUENCES**

The summary of environmental consequences considers the actions being proposed and the cumulative impacts on resources from occurrences inside and outside the park. To focus the environmental analysis, the issues identified during scoping were used to derive a number of impact topics. Impact topics identify resources of concern that could be affected, either beneficially or adversely, by implementing any of the proposed alternatives. Impact topics carried forward for detailed analysis include soils, vegetation, wetlands, wildlife, archeological resources, historical resources, ethnographic resources, wilderness character, visitor use and experience, and human health and safety.

### **Impacts from Alternative 1**

Under alternative 1, soils, vegetation, wetlands, and wildlife would continue to experience adverse impacts. Visitor activities would continue to result in soil compaction, vegetation trampling, erosion, disturbance, pressure from nonnative species, and diversion of water. Visitor activities would also continue to affect wilderness character through activities such as vehicle use and creation of artwork.

Archeological resources would continue to be vulnerable to inadvertent damage and vandalism. There would be no effect on the area of historic significance, as the contributing and non-contributing features would remain in place and be available for visitors to use and enjoy. The area of ethnographic significance would continue to be adversely affected from visitor activities, development, and the presence of nonnative species. Visitor experience would continue in the same manner at the Saline Valley Warm Springs Area. Those visitors that enjoy the development of the Saline Valley Warm Springs Area and communal recreation would continue to benefit from the unique visitor experiences available at the springs. Those visitors seeking solitude with soaking opportunities could also achieve their desired experience depending on the time of visit and campsite selection. The health and safety of the visitors would continue to be at risk due to unregulated recreational water use, habituated wildlife, and improper storage of hazardous materials. The no-action alternative would not significantly impact the resources of the Saline Valley Warm Springs Area.

## **Impacts from Alternative 2**

Alternative 2 would not differ greatly from the no-action alternative; therefore, the impacts on the resources of the Saline Valley Warm Springs Area would be nearly the same. This alternative would result in beneficial impacts on natural resources over current conditions with plans to remove nonnative invasive palms from Upper Spring, control other nonnative plant species, allow natural revegetation, and install feral burro exclusion fencing. The efforts to reduce nonnative species at the Saline Valley Warm Springs Area would also produce a beneficial effect on the area of ethnographic significance. The removal of non-historic rock art in wilderness and restricting visitors from creating new art would benefit the area of ethnographic significance, as well as wilderness character. Human health and safety would be improved under alternative 2 from the proper use and storage of hazardous materials and water quality monitoring. The removal of the vehicle support facility would also reduce the amount of hazardous substances that would be stored at the Saline Valley Warm Springs Area. Visitor use and experience could be affected by the mandatory no-cost permit system for overnight campers, the removal of user created fire rings, and the limitations on creating new artwork. These changes would adversely affect the visitors that enjoy the existing atmosphere and recreation opportunities that the Saline Valley Warm Springs Area provides. However, alternative 2 would give visitors opportunities to become more engaged in the upkeep of the Saline Valley Warm Springs Area through hauling out ash and charcoal with other trash when leaving, packing out waste from the Chicken Strip, an MOU for maintenance of the soaking tubs, and an MOU for continued maintenance of the Chicken Strip. Overall, alternative 2 would not significantly impact the resources of the Saline Valley Warm Springs Area.

## **Impacts from Alternative 3**

Alternative 3 would retain much of the same recreational use of the Saline Valley Warm Springs Area as is currently available and result in impacts similar to alternative 2; however, this alternative would incorporate greater stewardship opportunities for visitors, large changes to the current camping structure (including camping at the Chicken Strip), and more vigorous nonnative species control. Alternative 3 would provide for greater protection of the resources of the Saline Valley Warm Springs Area by the following: creating a monitoring plan and further resource stewardship efforts with plans to remove nonnative invasive palms from Upper Spring and the lawn from Lower Spring, to allow natural revegetation or replant the areas with native vegetation; allowing the installation of food boxes to aid in proper storage of food, thus reducing chances of wildlife becoming habituated to human food; and fencing the source springs, soaking tubs, and riparian areas to reduce impacts from feral burros. Alternative 3 would therefore have beneficial effects on the natural resources and wilderness character of the Saline Valley Warm Springs Area. These changes would also benefit the area of ethnographic significance; this benefit would be slightly greater than that for alternative 2. The monitoring and

stewardship efforts would encourage visitors to become engaged in resource protection, thus improving their experience at the Saline Valley Warm Springs Area. However, visitor experience for those that enjoy the current setting and feeling of the Saline Valley Warm Springs Area would be adversely impacted by the change to designated car camping areas, walk-in overflow camping areas with associated parking areas, and the elimination of camping at the Chicken Strip. All efforts to remove nonnative vegetation, incorporate traditional ecological knowledge of the Tribe, remove development (e.g., permanent camp host housing and vehicle support facility), remove non-historic artwork throughout the backcountry and wilderness, and increase visitor education would benefit the area of ethnographic significance. Conversely, some of these changes would create adverse impacts on the area of historic significance. Overall, alternative 3 would not significantly impact the resources of the Saline Valley Warm Springs Area.

## **Impacts from Alternative 4**

Alternative 4 would remove all existing development at the Saline Valley Warm Springs Area and restore the area to natural conditions. This alternative would result in short-term impacts on natural resources, as removing the developed features would require ground disturbance and heavy equipment; however, over the long term, the impacts on natural resources would be beneficial. With ongoing nonnative control, the area would be restored to more natural conditions with native vegetation concentrated close to the source springs. Although this would result in a reduction of the amount of vegetation (palm trees and mesquite and understory vegetation near Burro Spring) and wetlands (settling pond and wetland 3 south of the settling pond) from removing all water diversion, the changes would be considered natural and would not constitute an adverse impact. The restoration efforts would be protected by fencing that would be installed at the boundary between the backcountry and wilderness areas. This would have an adverse impact on wilderness character and the area of ethnographic significance; however, due to mitigation measures, this impact would be minimal. Wilderness character would continue to be subject to impacts from camping, driving, and off-road vehicle use but the impacts would be lower than those experienced under current conditions, as visitation is expected to decline under this alternative. Alternative 4 would result in significant adverse effects on the area of historic significance due to complete site destruction and removal. The historic site would be fully documented prior to removal of the features, but this action would have significant adverse impacts on visitors who travel to the Saline Valley Warm Springs Area to soak in the tubs, take place in group recreation activities, or fly their aircraft to the Chicken Strip airstrip. Conversely, alternative 4 would have a significant beneficial effect on the Tribe, the area of ethnographic significance to the Tribe, other users that value the ethnographic resources at the site, and those that appreciate natural backcountry conditions. Alternative 4 would significantly impact the resources of the Saline Valley Warm Springs Area, specifically historic properties, ethnographic resources, and visitor use and experience.

## **Impacts from Alternative 5 (Preferred Alternative)**

The impacts that would occur from implementing alternative 5 would be similar to those described for alternative 3. The communal recreation activities of the Saline Valley Warm Springs Area would remain; however, there would be restrictions on camping locations, reduced areas where vehicles would be allowed, removal of the water diversion at Burro Spring, and the gradual removal of nonnative invasive palm trees. These efforts would benefit the natural resources at the site, as described for alternative 3. Alternative 5 would install fencing around just the source springs at Lower Spring and Palm Spring and would replace and extend the fencing at Upper Spring; camping would continue to be prohibited within 100 feet of the source springs. These efforts would protect the water quality at Lower and Palm Springs while having a limited impact on visitor use. The fencing at Upper Spring would protect both the warm and cold source springs, as well as the native vegetation. The changes that would create a more natural



environment would also benefit ethnographic resources; however, these same changes would alter the setting and feeling of the Saline Valley Warm Springs Area, adversely affecting the area of historic significance and the visitors that enjoy its atmosphere and recreation opportunities. Although the existing mature palm trees would not be removed from Lower and Palm Springs until they die naturally, young palm trees would be pulled and removed. The National Park Service would plant native trees so that they are mature enough to provide shade for visitors by the time the existing palm trees die naturally. Additional measures under alternative 5 that would retain the atmosphere enjoyed by many visitors include the retention of the lawn at Lower Springs and completing visitor use surveys instead of implementing a mandatory permitting system. Alternative 5 would allow pilots to camp with their airplanes at the Chicken Strip, which would be a benefit to visitor use and experience that would not be provided under alternative 3. User groups would have opportunities to be involved in the maintenance of the Saline Valley Warm Springs Area under alternative 5 for activities such as invasive plant maintenance/removal, monitoring of the conditions at Upper Spring, campsite management, visitor education, and protection of archeological resources and wilderness boundaries. Overall, alternative 5 would not significantly impact the resources of the Saline Valley Warm Springs Area.

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## ACRONYMS AND ABBREVIATIONS

BLM	Bureau of Land Management
CFR	Code of Federal Regulations
DOE	Determination of Eligibility
FACW	facultative wetland
GMP	general management plan
Homeland Act	Timbisha Shoshone Homeland Act of 2000
MOU	memorandum of understanding
NEPA	National Environmental Policy Act of 1969, as amended
NHPA	National Historic Preservation Act
NPS	National Park Service
NRHP	National Register of Historic Places
NWI	National Wetland Inventory
OHV	off-highway vehicle
park	Death Valley National Park
PEM1	palustrine emergent wetland
PEMB	palustrine, emergent, saturated wetland
PEPC	Planning, Environment, and Public Comment
plan/EIS	Saline Valley Warm Springs Management Plan and Environmental Impact Statement
PSSB	palustrine, scrub-shrub saturated wetland
PSS1	palustrine scrub-shrub wetland
PUBH	palustrine, unconsolidated bottom, permanently flooded wetland
PUBr	palustrine, unconsolidated bottom, artificial wetland
RAF	Recreational Aviation Foundation
SHPO	State Historic Preservation Officer
SPA	Saline Preservation Association
TCP	Traditional Cultural Property
Tribe	Timbisha Shoshone Tribe
USC	US Code
USFS	US Forest Service
warm springs	warm springs of Saline Valley



# PURPOSE OF AND NEED FOR ACTION



BATHTUB AT LOWER SPRING





## PURPOSE OF AND NEED FOR ACTION

The Saline Valley Warm Springs Area is in the northwestern portion of Death Valley National Park (the park) and is bounded by the Saline Range of mountains to the north, the Last Chance Range to the east and the Inyo Mountains to the west (appendix A, figure 1). The Saline Valley Warm Springs Area is a unique portion of the park that is important to several user groups for various reasons. Visitors or recreation users travel to the Saline Valley Warm Springs Area to enjoy backcountry camping, a backcountry airstrip, and soaking tubs created by diverting water from natural source springs in a remote area of the park. Inyo County considers Saline Valley Warm Springs Area as a place with a unique legacy, which is part of the history of tourism and development of Inyo County.

The Timbisha Shoshone Tribe (the Tribe), whose homelands encompass the entirety of Death Valley National Park, has a deep affinity for the Saline Valley Warm Springs Area due to the existence of long-lived historical and ethnographic connections. The Timbisha Shoshone Homeland Act of 2000 (Homeland Act; Public Law 106-423) transferred more than 7,000 acres of ancestral homeland to the Tribe, including 314 acres at Furnace Creek within the park, and specified designated special use areas. Saline Valley is one of these special use areas in which tribal members are “authorized to use these areas for low impact, ecologically sustainable, traditional practices pursuant to a jointly established management plan mutually agreed upon by the Tribe, and by the National Park Service or the Bureau of Land Management (BLM), as appropriate.” The warm springs of Saline Valley (the warm springs) are a source of *puha* for the Tribe, a life force energy. Although the development of the area by Euro-Americans degraded *puha* and other ethnographic resources, Tribal leaders still seek these cultural connections from historic times until the present and will continue to do so in the future.

The Saline Valley Warm Springs Area is distinctive, both in the setting of the site and in its geology. Saline Valley is a closed basin, which means that the water does not flow to another body of water. Water in closed basins only leaves the system by evaporation or diversion. The warm springs are among the highest-flow springs in the park; the other high-flow springs are located at Furnace Creek in central Death Valley and Saratoga Springs in the southeast portion of the park. However, these warm springs are the only springs in the park that are located in a valley. The mountain ranges surrounding this valley, the Saline Range, the Last Chance Range, and the Inyo Range, have elevations ranging from 7,000 feet to over 10,000 feet, which result in spectacular views from the Saline Valley Warm Springs Area.

The Death Valley National Park General Management Plan (GMP) (NPS 2002a) provides the overall management strategy for the park. In the GMP, the National Park Service identified Saline Valley as one of several areas that would require a site-specific management plan; hence, this current planning effort. This Saline Valley Warm Springs Management Plan and Environmental Impact Statement (plan/EIS) provides direction for the National Park Service to make decisions regarding the future use of the Saline Valley Warm Springs Area. The plan/EIS analyzes the impacts of management of the developed features, the natural and cultural resources, and the diverse uses of the Saline Valley Warm Springs Area. This plan/EIS has been prepared in accordance with the National Environmental Policy Act of 1969, as amended (NEPA), the Wilderness Act, the Homeland Act, and other legal mandates governing decision making by the National Park Service.

## PURPOSE OF ACTION

The purpose of the federal action is to develop a management strategy for the Saline Valley Warm Springs Area that will supplement the 2002 GMP (NPS 2002a). The purpose of the plan/EIS is to:

## PURPOSE OF AND NEED FOR ACTION

- Provide a framework for the management of natural and cultural resources and visitor use at the Saline Valley Warm Springs Area.
- Provide a framework for administration and operations at the Saline Valley Warm Springs Area.
- Provide guidance for park managers as they work with the various stakeholders of the Saline Valley Warm Springs Area.
- Promote the partnership between the National Park Service and the Tribe to ensure the Saline Valley Warm Springs Area is protected and enhanced by cooperative activities.

## NEED FOR ACTION

The federal action is needed to supplement the GMP and address visitor use and development at the Saline Valley Warm Springs Area. Past visitors of the Saline Valley Warm Springs Area have altered the natural aspect of the area through diversion of water from the natural source springs and through construction of soaking tubs and other amenities. People who seek this type of recreational experience continue to visit the Saline Valley Warm Springs Area, and during certain holiday weekends, visitation can be concentrated. However, the Saline Valley Warm Springs Area is also part of the Timbisha Shoshone Natural and Cultural Preservation Area, and the ethnographic uses by the Tribe and recreational uses by other visitors can be in conflict. This plan/EIS has several goals:

- Fulfill the direction of the 2002 GMP, which calls for a site management plan for the Saline Valley Warm Springs Area as a planning need.
- Ensure cooperation and coordination with the Tribe to understand existing issues and future planning opportunities in accordance with the Homeland Act.
- Create a management strategy for park resources and maintenance requirements.
- Evaluate visitor use and experience and provide a basis from which to respond to future conditions at the Saline Valley Warm Springs Area.
- Provide for public health and safety at the Saline Valley Warm Springs Area.

## Cooperating Agencies

The National Park Service formally invited the Tribe, the Inyo County Board of Supervisors, the Inyo County Planning Director, the BLM Ridgecrest Field Office, and Inyo National Forest to participate as cooperating agencies in the plan/EIS process. The Tribe, the Inyo County Board of Supervisors, and the BLM Ridgecrest Field Office accepted the offer. Correspondence with the cooperating agencies is available in appendix B.

## BACKGROUND OF THE SALINE VALLEY WARM SPRINGS AREA

Saline Valley is a large desert valley located in the northwest portion of Death Valley National Park. The National Park Service has defined the Saline Valley Warm Springs Area as approximately 1,100 acres of backcountry surrounded by designated wilderness. It has not been formally or systematically developed for use by the National Park Service but does have a number of user developed and maintained structures and facilities and is considered a backcountry campground. This backcountry area, along with several additional features, comprises the Saline Valley Warm Springs Area (appendix A, figure 2). People have been using or visiting the Saline Valley Warm Springs Area since prehistoric times. The first developed recreational soaking tub is estimated to have been installed between 1933 and 1947 (New South 2015). Subsequent modification and expansion of the soaking tub complex occurred over the years until it

reached the present state of development with multiple soaking tubs, camping areas, and toilets. Additional descriptions, photographs, and figures of the features of the Saline Valley Warm Springs Area are available in appendix C.

## **RELEVANT PLANNING DOCUMENTS**

### **Death Valley National Park General Management Plan**

The 2002 GMP for Death Valley National Park deferred specific management of the Saline Valley Warm Springs Area to a future site-specific management plan; however, the GMP did include some changes to the management of the Saline Valley Warm Springs Area (NPS 2002a). These changes included closing the Crosswinds Strip, closing the informal small arms shooting range, enforcing a 30-day per year stay limit for the area, the removal of property after 10 days if it was abandoned, removal of several trailers, and the installation of three vault toilet restrooms by the National Park Service.

### **Wilderness and Backcountry Stewardship Plan and Environmental Assessment**

The National Park Service prepared a separate Wilderness and Backcountry Stewardship Plan and Environmental Assessment (NPS 2013a) which also supplements the GMP and provides a framework for managing the majority of lands and resources around the Saline Valley Warm Springs Area. This plan/EIS has been prepared separately to address the issues specific to the Saline Valley Warm Springs Area, and with consideration of the Wilderness and Backcountry Stewardship Plan so as not to conflict with the values and desired conditions set forth in that plan.

### **Special Regulation for Designation of the Chicken Strip Airstrip**

The National Park Service is proposing a special regulation to designate the Chicken Strip airstrip as a location available for the operation of aircraft, consistent with the preferred alternative in this plan/EIS. The proposed rule would authorize an exemption to 36 Code of Federal Regulations (CFR) 2.17(a)(1), which prohibits operation or use of an aircraft on lands or waters within national parks other than at locations designated pursuant to a special regulation. The proposal was posted on Regulations.gov on September 20, 2018 and was open for public comment until November 19, 2018. The National Park Service received 461 pieces of correspondence. This special regulation did not result in any changes to the preferred alternative in the final plan/EIS.

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

To focus the environmental analysis, the issues identified during scoping were used to derive a number of impact topics. Impact topics identify resources of concern that could be affected, either beneficially or adversely, by implementing any of the proposed alternatives. The issues and potential impacts associated with the alternatives are discussed in the following sections. Details on the existing conditions for each resource topic are presented in the “Affected Environment” chapter, and the anticipated impacts are presented in the “Environmental Consequences” chapter. The issues and impact topics dismissed from detailed analysis are presented in appendix D.

### **Soils**

Recreation activities could impact the soils of the Saline Valley Warm Springs Area. Visitors of the Saline Valley Warm Springs Area often travel by foot or by vehicle to areas surrounding the Saline

Valley Warm Springs Area. Traveling outside of the roads and trails, especially using off-road vehicles, can cause compaction of the soils, which alters the space between soil particles and water infiltration, often resulting in a reduction in root penetration and therefore, decreased plant growth. For these reasons, soils will be analyzed in this plan/EIS.

## Vegetation

Plant species in the Saline Valley Warm Springs Area are typical of desert scrub but also include a variety of nonnative species, some of which have been introduced by the users of the Saline Valley Warm Springs Area. Many of the nonnative species at the Saline Valley Warm Springs Area are dependent on continued watering and fertilizing by the Saline Valley Warm Springs Area users. The abundance of native and nonnative species could change based on activities associated with the plan; therefore, impacts on vegetation will be fully analyzed.

## Wetlands

The majority of the wetland areas currently at the Saline Valley Warm Springs Area were created artificially from tub runoff. However, the wetland at Upper Spring is considered a naturally occurring wetland, as there is no diversion of water. There are also several naturally occurring wetlands at Lower Spring. Wetlands could be reduced in size, eliminated, or even created by the actions of this plan. Because wetlands, both artificial and natural would be affected by the plan, impacts on wetlands will be analyzed fully in this plan/EIS.

## Wildlife

A variety of native and nonnative wildlife exist near the springs. Native species in the Saline Valley Warm Springs Area include a variety of mammals, birds, amphibians, and reptiles, such as desert pocket mouse (*Chaetodipus penicillatus*), silver-haired bat (*Lasionycteris noctivagans*), greater roadrunner (*Geococcyx californianus*), red-spotted toad (*Rhinella rubropunctata*), and desert spiny lizard (*Sceloporus magister*). Feral burros (*Equus asinus*) are frequent visitors of the springs. Introduced aquatic species exist in a settling pond at Lower Spring. Given the presence of a variety of wildlife in the Saline Valley Warm Springs Area, this topic will be carried through impacts analysis.

## Cultural Resources

**Archeological Resources.** Prehistoric archeological sites are present throughout the park at all elevations and in all environments. Historic archeological sites in the park are largely associated with transportation corridors, water sources, and mining and ranching operations of the late 19th and early 20th centuries. The research and information potential of archeological sites is an important aspect of their National Register of Historic Places (NRHP) eligibility (NPS 2002a).

There have been impacts to archeological resources in the Saline Valley Warm Springs Area. For example, the archeological sites around Palm Spring have been heavily damaged by visitors through years of use, dating from the time before the National Park Service assumed management of the area. Continued damage to archeological resources could occur if visitor use of the area continues; therefore, this topic will be carried through impacts analysis.

**Historic and Prehistoric Resources.** In 2014, the National Park Service completed a Determination of Eligibility (DOE) to identify and evaluate historic resources in the Saline Valley Warm Springs Area and to determine if the site is eligible for nomination to the NRHP (New South 2015). The “historic” DOE considered the potential significance of the site from the perspective of the Euro-American use and

development from the 1930s to the present. The historic DOE recommended that portions of the Saline Valley Warm Springs Area is an NRHP-eligible Historic Site that has a period of significance from 1955 to 1978 and is eligible at the local level of significance. The site is significant under Criterion A for Recreation as a campground established around a hot springs site, and for Social History as a site that typifies the ideals and principles of the countercultural movements associated with Hippie and Beat movements, along with the social trends that influenced them in the early to mid-1900s. Criteria Consideration G applies as some contributing resources are less than 50 years of age. It is recommended that as several other noncontributing resources reach 50 years of age, they should be reevaluated to determine if they maintain their significance and integrity and should therefore be reclassified as contributing. The historic DOE also recommended that a Cultural Landscape Inventory and possibly a Cultural Landscape Report be prepared for the Saline Valley Warm Springs Historic Site<sup>1</sup> (New South 2015). For this plan/EIS, the National Park Service treats the Saline Valley Warm Springs Historic Site as eligible for listing in the NRHP and is carrying this topic forward through impact analysis. For purposes of discussing the historic resources in this plan/EIS, the Saline Valley Warm Springs Historic Site is referred to as an “area of historic significance for the recreational users.”

**Ethnographic Resources.** Ethnographic resources are the cultural and natural features of a park that are of traditional significance to traditionally associated peoples and can include sites, structures, objects, traditional landscapes, or a natural resource feature assigned traditional legendary, religious, subsistence, or other significance in the cultural system of a traditionally associated group. These peoples are the contemporary park neighbors and ethnic or occupational communities that have been associated with a park for two or more generations (40 years), and whose use began before the establishment of the park (NPS 2006).

The National Park Service contacted the Tribe and other affiliated tribes during the scoping phase of the project. The Tribe responded to the scoping request and expressed interest in the management of the Saline Valley Warm Springs Area; however, the National Park Service will continue to communicate with the other five tribes throughout the EIS process and beyond. The warm springs were highly valued, and widely used by the older generation of contemporary tribal members of the Tribe for healing and medicinal purposes (Fowler et al. 1995, 29–30). The National Park Service is directed by the Homeland Act (Public Law 106-423) to accommodate access to and use of the Saline Valley Warm Springs Area by the Tribe for traditional, cultural, and religious activities in a manner consistent with the American Indian Religious Freedom Act (Title 42 of the United States Code (USC), section 1996 et seq.). Saline Valley Warm Springs Area is identified as a special use area for the Tribe in the *2000 Final Legislative Environmental Impact Statement: Timbisha Shoshone Homeland* and the Homeland Act. The Tribe has a historic relationship with Saline Valley Warm Springs Area; the area has been used by the older generation of contemporary tribal members for healing and medicinal purposes. The *2000 Final Legislative Environmental Impact Statement* also calls for the Tribe and National Park Service to establish a greater tribal presence at the Saline Valley Warm Springs Area and develop and conduct a pilot demonstration project regarding management of the Saline Valley Warm Springs Area.

One way that ethnographic areas of importance are identified is through Traditional Cultural Property (TCP) designation. The TCP process is completed through the NRHP program. National Register Bulletin 38 (Parker and King 1990) describes the evaluation process. Generally, TCPs are identified as areas having “... association with cultural practices or beliefs of a living community that (a) are rooted in that

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<sup>1</sup> In the historic DOE, the area of significance does not include all portions of the Saline Valley Warm Springs Area, as addressed in this plan/EIS. The historic site does not include Upper Spring or the upper peace sign; therefore, the National Park Service is using the term “Saline Valley Warm Springs Historic Site” to clearly distinguish the historic site from the area addressed in this plan/EIS.



community's history, and (b) are important in maintaining the continuing cultural identity of the community" (Parker and King 1990).

The National Park Service completed an "ethnographic" DOE that considered potential significance from the perspective of the Tribe and documented that the Saline Valley Warm Springs Ethnographic Site<sup>2</sup> is eligible for listing on the NRHP under Criterion A as an area of significance to the Tribe. The warm springs are a source of *puha*, or sacred knowledge, and were sought by Tribal spiritual leaders for *puha* and by Tribal elders for healing (Rucks 2016). *Puha* is defined as a life force energy that is at once everywhere yet concentrated in particular geographic features, such as the warm springs (Rucks 2016). Despite the development of the Saline Valley Warm Springs Area, the warm springs have retained their cultural significance to the Tribe. As stated above, the National Park Service submitted a consultation package to the State Historic Preservation Officer (SHPO) on February 15, 2018. The SHPO did not provide a formal response. The National Park Service is treating the ethnographic resources at the Saline Valley Warm Springs Area as eligible for listing in the NRHP and is carrying this topic forward through impact analysis. For purposes of discussing the ethnographic resources in this plan/EIS, the Saline Valley Warm Springs Ethnographic Site is referred to as an "area of ethnographic significance for the Tribe."

## Wilderness Character

Recreation activities, including visitor-created art, at the Saline Valley Warm Springs Area have the potential to expand into the surrounding designated wilderness areas and some activities are prohibited in wilderness (e.g., use of motorized vehicles). Impacts on wilderness are expected; however, the impacts could range from beneficial to adverse, depending on the alternative and the level of mitigation. For this reason, wilderness will be fully analyzed for all alternatives.

## Visitor Use and Experience

Recreational use could be affected by the proposed action and alternatives. The Saline Valley Warm Springs Area has been managed by recreational users of the area since before it was acquired by the National Park Service. This plan has the potential to change the way the Saline Valley Warm Springs Area is managed for recreation. The existing visitor experience, including use of the Chicken Strip airstrip for recreation and large group gatherings, could be affected by the proposed plan.

## Human Health and Safety

Human health and safety would be impacted differently depending on the level of management selected for the Saline Valley Warm Springs Area. For example, the method of cleaning or treating the tubs, or the practice of washing dishes at a single station, with resulting gray or black water discharges, would also influence the level of impact to human health and safety. Additionally, there is a risk of flood events at the Saline Valley Warm Springs Area. Although the alternatives would not affect the floodplains (as described in the "Floodplains" section of appendix D), visitors could be affected by flash floods. For these reasons, this topic will be fully analyzed.

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<sup>2</sup> In the ethnographic DOE, the area of significance is called the Saline Valley Warm Springs or the *Ko o'* Warm Springs (preferred by the Tribe). The geographic extent of the ethnographic site varies from the Saline Valley Warm Springs Area in this plan/EIS; therefore, the National Park Service is using the term "Saline Valley Warm Springs Ethnographic Site" to clearly distinguish the area of significance to the Tribe from the area addressed in this plan/EIS.

# ALTERNATIVES



BAT POLE AT ENTRANCE TO THE WARM SPRINGS AREA



## ALTERNATIVES

This chapter describes the alternatives considered for the Saline Valley Warm Springs Final Management Plan and Environmental Impact Statement (plan/EIS). These alternatives present a range of reasonable approaches that addresses the purpose and need for an action. This chapter also includes the elements common to all alternatives; details of the alternatives; and the National Park Service (NPS) preferred alternative; alternatives considered but dismissed; and mitigation measures.

Five alternatives are analyzed for the management of the Saline Valley Warm Springs Area. The alternatives under consideration include a no-action alternative, as prescribed by Title 40 of the Code of Federal Regulations (CFR), section 1502.14. The no-action alternative in this plan/EIS would continue the current management of the area with no changes to the maintenance and use of the Saline Valley Warm Springs Area as managed by the user groups and the volunteers. Four action alternatives for the management of the Saline Valley Warm Springs Area were developed based on information gathered during scoping activities conducted with the National Park Service, the Timbisha Shoshone Tribe (the Tribe), Bureau of Land Management (BLM), Inyo County, and the public.

### DESCRIPTION OF THE ALTERNATIVES

This section describes the alternatives selected for detailed analysis. Table 1 presents the details of the elements of the alternatives.

#### Elements Common to All Alternatives

The National Park Service is authorized to enter into a cooperative agreement with the Tribe by the Timbisha Shoshone Homeland Act of 2000 (Homeland Act; Public Law 106-423) “for the purpose of providing training on the interpretation, management, protection, and preservation of the natural and cultural resources of the areas designated for special uses by the Tribe.” The National Park Service is directed by the Homeland Act to accommodate access to and use of the Saline Valley Warm Springs Area by the Tribe for traditional cultural and religious activities in a manner consistent with the American Indian Religious Freedom Act (Title 42 of the United States Code [USC], section 1996 et seq.).

The warm springs of Saline Valley (the warm springs) is identified as a special use area for the Tribe in the *2000 Final Legislative Environmental Impact Statement: Timbisha Shoshone Homeland* and the Homeland Act. The Tribe has a historic relationship with Saline Valley Warm Springs Area; the area has been used by the older generation of contemporary tribal members for healing and medicinal purposes.

Any cooperative agreement for tribal use of the warm springs would agree with the objectives described in this plan/EIS and will comply with applicable state and federal law. Any cooperative agreement would also formally recognize the contributions by the Tribe to the history, culture, and ecology of Death Valley National Park and the surrounding area and could create a richer visitor experience through potential interactions with the Tribe. The National Park Service has engaged in government-to-government consultation with the Tribe regarding a cooperative agreement, separate from this plan/EIS. This consultation process is ongoing and will not be completed before a record of decision is signed for this plan/EIS.

## ALTERNATIVES

Several other elements are common to all alternatives, as they relate to the management of Death Valley National Park (the park), including the Saline Valley Warm Springs Area:

- The Superintendent's Compendium identifies guidelines for the park and includes regulations specific to the Saline Valley Warm Springs Area.
- Park entrance fees are required for anyone recreating in the park and apply to visitors of the Saline Valley Warm Springs Area.
- Visitors are allowed to camp throughout Death Valley National Park for up to 30 days per calendar year; except for Furnace Creek Campground, which has a limit of 14 days per calendar year.
- Off-road driving is prohibited in all areas of the park.
- Visitors to Death Valley National Park are expected to follow Leave No Trace® camping practices to avoid human-created impacts in the park.
- With the exception of alternative 4, developments or modifications would be designed using low-impact development practices, which work to maintain a landscape with the minimum impact possible.
- Nonnative vegetation that dies naturally or is physically removed may be replaced with native species to prevent future site occupation by nonnative species.
- The park has a "no burro or wild horse" goal and has entered into a 5-year agreement with the Texas-based nonprofit Peaceful Valley Donkey Rescue to capture 2,500 burros from the park and relocate them to offsite adoption facilities and sanctuaries.
- If a natural event, such as a flood, were to damage any feature within the Saline Valley Warm Springs Area, the National Park Service would not repair the damage or replace the feature.

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

The no-action alternative (alternative 1) is required by National Environmental Policy Act of 1969, as amended (NEPA), to assess the impacts of the continued management of the Saline Valley Warm Springs Area without changes to the management strategy by the National Park Service. The no-action alternative, as described in the NPS NEPA handbook, "provides a benchmark for the public and a decision maker to compare what would happen to the environment if current management were continued into the future, as opposed to what would happen to the environment if one of the action alternatives were selected for implementation" (NPS 2015a).

The Death Valley General Management Plan (GMP) (NPS 2002a) deferred specific management of the Saline Valley Warm Springs Area to a future site-specific management plan (this plan/EIS); however, it did include the follow directives regarding ongoing visitor use at the Saline Valley Warm Springs Area:

- Limit soaking tubs/spas to the current level of improvements.
- Protect the Upper Spring area from human improvements and use from feral burros.
- Maintain Saline Valley Road to its current surface condition by Inyo County.

Under the no-action alternative, use of the Saline Valley Warm Springs Area would continue under the current management with no changes. The users, with help from the volunteer camp hosts, would continue to informally oversee the recreational uses of the Saline Valley Warm Springs Area. Visitors would continue to be able to use the tubs and associated facilities, including showers, dishwashing

stations, and user-created fire rings. Camping would be dispersed with car camping in backcountry areas. Camping areas would not be designated by the National Park Service. The camp host would be able to assist visitors with vehicle issues due to presence of the vehicle support facility and supplies at Lower Spring. Visitors with small aircraft would continue to be able to land at the Chicken Strip airstrip and camp with their aircraft, special regulation pending. All elements of the no-action alternative are presented in table 1.

Natural and cultural resources would not receive any further protection under the no-action alternative. There would be minimal control of nonnative vegetation through trimming and minor removal efforts by the camp host. Feral burro control would include the existing fencing at Lower Spring and education by the volunteer camp host to prevent feeding of wildlife. Visitors could continue to create new artwork throughout the Saline Valley Warm Springs Area that may disturb archeological and ethnographic resources.

The no-action alternative could result in noncompliance with federal and state regulations for human health and safety due to the recreational use of water without water quality monitoring and unregulated storage and use of hazardous materials, such as bleach and automotive supplies. Due to this noncompliance, the no-action alternative cannot be selected as the preferred alternative.

## **Alternative 2: Regulatory Compliance Alternative**

The Saline Valley Warm Springs Area has been used for decades for soaking and camping by a number of deeply committed users. The National Park Service developed the regulatory compliance alternative, which retains much of the existing use of the Saline Valley Warm Springs Area but brings the actions and conditions into compliance with NPS, state, and federal regulations.

In an effort to protect the health and safety of visitors, the regulatory compliance alternative would require the National Park Service to consult with the NPS Office of Public Health to develop an approach for water quality monitoring, add signs at the sinks to inform visitors of nonpotable water, add filtration systems for discharged water at the dishwashing stations, and make the tubs accessible, to the extent possible, as defined by the 2010 *Americans with Disabilities Act Standards for Accessible Design*. Further actions to protect public health would include fencing the source springs at Lower and Palm Springs to prevent access to water sources by feral burros, fencing the settling pond, and proper storage of hazardous materials. The vehicle support facility would be removed, and emergency vehicle assistance should not be expected by the visiting public; this matches policy throughout the park. Visitors with small aircraft would continue to be able to land at the Chicken Strip airstrip (special regulation pending) and camp with their aircraft.

The National Park Service would work to limit visitor impacts by creating a no-cost permit system for all overnight guests, prohibiting the manipulation of natural or cultural resources for the purpose of art, and removing all non-historic art from wilderness. This would include all artwork with the exception of the lower peace sign.

Alternative 2 would also take steps to improve and restore the natural and cultural environments by controlling nonnative plant species, removing user-created fire rings, requiring visitors to haul out ash and charcoal, encouraging visitors at the campgrounds—but requiring campers at the Chicken Strip—to pack out their waste, encouraging the use of NPS-provided firepans at the campsites, and treating the Saline Valley Warm Springs Area as areas of ethnographic and historic significance for the Tribe and recreational users, respectively. Finally, visitor education would increase under alternative 2 to include regulatory, health and safety, and compliance information. All elements of the regulatory compliance alternative are presented in table 1.

### **Alternative 3: Community Engagement Alternative**

The community engagement alternative aims to involve user groups in the protection of park resources and to ensure compliance with applicable NPS, state, and federal regulations, while providing visitors with the types of experiences they currently value. The user groups would be engaged through agreements to identify and carry out many of the actions needed to protect natural and cultural resources, protect human health and safety, and identify roles and responsibilities for protecting resources and maintaining visitor facilities. The user groups would be engaged in the accomplishment of many of the actions needed to protect human health and park resources through memoranda of understanding (MOUs) that could identify responsibilities for maintenance of facilities, maintenance of the airstrip, and protection of natural and cultural resources.

The community engagement alternative would employ the same measures to protect the health and safety of visitors as alternative 2; however, instead of fencing just the source springs, this alternative would install artistic wooden fencing to enclose the soaking tubs, source springs, and riparian areas at Lower Spring and Palm Spring to prevent access to water sources by feral burros.

Increased resource protection would be incorporated into alternative 3, including additional nonnative vegetation control, the potential use of food storage boxes, a monitoring and response program, and establishment of thresholds for overuse of the resources. This alternative includes restoration measures, such as removing the diversion piping from Burro Spring.

Efforts to limit visitor impacts and improve and restore natural and cultural environments under alternative 3 would be similar to those described for alternative 2. However, camping would be restricted to designated camping areas with designated overflow walk-in camping areas and associated defined parking areas; no camping would be allowed within 200 feet of the source springs. Visitors with small aircraft would continue to be able to land at the Chicken Strip airstrip (special regulation pending) but would not be able to camp with their aircraft. Alternative 3 would expand education to include additional signs on campground boards and engagement by the volunteer camp host, and tribes would be engaged to incorporate traditional ecological knowledge. All elements of the community engagement alternative are presented in table 1.

### **Alternative 4: Restoration Alternative**

The goal of the restoration alternative is to restore the Saline Valley Warm Springs Area, as closely as possible, to natural conditions with minimal or no development. The tubs and associated infrastructure would be removed, as would the dishwashing stations, showers, vehicle support facility, airstrip, the vault toilets, and all artwork. Dispersed camping would continue to be permitted but would be more restrictive, as visitors would be required to camp at least 200 feet from all water sources. Park staff would develop and implement a habitat restoration plan to remove nonnative plants and restore native habitats. The National Park Service and the Tribe would work to restore the Saline Valley Warm Springs Area to its natural and ethnographic landscape. Prior to removal of the tubs and infrastructure, the National Park Service would properly document the proposed Saline Valley Warm Springs Historic Site, including drawings, photographs, and other materials. This alternative would require extensive park law enforcement and resource staff support during implementation for education, enforcement, and restoration activities. All elements of the restoration alternative are presented in table 1.



## **Alternative 5: Preferred Alternative**

In June 2016, the interdisciplinary team met to discuss the alternatives and to recommend a preferred alternative for the management of the Saline Valley Warm Springs Area. The preferred alternative was developed by examining the elements of action alternatives 2, 3, and 4 and creating a new alternative that allowed for continued recreational visitor use, while protecting the natural and cultural resources of the site. The preferred alternative incorporates community engagement in the management of the site through MOUs with interested organized groups. The preferred alternative was further revised by the interdisciplinary team in September 2018 after assessing public comments received during the review period for the draft plan/EIS. Alternative 5, the preferred alternative, is similar to alternative 3, except as explained in the following paragraphs.

Under alternative 5, the National Park Service would not require permits for camping at the Saline Valley Warm Springs Area. The National Park Service would instead gather data on visitor use patterns through formal visitor use studies, which could include ways to count visitors at both high and low use periods. These data would help the National Park Service understand current visitor use trends and impacts. If overnight camping fees or permits are implemented in the future for developed backcountry campgrounds throughout the park, they would also apply at the Saline Valley Warm Springs Area.

Three distinct camping zones would be established: designated dispersed camping (with car camping), overflow walk-in camping with a separate designated parking area, and no camping areas. Visitors would be unable to camp within 100 feet of the source springs. Under alternative 5, visitors with small aircraft would continue to be able to land at the Chicken Strip airstrip (special regulation pending); camping would be allowed at the Chicken Strip airstrip and additional tiedowns could be added. Visitors that camp at the airstrip would be required to pack out their waste, unlike alternative 3.

Managing and protecting natural resources through onsite monitoring while maintaining the historic values of the site is an NPS priority for the Saline Valley Warm Springs Area. The lawn at Lower Spring would be allowed to remain but only within its current footprint; expansion would not be allowed. Existing mature palm trees would remain at the site and would only be removed after they die naturally. Young palm trees would be removed, and native species would be planted while the existing mature palm trees are still alive to allow the native trees time to mature and provide shade. Unlike alternative 3, which proposed to install artistic wood fencing to enclose the soaking tubs, the source springs, and the riparian areas, the preferred alternative would install fencing around the source springs only, as described for alternative 2, to prevent feral burro access to water sources. All fencing would be dependent on archeological surveys and additional consultation with the State Historic Preservation Officer (SHPO). Alternative 5 would also replace the fencing at Upper Spring and would expand the fenced area to incorporate the warm and cold source springs. The preferred alternative would remove non-historic art from wilderness but would allow art to remain in non-wilderness areas. New art would be allowed in the non-wilderness areas, provided that natural and cultural resources are not manipulated, the art is not a permanent fixture, and the art is removed from the site when the visitor creating the art leaves the site. The National Park Service would install a subterranean system for treating wastewater generated at the site. Finally, the Saline Valley Warm Springs Area would be made accessible to the extent practical while preserving potential significant historical features. All elements of the preferred alternative are presented in table 1.



TABLE 1. ELEMENTS OF THE ALTERNATIVES

## Notes:

Items identified in this table as NPS-provided, such as fire enclosures, would be distributed as funding allows.

Items in italics in this table are mitigation and/or restoration efforts required under each alternative. Users, volunteers, and park staff could engage in further restoration efforts under NPS management; however, the actions identified in this table are the minimum actions required under each alternative.

The no-action alternative and the regulatory compliance alternative present the minimum required actions for each element of these alternatives; however, visitors, volunteers, and park staff could use the Saline Valley Warm Springs Area in a manner that would be more protective of the natural and cultural resources.

Management Elements	Alternative 1: No-Action Alternative	Alternative 2: Regulatory Compliance Alternative	Alternative 3: Community Engagement Alternative	Alternative 4: Restoration Alternative	Alternative 5: NPS Preferred Alternative to Recommend
<b>Natural Resources</b>					
Nonnative Vegetation	<ul style="list-style-type: none"> <li>Minimal control of nonnative plants (e.g., trimming and hand pulling of young nonnative invasive palms is accomplished by volunteer camp host)</li> </ul>	<ul style="list-style-type: none"> <li><i>Remove nonnative invasive palms from Upper Spring</i></li> <li><i>As nonnative invasive palm trees die naturally at Lower Spring and Palm Spring, allow the area to naturally revegetate</i></li> <li><i>Nonnative plant control by National Park Service</i></li> </ul>	<ul style="list-style-type: none"> <li><i>Removal of nonnative invasive palms from Upper Spring</i></li> <li><i>As nonnative invasive palm trees die naturally at Lower Spring and Palm Spring, allow the area to naturally revegetate</i></li> <li><i>Nonnative plant control by National Park Service</i></li> <li><i>Remove the lawn and allow the area to naturally revegetate or replant with native vegetation</i></li> <li><i>Engage tribes to incorporate traditional ecological knowledge</i></li> </ul>	<ul style="list-style-type: none"> <li>Removal of all nonnative species, including the lawn at Lower Spring</li> <li>Restoration with native species in natural distribution patterns</li> <li>Engage tribes to incorporate traditional ecological knowledge</li> </ul>	<ul style="list-style-type: none"> <li><i>Removal of nonnative invasive palms from Upper Spring</i></li> <li><i>Retain existing mature palm trees at Lower Spring and Palm Spring and remove as they die naturally; remove young palm trees and add native species</i></li> <li><i>Nonnative plant control by National Park Service</i></li> <li><i>Retain the lawn in its current footprint; no expansion</i></li> <li><i>Engage tribes to incorporate traditional ecological knowledge</i></li> </ul>

Management Elements	Alternative 1: No-Action Alternative	Alternative 2: Regulatory Compliance Alternative	Alternative 3: Community Engagement Alternative	Alternative 4: Restoration Alternative	Alternative 5: NPS Preferred Alternative to Recommend
Feral Burro Access	<ul style="list-style-type: none"> <li>Minimal control (e.g., fencing to exclude feral burros from lawn at Lower Spring)</li> </ul>	<ul style="list-style-type: none"> <li>Artistic fencing to surround the source springs at Lower and Palm Springs to prevent access to the water sources by feral burros<sup>3</sup></li> </ul>	<ul style="list-style-type: none"> <li>Extension of the artistic wooden fencing around the tubs, source springs and riparian areas at Lower and Palm Springs to prevent access to water sources and vegetation by feral burros<sup>3</sup></li> </ul>	<ul style="list-style-type: none"> <li>Installation of fencing around the Saline Valley Warm Springs Area at the wilderness boundary to prevent access by feral burros<sup>3</sup></li> </ul>	<ul style="list-style-type: none"> <li>Installation of fencing around the source springs to prevent access to water sources by feral burros<sup>1</sup></li> <li>Replace and expand fencing at Upper Spring to incorporate warm and cold source springs<sup>3</sup></li> </ul>
Habituated Wildlife and Food Storage	<ul style="list-style-type: none"> <li>Education to prevent deliberate or inadvertent feeding of wildlife</li> </ul>	<ul style="list-style-type: none"> <li>Appropriate food storage would be encouraged through on-site and online outreach to users</li> <li>Camp host(s) would encourage users to keep all food safely and securely stored in vehicles</li> <li>Education (including signage) to prevent deliberate or inadvertent feeding of wildlife</li> </ul>	<ul style="list-style-type: none"> <li>Appropriate food storage would be encouraged through on-site and online outreach to users</li> <li>Camp host(s) would encourage users to keep all food safely and securely stored in vehicles or food storage boxes</li> <li>Education (including signage) to prevent deliberate or inadvertent feeding of wildlife</li> <li>Installation of food storage box(es), if necessary</li> </ul>	<ul style="list-style-type: none"> <li>Education to prevent deliberate or inadvertent feeding of wildlife</li> </ul>	<ul style="list-style-type: none"> <li>Appropriate food storage would be encouraged through on-site and online outreach to users</li> <li>Camp host(s) would encourage users to keep all food safely and securely stored in vehicles or food storage boxes</li> <li>Education (including signage) to prevent deliberate or inadvertent feeding of wildlife</li> <li>Installation of food storage box(es), if necessary</li> </ul>

<sup>3</sup> The fencing locations discussed in this table and depicted in figures in this plan/EIS are approximate. Prior to finalizing the location of the fencing, the National Park Service would be required to complete a survey for archeological resources and additional consultation with the SHPO.

Management Elements	Alternative 1: No-Action Alternative	Alternative 2: Regulatory Compliance Alternative	Alternative 3: Community Engagement Alternative	Alternative 4: Restoration Alternative	Alternative 5: NPS Preferred Alternative to Recommend
Resource Stewardship	<ul style="list-style-type: none"> <li>Consistent with resource stewardship throughout the park</li> </ul>	<ul style="list-style-type: none"> <li>Consistent with resource stewardship throughout the park</li> <li>MOU with user group for minimal maintenance of tubs</li> </ul>	<ul style="list-style-type: none"> <li>MOU with user groups that may include activities such as invasive plant removal; monitoring of Upper Spring; campsite management; minimal maintenance of tubs; and protection of archeological resources and wilderness boundaries</li> <li>Establish thresholds on use and overuse of the area</li> <li>Monitoring and response whereby actions would be taken by park management to restrict use of the springs if damage to natural and cultural resources is observed</li> <li><i>Implementation of restoration measures, such as removing the water diversion piping at Burro Spring</i></li> </ul>	<ul style="list-style-type: none"> <li>Establish thresholds on use and overuse of the area</li> <li>Monitoring and response whereby actions would be taken by park management to restrict access to the springs if damage to natural and cultural resources is observed</li> <li>Contract with organizations for specified services related to protection of natural and cultural resources</li> </ul>	<ul style="list-style-type: none"> <li>MOU with user groups for activities that may include, but are not limited to, maintaining the soaking pools, invasive plant maintenance/removal (other than the lawn and existing mature palm trees), monitoring the conditions of the Saline Valley Warm Springs Area, visitor education, or other duties that may be identified and agreed upon in the future</li> <li>Manage and protect natural resources through onsite monitoring while maintaining the historic values of the site; response actions taken by park management to restrict use of the springs if damage to natural and cultural resources is observed</li> <li><i>Implementation of restoration measures, such as removing the water diversion piping at Burro Spring</i></li> </ul>

Management Elements	Alternative 1: No-Action Alternative	Alternative 2: Regulatory Compliance Alternative	Alternative 3: Community Engagement Alternative	Alternative 4: Restoration Alternative	Alternative 5: NPS Preferred Alternative to Recommend
<b>Recreation</b>					
Camping Permits	<ul style="list-style-type: none"> <li>Permit not required</li> </ul>	<ul style="list-style-type: none"> <li>Mandatory no-cost permit system modeled after the Visitor Use Permit system (appendix E) proposed in the Death Valley National Park Wilderness and Backcountry Stewardship Plan</li> </ul>	<ul style="list-style-type: none"> <li>Mandatory no-cost permit system modeled after the Visitor Use Permit system (appendix E) proposed in the Death Valley National Park Wilderness and Backcountry Stewardship Plan</li> <li>A sign-in log would be maintained for campers</li> </ul>	<ul style="list-style-type: none"> <li>Mandatory no-cost permit system modeled after the Visitor Use Permit system (appendix E) proposed in the Death Valley National Park Wilderness and Backcountry Stewardship Plan</li> </ul>	<ul style="list-style-type: none"> <li>Complete formal visitor use surveys to gather data on visitor use patterns and impacts</li> <li>Future changes to permit requirements for developed backcountry campgrounds in the park would apply, consistent with the established framework in the Death Valley National Park Wilderness and Backcountry Stewardship Plan</li> </ul>
Fees	<ul style="list-style-type: none"> <li>Park entrance fee applies</li> </ul>	<ul style="list-style-type: none"> <li>Park entrance fee applies</li> <li>Overnight camping fee could be implemented in the future and would include an independent public process</li> </ul>	<ul style="list-style-type: none"> <li>Park entrance fee applies; campground host(s) check compliance</li> <li>Overnight camping fee could be implemented in the future and would include an independent public process</li> </ul>	<ul style="list-style-type: none"> <li>Park entrance fee applies</li> </ul>	<ul style="list-style-type: none"> <li>Park entrance fee applies; campground host(s) check compliance</li> <li>Future changes to overnight camping fee requirements for developed backcountry campgrounds in the park would apply, consistent with the established framework in the Death Valley National Park Wilderness and Backcountry Stewardship Plan</li> </ul>

Management Elements	Alternative 1: No-Action Alternative	Alternative 2: Regulatory Compliance Alternative	Alternative 3: Community Engagement Alternative	Alternative 4: Restoration Alternative	Alternative 5: NPS Preferred Alternative to Recommend
Camping Areas	<ul style="list-style-type: none"> <li>No designated camp areas</li> <li>Unrestricted dispersed camping, including car camping in backcountry area</li> </ul>	<ul style="list-style-type: none"> <li>No designated camp areas</li> <li>Unrestricted dispersed camping, including car camping in backcountry area</li> </ul>	<ul style="list-style-type: none"> <li>Dispersed camping within designated camp areas defined by appropriate elements, such as delineation of roadways or signposts, with area use maps posted at the campground and online</li> <li>No camping within 200 feet of source springs</li> <li>Designated overflow walk-in camping areas with defined parking</li> </ul>	<ul style="list-style-type: none"> <li>Dispersed camping</li> <li>No camping within 200 feet of water</li> </ul>	<ul style="list-style-type: none"> <li>Three camping zones defined by appropriate elements, such as delineation of roadways or signposts, with area use maps posted at the campground and online: <ul style="list-style-type: none"> <li>Dispersed camping area with the ability to camp next to vehicles</li> <li>Overflow walk-in camping area and an associated parking area separate from the camping area</li> <li>Areas where camping is prohibited</li> </ul> </li> <li>No camping within 100 feet of source springs</li> </ul>
Campfires	<ul style="list-style-type: none"> <li>User-created fire rings</li> <li>NPS-provided fire enclosures, grates, or grills</li> </ul>	<ul style="list-style-type: none"> <li><i>Remove user-created fire rings at campsites</i></li> <li>Retain communal fire ring at Lower Spring</li> <li>Encourage the use of NPS-provided fire enclosures, grates, grills, or firepans</li> <li>Visitors to haul out ash and charcoal</li> </ul>	<ul style="list-style-type: none"> <li><i>Remove user-created fire rings at campsites</i></li> <li>Retain communal fire ring at Lower Spring</li> <li>Encourage the use of NPS-provided fire enclosures, grates, grills, or firepans</li> <li>Visitors to haul out ash and charcoal</li> </ul>	<ul style="list-style-type: none"> <li>Removal of all fire enclosures and fire rings</li> <li>No campfires</li> </ul>	<ul style="list-style-type: none"> <li><i>Remove user-created fire rings at campsites</i></li> <li>Retain communal fire ring at Lower Spring</li> <li>Encourage the use of NPS-provided fire enclosures, grates, grills, or firepans</li> <li>Visitors to haul out ash and charcoal</li> </ul>

Management Elements	Alternative 1: No-Action Alternative	Alternative 2: Regulatory Compliance Alternative	Alternative 3: Community Engagement Alternative	Alternative 4: Restoration Alternative	Alternative 5: NPS Preferred Alternative to Recommend
"Chicken Strip" Airstrip	<ul style="list-style-type: none"> <li>Airstrip open for use; special regulation pending</li> <li>Camping allowed at airstrip</li> <li>Continuation of MOU with Recreational Aviation Foundation (RAF) for maintenance of the Chicken Strip airstrip</li> </ul>	<ul style="list-style-type: none"> <li>Airstrip open for use; special regulation pending</li> <li>Camping allowed at airstrip</li> <li>Visitors required to pack out waste</li> <li>Continuation of MOU with RAF for maintenance of the Chicken Strip airstrip</li> </ul>	<ul style="list-style-type: none"> <li>Airstrip open for use; special regulation pending</li> <li>No camping allowed at airstrip</li> <li>Allow for additional airplane tiedowns with NPS approval</li> <li>Continuation of MOU with RAF for maintenance of the Chicken Strip airstrip</li> </ul>	<ul style="list-style-type: none"> <li>Removal of the airstrip</li> <li>Chicken Strip airstrip removed from MOU with RAF</li> </ul>	<ul style="list-style-type: none"> <li>Airstrip open for use; special regulation pending</li> <li>Camping allowed at airstrip</li> <li>Allow for additional airplane tiedowns with NPS approval</li> <li>Continuation of MOU with RAF for maintenance of the Chicken Strip airstrip</li> <li>Visitors required to pack out waste</li> </ul>
<b>Cultural Resources</b>					
Ethnographic Resources	<ul style="list-style-type: none"> <li>Management of the Saline Valley Warm Springs Area as an area of ethnographic significance for the Tribe</li> </ul>	<ul style="list-style-type: none"> <li>Management of the Saline Valley Warm Springs Area as an area of ethnographic significance for the Tribe</li> <li>Consultation with tribes to identify and maintain ethnographic resources (e.g., native vegetation)</li> </ul>	<ul style="list-style-type: none"> <li>Management of the Saline Valley Warm Springs Area as an area of ethnographic significance for the Tribe</li> <li>Consultation with tribes to identify and maintain ethnographic resources (e.g., native vegetation)</li> </ul>	<ul style="list-style-type: none"> <li>Management of the Saline Valley Warm Springs Area as an area of ethnographic significance for the Tribe</li> <li>Consultation with tribes to identify and maintain ethnographic resources (e.g., native vegetation)</li> <li>Removal of all development and restoration to natural and ethnographic landscape</li> </ul>	<ul style="list-style-type: none"> <li>Management of the Saline Valley Warm Springs Area as an area of ethnographic significance for the Tribe</li> <li>Consultation with tribes to identify and maintain ethnographic resources (e.g., native vegetation)</li> <li>If necessary, preparation of MOU with SHPO and the Tribe for any adverse effects to ethnographic resources</li> </ul>
Historical Resources	<ul style="list-style-type: none"> <li>Management of the Saline Valley Warm Springs Area as an area of historical significance for recreational users</li> </ul>	<ul style="list-style-type: none"> <li>Management of the Saline Valley Warm Springs Area as an area of historical significance for recreational users</li> </ul>	<ul style="list-style-type: none"> <li>Management of the Saline Valley Warm Springs Area as an area of historical significance for recreational users</li> </ul>	<ul style="list-style-type: none"> <li>Documentation of and mitigation for the effects on elements of the proposed Saline Valley Warm Springs Historic Site</li> </ul>	<ul style="list-style-type: none"> <li>Management of the Saline Valley Warm Springs Area as an area of historical significance for recreational users</li> <li>If necessary, preparation of MOU with SHPO for any adverse effects to cultural resources</li> </ul>

Management Elements	Alternative 1: No-Action Alternative	Alternative 2: Regulatory Compliance Alternative	Alternative 3: Community Engagement Alternative	Alternative 4: Restoration Alternative	Alternative 5: NPS Preferred Alternative to Recommend
Archeological Resources	<ul style="list-style-type: none"> <li>NPS monitoring</li> </ul>	<ul style="list-style-type: none"> <li>NPS monitoring</li> </ul>	<ul style="list-style-type: none"> <li>NPS monitoring</li> <li>Monitoring by NPS-trained site stewards</li> <li>Increased education</li> </ul>	<ul style="list-style-type: none"> <li>NPS monitoring</li> <li>Monitoring by NPS-trained site stewards</li> </ul>	<ul style="list-style-type: none"> <li>NPS monitoring</li> <li>Monitoring by NPS-trained site stewards</li> <li>Increased education</li> </ul>
Bat Pole and Other Art	<ul style="list-style-type: none"> <li>Identify and manage National Register of Historic Places (NRHP)-eligible art</li> <li>Restrictions on artwork not actively enforced</li> </ul>	<ul style="list-style-type: none"> <li>Identify and manage NRHP-eligible art</li> <li>Non-historic artwork removed from wilderness</li> <li>No manipulation of natural or cultural resources (to include disturbance and collection) for the purposes of art</li> </ul>	<ul style="list-style-type: none"> <li>Identify and manage NRHP-eligible art</li> <li>Non-historic artwork removed from wilderness and backcountry area</li> <li>No manipulation of natural or cultural resources (to include disturbance and collection) for the purposes of art</li> </ul>	<ul style="list-style-type: none"> <li>Remove all artwork, including the bat pole</li> <li>Ongoing monitoring to prevent installations of new artwork</li> </ul>	<ul style="list-style-type: none"> <li>Identify and manage NRHP-eligible art</li> <li>Non-historic artwork removed from wilderness</li> <li>Retain existing artwork (as of January 1, 2019) in non-wilderness areas</li> <li>New art in non-wilderness allowed if natural and cultural resources are not manipulated, the art is not a permanent fixture, and the art is removed from the site when the visitor creating the art leaves the site</li> </ul>
<b>Infrastructure</b>					
Toilet Management	<ul style="list-style-type: none"> <li>NPS maintenance staff pumps vault toilets once or twice a year</li> </ul>	<ul style="list-style-type: none"> <li>NPS maintenance staff or contractors pump vault toilets once or twice a year</li> <li>Encourage visitors to pack out waste</li> <li>Education on the benefits of packing out waste</li> </ul>	<ul style="list-style-type: none"> <li>Vault toilets pumped as needed by NPS maintenance staff, by contractor, or through an MOU with user groups</li> <li>Encourage visitors to pack out waste</li> <li>Education on the benefits of packing out waste</li> <li>Additional toilets could be added to Lower Spring or Palm Spring, if necessary.</li> </ul>	<ul style="list-style-type: none"> <li>Removal of vault toilets</li> <li>Visitors required to carry out human waste</li> </ul>	<ul style="list-style-type: none"> <li>Vault toilets pumped as needed by NPS maintenance staff, by contractors, or through an MOU with user groups</li> <li>Visitors required to use toilet facilities or pack out waste</li> <li>Education on the benefits of packing out waste</li> <li>Additional toilets could be added to Lower Spring or Palm Spring, if necessary.</li> </ul>

Management Elements	Alternative 1: No-Action Alternative	Alternative 2: Regulatory Compliance Alternative	Alternative 3: Community Engagement Alternative	Alternative 4: Restoration Alternative	Alternative 5: NPS Preferred Alternative to Recommend
Dishwashing Stations	<ul style="list-style-type: none"> <li>Dishwashing stations would be retained</li> <li>Signage at sinks to indicate water is non-potable</li> </ul>	<ul style="list-style-type: none"> <li>Retain dishwashing stations and add filtration systems to catch food debris</li> <li>Signage at sinks to indicate water is non-potable</li> </ul>	<ul style="list-style-type: none"> <li>Retain dishwashing stations and add filtration systems to catch food debris</li> <li>Signage at sinks to indicate water is non-potable</li> </ul>	<ul style="list-style-type: none"> <li>Removal of dishwashing stations</li> </ul>	<ul style="list-style-type: none"> <li>Retain dishwashing stations</li> <li>Signage at sinks to indicate water is non-potable</li> </ul>
Settling pond	<ul style="list-style-type: none"> <li>Unfenced</li> </ul>	<ul style="list-style-type: none"> <li>Fence settling pond</li> </ul>	<ul style="list-style-type: none"> <li>Fence settling pond</li> </ul>	<ul style="list-style-type: none"> <li>Removal of settling pond</li> </ul>	<ul style="list-style-type: none"> <li>Fence settling pond</li> </ul>
Vehicle Assistance	<ul style="list-style-type: none"> <li>Continued vehicle repair by camp host</li> </ul>	<ul style="list-style-type: none"> <li>Remove vehicle support facility</li> <li>Emergency vehicle assistance should not be expected by the visiting public</li> </ul>	<ul style="list-style-type: none"> <li>Remove vehicle support facility</li> <li>Emergency vehicle assistance should not be expected by the visiting public.</li> </ul>	<ul style="list-style-type: none"> <li>Removal of vehicle repair support facility</li> <li>Emergency vehicle assistance should not be expected by the visiting public.</li> </ul>	<ul style="list-style-type: none"> <li>Remove vehicle support facility<sup>4</sup></li> <li>Emergency vehicle assistance should not be expected by the visiting public.</li> </ul>
Accessibility	<ul style="list-style-type: none"> <li>Tubs would not be altered to increase accessibility</li> </ul>	<ul style="list-style-type: none"> <li>To the extent possible, facilities would be made accessible.</li> </ul>	<ul style="list-style-type: none"> <li>To the extent possible, facilities would be made accessible.</li> </ul>	<ul style="list-style-type: none"> <li>All facilities would be removed and the site restored. The site would be accessed in the same manner as all backcountry sites in the park.</li> </ul>	<ul style="list-style-type: none"> <li>To the extent practical, while preserving potential significant historical features, facilities would be made accessible.</li> </ul>

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<sup>4</sup> The National Park Service would close the automobile repair facility when the current NPS camp host leaves or in 3 years, whichever comes first.



Management Elements	Alternative 1: No-Action Alternative	Alternative 2: Regulatory Compliance Alternative	Alternative 3: Community Engagement Alternative	Alternative 4: Restoration Alternative	Alternative 5: NPS Preferred Alternative to Recommend
Maintenance of Tubs, Roads, and Infrastructure	<ul style="list-style-type: none"> <li>• No expansion related to tubs<sup>5</sup></li> <li>• Upper Spring would remain undeveloped<sup>5</sup></li> <li>• Water diverted from source springs to soaking tubs, showers/bathtubs, and dishwashing sinks; all uses have dedicated piping directly from the source springs</li> <li>• Users/camp host(s) maintain plumbing infrastructure and tubs under NPS oversight</li> <li>• Maintenance of Warm Springs Road by users / camp host using large tires or other road drag</li> </ul>	<ul style="list-style-type: none"> <li>• No expansion related to tubs<sup>5</sup></li> <li>• Upper Spring would remain undeveloped<sup>5</sup></li> <li>• Water diverted from source springs to soaking tubs, showers/bathtubs, and dishwashing sinks; all uses have dedicated piping directly from the source springs</li> <li>• Users/camp host(s) maintain plumbing infrastructure and tubs under NPS oversight</li> <li>• Maintenance of Warm Springs Road by National Park Service in accordance with guidelines for four-wheel drive high clearance roads<sup>6</sup></li> </ul>	<ul style="list-style-type: none"> <li>• No expansion related to tubs<sup>5</sup></li> <li>• Upper Spring would remain undeveloped<sup>5</sup></li> <li>• Water diverted from source springs to soaking tubs, showers/bathtubs, and dishwashing sinks; all uses have dedicated piping directly from the source springs</li> <li>• Users/camp host(s) maintain plumbing infrastructure and tubs under NPS oversight</li> <li>• Maintenance of Warm Springs Road by National Park Service in accordance with guidelines for four-wheel drive high clearance roads<sup>6</sup></li> </ul>	<ul style="list-style-type: none"> <li>• All development and modifications would be removed and the site restored</li> <li>• No water diversion</li> <li>• Maintenance of Warm Springs Road by National Park Service in accordance with guidelines for four-wheel drive high clearance roads<sup>6</sup></li> </ul>	<ul style="list-style-type: none"> <li>• No expansion related to tubs<sup>5</sup></li> <li>• Upper Spring would remain undeveloped<sup>5</sup></li> <li>• Water diverted from source springs to soaking tubs, showers/bathtubs, and dishwashing sinks; all uses have dedicated piping directly from the source springs</li> <li>• Users/camp host(s) maintain plumbing infrastructure and tubs under NPS oversight</li> <li>• Maintenance of Warm Spring Road by National Park Service in accordance with guidelines for four-wheel drive high clearance roads<sup>6</sup></li> </ul>

<sup>5</sup> Per the 2002 GMP (NPS 2002a)

<sup>6</sup> As described in the Death Valley National Park Wilderness and Backcountry Stewardship Plan (NPS 2013a)

Management Elements	Alternative 1: No-Action Alternative	Alternative 2: Regulatory Compliance Alternative	Alternative 3: Community Engagement Alternative	Alternative 4: Restoration Alternative	Alternative 5: NPS Preferred Alternative to Recommend
Lower Spring Camp Host Site	<ul style="list-style-type: none"> <li>Retain permanent housing, water feature, drainage ditch, plumbing, solar array, government vehicles and personal items</li> </ul>	<ul style="list-style-type: none"> <li>Retain permanent housing, water feature, drainage ditch, plumbing, and personal items with housekeeping policy<sup>7</sup></li> <li>Allow for power system that complies with applicable regulations and cultural landscape</li> <li>Retain government vehicle</li> </ul>	<ul style="list-style-type: none"> <li>Remove permanent housing; host would provide temporary housing</li> <li>Retain water feature, drainage ditch, plumbing, and personal items with housekeeping policy<sup>7</sup></li> <li>Allow for power system that complies with applicable regulations and cultural landscape</li> <li>Retain government vehicle</li> </ul>	<ul style="list-style-type: none"> <li>Remove all elements of the camp host site</li> </ul>	<ul style="list-style-type: none"> <li>Remove permanent housing; host would provide temporary housing</li> <li>Retain water feature, drainage ditch, plumbing, and personal items with housekeeping policy<sup>7</sup></li> <li>Allow for power system that complies with applicable regulations and cultural landscape</li> <li>Retain government vehicle</li> </ul>
<b>Management</b>					
Camp Host	<ul style="list-style-type: none"> <li>Full-time camp host at Lower Spring; Seasonal camp hosts at Palm Spring</li> <li>Continue with current camp host term</li> </ul>	<ul style="list-style-type: none"> <li>Camp host(s) will be present</li> <li>Continue with current camp host term</li> </ul>	<ul style="list-style-type: none"> <li>Camp host(s) will be present</li> <li>Camp host term would be one year/season with possible reinstatement; host must re-apply annually</li> </ul>	<ul style="list-style-type: none"> <li>No camp host</li> </ul>	<ul style="list-style-type: none"> <li>Camp host(s) will be present—year-round camp host at Lower Spring and seasonal camp host at Palm Spring</li> <li>Camp host term would be one year with possible reinstatement; host must re-apply annually</li> </ul>

<sup>7</sup> Housekeeping policy: The grounds of the camp host site would be kept clutter free. The camp host would not make improvements to the camp host site and would not have more than two vehicles at the camp host site. As this is not a permanent residence, all items at the camp host site should be removable within a two-day notice. There should be no evidence of the host once he or she completes the camp host assignment.

Management Elements	Alternative 1: No-Action Alternative	Alternative 2: Regulatory Compliance Alternative	Alternative 3: Community Engagement Alternative	Alternative 4: Restoration Alternative	Alternative 5: NPS Preferred Alternative to Recommend
Education	<ul style="list-style-type: none"> <li>Some signs on campground boards</li> <li>Camp host disperses information</li> </ul>	<ul style="list-style-type: none"> <li>Education through various media focused on regulatory, health and safety, and compliance information</li> </ul>	<ul style="list-style-type: none"> <li>Education through various media focused on regulatory, health and safety, and compliance information</li> <li>Interpretive program to include signs on campground boards and engagement by camp host on topics such as potential for flooding, resource protection, visitor safety, relationship with the Tribe, and history of Saline Valley</li> </ul>	<ul style="list-style-type: none"> <li>Minimal outreach and education as appropriate for undeveloped backcountry area</li> </ul>	<ul style="list-style-type: none"> <li>Education through various media focused on regulatory, health and safety, and compliance information. Includes wayfinding, promoting preparedness for entering potentially harsh desert conditions, and removal of vehicle repair services</li> <li>Interpretive program to include campground board signs and engagement by camp host on topics such as potential for flooding, resource protection, visitor safety, relationship with the Tribe, and history of Saline Valley</li> </ul>
<b>State and Federal Regulations</b>					
Recreational Water Usage	<ul style="list-style-type: none"> <li>No water quality testing</li> </ul>	<ul style="list-style-type: none"> <li>Consult with the Office of Public Health to develop an approach for water quality monitoring</li> </ul>	<ul style="list-style-type: none"> <li>Consult with the Office of Public Health to develop an approach for water quality monitoring</li> </ul>	<ul style="list-style-type: none"> <li>Tubs would be removed and water from source springs would not be used for recreation purposes</li> </ul>	<ul style="list-style-type: none"> <li>Consult with the Office of Public Health to develop an approach for water quality monitoring</li> <li>Incorporate a subterranean system for treating wastewater<sup>8</sup></li> </ul>

<sup>8</sup> This plan/EIS analyzes the impacts on the environment and on human health from wastewater being diverted to a subterranean system. Prior to implementation, a separate NEPA process may be required for determining the appropriate type of subterranean system.

Management Elements	Alternative 1: No-Action Alternative	Alternative 2: Regulatory Compliance Alternative	Alternative 3: Community Engagement Alternative	Alternative 4: Restoration Alternative	Alternative 5: NPS Preferred Alternative to Recommend
Hazardous Materials Storage	<ul style="list-style-type: none"> <li>• Use and storage on-site not compliant with regulations</li> </ul>	<ul style="list-style-type: none"> <li>• Use and storage would meet Occupational Safety and Health Administration regulations</li> <li>• Removal of hazardous materials used or stored at the vehicle support facility</li> </ul>	<ul style="list-style-type: none"> <li>• Use and storage would meet Occupational Safety and Health Administration regulations</li> <li>• Removal of hazardous materials used or stored at the vehicle support facility</li> </ul>	<ul style="list-style-type: none"> <li>• Removal of all hazardous materials</li> </ul>	<ul style="list-style-type: none"> <li>• Use and storage would meet Occupational Safety and Health Administration regulations</li> <li>• Removal of hazardous materials used or stored at the vehicle support facility</li> </ul>

## ALTERNATIVE ELEMENTS ELIMINATED FROM FURTHER STUDY

During the alternatives development process, the following management actions were considered but dismissed for the following reasons:

**Eliminating Camping.** The National Park Service considered the option of eliminating camping at the Saline Valley Warm Springs Area. This alternative was dismissed because the Saline Valley Warm Springs Area is a difficult destination to reach for a day trip. Additionally, the Saline Valley Warm Springs Area is also often used as a staging area for visitors who want to explore Saline Valley through activities such as day hikes or bike rides. For these reasons, eliminating camping would be considered too big an impact on visitor experience; therefore, it was dismissed as a management option for the Saline Valley Warm Springs Area.

**Commercial Use.** The National Park Service considered commercial use and using concessionaire services to support the use of the soaking tubs. However, it was decided that this option was not feasible. The use of concessionaire services would likely cause conflicts between user groups and concessionaires; there could also be conflicts with the Tribe. Additionally, commercial services would likely promote more use of the Saline Valley Warm Springs Area. For these reasons, commercial use was dismissed as a management option for the Saline Valley Warm Springs Area.

**Intensive Development.** In addition to considering concessionaire services, the National Park Service, at the request of the Inyo County Board of Supervisors (cooperating agency), considered a full development alternative. Under this alternative, the Saline Valley Warm Springs Area would be converted into a resort-type destination. Intense development of the Saline Valley Warm Springs Area would increase economic development, but this alternative is not feasible due to the level of NPS management that would be required. Additionally, the National Park Service is tasked with improving and restoring the natural and cultural resources of the park. Intensive development would be inconsistent with this goal; it would not meet the purpose and need for this plan, as described in the “Purpose of and Need for Action” chapter. For these reasons, this alternative was considered but dismissed.

**Transfer the Saline Valley Warm Springs Area to BLM.** Based on internal discussions and public comments, the National Park Service considered the option of transferring the Saline Valley Warm Springs Area to BLM. The deletion of lands from the authorized boundaries of the park requires an act of Congress. In the event this action was pursued, the Saline Valley Warm Springs Area would continue to require a management framework by whichever federal agency was managing it, including BLM. This alternative would not provide a framework for resource management, administration, operations, and the management of visitor use at the Saline Valley Warm Springs Area. It would not provide the NPS guidance as they work with stakeholder groups in the area, and it would not promote partnership between the National Park Service and the Tribe. The transfer of the Saline Valley Warm Springs Area to BLM is outside the scope of the plan and would not resolve the need for action. Therefore, it was dismissed from further consideration.

## MITIGATION MEASURES

The National Park Service has incorporated mitigation measures for the protection of natural and cultural resources into alternatives 2, 3, and 5. These measures are identified in table 1 as italicized text.

Under alternative 4, the restoration of the Saline Valley Warm Springs Area would reduce impacts on natural and ethnographic resources. Under alternative 4, the National Park Service would mitigate the damages from removal of the Saline Valley Warm Springs Historic Site through complete documentation of the site.

Additionally, steps would be taken to minimize the effects of the fencing under the action alternatives. Alternatives 2, 3, and 5 would use artistic wood fencing similar to the existing fencing around the lawn at Lower Spring. The fencing for alternative 4 would be 5-feet high with four-strand smooth wire fence. The following measures would be taken to reduce the effects of construction of the fence and the visual intrusion on the landscape, which borders wilderness.

- An approved environmental monitor would be present on-site during construction to ensure the protection of environmental resources.
- Fencing construction methods and equipment would be used that would result in minimal ground disturbance and would minimize the visibility of track marks following construction.
- The National Park Service could specify the use of materials in the project plans that would blend into the landscape to reduce visual impacts from the presence of the fence.

While the alternatives require specific mitigation measures, best management practices related to public health and safety from flood events would apply to all alternatives. Drainage patterns indicate that Warm Springs Road is subject to flooding above and below the Saline Valley Warm Springs Area, and visitors attempting to evacuate the area using Warm Springs Road are likely to encounter flooded roadways. Roads are presented in appendix A, figure 3.

Mitigation measures for alternatives that would retain development at the Saline Valley Warm Springs Area and a camp host (alternatives 1, 2, 3, and 5) would be the same. In the event of a weather emergency, the camp host would personally communicate with each camper, advise them of flood warnings, and instruct them on how to reach higher safe ground. The higher safe ground is the bluff east of Lower Spring known as the art board and the rock alignment area and the bluff southwest of Palm Spring (appendix A, figure 4). These are areas where visitors the create artwork.

The camp host has the capacity to directly contact the park headquarters and the Inyo County Sheriff's Office for emergencies, such as law enforcement, emergency medical, and search and rescue events. The art board (at Lower Spring) and Bat Rock Road (approximately 1 mile west of the Saline Valley Warm Springs Area) have limited cell coverage, and some users have success using portable cellular booster equipment. Additionally, the Saline Valley Warm Springs Area has technology in place to aid in the event of an emergency, including a base station radio, a vehicle radio, a handheld Bendix King radio, a satellite phone and a weather station. The National Park Service provides all these items to the camp host.

Under alternative 4, the Saline Valley Warm Springs Area would not have a camp host with a site to store emergency contact equipment. Safety information, such as the higher safe ground at the Saline Valley Warm Springs Area, would be available at any of the ranger stations in the park. This is consistent with other backcountry areas of the park.

## ALTERNATIVES

# AFFECTED ENVIRONMENT



LOWER PEACE SIGN





# AFFECTED ENVIRONMENT

## INTRODUCTION

The “Affected Environment” chapter describes the resources that could be affected as a result of implementation of any of the alternatives. The descriptions of the resources provided in this chapter serve as an account of the baseline conditions against which the potential effects of the proposed actions considered in this Saline Valley Warm Springs Final Management Plan and Environmental Impact Statement (plan/EIS) are compared. The resource topics presented in this chapter and the organization of the topics correspond to the resource impact discussions contained in the “Environmental Consequences” chapter. The general project setting has been included to provide the background information necessary to understanding the resources and environmental setting of Death Valley National Park (the park). The following resources are included in this chapter: soils; vegetation (native species and nonnative species); wetlands; wildlife (native species and nonnative species); cultural resources (archeological resources, historical resources, and ethnographic resources); wilderness character; visitor use and experience; and human health and safety.

## General Project Setting

Death Valley National Park encompasses nearly 3.4 million acres of valley and surrounding canyons and mountains, including all of Death Valley, the Amargosa Range on the east and the Panamint Range on the west, as well as most of the Saline, Eureka, northern Panamint, and Greenwater Valleys (NPS 2002a). Saline Valley is an alluvial valley located in the northwest portion of Death Valley National Park, bordered by the Saline Range to the north, the Last Chance Range to the east, and the Inyo Mountains to the west (see appendix A, figure 1) (CA DWR 2004). The Saline Valley Warm Springs Area is small in comparison to the valley as a whole. The study area encompasses approximately 1,100 acres, including the backcountry area surrounding Lower and Palm Springs and Chicken Strip Airstrip (approximately 1,044 acres), roads in the backcountry that lead to Upper Spring and the bat pole (approximately 43 acres), and the social trail in designated wilderness that leads to the southern peace sign artwork (approximately 11 acres) (see appendix A, figure 2).

The Saline Valley Warm Springs Area is comprised of three distinct areas—the Lower Spring area, the Palm Spring area, and the Upper Spring area—and is considered one of the park’s developed backcountry campgrounds. Four source springs are associated with Lower Spring, two are associated with Palm Spring, and two are associated with Upper Spring (NPS 2012a; Friese 2015). The source springs emerge from the structural basin of Saline Valley between the Last Chance and Saline ranges. Past overflow from the source springs deposited minerals near the orifices, resulting in elevated crater-like spring mounds. The temperatures of the source springs range from 61.2°F to 117.0°F and the flow ranges from less than 1 liter per minute to 30 liters per minute.

A system of pipes and hoses has been created at the Saline Valley Warm Springs Area to divert water from the source springs to the soaking tubs, showers, dishwashing sinks, and other features. Figures 5a, 5b, and 6 in appendix A present the source springs and the piping that leads to the features at Lower Spring and Palm Spring; in most instances, the diversion pipes are buried. At Lower Spring, there are two source springs that supply water to developed features. The cold source spring is immediately diverted by a pipe into the Cool Pool, which is a tub that is no longer used for soaking. Water from the Cool Pool is led by pipe to the sprinkler that is used to water the lawn at Lower Spring. The warm source spring is diverted to seven features at Lower Spring. The Sunrise Pool is fed directly from the warm source spring by a pipe. Other pipes from the warm source spring lead to a pipe distribution box where they then travel

to the Crystal Pool, the bathtub, the shower, the dishwashing sink, the Children's Play Tub, the camp host's trailer, and the camp host's shower. Each feature at Lower Spring is fed by an independent pipe. The water from the Crystal Pool, Sunrise Pool, the bathtub, the shower, the dishwashing sink, and the Children's Play tub drain to the settling pond. Runoff from the lawn also drains to the settling pond. A hose from another source spring, Burro Spring, leads to a large barrel that is used as a wildlife trough. This trough overflows, and the water spills on the ground, watering a line of mesquite and associated ground cover herbaceous plants.

At Palm Spring, two warm source springs supply water to two soaking tubs, a shower, and a dishwashing sink. A pipe runs from the northern warm source spring, under Warm Springs Road, to the Wizard Pool. Another underground pipe leads overflow water from the northern warm source spring to the southern warm source spring. The southern warm source spring then feeds the Volcano Pool by an underground pipe. Another underground pipe leads water from the southern warm source spring to the shower and the dishwashing tub. When the Volcano Pool is emptied, water drains to the small grove of nonnative invasive palm trees next to the tub. Water from the Wizard Pool is drained to the palm grove directly south of it. This area supports a small area of grasses, but water is not diverted from the source springs to maintain the grass. Runoff from the shower and dishwashing sink drain to a wash behind these features.

Upper Spring is undeveloped and enclosed by a metal chain-linked fence, which serves to exclude feral burros. At Upper Spring, the water is not diverted from the natural spring, and there are no soaking tub, shower, dishwashing, or toilet facilities.

## SOILS

Death Valley National Park is a part of the larger Basin and Range Province, which is characterized by steep mountains and large flat expanses (USGS 2004). The Saline Valley Warm Springs Area lies within the Mojave Basin and Range, which contains widely spaced mountain ranges, running north to south, separated by broad basins, valleys and old lakebeds covering vast alluvial fans (NRCS 2006). This rugged landscape contributes to the composition of the soils of the Saline Valley Warm Springs Area.

The dominant soils of the Mojave Basin and Range are aridisols and entisols. Aridisols are the most common soils found in deserts; they are dry for most of the year and have little organic material. Entisols are relatively young soils usually with no horizons, or layers of rock with a particular composition. Entisols are generally found in steep rocky settings (University of Idaho n.d.). These soils have a thermic soil temperature regime and an aridic soil moisture regime (NRCS 2006). There are 16 soil types in the Mojave Basin and Range. Soils on the valley floor are characterized as well-drained to excessively drained with average slopes ranging from 0 to 15%, and a maximum slope of 50%. Soils of the higher elevations (mountains and terraces) are well-drained to somewhat excessively drained with slopes of 0 to 75% (NRCS n.d.). Soils with a greater potential for erosion are those with greater slopes, located on hillsides. The low slope of the valley floor makes the soils there less susceptible to erosion.

Although the soils of Saline Valley have little organic content from decaying plant material, biological soil crusts contribute nutrients and organic matter. Biological soil crusts are comprised of complex mosaics of cyanobacteria, green algae, lichens, mosses, microfungi, and other bacteria (USDI, BLM, and USGS 2001), and are found where vegetation is absent. Biological crusts are fragile and extremely susceptible to compaction and sedimentation (USGS 2001).

## VEGETATION

### Native Species

The vegetation of Saline Valley is characterized by vegetation assemblages referred to as communities. These vegetation communities are distinctive and described by their dominant vegetation type. National Park Service (NPS) botanists surveyed the vegetation surrounding the three spring areas in 2012. The results of this survey are presented in appendix F. The remaining vegetation communities in the study area are described based on vegetation mapping of the Central Mojave Desert (USGS 2002). Wetlands at the Saline Valley Warm Springs Area and the associated vegetation are described in detail in the “Wetlands” section. Creosote bush shrubland comprises the majority of the Saline Valley Warm Springs Area. This habitat is sparsely vegetated and dominated by creosote bush. Associated species can include burrobush (*Ambrosia dumosa*), Mojave indigo bush (*Psoralea arborescens*), Schott’s dalea (*P. schottii*), Baja desert-thorn (*Lycium brevipes*), water jacket (*L. andersonii*), burrobush (*Hymenoclea salsola*), brittlebush (*Encelia farinosa*), button brittlebush (*E. frutescens*), desert globemallow (*Sphaeralcea ambigua*), beavertail pricklypear (*Opuntia basilaris*), teddybear cholla (*O. bigelovii*), and Wiggins’ cholla (*O. echinocarpa*) (Calflora.net n.d.). Creosote bush shrubland occurs in the large backcountry area surrounding Lower and Palm Springs, as well as along most of the roads and social trail within the study area, covering approximately 860 acres of the study area.

The central portion of the study area surrounding Lower Spring is classified by US Geological Survey as sparsely vegetated (approximately 230 acres). This area has endured the greatest amount of disturbance from human activities (e.g., camping, driving) and contains altered habitat. Water diversion and irrigation have greatly increased the amount of vegetation at Lower Spring; however, much of this vegetation is nonnative and discussed in the “Nonnative Species” section below.

Native vegetation communities, creosote bush/burrobush (*Larrea tridentata*/*Ambrosia dumosa*) scrub and mesquite bosque, comprise the vegetation communities within the disturbed area at Lower Spring and Palm Spring (appendix A, figure 7). Creosote bush/burrobush scrub surrounds Upper Spring as well. At the Saline Valley Warm Springs Area, species associated with creosote bush/burrobush scrub include desert centauray (*Centaurea exaltatum*), desert holly (*Atriplex hymenelytra*), Mojave cleomella (*Cleomella obtusifolia*), and mesquite mistletoe (*Phoradendron californicum*) (Calflora.net n.d.). Several patches of mesquite bosque inhabit Lower Spring and there is one small patch at Palm Spring. Mesquite bosques at the Saline Valley Warm Springs Area are dominated by screwbean mesquite (*Prosopis pubescens*). Associate species include creosote bush and desertholly, as well as riparian species such as arrowweed, saltgrass (*Distichlis spicata*), and chairmaker’s bulrush (*Schoenoplectus americanus*) (Meyer 2005). Mesquite bosques occur at Lower Spring in the drainage area associated with Burro Spring, in the drainage area south of wetland 2, and east of the developed area. These areas range from 0.7 to 1.2 acres. The mesquite bosque at Palm Spring is approximately 0.08 acre and is located northeast of the source spring.

Desert holly shrubland, the other naturally occurring vegetation community is present along the social trail to the lower peace sign and along the road just southwest of Upper Spring (appendix A, figure 7). The shrubs in this community are generally small, with small leaves and small flowers, grayish, intricately branched and often spiny. The dominant species in this community is shadscale saltbush (*Atriplex confertifolia*). Other species in this community include spiny hopsage (*Grayia spinosa*), bud sagebrush (*Artemisia spinescens*), winterfat (*Kraschenennikovia lanata*), snakeweeds (*Gutierrezia* spp.), burrobush, blackbrush (*Coleogyne ramosissima*), spiny mendora (*Menodora spinescens*), and various species of jointfir (*Ephedra* spp.) (Calflora.net n.d.). This community accounts for approximately 8 acres of the study area.

## Nonnative Species

Based on the May 2012 vegetation survey, the study area contains 12 nonnative vegetation species (table F-1, appendix F). Lower Spring contains eleven of these nonnative species; Palm Spring contains six species; and Upper Spring contains three species.

Two species of palm trees are present in the study area, date palm (*Phoenix dactylifera*) and California fan palm (*Washingtonia filifera*). Users of the Saline Valley Warm Springs Area planted palm trees to create shade for the tubs. These palm tree species are not native to the Death Valley region and are invasive, meaning that their presence at the Saline Valley Warm Springs Area could cause harm to native plant communities. Birds and coyotes can carry the seeds of these nonnative invasive palms long distances to other riparian areas, where the palm trees can disrupt the desert ecology by shading native plants, monopolizing water resources, and increasing fire danger, if they become established (Cornett 1988). Both species of palms are present at Lower and Palm Springs, and California fan palms are present at Upper Spring.

A lawn of turf and nonnative grasses persists at Lower Spring because users planted and continue to hydrate it with water diverted from the source spring. The lawn consists of the following species: creeping bentgrass (*Agrostis stolonifera*), cheatgrass (*Bromus tectorum*), Bermudagrass (*Cynodon dactylon*), annual rabbitsfoot grass (*Polypogon monspeliensis*), cereal rye (*Secale cereale*), and St. Augustine grass (*Stenotaphrum secundatum*). Bermuda grass and annual rabbitsfoot grass also occur at Palm Spring and Upper Spring. These grasses range from heat tolerant (Bermudagrass and St. Augustine grass), to preferring cooler, humid climates (cereal rye and creeping bentgrass) (Texas A&M n.d.a; Texas A&M n.d.b; Texas A&M n.d.c; UCANR n.d.).

Saltcedar (*Tamarix ramosissima*), also known as tamarisk, is an introduced species and opportunistic invader of moist areas throughout Death Valley National Park, including Lower Spring. In Saline Valley, the National Park Service performed removal and treating efforts to control spread of saltcedar in 1984. Follow up surveys in 1987 showed resprouting of some of the cut and treated plants (NPS 1987). Although a single saltcedar can produce up to 600,000 very small seeds that can be widely dispersed by wind currents, saltcedar has not yet spread to Palm Spring and Lower Spring.

Two herbaceous nonnative species are present in the study area. Redstem stork's bill (*Erodium cicutarium*) is found at Lower Spring and Palm Spring. This is a pioneer species that prefers disturbed areas and arid climates and often crowds out or out-competes native species (ISSG 2005). Scarlet pimpernel (*Anagallis arvensis*) is found at Palm Spring. This nonnative herbaceous species crowds out natives by forming dense populations (University of Queensland 2011).

## WETLANDS

Section 404 of the Clean Water Act and a number of California state laws and provisions regulate activities in wetlands. Executive Order 11990: *Protection of Wetlands*, directs all federal agencies to avoid, to the extent possible, the long- and short-term adverse impacts associated with the destruction or modification of wetlands, and to avoid direct or indirect support of new construction in wetlands wherever there is a practicable alternative. In the absence of such alternatives, parks must modify actions to preserve and enhance wetland values and minimize degradation. Director's Order 77-1: *Wetland Protection* states that for new actions where impacts on wetlands cannot be avoided, proposals must include plans for compensatory mitigation that restores wetlands on NPS lands, where possible, at a minimum acreage ratio of 1:1 (NPS 2012b). Consistent with Executive Order 11990 and Director's Order 77-1, the National Park Service adopted a goal of "no net loss of wetlands" (NPS 2002b).

Formal wetland delineations have not been performed in Saline Valley, but wetland areas do exist at the site. To generally describe the existing wetland habitats, National Wetland Inventory (NWI) maps were reviewed and vegetation mapping completed by the park has been examined in conjunction with historic and current aerial photographs. In addition to the wetlands described below, artificial tubs supporting wetland vegetation are present at both Lower and Palm Springs due to spring diversion activities. The National Park Service requires *all natural and artificial wetlands* in the study area to be described (NPS 2012b). The National Park Service describes “artificial” wetlands as those areas that have been created on former uplands or in deepwater habitats as a result of human activities; such wetlands may be *incidental* or may be *intentional* (NPS 2012b). Artificial wetlands can be excluded from wetlands statements of findings and compensation requirements if, after evaluation of impacts on wetland functions and values, the anticipated wetland loss or degradation is determined to be minor (NPS 2012b). The vegetation mapping is presented in appendix A, figure 7.

## Lower Spring

At Lower Spring, wetlands exist in their current state partially due to hydrology supplied through diversions of the natural springs. Water from the warm and cold source springs is diverted using pipes to supply the Sunrise Pool, the Crystal Pool, the Children’s Play Tub, the shower, and the sink. Water from Burro Spring is diverted via a hose and creates a riparian corridor. The piping, hosing, and soaking tub overflow that diverts water into areas that would likely be dry under natural conditions, but currently supports wetland vegetation. The NWI maps indicate that two wetland areas exist at Lower Spring: a palustrine, emergent, saturated (PEMB) wetland and a palustrine, unconsolidated bottom, permanently flooded (PUBH) wetland. Comparisons of historic aerials from 1947 (approximately the time when development began at the springs) to present show that the vegetated areas at Lower Spring have increased in size, particularly the lawn area, the drainage area south of the settling pond, and the drainage area west of Burro Spring (appendix A, figure 8). These changes suggest that the unnatural diversion of water has influenced the habitat of the Saline Valley Warm Springs Area.

Park biologists have identified three distinct wetland areas (wetlands 1, 2, and 3) that occur at the Lower Spring area (appendix A, figure 7). Wetland 1 includes three small and isolated palustrine emergent wetland areas (PEM1), totaling approximately 0.35 acre in size supported by a separate warm source spring. The dominant plant species at wetland 1 are identified as whiteflower rabbitbrush (*Chrysothamnus albidus*) and a rush species (*Juncus* sp.). Based on the habitat and vegetative characteristics, the rush species is most likely Cooper’s rush (*Juncus cooperi*); however, at the time of vegetation surveys, the inflorescences of the plants have been grazed by feral burros, making positive identification impossible. Whiteflower rabbitbrush and Cooper’s rush are both on the California Native Plant Society watch list and are identified as vulnerable in California. Whiteflower rabbitbrush is a perennial evergreen shrub that grows in chenopod scrubs, meadows and seeps, and saline or alkaline playas. This species is threatened by hydrological changes, and possibly by vehicles and nonnative plants (CNPS 2013). Cooper’s rush is a perennial herb found in meadows and seeps. Threats to this species include changes in hydrology and grazing (CNPS 2016). Whiteflower rabbitbrush does not have a hydrophytic status (USDA 2014a). In contrast, Cooper’s rush has the hydrophytic status of facultative wetland (FACW), or “usually occurs in wetlands” (USDA 2014b). At Lower Spring, the whiteflower rabbitbrush/Cooper’s rush wetlands are unique in that they are naturally occurring with no water diverted from springs. The whiteflower rabbitbrush / Cooper’s rush marshes have intrinsic value, as noted in table 2. The wetlands act as a wildlife habitat and support the whiteflower rabbitbrush.

TABLE 2. FUNCTIONS AND VALUES OF WETLANDS FOUND AT LOWER AND UPPER SPRINGS

Wetland	Lower Spring			Upper Spring
	Wetland 1 (PEM1) 0.35 acre	Wetland 2 (PUBr) 0.027 acre	Wetland 3 (PSS1) 0.89 acre	Wetland 4 (PEM1/PSS1) 0.65 acre
Functions				
Groundwater recharge/discharge				
Floodflow alteration		x		x
Fish and shellfish habitat		x		x
Sediment/toxicant retention		x		
Nutrient removal				
Production export				x
Sediment/shoreline stabilization				
Values				
Wildlife habitat	x	x	x	x
Recreation				
Education/scientific				x
Uniqueness/heritage				x
Visual quality/aesthetic				x
Endangered species habitat	x			

PEM1 = palustrine emergent wetland

PUBr = palustrine, unconsolidated bottom, artificial

PSS1 = palustrine scrub-shrub

Wetland 2, the settling pond and associated vegetation, is located at the southern edge of the developed area of Lower Spring and is approximately 0.027 acre in size (appendix A, figure 7). Wetland 2 is characterized as a palustrine, unconsolidated bottom, artificial (PUBr) wetland. Discharge water from the two Lower Spring soaking tubs, the sink, and the shower ultimately drain into this settling pond, as well as runoff from the sprinkler used to water the lawn. The settling pond is located in a developed area and the hydrology from the springs supports date palm and California fan palm, both nonnative invasive species. California fan palm has the hydrophytic status of FACW while date palm has no hydrophytic status (USDA 2014c, d). The settling pond itself is an open water area stocked by users of the Saline Valley Warm Springs Area with nonnative koi (*Cyprinus carpio*) and western mosquito fish (*Gambusia affinis*). Although it is perpetuated by artificial drainage, the settling pond performs several functions and has value. These functions include helping to reduce flood damage by retaining water, providing habitat for fish, retaining runoff, and collecting graywater. Graywater may contain cleaning supplies and water drained from the tubs, sinks, and showers, and rinse water from the sinks. The settling pond intercepts these toxicants and fertilizer from the lawn from entering the surrounding upland habitats. The value of the settling pond comes from its ability to provide wildlife habitat. Wildlife such as great blue herons (*Ardea herodias*), an occasional visitor, and American coots (*Fulica americana*), seasonal residents, use the settling pond. The coots have become habituated to humans, as they are regularly fed illegally by users and graze the lawn adjacent to the settling pond.

Wetland 3 is also located at Lower Spring and is a riparian wetland characterized as a palustrine scrub-shrub (PSS1) wetland dominated by arrowweed (*Pluchea sericea*). Arrowweed is a shrub that often persists in drainages and washes and has a hydrophytic status of FACW (USDA 2014e). Wetland 3 is approximately 0.89 acre in size and occurs southwest of the developed area containing the soaking tubs, water diversion infrastructure, and the settling pond. Cattails (*Typha* sp.), rushes, bulrushes (*Scirpus* sp.), and saltgrass are often associate species of arrowweed (Davis et al. 1998) and likely also occur at this wetland. The arrowweed scrub habitat at Lower Spring provides wildlife habitat (table 2); however, due to the small area of scrub, the quality of the habitat is limited.

## Palm Spring

Although the NWI maps indicate that a palustrine, scrub-shrub saturated (PSSB) wetland is present at Palm Spring, park biologists have indicated that no true wetlands are present in the Palm Spring area (appendix A, figure 7). There are two source springs at Palm Spring that flows into the Volcano Pool and the Wizard Pool. The areas beyond these two soaking tubs where the tubs drain into the surrounding vegetation provide some limited hydrology. Plants with a hydrophytic status are present; however, the area is not considered to support a functioning wetland. For example, several native hydrophytic plants were observed at Palm Spring during vegetation surveys, including beaked spikerush (*Eleocharis rostellata*) and desert centaury. Three nonnative hydrophytic plants also occur at Palm Spring, including California fan palm, annual rabbitsfoot grass, and scarlet pimpernel. However, these areas do not provide any functions or values and are therefore not characterized as wetlands.

## Upper Spring

The Upper Spring area is the most natural setting at the Saline Valley Warm Springs Area since no bathing tubs or diversions exist at Upper Spring. The NWI maps indicate that one wetland area (PSSB) exists. This wetland is referred to as Wetland 4 and actually exists at the site as a PEM1/PSS1 wetland, totaling approximately 0.65 acre. Two springs provide hydrology to Wetland 4. The first of these is the warm source spring, which is surrounded by a fence to exclude feral burros from the source spring, while the other spring, the cold source springs, is located outside of the burro fence. The vegetation at this wetland is dominated by hydrophytic species including beaked spikerush, chairmaker's bulrush, arrowweed, yerba mensa (*Anemopsis californica*), screwbean mesquite, and California loosestrife (*Lythrum californicum*). Although not native, the California fan palm and annual rabbitsfoot grass are additional hydrophytic species that occur at Upper Spring. The wetland at the Upper Spring (wetland 4) consists of a small area (0.029 acre) comprised of chairmaker's bulrush and beaked spikerush where the pool is located, surrounded by arrowweed scrub (0.62 acre) (appendix A, figure 7). This wetland performs several functions and has several natural values (table 2). This wetland acts to help reduce flood flow by retaining water. Wetland 4 acts as habitat for arthropods and produces food for other wildlife. Wetland 4 has several intrinsic values, such as providing wildlife habitat. As it is the most pristine of the wetlands at the Saline Valley Warm Springs Area, wetland 4 is a source of scientific value. It also provides aesthetic and recreational values, as visitors occasionally use Upper Spring for soaking. Finally, Upper Spring has a link to the heritage of the Saline Valley Warm Springs Area in comparison to the developed nature of Lower and Palm Springs. The Timbisha Shoshone Tribe (the Tribe) has traditionally used the source springs at Saline Valley, and the ethnographic values are part of the heritage of Upper Spring; due to the lack of development, this spring may retain the greater presence of ethnographic resources.



## WILDLIFE

### Native Species

Native wildlife in Saline Valley is typical of desert habitats, with the majority of wildlife species being small in stature and nocturnal. Death Valley National Park is home to many native species including 51 mammal species, 307 bird species, 36 reptile species, 3 amphibian species, and 5 fish species (NPS 2013b). Common species at the Saline Valley Warm Springs Area include kangaroo rats (*Dipodomys* spp.), common ravens (*Corvus corax*), and coyotes (*Canis latrans*). Appendix F presents wildlife species that have been observed within the study area or are expected to occur there.

Springs occur throughout the Death Valley National Park. Some springs dry periodically while others are reliable water sources. As a consequence of their lengthy isolation and long-term persistence, many Death Valley springs support pupfishes and aquatic macroinvertebrates that are endemic to the park. Typically, the invertebrate community of desert springs and springbrooks are dominated by spring snails and most springs contain amphipods (NPS 2013a).

### Nonnative Species

Nonnative wildlife species that occur or are likely to occur in the study area include feral burros, house sparrows (*Passer domesticus*), and European starlings (*Sturnus vulgaris*). Additional species that have been introduced to the aquatic habitats at the Saline Valley Warm Springs Area include western mosquito fish, koi, and Louisiana swamp crayfish (*Procambarus clarkii*). These aquatic species could migrate through natural means such as flooding or through intentional human interaction.

Burros were introduced to the Death Valley region in the 1800s and were used into the early 20th century by prospectors and miners. Most of the free-roaming burros in the region at that time were either escaped from mining operations or were abandoned by the miners (Sanchez 1974). Feral burros are well adapted to the Mojave Desert environment and reproduce at a rate of 20 to 25% annually, potentially doubling the population size every 4-5 years. Feral burros compete with native animals for resources; impact soils, sensitive species, and cultural resources through trampling; and foul water sources (NPS 2013a).



*Feral burros at camp host site at Lower Spring*

From about 1920 to the 1960s, feral burro populations were kept at low levels by government agencies like the National Park Service and by the public. These efforts to reduce or eliminate feral burros from national park lands were the response of park managers to the burros damaging park resources and changing the ecological composition at the expense of the park's native biotic communities. Major efforts to reduce feral burro numbers were stalled in the 1960s and early 1970s due to public outcry. Since that time, several efforts have been taken to reduce and eventually eliminate feral burros from Death Valley National Park and

surrounding areas, including live trapping and shooting and roundup and removal of live burros by animal protection groups (NPS 2002a). The last burro removal effort was in 2005. The National Park Service reduced feral burro numbers park-wide to an estimated 200–400 animals. Invasive burros increase their population numbers by approximately 20% each year, and park staff now estimate between 2,000 and 4,000 burros may occur within the park.

The park has a “no burro or wild horse” goal and has a three-phase strategy to remove all wild horses and feral burros from the park. In 2018, the National Park Service entered into a 5-year agreement with the Texas-based nonprofit Peaceful Valley Donkey Rescue to capture 2,500 burros from Death Valley National Park and relocate them to offsite adoption facilities and sanctuaries. Relocations will be done through a public-private partnership with minimal cost to the government. Peaceful Valley’s burro project at Death Valley National Park is entirely funded by private donations, foundation grants, and corporate sponsorships. Peaceful Valley will use humane methods to capture burros. One method is to bait burros into a temporary pen with water or food. Wranglers on horseback may also drive the animals into temporary corrals. Peaceful Valley will transport burros to temporary holding facilities before transferring them to a training facility. Trainers will work to prepare the burros for adoption.

## CULTURAL RESOURCES

The Saline Valley Warm Springs Area contains a number of cultural resources. These can be divided into two groups – those associated with the prehistoric occupation of Saline Valley and those associated with historic period occupation. Human habitation of Saline Valley extends back thousands of years into the past and according to the traditions of the Tribe, they have inhabited the Death Valley region since time immemorial (Catton 2009). The Tribe’s homelands encompass the entirety of Death Valley National Park (Rucks 2016). Archeological evidence for human occupation extends back to 9,000 B.P. and can be divided into six broad periods based on the type and style of artifacts recovered in archeological studies (table 3) (Giambastiani et al. 2005).

**TABLE 3. CULTURAL CHRONOLOGY FOR THE SALINE VALLEY WARM SPRINGS AREA**

Period	Alternate Name	Date Range
Death Valley I	Early Holocene	9,000-7,000 B.P.
Early Death Valley II	Middle Holocene	7,000-4,000 B.P.
Late Death Valley II	Late Holocene	4,000-1,500 B.P.
Death Valley III		1,500-650 B.P.
Death Valley IV		650-100 B.P.
Ethnohistoric Period		100 B.P. to Present

Source: Giambastiani et al. 2005

The study area lies approximately between 1,000 and 2,000 feet in elevation. Within the cultural periods described in table 3, archeologists note that the following types of sites are the most frequently encountered: cleared circles, geoglyphs, hunting blinds, hunting camps, lithic quarries, lithic scatters, lithic workshops, rock rings, and trails (Giambastiani et al. 2005). The most prevalent of these are hunting blinds, cleared circles, lithic quarries, or lithic scatters/workshops. Hunting blinds in particular were located between 1,000 and 2,000 feet and placed in proximity to bighorn sheep trails and water sources (Brook 1980 in Giambastiani et al. 2005).

Within the park, in the Death Valley I period, people followed a nomadic hunter-gatherer lifestyle and took advantage of different ecosystems within the park, using upland locations, as well as the edges of Lake Manly (Giambastiani et al. 2005). As the weather warmed during the Death Valley II occupation, sites become less common in the park. This period saw a shift away from tools manufactured with milky quartz and chalcedony to those made with volcanic rocks. Grinders have not been found at either Death Valley I or II sites. By the late Death Valley II occupation, the climate was improving again, which increased game populations, and the growing human population of Death Valley was exploiting different

vegetation. Mortars and pestles, as well as evidence for long distance trade, appear in the archeological record during this period. In the Death Valley III period, the bow and arrow appear, and growing numbers of grinders are found at occupation sites. Death Valley IV continued many of the trends begun in Death Valley III, including the reuse of sites that had been occupied before but also saw the development of pottery making, basketry and the introduction of the glass trade bead (Giambastiani et al. 2005). Based on the archeological record within the Death Valley IV population, it is likely that more than one ethnographic group was present. It is not known whether the Shoshone culture developed in Death Valley and spread out through the Great Basin, or if this culture arrived at a later date in Death Valley from elsewhere in the Great Basin.

According to Giambastiani et al. (2005) the following groups were present in the Death Valley 100 years ago:

The Shoshone occupied the northern part of the valley, including most of the bordering Cottonwood and Grapevine mountains. The southern part of the valley, including the area southeast of modern-day Furnace Creek, was settled by the southern Paiute. Finally, the Kawaiisu occupied the extreme southern end of the Valley and parts of the Panamint range.

Today's Tribe, who are affiliated with Saline Valley in the 19th and 20th centuries, are descended from the Panamint Shoshone (Rucks 2016). Additionally, the Owens Valley Paiute may have lived and hunted within Saline Valley. For both of these groups, the availability of water partially accounts for their prehistoric and historic use of the Saline Valley Warm Springs Area, as well as areas around the canyons of the Last Chance and Nelson mountain ranges. Habitation and more long-term use sites tend to be located near permanent water sources. Temporary occupation sites in Saline Valley are generally smaller and were used more during the winter months (Edwards AFB 2003).

The first Euro-American trappers and entrepreneurs arrived in the Death Valley area in the 1820s (Rothman 2005). While the 49ers, early railroad surveyors, and military expeditions all passed near, or mentioned, Saline Valley, the first group of Euro-Americans to become interested in describing Saline Valley seems to have been biologists from the US Department of Agriculture in 1891 and borax and salt miners at the beginning of the twentieth century (Unrau 1997; Treadwell 1884). Even though industry-mining officials did not become interested until the turn of the century, individual miners had already begun to exploit the mineral riches 20 years earlier. The Saline Valley Warm Springs Area appears for the first time on a map in the 1904 Map of Inyo County, California by A. M. Strong. The only two features noted in Saline Valley are the "Hot Springs" and the "Borax Works." Large-scale salt mining at the Saline Valley salt lake is thought to have begun around this same time. Between 1910 and 1913, the Saline Valley Salt Works constructed the Saline Valley Cable Tramway to move high-quality salt from the salt lake across the Inyo Mountains to Owens Valley where it was milled and packaged (Owens Valley History 2014). The tramway was the steepest in the United States. Although it was an engineering feat, it was costly to run and keep in repair. It was in use sporadically from 1913 to 1936 (Owens Valley History 2014). The tramway was listed on the National Register of Historic Places (NRHP) in 1974. During the later nineteenth century and throughout the twentieth century, some ranchers and miners, both Native American and Euro-American, have made the canyons of the valley their home. Potential historic sites and historic archeological sites for Saline Valley would include historic mining and ranching sites, as well as later period recreational sites.

Recreational use of the Saline Valley Warm Springs Area began likely in the 1940s and was conclusively in use from 1955 to the present. In 1955, the springs were identified as a destination on a tourism map of Inyo and Mono counties. (For a detailed timeline of the physical development of the recreational site at the springs, see the "Visitor Use and Experience" section later in this chapter.)

In a letter to the State Historic Preservation Officer (SHPO) on May 23, 2017, the National Park Service identified the preferred alternative and the proposed area of potential effect. The area of potential effect at the Saline Valley Warm Springs Area is defined as the camping areas, the developed area, the Chicken Strip airstrip, and the boundaries of the proposed historic and ethnographic districts. The SHPO responded on July 20, 2017 and concurred that the proposed area of potential effect was sufficient to determine the direct and indirect effects of the alternatives.

## Archeological Resources

**Prehistoric Archeological Surveys and Sites.** There have been a number of archeological investigations in Saline Valley; however, only four of these have occurred in the Saline Valley Warm Springs Area (tables 4 and 5). In 1931, archeologist Clifford Park Baldwin, who was studying the Owens Valley Paiute for the Southwest Museum in Los Angeles and the Eastern California Museum in Independence, completed the first archeological investigations in Saline Valley (Unrau 1997). Baldwin and his team drove first to Lower Spring where they noted the presence of a wickiup that had been photographed by Kerr eight years earlier in 1923. They continued to the Upper Spring where they spent three days exploring caves, looking at rock circles, and finding artifacts such as projectile points, pottery sherds, and basketry fragments. On their return trip, they stopped at the “Middle Spring” (Palm Spring) area and noted a group of obsidian knives and chips (Baldwin 1931). Three sites were recorded at or near the springs at this time. The next survey was completed in the 1970s by the Bureau of Land Management (Robarchek 1972). The third study was completed by Brook et al. and documented in 1976 (as cited in Durk 2014), but the sites were not identified in the report. The fourth study was completed in 1997/1998 (Brewer et al. 2000). This study completed an Archeological Inventory and Assessment at numerous locations in the park considered at-risk, including the Saline Valley Warm Springs Area. That survey recorded 80 isolates and relocated one site, INY-163 (CA-INY 0406). In 1999, Canaday completed a study of the vault toilet locations before installation (as cited in Durk 2014). No sites were located in that effort. McCuiston completed condition assessments of 67 sites in Death Valley in 2011. Two previously identified sites could not be relocated, and one (CA-INY-1823) was described as poor/destroyed. The sixth study was completed by Death Valley National Park in 2011 and described archeological findings for the Saline Valley Warm Springs Area (Bonstead 2011 and 2013). Bonstead (2011) noted that evidence for the two previously recorded archeological sites (INY-1569 and INY-163) was scarce and the sites’ conditions were poor (table 4). Finally, the most recent study (Durk 2014) was conducted by Death Valley archeologists in 2014 and resulted in the identification of three new sites in the study area.

**TABLE 4. ARCHEOLOGICAL SURVEYS CONDUCTED IN THE SALINE VALLEY WARM SPRINGS AREA**

DEVA Project No./Year	Author(s)	Sites
1931	Baldwin, Clifford Park	CA-INY-0405 (INY-1569) and CA-INY-0406 (INY-163)
1976H	Brook, Richard and Eric Ritter	Sites not listed, but one was likely CA-INY-1823
1997C	Brewer, Harold et al.	80 Isolated Artifact Finds and relocated CA-INY-0406
1999T	Canaday, Tim	No Findings
2011	McCuiston, Emily	Relocated CA-INY-1823, could not relocate CA-INY-0405 and CA-INY-0406
2011 (11-036)	Bonstead, Leah	Could not relocate CA-INY-0405, CA-INY-0406, and CA-INY-1823
2014 (15-006)	Durk, Jennifer	Located three new sites, SV-01, SV-02, and SV-03

**TABLE 5. PREHISTORIC ARCHEOLOGICAL SITES RECORDED IN THE SALINE VALLEY WARM SPRINGS AREA**

Site Number	Recorded by	Description
CA-INY-0405 (INY-1569)	Baldwin 1931	Long-term camp / “village” – Lower Spring vicinity, Brush Shelter (observed in 1923 and 1931, not relocated 2011).
INY-1571	Baldwin 1931 (site number referenced in Robarchek 1972, relocated 1972)	Upper Spring Vicinity.
CA-INY 0406 (INY-163)	Baldwin 1931; Brewer et al. 2000; Bonstead 2011	Campsite/artifact scatter – Palm Spring. Not relocated 2011.
INY-1576	Noted in Robarchek 1972	Glass beads, pottery fragments, flakes, condition good 2011.
CA-INY-1823 (INY-124)	Recorded in 1976, (likely by Brook et al., as cited in Durk 2014)	Lithic scatter, Upper Warm Spring, condition poor/destroyed 2011.
80 Prehistoric Isolates	Brewer et al. 2000	Predominantly lithics throughout study area
SV-01	Durk 2014	Artifact scatter with metate and two flakes, Palm Spring vicinity.
SV-02	Durk 2014	Lithic concentration, Palm Spring vicinity.
SV-03	Durk 2014	Multiple rock cairns, Warm Springs Road south of Lower Springs.

**Historic Archeological Sites.** At present, no historic archeological sites have been recorded in the Saline Valley Warm Springs Area, with possible exception that the stone dwelling near the Upper Spring, INY-124 may be a mining cabin, not a prehistoric dwelling.

## Historical Resources

In 2014, the National Park Service completed a Determination of Eligibility (DOE) to identify and evaluate historic resources in the Saline Valley Warm Springs Area and determine if the site is eligible for nomination to the NRHP (New South 2015). The “historic” DOE considered the potential significance of the site from the perspective of the Euro-American use and development from the 1930s to the present. The National Park Service completed consultation with the SHPO under section 106 of the National Historic Preservation Act of 1966 (NHPA). The National Park Service sent a consultation package with the identification of historic properties (including archeological surveys and DOE documents for the historic and ethnographic sites) and the Assessment of Effect to the SHPO on February 15, 2018. Per 36 Code of Federal Regulations (CFR) 800, “Protection of Historic Properties,” the SHPO had 60 days from the time the package arrived to respond formally. The National Park Service did not receive a formal response but sent another letter in July 2018, requesting SHPO comments or concurrence by the end of August 2018. The National Park Service did not receive a formal response at the time of completing this report; therefore, in accordance with 36 CFR 800.5(c)(1), the National Park Service would proceed with the undertaking once a decision is made. The National Park Service would continue to treat the Saline Valley Warm Springs Historic District as eligible for listing on the NRHP for this project and future projects. The historic DOE also recommended that a Cultural Landscape Inventory and possibly a Cultural Landscape Report be prepared for the Saline Valley Warm Springs Historic Site (New South 2015). A Cultural Landscape Inventory and a Cultural Landscape Report would be appropriate to complete in the future to provide guidance on how to maintain the cultural landscape at the Saline Valley Warm Springs Area.

The DOE recommends that the area of historic significance for the recreational users is significant at the local level under Criterion A for recreation as a campground established around a hot springs site in use by Euro-Americans since 1955. Additionally, the DOE recommends that the area of historic significance is significant for social history. The site typifies the ideals and principles of a continuum of counterculture movements, in particular the Beat and Hippie movements and the social trends that influenced them, such as nudism or naturism. The contributing resources at the site reflect these social movements in the California Deserts. The site's earliest use for tourism and visitation was tied to primitive recreationism and the rise in the automobile tourism that occurred during the post-World War II economic boom. The site is not easily accessed on foot or by horseback, and even motorized vehicles need to be prepared for rough roads and a lack of services. The appropriate type of off-road vehicle became more widely available after World War II.

The springs saw frequent but light use through the 1940s and 1950s with visitation increasing, as well as the length of time individuals were staying at the site, through the early 1960s. Evidence that the site was seeing heavier recreational usage leading up to 1965 was implied by the perceived need to clean up the site and encourage a different type of self-motivated and community-motivated upkeep of the campsites and springs. In 1965, the site cleanup was organized and later that year the Sunrise Pool was built, marking the start of increasing development at the springs and the evolution of the unique community at the site.

From 1965 to 1978, there were many additions to the landscape at the springs: five pools were constructed at the site; the source springs became off-limits to soakers; the users began to increasingly build campfire rings and other small additions to frequently used camping areas; and the communal areas of the sites were established. This movement of visiting the desert for recreation was very popular from the 1930s through the 1970s in California, throughout the West, and Saline Valley. Deserts became a unique destination due to their lack of oversight, private ownership, and commercialization for these years. Most of the hot and warm spring sites in the West are heavily used, commercialized, privately owned, or overdeveloped. According to the longtime visitors to the springs, many of whom have visited numerous springs throughout the western United States, the Saline Valley Warm Springs Area is unique as a recreational resource with a combination of beauty, remoteness, facilities, and community.

In the 1950s, members of the Beat Generation, who opposed society's status quo, celebrated a return to nature and the basics, as well as a non-materialistic lifestyle. Bored of the sameness of the expanding American suburbs, many sought escape from their daily lives in wild, remote, outdoor destinations, such as Saline Valley. People came to Saline Valley for recreation to "get away from it all." Noted sculptor Gordon Newell, who was a member of the Beat Movement in California, left his life in the commercial culture of Hollywood for a simpler existence in nearby Darwin, California, and likely found visiting the Saline Valley Warm Springs Area as an even greater escape.

Sometime during the 1950s or 1960s, a culture that either accepted or embraced nudity began at the springs. Naturists sought out remote locations where they could recreate and vacation in the nude. During the period of significance for the springs, nudity gradually went from being occasional, or at least accepted at the springs, to being the norm, particularly where soaking in the tubs was concerned. This was reflective of a larger counterculture movement in California. Where once only more fringe elements of society like the Nature Boys frequented the California Deserts in the nude, soon nudity was embraced by many in the Hippie Movement as well. The springs became a recreational haven where naturists and nudists could feel safe and accepted.

As the Hippie Movement flowered, their ideals found a strong expression in the recreational landscape that continued to evolve at the springs. Soaking pools and rugged campsites accompanied a communal fire ring for socializing, singing, and celebrating. The landscape that developed, particularly at the Lower

Spring, exhibited the communal lifestyle favored by the Hippies with shared cooking, bathing, and social areas in the site. The fact that Charles Manson and members of his family came to the springs circa 1968, presumably for recreation, is notable; not in the context of their later terrible crimes, but in the context of their participation in the Summer of Love and embrace of a semi-nomadic Hippie lifestyle. During this period people spent months or years at the springs, often leaving during the hottest months of summer and returning in the winter. Spending time at the springs has for many become a multigenerational, recreational, and experiential tradition.

The area of historic significance for the recreational users is also recommended significant under Criterion A for social history. The period of development for the site coincides with a strong counterculture social movement in American history. Populated by a segment of American society that had become disillusioned with the political and social establishment, the Counterculture Movement emerged in the 1930s with a back-to-nature approach and continued through the post-war era of the mid-1940s. The Beat Movement of the 1950s and the Hippie Movement of the 1960s and 1970s grew from the earlier counterculture movements of the early and mid-twentieth century, such as the Nudist Movement and the German Wandervogel Movement. The Hippie Movement would then coincide, and in many cases comingle with, the Anti-War Movement, the Feminist Movement, the Civil Rights Movement, and the Environmental Movement. The 1960s and early 1970s were a time of significant upheaval in American society, and the Beat and Hippie Countercultures that developed at the time clearly flourished at the Saline Valley Warm Springs Area and continue to thrive there to this day. At present, the site seems to be overlaid with the many layers of countercultural beliefs of its users.

For members of the Beat Generation, places like Saline Valley were distant places where one could get away from the greater materialistic American society of the 1950s. Like the primitive recreationists, the Beats sought out wild destinations and lauded literary works such as Henry David Thoreau's *Walden*. They felt that real creative moments flowed from experiencing all aspects of the world, beautiful and ugly. A desert landscape that is both challenging and beautiful like Saline Valley would certainly have fit this description.

The utopian view of a community where everyone is accepted for who they are, as well as the idea of searching for a simpler existence that is closer to nature, the ethic of shared responsibility and communalism, and the idea that responsibility can be shared, and people can gently be taught to do something is at the heart of Hippie ideology. In a famous *Time Magazine* article from July of 1967, during the Summer of Love, the writer describes the Hippie ethos, which also very accurately reflects the ongoing culture of the springs, "Hippies preach altruism and mysticism, honesty, joy, and nonviolence. They find almost a childish fascination in beads, blossoms and bells, blinding strobe lights and ear-shattering music, exotic clothing and erotic slogans. Their professed aim is nothing less than the subversion of Western society by 'flower power' and force of example." This is the social structure that has allowed the springs to work as a recreational site and one rooted in Hippie ideology. Veteran visitors to the springs would prefer to use politeness and lead by example than employ rigid rules.

The Hippie ideology is manifested in the physical landscape of the springs as well. The Lower (East) Peace Sign was created during this period and in addition to serving as the most famous emblem of the Hippie Movement at the springs, its size and location allowed it to be a very clear protest statement to the military pilots flying over the site from nearby Naval Air Weapons Station China Lake. Other art that has developed over time at the site is inspired by nature, mysticism, and whimsy, all of which are favored themes of the period.

Hippie values have also significantly influenced the Nudist culture that has developed at the springs. While the roots of the Naturist Movement stretch all the way back to the early 1900s, the Hippies' more relaxed attitudes toward nudity brought the culture out of private camps and into public spaces and public

lands. The physical layout of the pools and showers of Lower Spring and Palm Spring do not allow for privacy in their design. If one wishes for privacy, they wear a bathing suit.

During this period as well, scientists in the emerging new field of environmental studies, visited the springs for study and recreation. As one noted environmental scientist stated, “[At the springs] you can see the effect of thoughtful, green, and sustainable before those were buzz words” (Sage in New South 2015). It is significant that Stewart Brand, publisher of the iconic *Whole Earth Catalog* and member of the Merry Pranksters, chose Saline Valley as a test location to prove that enterprise could coexist with the wilderness. As a prominent member of the Hippie and Environmental movements, the fact that Brand knew of the springs speaks to its notoriety amongst the movers and shakers of the movement.

The area of historic significance for the recreational users consists of a campground and recreational site focused around soaking pools (tubs) that have been constructed at the Lower Spring and Palm Spring by visitors between 1965 and the early 1990s. The site has a discontinuous boundary and includes the Lower (East) Peace sign to the east of Lower Spring. In addition to the tubs, the site contains camping areas, communal use areas, artwork, supporting infrastructure, roads and paths, and airstrips. Contributing and non-contributing features of this site are detailed in table 6 and appendix C.

**TABLE 6. FEATURES OF THE AREA OF HISTORIC SIGNIFICANCE FOR THE RECREATIONAL USERS**

Name of Feature	Contributing	Non-Contributing	Undetermined
Bat Pole (Painted Pole)	X		
Road from Bat Pole to North End of Palm Spring Central Area (Warm Springs Road)	X		
Lower (East) Peace Sign	X		
Lower Spring Warm Source Spring Piping/Utilities	X		
Lower Spring Cold Source Spring/Cool Pool	X		
Burro Spring Piping/Utilities		X	
Bathtub	X		
Sunrise Pool	X		
Crystal Pool	X		
Children's Play Tub <sup>a</sup>		X	
Shower, Lower Spring <sup>a</sup>		X	
Library Recycling Area	X		
Communal Campfire Circle	X		
Wood Storage Area <sup>b</sup>			X
Dishwashing Area, Lower Spring	X		
Settling Pond	X		
Lawn	X		
Lower Spring Palms <sup>c</sup>			X
Campground Host Compound, Lower Spring <sup>a</sup>		X	
Boneyard		X	
Weather Station		X	
Decommissioned Airstrip (Tail Dragger Strip)	X		



Name of Feature	Contributing	Non-Contributing	Undetermined
Art Board/Rock Alignment Area		X	
Active Airstrip (Chicken Strip)	X		
Ball Field/Balcony	X		
Lower Warm Spring Signage		X	
Central Camping Area, Lower Spring	X		
Cool Pool Camping Area	X		
Burro Spring Camping Area	X		
Lower Dispersed Camping Area	X		
Fencing <sup>a</sup>		X	
Vault Toilet #1, Lower Spring		X	
Vault Toilet #2, Lower Spring		X	
Middle Dispersed Camping Area		X	
Palm Spring Northern Warm Source Spring, Piping/Utilities	X		
Palm Spring Southern Warm Source Spring, Piping/Utilities	X		
Volcano Pool	X		
Wizard Pool	X		
Palm Spring Palm Trees	X		
Shower, Palm Spring		X	
Dishwashing Area, Palm Spring		X	
Central Camping Area, Palm Spring	X		
Vault Toilet, Palm Spring		X	

a Feature should be re-evaluated for contributing status once the resource reaches 50 years of age.

b Undetermined.

c Undetermined due to conflicting accounts on when the palms were planted.

## Ethnographic Resources

The 2000 *Legislative Environmental Impact Statement: Timbisha Shoshone Homeland* identified the Saline Valley Warm Springs Area as part of a special use area for the Tribe. The Timbisha Shoshone Natural and Cultural Preservation Area, which includes the Saline Valley Warm Springs Area, can be used by members of the Tribe for low impact, ecologically sustainable, traditional practices (e.g., camping, ceremonies, and other traditional practices) pursuant to a jointly established management plan (NPS 2000).

The warm springs at Saline Valley (the warm springs) were highly valued and widely utilized by the older generation of contemporary Tribal members for healing and medicinal purposes (Fowler et al. 1995). As development of the Saline Valley Warm Springs Area increased, the Tribe's use of and visitation diminished. Despite the avoidance of the Saline Valley Warm Springs Area, the Tribe has expressed interest in the management of the Saline Valley Warm Springs Area.

In January 2018, the National Park Service completed a DOE report to identify ethnographic resources in the Saline Valley Warm Springs Area and to evaluate the site's NRHP eligibility. The "ethnographic" DOE considered the potential significance of the site from the perspective of the Tribe and documented that the warm springs are eligible for listing on the NRHP under Criterion A as an area of significance to the Tribe. The waters of the warm springs are a source of *puha*, or sacred knowledge, and the warm springs were sought by Tribal spiritual leaders for *puha* and by Tribal elders for healing (Rucks 2016). *Puha* is defined as a life force energy that is at once everywhere yet concentrated in particular geographic features, such as the warm springs (Rucks 2016). Despite the development of the Saline Valley Warm Springs Area, the warm springs have retained their cultural significance to the Tribe. As previously stated, the National Park Service has completed consultation with the SHPO under section 106 of the NHPA. Without official response from the SHPO and in accordance with 36 CFR 800.5(c)(1), the National Park Service would proceed with the undertaking. The National Park Service is treating the ethnographic resources at the Saline Valley Warm Springs Area as eligible for listing in the NRHP.

A separate ethnographic evaluation of the individuals who currently use area of historic significance was not a component of the historic DOE, which focused on the Euro-American use of Saline Valley Warm Springs Area since 1930. However, the historic DOE noted that the community that has developed and maintained the area of historic significance may be a continuing distinct culture based on the ideals of the counterculture movements from the 1930s to today (New South 2015). From the ideals of primitive recreationists to the Beat and the Hippie movements that followed, and through the Environmental Movement, a distinct culture may have developed among the community that uses the springs. Additional ethnographic research and documentation would be necessary to determine if the area of historic significance is eligible for listing in the NRHP as a Traditional Cultural Property (TCP) for its association with the community that uses it today. For a site to be a TCP, it must have "... association with cultural practices or beliefs of a living community that (a) are rooted in that community's history, and (b) are important in maintaining the continuing cultural identity of the community" (NPS 1998).

## WILDERNESS CHARACTER

Wilderness is described by the Wilderness Act of 1964 [section 2(c)] as land that is

protected and managed so as to preserve its natural conditions and which (1) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; (3) has at least five thousand acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition; and (4) may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

Approximately 91% of Death Valley National Park is designated as wilderness (NPS 2012c). Only 1% (11 acres) of the study area is wilderness (appendix A, figure 2); however, the Saline Valley Warm Springs Area is often used as a staging area for people who enjoy exploring wilderness. Users will often camp in the Saline Valley Warm Springs Area or drive the roads leading to the Saline Valley Warm Springs Area to access the surrounding wilderness areas.

The road from Palm Spring to Upper Spring is an unmaintained path that is subject to changes from rain events and washouts. As a result, the road does not remain within the designated wilderness boundary. The designated wilderness boundary in the study area is described as being 50 feet from the centerline on either side of the Steel Pass Road from the boundary where it leaves the backcountry area at Palm Spring to Upper Spring. At the time of publication for this plan/EIS flooding and washouts had moved the road from the north side of Upper Spring to the south side. Due to the legal description of the wilderness

boundary and the wilderness exclusion for Upper Spring, the road cannot be switched to this location and needs to be re-established on the north side of the Upper Springs. This adjustment will be managed as described in the Wilderness Stewardship Plan (NPS 2013a) and will not be a part of this plan/EIS.

Creating art in the desert at the Saline Valley Warm Springs Area is recognized as an integral part of the experience for some visitors (see full discussion in the “Visitor Use and Experience” section). The lower peace sign and upper peace sign are two large pieces of artwork that were created in the designated wilderness area. Most artwork occurs in the backcountry close to the developed areas of the site, but some visitors occasionally create art from rocks within designated wilderness.

## **VISITOR USE AND EXPERIENCE**

### **Saline Valley Warm Springs Area**

The Saline Valley Warm Springs Area is remote and limited in size relative to the 3.4 million acres of the park. It takes a substantial effort for a visitor to make it to the area to use the springs. Over the years, an established community of users has formed. Users of the Saline Valley Warm Springs Area started to enhance the area by constructing soaking tubs of concrete by the 1940s when the land was under the management of the Bureau of Land Management.

Currently, the Saline Valley Warm Springs Area, a developed backcountry campground, is informally managed by a combination of the established community of users who frequent the area, a year-round volunteer camp host, seasonal camp hosts, and Death Valley National Park rangers. The camp host has an NPS-issued radio and other means of communicating with park personnel if necessary. However, the remoteness of the area and the time it takes for park personnel to travel to the Saline Valley Warm Springs Area make the response times approximately 2 to 6 hours depending on the availability of personnel. Park rangers visit the area regularly and make a point to be visibly present and available to address enforcement or safety issues on busy periods, such as holidays (e.g., Presidents Day). The current camp host also provides vehicle support to assist visitors with minor auto repairs. The vehicle support facility is supplied and maintained by the camp host. This service is not offered elsewhere in the park and is not sanctioned by the National Park Service.

Many of the people who visit Saline Valley Warm Springs Area are a part of Saline Preservation Association (SPA), a non-profit organization established in 1986. SPA’s mission is to provide the following:

an informational conduit both between and among governing agencies and a widely dispersed community who visit the Saline Valley and its Warm Springs. SPA’s goal is protection, preservation and conservation of the valley to include geology, wildlife habitat, archeology, and a traditional human presence that emphasizes responsible individual freedom of choice (SPA n.d.).

In February 2001, a former Death Valley National Park Superintendent and a former SPA President signed a memorandum of understanding (MOU). This MOU defined certain volunteer efforts that were provided by members of SPA including reasonable care, sanitation, public safety, public information, mutual communications, resource conservation, and visitor use (SPA 2001). This MOU expired in 2006 and has not been renewed.

Park personnel have described the community as effective in handling instances of unruly or loud visitors and visitors who do not follow the general camp cleanliness guidelines. The established community has maintained a self-managing policy and contacts park law enforcement only when an issue cannot be resolved within the community. Recently, there has been a noticeable shift in the community as new visitors vacation in the Saline Valley Warm Springs Area. These visitors are often unfamiliar with the traditional recreational community and its norms. As the community expands with these new visitors, the cohesiveness of the community also seems to be changing.

When large gatherings occur at the springs, group activities and cooperation are standard. At Thanksgiving, there is a softball game between the Palm Spring and the Lower Spring teams, as well as a traditional communal dinner. During Presidents Day, a par-three golf course is constructed and played. Both the ballfield and golf course have been created by the visitors without authorization from the National Park Service. Group campfires and singing are common.



*The Bat Pole marks the entrance to Saline Valley Warm Springs Area*

Art is a large part of the culture of Saline Valley Warm Springs Area. Two peace symbols have been created by moving dark desert pavement rocks to expose the lighter soil along hillsides near Saline Valley Warm Springs Area but within designated wilderness. The oldest peace symbol created on a hillside to the east of Lower Spring is within the viewshed of the area. The peace symbol was created during the Vietnam War era to be visible to the military pilots training in the airspace. A second peace symbol is on a hillside to the west of Upper Spring. This peace symbol was created later than the Vietnam War era symbol (perhaps 1990s). The Bat Pole, which marks the entrance to the Saline Valley Warm Springs Area on South Pass, is an evolving piece of artwork. Smaller pieces of artwork, much of it metal work, can be found throughout Lower and Palm Springs.



*Unauthorized artwork created by a Saline Valley Warm Springs Area visitor*

Lower Spring is the most developed area with many amenities for visitors, including the Crystal Pool, the Sunrise Pool, the Cool Pool, the Children's Play Tub, a shower, a bathtub, a sink for washing dishes, a library, shade canopies, a pond with koi, and vault toilets. Palm Spring has two soaking tubs, the Volcano Pool and the Wizard Pool. Palm Spring also has a vault toilet, a shower, and a dishwashing sink. Dispersed camping (no designated campsites) occurs between Lower and Palm Springs, and anecdotal accounts of camping between Palm and Upper Springs have been reported.

Camp hosts at Lower Spring recorded the number of visitors between September 2012 and April 2013; Palm Spring visitors were logged

from November 2012 through March 2013. These logs are not considered to be entirely accurate for several reasons: data are missing for some days (data are missing for Lower Spring for December 2012, as well as several weeks in October and November 2012); only vehicle counts were recorded during

certain periods and visitor counts had to be estimated based on the remaining data; and length of stay information was not recorded for many visitors or groups of visitors. The number of visitors at Lower Spring and Palm Spring cannot be compared because the recording was not synchronized; however, visitation at the two areas was generalized from the available data and summarized in the following two paragraphs and table 7.

Based on visitor logs, approximately 3,800 people visited Lower Spring between September through November 2012 and January through April of 2013. Monthly visitor counts ranged from 44 people (September 2012) to 950 people (April 2013). Holiday weekends often bring the largest numbers of visitors to the springs, including Presidents Day and Thanksgiving. The length of stay at Lower Spring ranged from 1 day to 30 days, with an average of 3 days.

**TABLE 7. MONTHLY VISITATION AT LOWER SPRING AND PALM SPRING BASED ON VISITOR AND VEHICLE COUNTS TAKEN BY CAMP HOSTS IN 2012 AND 2013**

Location	September 2012	October 2012	November 2012	December 2012	January 2013	February 2013	March 2013	April 2013
Lower Spring	45	453	686*	ND	174	442	942*	950*
Palm Spring	ND	ND	417	187	125	250	742*	ND

\* These numbers are estimates. In some instances, only the vehicle counts were recorded, and the number of visitors had to be extrapolated based on visitor to vehicle ratios derived from available data. Lower Spring has a visitor to vehicle ratio of 1.60 and there is an average of 1.78 people per vehicle at Palm Spring.

ND = no data

Visitor logs from Palm Spring only include November 2012 through March 2013. Approximately 1,700 people visited Palm Spring during this time. Monthly visitor counts ranged from 125 people (January 2013) to 742 people (March 2013). The length of stay at Palm Spring ranged from 1 day to 21 days, with an average length of stay of 4 days.

It is important to note that these data were collected by the camp hosts at Lower Spring and Palm Spring. It is possible that visitors could have been counted more than once, although this is unlikely due to the nature of camping at the springs. Visitors tend to set up camp close to their vehicles.

## Chicken Strip

The Chicken Strip is a backcountry dirt airstrip located in the backcountry area of Saline Valley, approximately 0.5 mile from Lower Spring. The airstrip is approximately 1,400 feet long and 35 feet wide. Features of the airstrip include a windsock, painted rocks lining the strip, and two airplane tiedowns. Those visitors who fly into the Saline Valley Warm Springs Area via the Chicken Strip often camp next to their airplanes. As stated in the “Purpose of and Need for Action” chapter, the National Park Service is proposing a special regulation to designate the Chicken Strip airstrip as a location available for the operation of aircraft.

Recreational Aviation Foundation (RAF) is a 501(c)(3) public charity dedicated to “keeping the legacy of recreational aviation strong by preserving, maintaining and creating public use recreational and backcountry airstrips nationwide” (RAF 2011).

RAF has a current MOU with Death Valley National Park that allows members of RAF to volunteer their time to make necessary repairs to the Chicken Strip airstrip in Saline Valley (RAF n.d.). RAF arranges work days, often with the help of park personnel, to make repairs to the Chicken Strip to keep it in safe working order. Repairs include leveling the dirt strip after rain events, replacing the wind sock, and painting the rocks that line the strip.

Based on visitor registration logs at the Chicken Strip, approximately 440 people visited Saline Valley via airplane from 2008 to 2012, averaging 88 visitors per year. Of the aircraft reported, approximately two-thirds were various models of Cessna airplanes. Other types of planes included various models of Pipers, Maules, and Beechcraft. The largest number of people recorded in one aircraft was six.



*The Chicken Strip Airstrip is the only active airstrip in Saline Valley*

## HUMAN HEALTH AND SAFETY

The health and safety of visitors, park staff, and volunteers are of paramount concern to the National Park Service. NPS *Management Policies 2006* summarizes the commitment of the National Park Service to providing appropriate, high-quality opportunities for visitors while striving to protect human life and providing for injury-free visits (NPS 2006). Director's Order 83: *Public Health*, outlines what the National Park Service will do to ensure compliance with prescribed public health policies, practices, and procedures. This order establishes NPS policy with respect to all public health activities within areas of NPS jurisdiction, regardless of whether those activities are carried out by the National Park Service or other federal employees, or by other organizations, including the NPS Public Health Program. Public health includes illnesses associated with drinking water, wastewater, food safety, animal vectors, animal reservoirs, hazardous wastes, indoor air pollution, institutional sanitation, radiation safety, medical wastes, solid wastes, air pollution, and other related areas of environmental health.

The Superintendent's Compendium includes rules specific to the Saline Valley Warm Springs Area, created to protect public health and safety. These restrictions include closing source springs to bathing, keeping domestic pets at least 50 feet away from the tubs and springs, prohibiting people who are sick from soaking in the tubs, excluding the introduction of human bodily waste, prohibiting birthing in the waters, and requiring young children to wear waterproof swimming diapers (NPS 2016a).

## Risks from Flood Events

Under the present hydrologic and sediment regime, drainage patterns around the developed areas of the Saline Valley Warm Springs Area indicate that flood runoff is derived from watersheds in the Saline Range to the north and northeast. In the study area, the National Park Service has identified three watersheds (appendix A, figure 9), which are discussed in detail in the Floodplains Statement of Findings (appendix G).

The east watershed flows south out of the Saline Range and then southwest down the valley to Upper Spring. There is no indication that the elevated spring mound area has been subject to recent flooding.

The runoff to the north of Palm Spring and Lower Spring is derived from the west watershed, which flows to the southwest out of the Saline Range into the valley. The drainage patterns indicate that the developed areas of Palm Spring and Lower Spring have not been affected by recent flooding from the west watershed; however, the Chicken Strip airstrip is within the west watershed, and there is some evidence of flooding across the mid-southern portion of the airstrip.

The middle watershed flows to the southwest out of the Saline Range then into the valley. The watershed drains around the southeast of Palm Spring, and the drainage patterns indicate that the developed areas at Palm Spring have not been subjected to recent flooding; however, the expansion of the camping area has probably resulted in impromptu campsites being located within flood zones. The dominant drainage of the middle watershed continues along the southeast side of the spring deposits before it turns to the west towards Lower Spring. Drainage patterns and anecdotal evidence indicate that a significant amount of the developed area in Lower Spring is subject to flooding. As runoff enters Lower Spring, the focused channel flow spreads out around the highest parts of the spring mound. A small levee has been built to protect the camp host site, and this feature diverts some of the southwesterly flow to the southeast. The energy of the runoff is further dissipated by the concentration of manmade features and vegetation surrounding Lower Spring, but below the developed area the flow becomes refocused in the drainage. There are numerous campsites that are subject to flooding below the developed area of Lower Spring. These campsites are rarely occupied during the summer when flooding is most likely. Higher ground can be found immediately to the southeast and northwest of the drainage.

## Risks of Recreational Water Use

There are risks associated with recreational water use, although attributing an infection to the water is difficult (Pond 2005). Two diseases associated with recreational use of hot or warm springs are primary amoebic meningoencephalitis and Legionnaires' disease. Primary amoebic meningoencephalitis is caused by the amoeba *Naegleria fowleri* and eventually results in the destruction of brain tissue (Pond 2005). Legionnaires' disease is a type of pneumonia caused by the bacteria *Legionella* (Pond 2005). Both *Naegleria fowleri* and *Legionella* are found in freshwater worldwide (Pond 2005).

## Risks from Habituated Wildlife

Habituated and nuisance wildlife species can pose threats to human health and safety. At the Saline Valley Warm Springs Area, these species include common ravens, American coots, Eurasian collared doves (*Streptopelia decaocto*), feral burros, coyotes, and various rodents. Food is the contributing factor to the presence of these species in the Saline Valley Warm Springs Area. Park personnel have developed



flyers for the camp host to post to encourage visitors to practice proper food storage. However, anecdotal reports from users of the Saline Valley Warm Springs Area indicate that alfalfa and dog food, as well as food scraps, are provided at unofficial feeding stations. Visitors regularly and illegally feed wildlife at the Saline Valley Warm Springs Area. Features such as the settling pond and lawn can be an attractive nuisance, as they bring wildlife to an area where they are exposed to human activity, creating a greater potential for becoming habituated to humans. Users report large amounts of burro and bird feces, which lead to an increase in insects and rodents. The National Park Service has not tested rodents from the Saline Valley Warm Springs Area for hantavirus; however, it has been detected in other areas of the park. Hantavirus is transmitted to humans through contact with infected rodents or their excrement (CDC 2012).



*Feral burro drinking from a source spring at Palm Spring*

## Hazardous Material Handling

The National Park Service issued Director's Order 50B: *Occupational Safety and Health Program* and the associated Reference Manual 50B to protect the health and safety of the visiting public, employees, contractors, and volunteers. The storage and use of hazardous materials for the operations of the Saline Valley Warm Spring area should be regulated under these guidance documents. Hazardous materials at the Saline Valley Warm Spring area include cleaning products, such as bleach for the soaking tubs and toilet facilities, and items for vehicle repair, such as batteries, gasoline, and motor oil.



*Collection of batteries at the camp host site*





# ENVIRONMENTAL CONSEQUENCES



FOLK ART AT LOWER SPRING



## ENVIRONMENTAL CONSEQUENCES

This chapter describes the potential environmental consequences of implementing any of the alternatives being considered. It is organized by resource topic and provides a standardized comparison among alternatives based on topics discussed in the “Purpose of and Need for Action” chapter and further described in the “Affected Environment” chapter. In accordance with the Council on Environmental Quality regulations (Title 40 of the Code of Federal Regulations [CFR], section 1502.16) and the *National Park Service NEPA Handbook* (NPS 2015b), direct, indirect, and cumulative impacts are described, and the impacts are assessed in terms of context, intensity, and duration. This analysis is based on the assumption that the mitigation measures identified in this Saline Valley Warm Springs Final Management Plan and Environmental Impact Statement (plan/EIS) would be implemented for the action. Mitigations are actions taken to lessen the severity and probability of a potential impact.

### GEOGRAPHIC AREA EVALUATED FOR IMPACTS

This plan/EIS is evaluating the Saline Valley Warm Springs Area, which includes Lower Spring and Palm Spring and the backcountry area that surrounds them, Upper Spring, the bat pole and the roads that lead to these features. The Saline Valley Warm Springs Area extends into the designated wilderness along the trail that leads to the east peace sign and the area immediately surrounding the peace sign. The Saline Valley Warm Springs Area encompasses approximately 1,100 acres, of which approximately 11 acres are designated wilderness.

### ADDITIONAL CONTEXT FOR ASSESSING THE IMPACTS

**Visitation Trends.** As stated in the “Background of Saline Valley Warm Springs Area” section of the “Purpose of and Need for Action” chapter, the warm springs of Saline Valley (the warm springs) are used throughout the year but the cooler months, September to May, receive the highest use. Presidents Day and Thanksgiving weekends are traditional heavy use periods for the Saline Valley Warm Springs Area; between 200 and 400 people have been observed during heavy use weekends. The impact analyses consider these fluctuations in visitation and discuss issues from high visitation where appropriate.

**Site Stewardship.** Impacts on the resources at the Saline Valley Warm Springs Area are largely driven by visitor activities. The volunteer camp host and repeat visitors to the Saline Valley Warm Springs Area work to educate new visitors on the stewardship of the springs and surrounding areas. The level of resource management would change under each alternative, but it is expected that the visitors would continue to oversee themselves and other visitors for protection of the resources.

### CUMULATIVE EFFECTS

The Council on Environmental Quality regulations that implement National Environmental Policy Act of 1969, as amended (NEPA), require assessment of cumulative effects in the decision-making process for federal projects. Cumulative effects are defined as “the impact on the environment which results from the incremental impact of the action when added to other past, present and reasonably foreseeable future actions, regardless of what agency (federal or nonfederal) or person undertakes such other actions” (40 CFR 1508.7). Cumulative effects can result from individually minor, but collectively significant, actions taking place over a period. Cumulative effects are considered for all alternatives and are presented at the end of each impact topic discussion.



## Methods for Assessing Cumulative Effects

To determine potential cumulative effects, past, present, and foreseeable future actions and land uses were identified in or near the Saline Valley Warm Springs Area. Cumulative impacts are considered for all alternatives, including the no-action alternative. Cumulative impacts were determined by combining the impacts of the alternative being considered with other past, present, and reasonably foreseeable future actions. Therefore, it was necessary to identify other ongoing or reasonably foreseeable future projects and plans at Saline Valley and the surrounding area.

These actions were then assessed in conjunction with the impacts of the alternatives to determine if they would have any added adverse or beneficial effects on a particular natural resource, cultural resource, or visitor use. The evaluation of cumulative effects was based on the available information about the actions. The following three projects were considered in the cumulative impact analysis for each resource:

- **Saline Valley Road Borrow Sites and Gravel Management Plan (NPS 2011a).** The National Park Service intends to permit the reactivation of sand and gravel borrow pits for maintenance of Saline Valley Road in Death Valley National Park (the park). Saline Valley Road is an 84-mile-long, graded-dirt road that forms much of the northwestern boundary of the park. Saline Valley Road is in need of repair and re-grading in sections. Inyo County is responsible for the maintenance of Saline Valley Road. The project will reopen six of the existing sand-and-gravel-borrow sites along Saline Valley Road. Material from the borrow sites is needed to maintain this road in a cost-effective manner. No other suitable material sites have been identified at a reasonable distance to the road within the park boundaries and obtaining materials from outside the park is both expensive and runs the risk of introducing nonnative plant species to the park environment. The permit for the borrow sites would be active for 20 years and the borrow areas would be restored at the end of the permit. This project has the potential to affect the following resources: soils and vegetation, wildlife, archeological resources, and visitor experience.
- **Inyo County ATV Adventure Trails of the Eastern Sierra Project (Inyo County 2014).** California State Legislature Assembly Bill 628 establishes a 5-year pilot project that will allow Inyo County to designate certain county roads as combined-use routes up to 10 miles long. These combined-use routes can be used to link existing off-highway vehicle (OHV) trails and trailheads on Bureau of Land Management (BLM) or US Forest Service (USFS) lands to create a unified OHV trail system. OHV use could stray into the park and onto the Saline Valley Road, as the boundaries are not clear in the northwest corner of park and signage in the park does not include language to indicate to visitors that OHV use is not permitted. This pilot project will extend through 2020. The Adventure Trails of the Eastern Sierra Project would incorporate 38 combined-use routes, which include portions of Death Valley Road outside and west of Death Valley National Park. This project has the potential to affect the following resources: soils and vegetation, wildlife, wilderness character, and visitor experience.
- **Road Maintenance.** Road maintenance is an ongoing action performed by Inyo County and by the National Park Service. The roads leading to the Saline Valley Warm Springs Area (appendix A, figure 3) are owned by the National Park Service but most are maintained by Inyo County; the National Park Service is working towards a formal agreement for road maintenance with the County. Saline Valley Road, the main road that leads to the Saline Valley Warm Springs Area, is adjacent to the park boundary for most of the route; however, some sections are within the park boundary. Saline Valley Road also crosses through USFS, BLM, state, county, and private lands. Most visitors access the Saline Valley Warm Springs Area via Saline Valley Road, from either the north (North Pass) or the south (South Pass). Inyo County maintains the road from the southern access at California Highway 190 to Big Pine Road at the northern access. The Saline

Valley Warm Springs Area can be accessed from the northeast via Steel Pass Road and the southeast via Lippencott Road; however, these roads are unmaintained and are best navigated by experienced drivers operating high-clearance four-wheel drive vehicles. The access roads to the Saline Valley Warm Springs Area are subject to closure after washouts from heavy rains for the safety of the visitors. Routine road maintenance by Inyo County has the potential to affect archeological resources.

## **SOILS AND VEGETATION**

### **Methodologies**

Baseline conditions in the Saline Valley Warm Springs Area were determined using maps showing vegetation cover and consultations with park botanists. The analysis of vegetation considered that changes in plant community size, integrity, or continuity could occur as a result of the implementation of various proposed activities. This analysis included an evaluation of the potential for proposed actions to favor the establishment and/or expansion of invasive species. Quantitative vegetation surveys have not been completed at the Saline Valley Warm Springs Area; therefore, specific acreages of vegetation impacts were not estimated as part of this project. In addition to vegetation, this analysis considers changes in soil composition or soil function that would occur as a result of the implementation of the various management activities. The information in this analysis was obtained through best professional judgment of park botanists and experts in the field, as well as supporting literature, where appropriate.

### **Types of Impacts on Soils and Vegetation**

The primary soil impacts from recreation activities would be compaction, disturbance, and contamination. Impacts on soils can be directly related to impacts on vegetation. For example, the changes in soils as a result of trampling and compaction can affect plant growth and survival, although the effects are highly variable and dependent upon existing conditions (Kuss 1986). Additional impacts to plants occur from trampling of vegetation and introduction of nonnative species.

**Compaction and Trampling.** Soils and vegetation can be both indirectly and directly affected by human activities. Soil compaction is the physical compression of soil particles through applied force, which reduces porosity, water and air infiltration and hinders root penetration by plants. Activities that contribute to soil compaction include driving on dirt roads, off-road vehicle use, camping, and hiking. Compaction can cause damage to soil structure, which determines the ability of a soil to hold and conduct water, nutrients, and air necessary for plant root activity and growth (UM 2001). Soil compaction can also increase erosion, which removes topsoil, reduces levels of soil organic matter, and contributes to the breakdown of soil structure (USDA 1996). Compacted soils are often void of vegetation, and this is true for the Saline Valley Warm Springs Area.

Generally, soil compaction creates changes in soil structure and function, impeding vegetation growth by limiting available water and nutrients and obstructing root growth. The effects of trampling are related to the resiliency of the environment in which it occurs. Recovery of desert soils and native plants can be slow due to decreased water infiltration, disrupted nutrient cycles, and slowed decomposition of soil organic matter (Belnap 1998). For example, it is more difficult for plant roots to move through compacted soils; this can cause changes such as the reduction of plant vigor and can impede the reproduction and establishment of seedlings (Cole 2002).

Vegetation can be affected indirectly by trampling through the consolidation of the soil and directly by treading upon the plant itself (Bates 1935). Trampling, which initially bends and weakens leaves and

branches, can ultimately cause breaking and injury to the plant (Douglass, Hamann, and Joslin 1999; Bates 1935). Some plant species can be damaged and completely destroyed by the action of treading, while other species are comparatively immune to harm of this kind (Bates 1935).

**Disturbance.** Soils and vegetation can be affected by disturbance through displacement or direct removal. Soils do not retain their physical properties once disturbed, leading to lower infiltration rates and an increased potential for erosion. Sources of soil disturbance in the park include natural forces, such as wind and weather, and human disturbance, such as development, road or trail creation, and hiking. Camp hosts and visitors could disturb soils through driving, using the Chicken Strip airstrip for taking off and landing, dragging the Chicken Strip airstrip and Warm Springs Road with large tires or other devices, and moving rocks to create impromptu fire rings, artwork, and road alignments. The Chicken Strip airstrip is approximately 1,400 feet long and 35 feet wide or 1.1 acre, and Warm Springs Road from the bat pole to the Saline Valley Warm Springs Area is approximately 2.0 miles and the road is approximately 20 feet wide, or 4.8 acres. The two areas combined represent approximately 5.9 acres that are currently dragged. This soil disturbance would occur infrequently, though the occurrence would be higher between October and May, when visitation is higher. Road and airstrip dragging is a small impact when compared to the dust storms that frequent the park, especially during periods of high wind in the spring and fall. These storms can lift large clouds of sand and dust thousands of feet into the air, creating poor visibility and even whiteout conditions.

Additionally, hiking, illegal use of off-road vehicles, and other recreational activities could disturb cryptobiotic soil crusts. These crusts are a community of organisms primarily comprised of cyanobacteria, green algae, fungi, lichens, and mosses that can survive long periods of drought (Armstrong 2008). Cryptobiotic soil crusts perform several important functions, including providing habitat for other organisms, covering areas of sparse vegetation, protecting desert soils from erosion, and aid in plant succession, allowing other vegetation to become established in a harsh environment (Armstrong 2008). However, cryptobiotic soil crusts are extremely fragile and slow to recover from disturbance, especially in very dry conditions (Belnap and Eldridge 2001).

**Contamination.** Contamination can occur from the introduction of any substance to the soils. Soils of the Saline Valley Warm Springs Area can be contaminated through waste products of humans and wildlife, specifically feral burros (*Equus assinus*). Feral burros walk through the Saline Valley Warm Springs Area and leave large amounts of manure on the grounds. Manure and urine contribute to soil contamination, which could alter soil chemistry and ultimately change the vegetation composition. Additionally, the storage and use of cleaning products, automobile repair fluids and components, batteries, and fertilizer have the potential to affect soils and vegetation through contamination.

**Nonnative Species.** Disturbed areas provide opportunities for and can act as corridors for colonization by nonnative or invasive plant or animal species. Visitors can act as vectors and alter dispersal of native and nonnative plants, possibly resulting in the spread and establishment of new populations of invasive and/or nonnative plants. Nonnative species can be transported into new areas of the parks by travel on hikers' boots, gear, and clothing, as well as vehicle tires. New nonnative species may colonize an area where they were previously absent. By competing with native species, nonnative plant species contribute to species extinctions, alter the structure of natural plant communities, and disrupt ecosystem functions. All recreational activities have the potential to increase the spread of nonnative species.

## Alternative 1: No-Action Alternative

Under alternative 1, the no-action alternative, all visitor activities at the Saline Valley Warm Springs Area would continue; however, per the Death Valley General Management Plan (GMP) (NPS 2002a), no new tubs would be constructed, and no development would occur at Upper Spring. Soils would continue to be

affected by recreation and maintenance activities through compaction, disturbance, and contamination. These factors, in turn, affect the vegetation that grows at the Saline Valley Warm Springs Area. Other factors, including diverted water and nonnative plants also affect the vegetation communities.

The unrestricted and dispersed nature of the campsites at the Saline Valley Warm Springs Area has led to large areas of compacted and disturbed soils mostly devoid of native vegetation centered around Lower and Palm Springs. These impacts would continue under alternative 1. Figure 10 in appendix A depicts the camping areas at the Saline Valley Warm Springs Area between Lower Spring and Palm Spring—Lower Dispersed Camping Area, Burro Spring Camping Area, Cool Pool Camping Area, Central Camping Area, Middle Dispersed Camping Area, Central Site Area, and Upper Dispersed Camping Area. These areas total approximately 119 acres and represent the extent of the Saline Valley Warm Springs Area that is suitable for car camping due to the terrain. (Appendix C presents descriptions and figures of all of the activity areas within the Saline Valley Warm Springs Area.) Visitors are able to camp in desired locations within these areas, as there are no designated campsites.

Warm Springs Road is the only designated road at the Saline Valley Warm Springs Area, but vehicles travel on visitor-created dirt roads delineated by vegetation or rocks and camp close to the soaking tubs. During times of higher visitation, such as Presidents Day and Thanksgiving, visitors are forced to camp further from the tubs. Driving off-road is not permitted in Death Valley National Park, but visitors often travel throughout the camping areas with their vehicles. Repeated driving through the camping areas keeps soils compacted and prevents recovery of the soils and native vegetation in these areas. Although some areas are used less frequently (e.g., the Lower Dispersed Camping Area), all of the camping areas in the Saline Valley Warm Springs Area have been disturbed from driving, camping, and other foot traffic, and would continue to be disturbed under alternative 1.

While most of the impacts from visitors at the Saline Valley Warm Springs Area would be localized, visitors participate in many recreational activities once at the springs and all of these activities have the potential to trample soils and vegetation outside of the developed areas. Any activities that lead visitors away from the main developed areas of the Saline Valley Warm Springs Area would negatively affect soils and vegetation. There are no formal trails in Saline Valley due to the nature of the terrain; therefore, visitors are able to cross the landscape freely, including designated wilderness areas outside of the Saline Valley Warm Springs Area. (Impacts on wilderness character are discussed thoroughly in the “Wilderness Character” section.) Trampled grounds have a reduced ability to absorb water, are more susceptible to wind and water erosion, and hinder the root growth of desert plants (Lovich and Bainbridge 1999). Visitors traveling by foot can impact soils and cryptobiotic soil crusts, but off-road vehicle use is identified as the most damaging recreation activity in the desert (Lovich and Bainbridge 1999).



*A visitor drags Warm Springs Road using his personal vehicle*

No new development would occur under alternative 1, but displacement of soils would continue to occur from several other activities. Visitors routinely drag Warm Springs Road and the Chicken Strip airstrip by pulling large tires or other grading devices behind their vehicles. This process evens the road and airstrip,



but it also loosens soils on the surface, making them available to erosion by wind and water. Driving on the dirt roads also displaces soils of the Saline Valley Warm Springs Area. Additionally, visitors often move rocks to create impromptu fire rings, road alignments, and artwork,

In relatively undisturbed areas such as Upper Spring, vegetation naturally grows around source springs, as there is natural outflow from the spring. The current soil and vegetation conditions at the Saline Valley Warm Springs Area exist in part due to the diversion of water from the source springs. This diversion would continue; however, per the Death Valley GMP (NPS 2002a), no new tubs would be constructed under alternative 1, retaining the amount of diversion at the current levels.

Some water diversion directly benefits the native vegetation at the Saline Valley Warm Springs Area. Water diverted from Burro Spring irrigates the east/west line of western honey mesquite (*Prosopis glandulosa* var. *torreyana*) at Lower Spring. Without this diversion, the honey mesquite and the associated understory may not be as abundant. The runoff from the tubs, shower, and sink at Lower Spring would continue to drain to the settling pond and vegetation beyond. However, water diversions also benefit nonnative plant species at the Saline Valley Warm Springs Area, as discussed in the following paragraph.

Nonnative plant species are established and grow at all three springs sites. The majority of these species are nonnative invasive palm trees and grasses. Palm trees are present at all three sites, and they are considered beneficial for the visitors at Lower and Palm Springs because they provide shade for the soaking tubs. Under this alternative, nonnative vegetation would persist at the Saline Valley Warm Springs Area. The camp host currently aids in the control of new nonnative invasive palm trees by trimming and pulling young palms by hand; however, this minimal control would not completely stop the spread of palm trees at the Saline Valley Warm Springs Area. Water piped from the Cool Pool to a sprinkler irrigates the Lower Spring lawn. Visitors would continue to bring grass seed containing nonnative species for the lawn at Lower Spring, as well as fertilizer for the lawn. Due to the need for regular watering, the lawn is not expected to expand beyond its current limit. At Palm Spring, the runoff from the tubs, shower, and sink would continue to drain the washes adjacent to the developed areas. The effluent provides water for vegetation in these areas that would not be present under natural conditions. The nonnative species of highest concern is saltcedar (*Tamarix ramosissima*), a species of tamarisk, that is a threat to native plant and animal communities in Death Valley National Park. Saltcedar crowds out native species, consumes excessive amounts of water, and salinizes soils where its salty leaves drop (NPS n.d.). Saltcedar is currently present at Lower Spring. Because this species produces an excessive number of seeds that are wind-dispersed, it is reasonable to assume that this nonnative species could become established at Palm and Upper Springs as well.

Impacts at the Saline Valley Warm Springs Area are largely driven by visitor activities. The volunteer camp host and repeat visitors educate new visitors on the stewardship of the springs and surrounding areas. Under alternative 1, these efforts would continue, and National Park Service (NPS) signage with rules for recreating in the backcountry would remain in place at Lower Spring. The guidance from volunteers and signage helps to reduce behaviors that could negatively impact soils and vegetation at the Saline Valley Warm Springs Area; however, the amount that these efforts benefit the resources is unknown.

**Cumulative Impacts.** Few past, present, or reasonably foreseeable projects have a detectable effect on soils and vegetation. One project that may affect soils is the Saline Valley Road Borrow Sites and Gravel Management Plan that was approved in 2011 (NPS 2011a). This project would allow for the issuance of a permit to Inyo County for use of existing borrow pits along Saline Valley Road. If the permit is issued, there would be some short-term, construction-related impacts from disturbed soils and loss of vegetation where the borrow pits will be excavated. Once construction is complete, this project could result in

beneficial effects on soils, as the sites would be restored following the road repair activities; restoration is expected to be complete within the 20-year permit period.

The Inyo County ATV Adventure Trails of the Eastern Sierra Project (Inyo County 2014) allows Inyo County to designate certain county roads as combined-use routes to link existing OHV trails and trailheads on BLM or USFS lands to create a unified OHV trail system. Included in this trail system is 11.6 miles of Death Valley Road outside and west of Death Valley National Park. Death Valley Road is already paved; therefore, inclusion of this road would not involve construction, habitat modification, or addition of impervious surfaces. OHV use could, however, stray into the park and onto the Saline Valley Road, as the boundaries are not clear in the northwest corner of park. The ATV Adventure Trails Project could have a slight adverse impact on soils or vegetation through trampling and compaction if OHV users do not stay on roads designated for OHV use.

The no-action alternative would allow continued use of the Saline Valley Warm Springs Area and current impacts on soils and vegetation would also continue, including compaction, trampling, disturbance, and pressure from nonnative species. Considered together, there would be no meaningful additive or interactive effects among these projects and the proposed actions under the no-action alternative that would constitute a significant cumulative effect.

## **Alternative 2: Regulatory Compliance Alternative**

Alternative 2 would have similar impacts on soils and vegetation as the no-action alternative, as this alternative retains much of the existing use of the Saline Valley Warm Springs Area but brings the actions and conditions into compliance with NPS, state, and federal regulations.

Visitation under alternative 2 would most likely remain consistent with current conditions; therefore, the effects of compaction and trampling from driving, camping, and recreational activities would be the same as described under alternative 1. Approximately 119 acres of the Saline Valley Warm Springs Area would be available for camping and visitors would continue to impact soils and vegetation in these areas (appendix A, figure 10) via driving and foot traffic. Off-road driving, which is not permitted, would cause impacts similar to alternative 1. Under this alternative, Warm Springs Road would be maintained by the National Park Service in accordance with the guidance for high-clearance four-wheel drive roads, as described in the Wilderness and Backcountry Stewardship Plan (NPS 2013a). Under these guidelines, Warm Springs Road would be graded or repaired less frequently than under current conditions, reducing the potential for erosion.

The regulatory compliance alternative would not permit construction of new fire rings or artwork at the Saline Valley Warm Springs Area. All non-historic artwork in designated wilderness and user-created fire rings would be dismantled and the rocks would be dispersed throughout the Saline Valley Warm Springs Area. The removal of the artwork would alter the current landscape to a more natural one, and the disallowance of moving rocks for fire rings and art would reduce the potential for wind and water erosion, although this effect would be minimal. Prohibiting the use of user-created fire rings and encouraging the use of NPS-provided fire enclosures, grills, or firepans would be beneficial to soils. Campfires can change soil properties by destroying the organic material in the soil, which can make the soil more prone to erosion. Use of approved fire containment structures can reduce this risk. Further, visitors would be required to haul out ash and charcoal from fires at individual campsites, which could contribute nutrients to the soil if left in place, changing the soil chemistry. Alternative 2 would also require Chicken Strip users to pack out their waste. This requirement further protects the soils at the Saline Valley Warm Springs Area from contamination.

In addition to vehicle use and airstrip dragging and road maintenance, displacement of soils would occur under this alternative during installation of the artistic wooden fencing around the source springs at Lower and Palm Springs (appendix A, figure 11). The perimeter of the four sections of fencing at Lower Springs would be approximately 0.072 mile (301 feet) and 0.014 mile (74 feet) at Palm Spring, encompassing a total of approximately 0.044 acre. This fencing is irregular and would not require a great amount of soil displacement to install. While this action would permanently displace soils, the effects would be extremely localized and immeasurable.



*Artistic fence currently at Lower Spring*

Although the existing fencing at Lower Spring would continue to prohibit the feral burros from grazing on the lawn, the additional fencing around the source springs would not keep feral burros from trampling or grazing on understory vegetation. However, the water diversion under alternative 2 would be the same as described for alternative 1, which would help both native and nonnative vegetation in the Saline Valley Warm Springs Area to persist.

Alternative 2 would also result in beneficial effects on the vegetation community through nonnative species control efforts. Palm trees would be removed from Upper Spring, and as palm trees, which are nonnative and invasive, die naturally at Palm and Lower Springs, the area would be allowed to revegetate naturally. The volunteer camp host could continue to water the lawn to retain the quality of the site that is important to the visitors. The use of fertilizer for the lawn would be addressed in a memorandum of understanding (MOU) with the user group. The National Park Service would continue to perform nonnative plant control through the park's existing invasive management plan and other regulations to implement nonnative species removal.

**Cumulative Impacts.** Few past, present, or reasonably foreseeable projects have a detectable effect on soils and vegetation. These projects include the Saline Valley Road Borrow Sites and Gravel Management Plan (NPS 2011a) and the Inyo County ATV Adventure Trails of the Eastern Sierra Project (Inyo County 2014). These projects are described for alternative 1. Alternative 2 would allow for continued use of the Saline Valley Warm Springs Area, similar to current conditions, with added elements for resource protection, including nonnative plant species removal and disallowance of rock movement for impromptu fire rings and artwork. Visitation would remain consistent with current conditions under this alternative, and the beneficial effects from the efforts of alternative 2 would result in little change to soils and vegetation at the Saline Valley Warm Springs Area. Considered together, there would be no meaningful additive or interactive effects among these projects and the proposed actions under this alternative that would constitute a significant cumulative effect.

### **Alternative 3: Community Engagement Alternative**

Alternative 3 would have similar impacts on soils and vegetation as those described for alternative 1; however, alternative 3 aims to provide a greater level of natural resource protection by engaging user groups in the management of the Saline Valley Warm Springs Area while retaining use of the tubs.

The number of visitors under alternative 3 is expected to remain consistent with current visitation levels. Trampling from visitors driving and participating in recreational activities resulting in soil compaction and potential damage to cryptobiotic soil crusts and vegetation would be similar to those described for alternative 1. Alternative 3 would differ in that it would create designated camping areas to limit sprawl into undisturbed areas. For times of higher visitation, designated overflow walk-in camping areas would be created with an associated parking area. With this camping design, effects on soils and vegetation would be limited to previously disturbed areas, reducing impacts from car camping. Additionally, visitors would be required to camp at least 200 feet from all source springs. This restriction would protect approximately 2.8 acres of the Burro Spring, Cool Pool, and Middle Dispersed camping areas from further impacts from camping activities (appendix A, figure 12). Under current conditions with a 100-foot buffer, camping is prohibited from approximately 1 acre of land surrounding the source springs. When the National Park Service designates the car camping areas, walk-in camping areas, and parking areas, they would be located outside of the 200-foot buffer.



*Example of a food storage box*



*Airplane tiedown at the Chicken Strip airstrip*



*Vault toilet at Lower Spring*

Displacement of soils would be similar to alternative 2 in that visitors would continue to drive their vehicles on the dirt road, the airstrip would be maintained by the users with a drag, and creation of new fire rings and artwork would be prohibited. Warm Springs Road would be graded or otherwise maintained by the National Park Service under alternative 3, which would continue to displace soils, though the frequency of maintenance may be less than experienced under current conditions. Under alternative 3, the fence restricting feral burro access would be an extension of the wooden artistic fencing currently surrounding the lawn at Lower Spring. The fencing would be placed around the soaking tubs, source springs, and riparian areas at Lower Spring and Palm Spring (appendix A, figure 13). The perimeter of the four sections of fencing at Lower Spring would be approximately 1.0 mile and 0.32 mile at Palm Spring, encompassing a total of 6.9 acres. This fencing is irregular and would not require a great amount of soil displacement to install. In addition, food storage boxes could be installed at Lower and Palm Springs, additional airplane tie downs could be installed at the Chicken Strip airstrip, and additional vault toilets could be added to Lower Spring or Palm Spring, if necessary. The fence, food storage boxes, tie downs, and vault toilet would displace soils, and although the amount would be greater than that under alternative 2, the amount of soil would be small, and the impacts would be extremely localized.

Vegetation would benefit slightly from the fencing that would be installed around the riparian vegetation. Just as the current fencing at Lower Spring prohibits the feral burros from grazing on the lawn, the

additional fencing would keep feral burros from grazing on understory vegetation. This fencing is minimal and would not protect all vegetation from trampling or grazing by burros. For example, approximately 0.31 acre of emergent wetlands at Lower Spring would be excluded from the fencing and the herbaceous vegetation that grows there (including two plants of management concern) would be vulnerable to feral burro browsing.

Alternative 3 would remove the diversion at Burro Spring. This diversion was installed around 1990 (New South 2015) and has been providing a constant water source to the mesquite and understory vegetation in the middle of the Lower Spring. A comparison of aerial photos from 1993 and 2016 (appendix A, figure 8) indicate that this vegetation persists at Lower Spring due to the water diversion. If Burro Spring has enough flow, natural outflow from the spring could help establish vegetation closer to the source spring, but the line of western honey mesquite and associated understory may not survive. There is likely to be a reduction in the density of the understory vegetation, but the mesquite trees have been established for approximately 20 years. The trees grow a very long taproot and an extensive lateral root system for obtaining water, making it likely the trees would be able to persist at this location, even with the loss of water from the diversion pipe. Over time, the vegetation would likely return to more natural conditions, which could result in a decrease in vegetation of up to approximately 1 acre. All other water diversions would remain under this alternative, and conditions would remain similar to current conditions.

The efforts for nonnative plant removal would be the similar to those described for alternative 2, but under alternative 3, the National Park Service could employ additional efforts, such as removing the lawn at Lower Spring and either allowing it to naturally revegetate or replanting with native vegetation. The National Park Service would also establish thresholds for use and overuse and monitor conditions at the Saline Valley Warm Springs Area, which could trigger response actions by park management to restrict use if damage to natural resources were observed. With the help of volunteers, the National Park Service would be able to better monitor the conditions of the soil and native vegetation at this remote site. Visitor activities, such as walking, camping, and driving, could create impacts on soils and native vegetation that would indicate unacceptable adverse impacts. If a particular area or resource becomes stressed, the National Park Service could implement restrictions on its use to allow for recovery. This monitoring would be done under the park's existing invasive management plan and other regulations. Further, the National Park Service would engage the Timbisha Shoshone Tribe (the Tribe) to incorporate traditional ecological knowledge for native vegetation management. These actions would help reduce impacts from nonnative species as well as misuse or overuse by park visitors. This program would result in a long-term beneficial effect on native vegetation.

**Cumulative Impacts.** Few past, present, or reasonably foreseeable projects have a detectable effect on soils and vegetation. These projects include the Saline Valley Road Borrow Sites and Gravel Management Plan (NPS 2011a) and the Inyo County ATV Adventure Trails of the Eastern Sierra Project (Inyo County 2014). These projects are described for alternative 1. Alternative 3 allows visitors to continue to use the Saline Valley Warm Springs Area for soaking and recreation, the same as alternative 1; however, the National Park Service would collaborate with the user groups to protect soil and vegetation resources. This partnership and camping limitations would create beneficial effects on soils and vegetation, though the net effect in this previously disturbed area would be minimal. Considered together, there would be no meaningful additive or interactive effects among these projects and the proposed actions under alternative 3 that would constitute a significant cumulative effect.

## Alternative 4: Restoration Alternative

The restoration alternative would remove all development at the Saline Valley Warm Springs Area and restore the area, as close as possible, to natural conditions. Recovery rates of desert environments are



generally very slow (Lovich and Bainbridge 1999), but removal of the development would reduce the draw for many regular visitors, thus reducing the number of visitors and reducing effects to soils and vegetation from recreational activities.

Visitors would continue to travel to the Saline Valley Warm Springs Area by vehicles, and some off-road driving, although prohibited, could occur. Camping would be dispersed, consistent with other backcountry sites in the park. With fewer visitors and fewer vehicles, soil compaction would be reduced and less concentrated. Soils, including cryptobiotic soil crusts, would be allowed to restore naturally.

Removal of the developed features (e.g., soaking tubs, showers, sinks, plumbing; presented in photographs and figures in appendix C) at the Saline Valley Warm Springs Area would disturb soils and expose them to wind and water erosion; however, removal of the infrastructure would provide beneficial effects over the long term from removal of impermeable materials and an increase in natural substrates. Warm Springs Road would be maintained by the National Park Service, as needed, to allow visitors to access the Saline Valley Warm Springs Area, resulting in some soil disturbance. Fencing to exclude feral burros would be installed



*Example of a visitor entrance through wire and wooden post fencing that would prohibit feral burros from entering the Saline Valley Warm Springs Area*

around the perimeter of the backcountry area at the Saline Valley Warm Springs Area (appendix A, figure 14). The perimeter of the Saline Valley Warm Springs Area is approximately 5.5 miles. This fencing, which would encompass approximately 1,042 acres, would require sinking posts into the ground at regular intervals, resulting in more soil disturbance than the artistic fencing that would be installed for alternatives 2 and 3. Although installation of this fencing would result in a small amount of soil displacement, it would be beneficial to vegetation throughout the Saline Valley Warm Springs Area. This benefit would be greater than that described for alternatives 2 and 3 because feral burros would be excluded from all vegetation at the Saline Valley Warm Springs Area. Therefore, all vegetation would be protected, including the species of management concern that would be vulnerable under alternatives 2 and 3. The Chicken Strip airstrip would be decommissioned and moving rocks for construction of fire rings and art would be prohibited, eliminating soil disturbance from maintenance and other rock-moving activities and changes in soil chemistry from campfires.

All water diversions would be eliminated under the restoration alternative. While the vegetation communities may be reduced from a decrease in water, the communities would benefit over the long term from the return to natural conditions. A comparison of current aerials with those from prior to heavy development (appendix A, figure 8) shows vegetation stands that are sparser under natural conditions, but the distribution patterns between the two aerials are not dissimilar, indicating that there would not be a drastic change in the areas of vegetation cover. As stated for alternative 3, the east-west line of mesquite is fairly well established and should persist, even with the removal of the water diversion pipe from Burro Spring, but the density of the understory vegetation would likely be decreased.

The National Park Service would remove nonnative plant species and the Saline Valley Warm Springs Area would be restored with native species. The vegetation restoration would be a tiered approach: (1) removal of nonnative plants, (2) passive restoration where the National Park Service would let the system

attempt to restore itself, and (3) active restoration where the National Park Service would plant native species, if needed, to accelerate recovery. The National Park Service would monitor the conditions at the Saline Valley Warm Springs Area to track and react to establishment of nonnative species under the park's existing invasive management plan and other regulations, which would provide a long-term beneficial effect on native vegetation.

**Cumulative Impacts.** Few past, present, or reasonably foreseeable projects have a detectable effect on soils and vegetation. These projects include the Saline Valley Road Borrow Sites and Gravel Management Plan (NPS 2011a) and the Inyo County ATV Adventure Trails of the Eastern Sierra Project (Inyo County 2014). These projects are described for alternative 1. Alternative 4 would remove all infrastructure and restore the Saline Valley Warm Springs Area. These activities would have temporary adverse impacts on soils from disturbance of the soils and reduction of water to the vegetation. Once construction activities needed to remove existing infrastructure are complete, this alternative would return the Saline Valley Warm Springs Area to more natural conditions by allowing it to naturally restore itself. The restoration would take years and likely decades to complete, but gradually the Saline Valley Warm Springs Area would restore to natural conditions. Additionally, monitoring and response efforts for nonnative species would be implemented. Considered together, there would be no meaningful additive or interactive effects among these projects and the proposed actions under this alternative that would constitute a significant cumulative effect.

## Alternative 5: Preferred Alternative

Alternative 5, the preferred alternative, would have similar impacts on soils and vegetation as those described for alternative 3 with some differences. The level of visitation and the types of impacts are expected to remain constant with current conditions.

Alternative 5 would be similar to alternative 3 in that displacement of soils would continue to occur from driving on Warm Springs Road and access roads and the dragging of the Chicken Strip and Warm Springs Road for maintenance. New art would be allowed in the backcountry under alternative 5, but visitors would not be able to manipulate natural or cultural resources, thus the impacts would be the same as alternative 3. Under alternative 5, the National Park Service would install fencing only around the source springs at Lower Spring and Palm Spring, resulting in the same impacts as described for alternative 2: extremely localized and immeasurable amounts of soil displacement. This fencing would protect water quality but would not offer protection of the soils and vegetation from compaction, trampling, and contamination (appendix A, figure 15). The fencing at Upper Spring would be replaced and expanded to encompass both the warm and cold source springs (appendix A, figure 15). The soil displacement would be minimal, and all native vegetation at Upper Spring would be protected from burro impacts.

Under alternative 5 the camping situation would be similar to that described for alternative 3. The National Park Service would establish camping zones: designated dispersed camping, overflow walk-in camping with an associated parking area, and areas of no camping for protection of resources. Under the preferred alternative, Warm Springs Road would be delineated and access roads to the designated dispersed camping area and the overflow parking area would be established. Driving would be prohibited elsewhere in the Saline Valley Warm Springs Area. Maintaining these camping zones would protect soils and vegetation from compaction and trampling while still allowing visitors to camp and participate in other activities at the Saline Valley Warm Springs Area. The preferred alternative would maintain the camping buffer around source springs of 100 feet to protect the water quality, continuing to protect the soils and native vegetation in this area from compaction and trampling from camping activities (appendix A, figure 10).

Alternative 5 would remove the water diversion at Burro Spring, resulting in a decrease in understory vegetation; the existing mesquite trees in this area would likely persist because they have been established for some time. Additionally, alternative 5 would divert wastewater from the dishwashing stations and showers to a subterranean system for treatment. At Palm Spring, this would eliminate the vegetation growing in the wash south of the Wizard Pool (appendix A, figure 5B), as it is sustained by the water that drains from the dishwashing station and the shower. At Lower Spring, the change in wastewater treatment would reduce the amount of water that reaches the settling pond but would not affect the vegetation.

Unlike alternative 3, the preferred alternative would allow the lawn to remain and would be maintained in its current footprint. Existing mature palm trees would be allowed to remain at Lower Spring and Palm Spring. The mature palm trees would be maintained by trimming the palm fronds and young palm trees would be removed. Native species would be planted at Lower and Palm Springs. Once the existing mature palm trees die naturally, they would be removed, by which time the native species should have matured sufficiently to provide shade to visitors. An MOU would be established with the user groups to help with many aspects of the management of the Saline Valley Warm Springs Area, including vegetation maintenance and visitor education. The National Park Service, with help from the user groups, would also conduct onsite monitoring of the conditions at the Saline Valley Warm Springs Area, which could trigger response actions by park management to restrict use if damage to natural resources, including soils and vegetation, were observed. If a particular area were to become stressed, the National Park Service could implement restrictions on its use to allow for recovery. These actions would help reduce impacts from nonnative species as well as misuse or overuse by park visitors. This program would result in a long-term beneficial effect on native vegetation.

**Cumulative Impacts.** Few past, present, or reasonably foreseeable projects have a detectable effect on soils and vegetation. These projects include the Saline Valley Road Borrow Sites and Gravel Management Plan (NPS 2011a) and the Inyo County ATV Adventure Trails of the Eastern Sierra Project (Inyo County 2014). These projects are described for alternative 1. Alternative 5 would allow visitors to continue to use the Saline Valley Warm Springs Area for soaking and recreation, the same as alternative 1. The National Park Service would collaborate with the user groups to protect soil and vegetation resources. This partnership and camping limitations would create beneficial effects on soils and vegetation, although the net effect in this previously disturbed area would be minimal. Considered together, there would be no meaningful additive or interactive effects among these projects and the proposed actions under alternative 5 that would constitute a significant cumulative effect.

## **Conclusion**

Under alternatives 1, 2, 3, and 5, the soils in the Saline Valley Warm Springs Area would continue to be affected through compaction, erosion, and disturbance or removal from visitor activities. The effects on soils would result in impacts that are not substantially different among these four alternatives; however, alternatives 3 and 5 would have smaller areas of impacts due to controlling camping sprawl and delineating roads, and alternative 3 would reduce impacts from burros on native vegetation by expanding the fencing to include vegetated areas. The greatest impacts on vegetation would result from continued water diversion and pressure from nonnative species. Alternative 2 would reduce adverse impacts from nonnative species over current conditions with plans to remove nonnative invasive palm trees and grasses and allowing natural revegetation. Alternatives 3 and 5 would provide further protection from nonnative plants with further resource stewardship efforts; however, alternative 5 would allow the lawn of nonnative grasses at Lower Spring to remain. Additionally, removing diverted water from Burro Spring would return one portion of Lower Spring to more natural conditions. Under alternative 4, adverse impacts on soils and vegetation would be greatly reduced over the long term, as the development at the Saline Valley Warm Springs Area would be removed, thus reducing visitation to the area. Visitors would still visit the Saline Valley Warm Springs Area and impacts from compaction, erosion, and disturbance are expected,



but dispersed camping from fewer visitors would allow the area to recover from decades of heavier use. The effects of visitor activities are not currently posing irreparable threats on soils and vegetation within the Saline Valley Warm Springs Area, and the action alternatives include elements that would improve conditions for these resources; therefore, it can be concluded that the effects from the action alternatives, including alternative 5, the preferred alternative, would not produce significant impacts on soils and vegetation.

## WETLANDS

### Methodologies

The evaluation of impacts on wetlands was based on both a quantitative (acreage affected) and a qualitative assessment of how each proposed alternative would affect wetland functions and values. A detailed discussion of wetlands and descriptions of wetland types is included in the “Affected Environment” chapter. Impacts were determined based on changes to wetland functions and values, including the ability of the wetland to support vegetation and wildlife. The Saline Valley Warm Springs Area, since its development more than 60 years ago, has undergone substantial modification by the user groups for recreational purposes. This analysis describes impacts on both natural and artificial wetlands, as directed by NPS Procedural Manual 77-1: *Wetland Protection*.

### Types of Impacts on Wetlands

The types of impacts on wetlands that relate to visitor use activities at the Saline Valley Warm Springs Area result from trampling, the indirect effects associated with the establishment of nonnative invasive plant species, and the diversion of water. These are described in the following paragraphs.

**Trampling.** Trampling impacts on wetland vegetation would be the same as those described in the “Soils and Vegetation” section. At the Saline Valley Warm Springs Area, wetlands 1 and 3 at Lower Spring and wetland 4 at Upper Spring would be susceptible to trampling effects.

**Nonnative Plant Species.** The threat of nonnative plant species at the Saline Valley Warm Springs Area is also described in the “Soils and Vegetation” section. Wetlands 2 and 4 are known to contain nonnative plants, but all of the wetlands at the Saline Valley Warm Springs Area are susceptible to establishment of nonnative plant species.

**Diversion of Water.** Diversion of water from the source springs through various features at the Saline Valley Warm Springs Area and ultimately to the settling pond creates an artificial wetland (wetland 2). This water also enhances another wetland south of the settling pond (wetland 3). Diversion of water not only creates and enhances these wetlands, but it also removes the possibility of overflow at the source spring, allowing for natural wetland habitat to establish, such as that seen at Upper Spring.

### Alternative 1: No-Action Alternative

Under the no-action alternative, existing conditions would continue at the Saline Valley Warm Springs Area. The current recreational activities would remain the same, as would the water diversions. Additionally, the number of visitors to the area would be expected to remain the same.

Wetland 1 (appendix A, figure 7) contains three small and isolated palustrine emergent wetlands located north of Burro Spring that occur naturally for a total of approximately 0.35 acre. The diversion of Burro Spring leads to a wildlife watering trough that the feral burros often use. The southernmost wetland

associated with wetland 1 is located just east of this trough. During a 2011 survey, one fire ring was documented adjacent to this wetland (Bonstead 2011). Although the fire rings at the Saline Valley Warm Springs Area are constructed and deconstructed by visitors and only represent a snapshot in time, the fire rings do indicate that visitors use this area for setting up camp. The historic Determination of Eligibility (DOE) defined this area as the Burro Spring camping area (appendix C; New South 2015). Wetland 1, which supports whiteflower rabbitbrush (*Chrysothamnus albidus*) and possibly Cooper's rush (*Juncus cooperi*) (plant species of management concern), would continue to be affected by human and feral burro activities (trampling and grazing) under the no-action alternative.

At Lower Spring, wetland 2 (0.027 acre) is the settling pond, an artificial wetland that persists due to the runoff from the tubs, sinks, shower, and lawn (appendix A, figure 7; appendix C). Under alternative 1, there would be no changes to the settling pond, as the diversions would continue, and visitation levels are expected to remain the same as current conditions. These factors would result in approximately the same amount of water provided to wetland 2.



Settling pond and Children's Play Tub at Lower Spring

Wetland 3, the 0.89-acre riparian area southwest of the developed area of Lower Spring (appendix A, figure 7), is supported in part by overflow from the settling pond and runoff from the Lower Spring lawn. Wetland 3 would be subject to trampling as visitors use the area surrounding the vegetation for dispersed camping. A 2011 survey documented six fire rings in or adjacent to wetland 3 along the edges of the vegetation (Bonstead 2011), and the historic DOE defined this area as the Central Camping Area (appendix C; New South 2015). Wetland 3 would remain unchanged under alternative 1, as water diversions and current visitor activities would be allowed to continue.

Wetland 4 (0.65 acres) at Upper Spring is the most natural wetland in the Saline Valley Warm Springs Area (appendix A, figure 7). Visitors occasionally soak in the natural pool and impact wetland vegetation through trampling. Visitors to the Upper Spring have altered the pool bottom for temperature control; however, the water from the spring has not been diverted. The burro exclusion fence, when in good condition, prohibits feral burros from entering the area and impacting the wetland through trampling or grazing. However, the fence has been vandalized by visitors, allowing feral burros to enter the habitat at Upper Spring. Although the National Park Service repaired the missing fence section with barbed wire, this is not completely effective in restricting access by feral burros.

Nonnative plant species currently grow in wetlands 2 and 4 in the form of palm trees, which are also invasive species. The palms will spread on their own under current conditions, and therefore, would likely persist at these wetlands. Saltcedar is a species of concern at Death Valley National Park and this species is found at Lower Spring. Because the seeds of saltcedar are plentiful and easily dispersed as discussed in the "Soils and Vegetation" section, and the plant can grow in wetland conditions, saltcedar could become a risk to any of the wetlands at the Saline Valley Warm Springs Area.

Under alternative 1, management actions at the Saline Valley Warm Springs Area would remain the same as current conditions. The sizes, functions, and values of the four wetlands, both natural and artificial, would remain unchanged.

**Cumulative Impacts.** Of the past, present, or reasonably foreseeable projects that could have a detectable effect on resources affected by the Saline Valley Warm Springs Management Plan (presented in the “Cumulative Effects” section of this chapter), none would have an effect on wetlands. Therefore, there would be no meaningful additive or interactive effects from these projects and the proposed actions under alternative 1 that would constitute a significant cumulative effect.

## Alternative 2: Regulatory Compliance Alternative

Alternative 2 would have similar impacts on wetlands as the no-action alternative. Alternative 2 retains much of the existing use of the Saline Valley Warm Springs Area but brings the actions and conditions into compliance with NPS, state, and federal regulations. Visitation levels are expected to remain constant with current conditions.

Impacts on wetlands 1, 2, and 3 at Lower Spring (appendix A, figure 7) from water diversion would be the same as described for alternative 1. The fencing installed around the source springs would not provide further protection for these wetlands. Wetland 2, the settling pond, is currently protected from burro impacts by the fencing that surrounds the Lower Spring lawn.

All wetlands at the Saline Valley Warm Springs Area would benefit from nonnative species control efforts. All palm trees would be removed from Upper Spring, allowing the native wetland plant community to reestablish where the palm trees currently exist. At Lower Spring, as palm trees die naturally, the area would be allowed to revegetate naturally, which would provide some benefits to the vegetation community at wetland 2. The National Park Service would perform nonnative plant control through the park’s existing invasive management plan and other regulations, and these efforts could prevent the establishment of other nonnative and invasive species, such as saltcedar, in the wetland areas.

Alternative 2 would not alter the sizes of the four wetlands. Removal of the nonnative plant species under this alternative would not expand the functions and values of the wetlands, but it would improve the quality of the wetlands by allowing native vegetation to become established throughout the wetlands.

**Cumulative Impacts.** Of the past, present, or reasonably foreseeable projects that could have a detectable effect on resources affected by the Saline Valley Warm Springs Management Plan (presented in the “Cumulative Effects” section of this chapter), none would have an effect on wetlands. Therefore, there would be no meaningful additive or interactive effects from these projects and the proposed actions under this alternative that would constitute a significant cumulative effect.



*Upper Spring source spring and vegetation*

### Alternative 3: Community Engagement Alternative

Alternative 3 would have similar impacts on wetlands as those described for alternative 2; however, alternative 3 aims to provide a greater level of natural resource protection by encouraging the participation of the user groups in the management of the Saline Valley Warm Springs Area while retaining the use of the tubs.

Under alternative 3, the Burro Spring diversion would be removed. This change is not expected to cause changes to wetland 1 as the three areas that comprise wetland 1 are naturally occurring as a result of the water from a natural source spring (refer to appendix A, figure 7).

This alternative would designate specific areas for camping to protect the resources at the Saline Valley Warm Springs Area, including wetlands. Under alternative 3, wetland 3 and a portion of wetland 1 would benefit from the artistic fencing that would be installed around the tubs, source springs, and riparian areas (appendix A, figure 13); however, the fence would be designed so that visitors would be able to camp in the same dispersed manner as described under current conditions. The fence would eliminate grazing by feral burros on the fenced wetland vegetation. Wetland 1 consists of three small, isolated palustrine emergent wetland areas that contain two species of management concern, whiteflower rabbitbrush and Cooper's rush. The fencing would protect the wetland area closest to Burro Spring, which is approximately 0.04 acre. Eliminating browsing effects from wetland vegetation would increase reproduction and fitness of the plants, benefitting the wetland system.

The efforts for nonnative plant removal would be the similar to those described for alternative 2. Alternative 3 could employ additional efforts, such as establishing thresholds for use and overuse and monitoring the conditions at the Saline Valley Warm Springs Area, which would trigger response actions by park management to restrict use if damage to natural resources were observed. These actions would help reduce impacts on wetlands from nonnative species as well as misuse or overuse by park visitors.

Similar to alternative 2, alternative 3 would not alter the sizes of the wetlands, but the quality of the wetlands would be improved through control of nonnative plant species and some protection from trampling and grazing by feral burros.

**Cumulative Impacts.** Of the past, present, or reasonably foreseeable projects that could have a detectable effect on resources affected by the Saline Valley Warm Springs Management Plan (presented in the "Cumulative Effects" section of this chapter), none would have an effect on wetlands. Therefore, there would be no meaningful additive or interactive effects from these projects and the proposed actions under alternative 3 or the preferred alternative that would constitute a significant cumulative effect.

### Alternative 4: Restoration Alternative

The restoration alternative would remove all development at the Saline Valley Warm Springs Area and restore the area, as close as possible, to natural conditions. Removal of the infrastructure would reduce the water supply to some of the wetlands at the Saline Valley Warm Springs Area.

At Lower Spring, alternative 4 would have an effect on wetlands 2 and 3. The settling pond (wetland 2) would be removed, which would result in removal of 0.027 acre of artificial palustrine wetland. Removal of all diversions and the settling pond would reduce the water available to wetland 3. This 0.89-acre palustrine scrub-shrub wetland would likely be reduced in size, though the change is expected to be minimal. A comparison of an aerial of Lower Spring from 1947 (prior to major water diversion) to an aerial from 2016 (appendix A, figure 8) indicates that the current vegetation follows the same distribution as under natural conditions. The northern area of the wetland appears to be more densely populated with

vegetation; this portion of the wetland currently benefits from overflow from the settling pond and runoff from the Lower Spring lawn. The removal of wetland 2 would result in a decrease in wildlife habitat, sediment retention, and flood flow alteration; however, this change would be a result of restoration of natural hydrology and would not be considered an adverse impact on wetlands. The reduction of wetland 3 would cover an area of approximately 0.1 acre; this would result in a slight reduction of wildlife habitat. However, removal of the water diversion infrastructure would create more natural conditions at the source springs. If the flow of the springs were great enough to provide overflow, wetland areas could form around the source springs if the conditions are appropriate.

Visitation to the Saline Valley Warm Springs Area would be expected to decrease under alternative 4. Visitors would use the Saline Valley Warm Springs Area in the same manner of other backcountry areas of the park. Trampling of wetland vegetation in wetlands 1, 3, and 4 could occur, but the impacts would be expected to be lower than those experienced under alternatives that retain the developed elements of the Saline Valley Warm Springs Area. Additionally, a wire fence would be constructed to surround the backcountry area (appendix A, figure 14). This would prohibit feral burros from trampling and grazing all wetland vegetation associated with Lower Spring.

Removal of the palm trees and other nonnative or invasive plant species and implementation of the monitoring and response program would create beneficial effects on wetland 1, 3, and 4. Most of the vegetation within these wetlands is native, but when the nonnative species are removed and managed over time, the native vegetation would be able to become established throughout the Saline Valley Warm Springs Area. The National Park Service would engage the Tribe to incorporate traditional ecological knowledge into the restoration plans.

Alternative 4 would result in reduced wetland functions and values at the Saline Valley Warm Springs Area. The removal of wetland 2 and potential reduction in size of wetland 3 would result in a reduction of wildlife habitat. It is important to note that these changes would result from the restoration of natural hydrology and would not be considered an adverse impact on wetlands. Further, wetlands 1, 3, and 4 would be improved through control of nonnative plant species and protection from trampling and grazing by feral burros.

**Cumulative Impacts.** Of the past, present, or reasonably foreseeable projects that could have a detectable effect on resources affected by the Saline Valley Warm Springs Management Plan (presented in the “Cumulative Effects” section of this chapter), none would have an effect on wetlands. Therefore, there would be no meaningful additive or interactive effects from these projects and the proposed actions under this alternative that would constitute a significant cumulative effect.

## Alternative 5: Preferred Alternative

Alternative 5 would have similar impacts on wetlands as those described for alternative 3, as alternative 5 would also incorporate camping zones, participation of the user groups in the management of the Saline Valley Warm Springs Area, and removal of the diversion at Burro Spring. However, alternative 5 would differ from alternative 3 in the areas that would be fenced and the handling of wastewater.

Under alternative 5, the fencing at Lower Spring and Palm Spring would be the same as described for alternative 2. The artistic fencing surrounding the source springs would not protect the wetlands at Lower Spring but would protect water quality. Alternative 5 would also replace the fencing at Upper Spring and expand the fencing to surround both the warm and cold source springs (appendix A, figure 15). The fencing would incorporate approximately 0.9 acre and would protect wetland 4 from burros. Visitors would be able to access wetland 4 and some trampling would occur, but Upper Spring receives limited visitation, and impacts to the functions and natural values would be minimal.

Alternative 5 would require the wastewater from dishwashing stations and showers be diverted to a subterranean system for treatment. This would result in less water in the settling pond (wetland 2) at Lower Spring. The settling pond receives water from the dishwashing stations, showers, tubs, and the runoff from the lawn. The reduced amount of water from adding the subterranean system is not expected to greatly reduce the input to the settling pond; therefore, impacts to wetland 2 would be immeasurable. Similarly, wetland 3, which is adjacent to wetland 2 and receives some benefit from runoff, would not be affected by the subterranean system for treating wastewater.

Alternative 5 would not alter the sizes of the wetlands, but the quality of the wetlands would be improved through control of nonnative plant species, protection from trampling and grazing of the Upper Spring wetland by feral burros, and resource protection. Onsite monitoring, completed by the National Park Service and through an MOU with user groups, would help NPS management respond to changing conditions by restricting visitor use in areas where damage to wetlands is occurring.

**Cumulative Impacts.** None of the past, present, or reasonably foreseeable projects that could have a detectable effect on resources affected by the Saline Valley Warm Springs Management Plan (presented in the “Cumulative Effects” section of this chapter) would have an effect on wetlands. Therefore, there would be no meaningful additive or interactive effects from these projects and the proposed actions under alternative 5 that would constitute a significant cumulative effect.

## Conclusion

Under alternatives 1, 2, 3, and 5, the four wetlands of Lower and Upper Springs would continue to be affected through trampling and pressure from nonnative plant species. The largest factor affecting the wetlands at the Saline Valley Warm Springs Area is diversion of water from the source springs. Under alternatives 1, 2, 3, and 5, most of the diversions would remain in place; therefore, the sizes of the wetlands would not be altered. Alternatives 3 and 5 would remove the diversion from Burro Spring to the wildlife trough, but this action would not have an impact on wetland 1. Alternative 2 would reduce adverse impacts from nonnative species over current conditions with plans to remove nonnative invasive palm trees after they die naturally and allow natural revegetation. Alternatives 3 and 5 would provide additional protection from nonnative plants with further resource stewardship efforts. These efforts would improve wetland quality. The burro exclusion fencing in alternative 3 would prohibit feral burros from grazing on a portion of wetland 1, which would benefit the two plant species of management concern, whiteflower rabbitbrush and Cooper’s rush, by allowing for greater reproduction and fitness. Alternative 5 would fully replace and extend the fencing at Upper Spring, providing better protection for wetland 4 from the trampling and grazing by feral burros. Under alternative 4, wetlands would be altered by the removal of all water diversion. This change would completely remove wetland 2, the settling pond, and likely reduce the size of wetland 3, which currently persists from overflow from the settling pond and runoff from the Lower Spring lawn. Based on historic aerials of the Lower Spring area prior to heavy development, the reduction of wetland 3 would not create a substantial difference in size. While alternative 4 would result in a reduction of wetland acreage, the changes from restoration actions would result in restoration of natural hydrology and return the Saline Valley Warm Springs Area to more natural conditions over time, ultimately resulting in beneficial effects. The effects of visitor activities are not currently posing irreparable threats on wetlands within the Saline Valley Warm Springs Area, and the action alternatives include elements that would improve conditions for these resources; therefore, it can be concluded that the effects from the action alternatives, including the preferred alternative, would not produce significant impacts on wetlands.



## WILDLIFE

### Methodologies

This analysis of impacts on wildlife considered the changes and disturbance to wildlife habitat, wildlife species, and the natural processes sustaining them that would occur as a result of the implementation of the alternatives. The impacts on wildlife were analyzed qualitatively. The information in this analysis was obtained through observations and best professional judgment of park wildlife biologists, experts in the field, and supporting literature (as cited in the text).

### Types of Impacts on Wildlife

**Disturbance and Displacement.** Potential impacts on wildlife can include disturbance and displacement as a result of human presence and noise. Disturbance affects all species differently, as some wildlife species are more tolerant of human presence. The type and intensity of disturbance to wildlife by human presence is based on many factors, including type of wildlife species (mammals versus birds) and location of disturbance (developed areas like campsites versus designated wilderness), as well as other factors. Disturbance can result in both short- and long-term impacts on wildlife. In most cases, disturbance as a result of human presence and noise would result in a flight response or cessation of foraging or mating behaviors (Cooke 1980, Knight and Cole 1991). These disturbances would typically be temporary in nature, and any mobile individuals, such as mammals and birds, that exhibited a flight response would typically resume their prior behaviors within a short amount of time. Less mobile and small fauna, such as invertebrates, would be more intensely affected by disturbance and displacement compared to larger and more mobile species because of their delayed flight response and small size. Disturbances are generally nonlethal and temporary.

**Habitat Modification.** Wildlife habitat can be adversely affected by humans through visitor activities and trampling. Existing habitat could also be altered to benefit wildlife through restrictions on uses or elimination of facilities. Changes in the vegetation communities can alter existing habitat for wildlife species. Actions that alter the light and moisture regime and those that remove vegetation could result in a reduction in habitat for wildlife species. Trampling is one of the most visible forms of disturbance caused by visitor recreation (Monz et al. 2009), and it can adversely impact vegetation and lead to altered habitat. Habitat damage caused by trampling can lead to reduced suitability for ground-nesting or burrowing wildlife species, or small fauna. Small mammal and invertebrate burrows may be crushed through trampling. Although changes in wildlife distribution may occur as a result of trampling, it is expected that the larger and more mobile wildlife species would usually avoid areas with visitors present during peak activities.

**Behavior Modification.** Normal wildlife behavior can be altered as a result of human presence, which can be an attractant or deterrent to wildlife. Behavior modification in wildlife from human presence can include changes to feeding, nesting, grooming, resting, and habitat use. Additionally, wildlife behavioral responses to disturbance may include reduced prey intake rates, increased vigilance levels, reduction in levels of parental care, or increased time spent in flight.

Human activities at campsites can disturb wildlife and deter them from approaching water sources, which is a critical impact in desert habitats (Hammit and Cole 1998). Other animals could be attracted to campsites due to food smells. Animals that are common at campsites include birds, mice, rats, and squirrels (Lueng and Marion 2000). At the same time, designated campsites can protect new areas from being impacted from camping by limiting the impacts to certain areas in the parks, which would protect other habitats.

Habituation to humans is a behavior modification that can result from human presence in the wilderness. There are two primary means by which wildlife can be adversely impacted by humans in particular: through frequent benign encounters with people, which can lead to habituation, and through the availability of human food items brought into the area by visitors, which if obtained by wildlife, can lead to food conditioning. Habituation is an adaptive response that minimizes unnecessary and irrelevant energy expenditures (McCullough 1982), but it can lead to negative consequences for both wildlife and people. Wildlife that learn to seek out campsites for food become a nuisance.

**Feral Burros.** Burros were introduced to the California desert in the late 1800s by settlers and miners (BLM and NPS 1999). Feral burros are well adapted to survive in the desert environment. Mountain lions (*Puma concolor*) will occasionally prey on feral burros, but this does not occur often enough to reduce the feral burro population. In some areas, feral burros can compete with native wildlife, such as bighorn sheep (*Ovis canadensis*) for food, water, and space. Although feral burros are not directly competing with other wildlife at the Saline Valley Warm Springs Area, they have become habituated to the visitors, often raiding campsites for food. After the development of the alternatives for the draft plan/EIS, the National Park Service entered into a 5-year agreement with Peaceful Valley Donkey Rescue to relocate burros from the park to offsite adoption facilities and sanctuaries. Because this effort would remove burros over a period of 5 years, the fencing options of the alternatives were retained for this final plan/EIS for resource protection. Where the alternatives have impacts on feral burros, these impacts are discussed separately from other wildlife species. The alternatives contain elements that work to control impacts from feral burros on the Saline Valley Warm Springs Area.



*Feral burro eating visitors' food at a campsite at the Cool Pool Camping Area*

## Alternative 1: No-Action Alternative

**Wildlife.** Under alternative 1, the no-action alternative, all visitor activities at the Saline Valley Warm Springs Area would continue. Wildlife would continue to be affected by visitor activities through disturbance and habitat modification.

As stated in the "Soils and Vegetation" section, Warm Springs Road is the only designated road at the Saline Valley Warm Springs Area. Visitors to the Saline Valley Warm Springs Area generally drive on roads created by rock alignments and camp close to the soaking tubs. However, during times of higher visitation, such as Presidents Day and Thanksgiving, visitors are forced to camp further from the tubs in the areas, such as the Lower Dispersed camping area (appendix A, figure 10; appendix C). The unrestricted and dispersed nature of the campsites has led to large areas of compacted land, which creates unsuitable habitat for small mammals and invertebrates that might otherwise burrow in the soils. Approximately 119 acres of the Saline Valley Warm Springs Area have been affected by use of the camping areas by visitors. This effect would continue under alternative 1.



At Lower Spring, visitors tend to camp close to vegetation where possible in the central, Burro Spring, and the Lower Dispersed camping areas, as depicted in figure 10 (appendix A) and appendix C. The human activity could deter wildlife from using the vegetation in these areas for foraging or shelter. Lower Spring contains the most vegetation at the Saline Valley Warm Springs Area; however, some of this habitat is supported by water diverted from the source springs and much of the vegetation is comprised of nonnative species, providing altered habitat. The plant species act as a food source for the wildlife of Saline Valley. For example, palm tree fruits and mesquite fruits, seeds, and flowers are valuable forage, even though the palms species at the Saline Valley Warm Springs Area are nonnative and invasive.

Some of the wildlife species that occupy the habitat at Lower Spring are those species that have become habituated to human presence, such as American coot (*Fulica americana*) and common raven (*Corvus corax*). The settling pond provides habitat for several nonnative aquatic species including western mosquito fish (*Gambusia affinis*), koi (*Cyprinus carpio*), and Louisiana swamp crayfish (*Procambarus clarkii*). These species, as well as others, benefit from the food scraps that are included in the waste water from the dishwashing stations and from poor food storage by visitors.

Visitors also camp in the Middle and Upper Dispersed camping areas (appendix A, figure 10; appendix C), which contain sparse vegetation. Palm Spring contains very little natural habitat. Upper Spring provides a small (approximately 0.8 acre) area of habitat. The Upper Spring vegetation is dense, and the majority of the plants in this community are native. The habitat at Upper Spring is appropriate for supporting aquatic species, terrestrial invertebrates, small mammals, reptiles, and birds. Visitors infrequently explore Upper Spring, thus the impacts from trampling and disturbance would be minimal.



Signage at the library area of Lower Spring

While most of the impacts from visitors at the Saline Valley Warm Springs Area would be localized, visitors participate in many recreational activities and all of these activities have the potential to disturb wildlife. Because the Saline Valley Warm Springs Area is sparsely vegetated, impacts on vegetation would be minimal, but recreation activities would have adverse effects on cryptobiotic soil crusts, which provide a food source for organisms that live below the surface. While foot traffic could disturb wildlife, off-road vehicle use has been shown to produce severe effects on wildlife, specifically in arid environments, through direct mortality, habitat destruction, and noise disturbance (Bury et al. 1977). Although off-road vehicle use is not permitted in Death Valley National Park, it would be expected to continue to occur.

Impacts at the Saline Valley Warm Springs Area are largely driven by visitor activities. The volunteer camp host and repeat visitors to the Saline Valley Warm Springs Area work to educate new visitors on the stewardship of the springs and surrounding areas. Under alternative 1, these efforts would continue, and NPS signage with rules for recreating in the backcountry would remain in place at Lower Spring. The guidance from volunteers and signage could reduce behaviors that negatively impact wildlife at the Saline Valley Warm Springs Area, such as poor food storage and vegetation trampling; however, the amount that these efforts benefit the resources is unknown.

**Feral Burros.** Currently, feral burros are able to roam throughout most of the Saline Valley Warm Springs Area. The users constructed a wooden fence around the Lower Spring lawn to keep the feral burros from grazing on the grasses, and the National Park Service constructed a chain-link burro exclusion fence around Upper Spring to retain its natural habitat and eliminate grazing and trampling from feral burros. However, as stated in the “Wetlands” section, the fence has been vandalized by visitors and the repaired fence may not be entirely effective in prohibiting feral burro access to Upper Spring. There is evidence of feral burros grazing the vegetation at Lower Spring. The feral burros are also known to look for food at visitors’ camps and in fire rings, often damaging items and spreading trash.

**Cumulative Impacts.** Few past, present, or reasonably foreseeable projects have a detectable effect on wildlife. One project that may affect wildlife is the Saline Valley Road Borrow Sites and Gravel Management Plan (NPS 2011a), which was approved in 2011. This project would allow for the issuance of a permit to Inyo County for use of existing borrow pits along Saline Valley Road. If the permit is issued, wildlife could be adversely affected by the temporary loss of desert scrub habitat, but these affected areas would be restored following the road repair activities; restoration is expected to be complete within the 20-year permit period.



*Sign on the book cabinet door of the library area at Lower Spring*

Another project, the Inyo County ATV Adventure Trails of the Eastern Sierra Project (Inyo County 2014), allows Inyo County to designate certain county roads as combined-use routes to link existing OHV trails and trailheads on BLM or USFS lands to create a unified OHV trail system. Included in this trail system is 11.6 miles of Death Valley Road outside and west of Death Valley National Park. Death Valley Road is already paved; therefore, inclusion of this road would not involve modification of wildlife habitat. Although traffic is expected to increase on this portion of Death Valley Road, an increase in collisions with wildlife is not expected. However, OHV use could stray into the park and onto Saline Valley Road, as the boundaries are not clear in the northwest corner of park. Interactions with wildlife from illegal use of OHV vehicles could occur, but these instances are expected to be minimal. Wildlife could be affected by traffic noise, but the increase over current conditions would not be substantial.

The no-action alternative would allow continued use of the Saline Valley Warm Springs Area and current impacts on wildlife would also continue, including trampling and disturbance. Considered together, there would be no meaningful additive or interactive effects among these projects and the proposed actions under alternative 1 that would constitute a significant cumulative effect.

## **Alternative 2: Regulatory Compliance Alternative**

**Wildlife.** Alternative 2 would have similar impacts on wildlife as the no-action alternative, as this alternative retains much of the existing use of the Saline Valley Warm Springs Area but brings the actions and conditions into compliance with NPS, state, and federal regulations. Visitation under alternative 2 is assumed to be consistent with current conditions; therefore, the effects of disturbance and trampling from driving, camping, and recreational activities would be the same as described under alternative 1.

Alternative 2 would differ from the no-action alternative in the treatment of nonnative plant species, management of the dishwashing stations, food storage education, and fencing.

Under alternative 2, the palm trees would be removed from Upper Spring, and as palm trees die naturally at Palm and Lower Springs, the areas would be allowed to revegetate naturally; these palms are nonnative invasive species. Additionally, the National Park Service would perform nonnative plant control via the park's existing invasive management plan and other regulations. These actions would allow the vegetation communities to exist and succeed in a more natural state, which would provide higher quality habitat for native wildlife species.

The National Park Service would add a filtration system to the dishwashing stations at Lower and Palm Springs, removing food scraps from the wastewater and reducing human-provided food for wildlife. This action would reduce habituation of wildlife, although wildlife would continue to be able to obtain improperly stored food from campsites. For this reason, the National Park Service would expand education efforts, specifically on how to properly store food while camping at the Saline Valley Warm Springs Area, through various media and through direct communication by the camp host.

**Feral Burros.** Under alternative 2, the burro exclusion fence around Upper Spring would remain, and the National Park Service would install wooden fencing around the source springs at Lower and Palm Springs to restrict feral burros. Feral burros would still have access to campsites and all vegetation except for the Lower Spring lawn, which is currently fenced, under this alternative. The fencing would protect the water sources but would not protect any terrestrial wildlife habitat from trampling and grazing by feral burros.

**Cumulative Impacts.** Few past, present, or reasonably foreseeable projects that have a detectable effect on wildlife. These projects include the Saline Valley Road Borrow Sites and Gravel Management Plan (NPS 2011a) and the Inyo County ATV Adventure Trails of the Eastern Sierra Project (Inyo County 2014). These projects are described for alternative 1. Alternative 2 would allow for continued use of the Saline Valley Warm Springs Area, similar to current conditions, with added elements for wildlife protection, including treatment of nonnative plant species and management of the dishwashing stations. Visitation would remain consistent with current conditions under this alternative, and the beneficial effects from these efforts would result in little change to wildlife at the Saline Valley Warm Springs Area. Considered together, there would be no meaningful additive or interactive effects among these projects and the proposed actions under this alternative that would constitute a significant cumulative effect.

### Alternative 3: Community Engagement Alternative

**Wildlife.** Alternative 3 would have similar impacts on wildlife as those described for alternative 2; however, alternative 3 aims to provide a greater level of natural resource protection by encouraging the participation of the user groups in the management of the Saline Valley Warm Springs Area while retaining use of the tubs. The number of visitors under alternative 3 is expected to remain consistent with current visitation levels; therefore, the levels of impacts would also be similar. Alternative 3 differs from alternative 2 by restricting camping to certain areas, managing food storage, removing the water diversion from Burro Spring, removing the lawn at Lower Spring, further increasing visitor education, and increasing restrictions on feral burro access.

The designated camping areas and overflow areas under alternative 3 would prohibit visitors from spreading into undisturbed areas. The buffer around the source springs under alternative 3 would protect approximately 2.8 acres from camping impacts, but the designated car camping areas, the walk-in camping area, and the parking area would concentrate the impacts from driving and foot traffic. While other portions of the Saline Valley Warm Springs Area would be open to recreation activities, this camping design would limit visitors' effects on wildlife habitat and reduce the potential for human

disturbance of wildlife. The intensity of the impacts, especially during times of high visitation that would result in significant sprawl under alternatives 1 or 2, would be reduced, allowing portions of the Saline Valley Warm Springs Area to recover, and reducing potential wildlife/human interactions.

Alternative 3 would work to reduce wildlife habituation. In addition to the filtration system on the dishwashing stations, the National Park Service would have the ability to provide food storage boxes for the storage of campers' food. When the filtration systems, the food storage boxes, and the increased education for camping practices are used in conjunction, they would greatly reduce the potential for wildlife to become dependent on humans for food.

Alternative 3 would remove the diversion at Burro Spring, which would return the mesquite and understory in the middle of the Lower Spring to more natural conditions over the long term. This change would eliminate a water source for wildlife. More importantly, it could reduce the line of mesquite from the middle of Lower Spring. Mesquite is an important resource for wildlife, as the trees can provide shelter, nesting, and roosting habitat, and the seeds, flowers, and fruits are a food source for a variety of wildlife species (Steinberg 2001). If a reduction were to occur, it would result in an adverse impact on wildlife, as it would reduce valuable habitat at Lower Spring. It should be noted that based on comparison of aerial photographs of Lower Spring, this mesquite habitat developed in the mid-1990s, most likely due to the addition of the diversion at Burro Spring; therefore, this habitat should not be considered part of the natural landscape, even though it is comprised of native species. These mesquite trees have been established for approximately 20 years. The trees grow a very long taproot and an extensive lateral root system for obtaining water, making it likely the trees would be able to persist in this location, even with the loss of water from the diversion pipe. If Burro Spring has enough flow, natural outflow from the spring could help establish vegetation closer to the source spring, and this new, naturally occurring habitat would be beneficial for the wildlife of the Saline Valley Warm Springs Area; however, natural restoration in desert habitat is a slow process. In the Mojave and Sonoran deserts, natural revegetation of perennial plant cover after various types of disturbance averaged 76 years (Abella 2010).

Alternative 3 would also remove the lawn at Lower Spring and allow the area to naturally revegetate or replant it with native species. The replacement species, whether planted or allowed to succeed naturally, would likely provide a different habitat than the lawn currently provides. These actions would reduce the nonnative species at the Saline Valley Warm Springs Area and allow for native habitat to return, thus providing a benefit to native wildlife species that would use it.

Alternative 3 would result in long-term beneficial effects on wildlife habitat, and therefore wildlife, through efforts to reduce nonnative species and to support the succession of natural habitats. Nonnative plant removal would be the similar to those described for alternative 2, but alternative 3 could employ additional efforts such as entering into an agreement with user groups to support the National Park Service with nonnative species removal and monitoring of all three springs sites for nonnative species establishment. The National Park Service would also monitor conditions at the Saline Valley Warm Springs Area, which would trigger response actions by park management to restrict use if damage to natural resources associated with overuse were observed. The National Park Service would establish thresholds for use and overuse. With the help of volunteers, the National Park Service would be able to better monitor the conditions of the natural resources at this remote site. If a particular area or resource becomes stressed, the National Park Service could implement restrictions on its use to allow for recovery. In support of these actions, the National Park Service would also increase the educational signage on campground boards and the camp host would be required to connect with visitors to encourage resource protection measures. These actions would help reduce impacts on wildlife habitat from nonnative species as well as misuse or overuse by park visitors, resulting in long-term beneficial impacts on wildlife and wildlife habitat. For all of the native habitat restoration efforts, the National Park Service would seek the traditional ecological knowledge of the Tribe.

**Feral Burros.** Under alternative 3, the burro exclusion fence around Upper Spring would remain, and the National Park Service would install wooden fencing around the tubs, source springs, and riparian areas at Lower and Palm Springs to restrict feral burros from these areas. Eliminating trampling and grazing together with nonnative plant species control, the habitats of Lower and Palm Springs would be able to return to more natural conditions, though this process would be slow, as stated in the previous section. Feral burros would still have access to campsites under this alternative.

**Cumulative Impacts.** Few past, present, or reasonably foreseeable projects have a detectable effect on wildlife. These projects include the Saline Valley Road Borrow Sites and Gravel Management Plan (NPS 2011a) and the Inyo County ATV Adventure Trails of the Eastern Sierra Project (Inyo County 2014). These projects are described for alternative 1. Alternative 3 allows visitors to continue to use the Saline Valley Warm Springs Area for soaking and recreation, the same as alternative 1. The National Park Service would work with the user groups to collaboratively to protect natural resources. These efforts, camping limitations, food management, and fencing would create beneficial effects on wildlife and wildlife habitat, though the net effect in this previously disturbed area would be minimal. Considered together, there would be no meaningful additive or interactive effects among these projects and the proposed actions under alternative 3 that would constitute a significant cumulative effect.

## Alternative 4: Restoration Alternative

The restoration alternative would remove all development at the Saline Valley Warm Springs Area and restore the area, as close as possible, to natural conditions. Recovery rates of desert environments are generally very slow (Abella 2010), but removal of the development would reduce the draw for many visitors, thus reducing effects from recreational activities. Physical removal of all the features at the Saline Valley Warm Springs Area would temporarily disturb wildlife, as these actions would likely require heavy equipment and vehicles. With fewer visitors and fewer vehicles, impacts on wildlife from trampling and disturbance would be reduced and less concentrated over the long-term.

Removal of the water diversion infrastructure at the Saline Valley Warm Springs Area could adversely affect the mesquite in the middle of Lower Spring, although the probability is low, and remove a reliable water source, as described for alternative 3. Alternative 4 would remove the settling pond, which would eliminate a wetland habitat at Lower Spring. Overflow from the settling pond and runoff from the Lower Spring lawn provide some hydration to the wetland south of these features. Under alternative 4, this wetland vegetation would be negatively affected by the loss of water supply. Although these changes would reduce the habitat available to wildlife, they would eventually restore the Saline Valley Warm Springs Area to more natural conditions, which would benefit native wildlife species over the long term.

The nonnative plant species management actions, the monitoring and response program, and the cooperative agreement between the National Park Service and the Tribe would be the same as described for alternative 3; however, there would not be a camp host and the signage present at the Saline Valley Warm Springs Area would be minimal. Visitors would be responsible for properly storing their food, and the National Park Service would provide the same level of information as is provided to other backcountry visitors in the park.

**Feral Burros.** Feral burros would be restricted from the entire Saline Valley Warm Springs Area by a wire fence that would be installed at the backcountry boundary; the fencing around Upper Spring would remain in place. These fences would prohibit feral burros from trampling and grazing anywhere at the three springs areas. Removal of all development, the expected drop in visitation, removal of all nonnative plant species, the monitoring and response program, and this feral burro exclusion would provide the greatest opportunity for the Saline Valley Warm Springs Area to return to natural conditions. However, even with the protection provided by alternative 4, the restoration process would be slow.

**Cumulative Impacts.** Few past, present, or reasonably foreseeable projects have a detectable effect on wildlife. These projects include the Saline Valley Road Borrow Sites and Gravel Management Plan (NPS 2011a) and the Inyo County ATV Adventure Trails of the Eastern Sierra Project (Inyo County 2014). These projects are described for alternative 1. Alternative 4 would remove all infrastructure and restore the Saline Valley Warm Springs Area. These activities would have temporary adverse impacts on wildlife from disturbance. Reduction of habitat would have an adverse effect on wildlife, as desert habitats are slow to recover from disturbance; however, over the long-term, this alternative would return the Saline Valley Warm Springs Area to more natural conditions. Additionally, a monitoring and response program for nonnative species would be implemented. Considered together, there would be no meaningful additive or interactive effects among these projects and the proposed actions under this alternative that would constitute a significant cumulative effect.

## Alternative 5: Preferred Alternative

**Wildlife.** Alternative 5 would be similar to alternative 3, except for the fencing, the treatment of the palm trees and the lawn, and the way wastewater is handled. Similar to alternative 3, alternative 5 would have camping zones, which would concentrate car camping to designated areas, allow walk-in camping in other areas with an associated parking area, and prohibit camping in other parts of the Saline Valley Warm Springs Area. These zones would limit impacts to wildlife habitat to previously disturbed areas and allow other areas to recover from previous human use. Over the long-term, this restored habitat could become suitable for use by more wildlife species. The camping buffer around the source springs at Lower and Palm Springs would remain at 100 feet under alternative 5, continuing to protect approximately 1 acre collectively from the Burro Spring, Cool Pool, and Upper Dispersed camping areas.

The Lower Spring lawn would be retained and maintained within its current footprint under alternative 5. Although the lawn allows nonnative species to persist, it does provide habitat and would continue to do so for any wildlife species that use the lawn currently for activities, such as foraging or resting. Under alternative 5, young palm trees would be actively removed, and native species would be planted so that when the existing mature palm trees die naturally and are removed, the native species would be mature enough to provide shade for visitors. The vegetation maintenance would be provided by the user groups under an MOU.

Alternative 5 differs from alternative 3 in that wastewater from the dishwashing stations and the showers would be diverted to subterranean systems to treat the water. At Palm Spring, this change would reduce the small amount of vegetation that grows in the wash south of the sink and shower. This vegetation provides poor quality habitat because it is nonnative, thus the loss of habitat would result in a minimal impact to wildlife. At Lower Spring, the subterranean system would result in a reduced amount of water entering the settling pond. This change is not anticipated to cause a change in the water level or the vegetation that grows around the settling pond.

Alternative 5 would result in minimal impacts on wildlife and wildlife habitat at Palm Spring from a slight reduction in low-quality habitat, but overall alternative 5 would create beneficial effects on wildlife and wildlife habitat throughout the Saline Valley Warm Springs Area. The reduction of nonnative plant species, collaborative efforts with user groups, the increased education, and the camping limitations would support the succession of natural habitat, reduce the potential for wildlife habituation, and allow previously disturbed areas to recover into potentially suitable wildlife habitat.

**Feral Burros.** The fencing that would be installed under alternative 5 would only surround the source springs at Lower and Palm Springs but would replace and extend the fencing at Upper Spring to include both source springs within the fencing. The habitat at Upper Spring would be protected from impacts of burros, but Lower Spring and Palm Spring would be susceptible to burro grazing and trampling. The

agreement between the National Park Service and the Peaceful Valley Donkey Rescue should reduce the burro population at the park and thus the impacts on the habitat at the Saline Valley Warm Springs Area; however, there is no guarantee that this program will be successful.

**Cumulative Impacts.** Few past, present, or reasonably foreseeable projects have a detectable effect on wildlife. These projects include the Saline Valley Road Borrow Sites and Gravel Management Plan (NPS 2011a) and the Inyo County ATV Adventure Trails of the Eastern Sierra Project (Inyo County 2014). These projects are described for alternative 1. Alternative 5 allows visitors to continue to use the Saline Valley Warm Springs Area for soaking and recreation, the same as alternative 1. The National Park Service would work with the user groups to collaboratively to protect natural resources. These efforts along with camping limitations would create beneficial effects on wildlife and wildlife habitat, though the net effect in this previously disturbed area would be minimal. Considered together, there would be no meaningful additive or interactive effects among these projects and the proposed actions under alternative 5 that would constitute a significant cumulative effect.

## Conclusion

Under alternatives 1, 2, 3, and 5, the wildlife in the Saline Valley Warm Springs Area would continue to be affected through trampling and disturbance from visitor activities. The effects on wildlife would result in impacts that are not substantially different among these four alternatives. Alternatives 3 and 5 would remove the diversion of water from Burro Spring to the line of mesquite. The density of the associated understory would likely be reduced, causing a reduction of available habitat, but the mesquite trees would likely persist. Efforts to reduce nonnative species and return the habitat in the Saline Valley Warm Springs Area to more natural conditions would have beneficial effects on wildlife species. Alternatives 2 and 3 would eventually remove nonnative invasive palm trees and allow natural revegetation, thus improving available wildlife habitat; alternative 5 would plant native tree species so that they would mature and provide shade by the time the palm trees die naturally and are removed. Alternative 3 would also remove the Lower Spring lawn and either allow natural revegetation or replant the area with native species. Alternatives 3 and 5 would provide further protection from nonnative plants through an MOU with the user groups for resource stewardship efforts. Under alternative 4, adverse impacts on wildlife would be reduced over the long-term, as the development at the Saline Valley Warm Springs Area would be removed, thus reducing visitation to the area. Visitors would still visit the Saline Valley Warm Springs Area and impacts from trampling and disturbance are expected, but dispersed camping from fewer visitors under the restoration alternative would allow the area to recover from decades of heavier use. Based on available information, the effects of visitor activities are not currently posing irreparable threats on native wildlife within the Saline Valley Warm Springs Area, and the action alternatives include elements that would improve conditions for these resources; therefore, it can be concluded that the effects from the action alternatives, including alternative 5, the preferred alternative, would not produce significant impacts on wildlife.

## CULTURAL RESOURCES

### Methodologies

Potentially eligible National Register of Historic Places (NRHP) archeological, historical, and ethnographic properties are present within the Saline Valley Warm Springs Area. As stated in the “Purpose of and Need for Action” chapter, cultural landscapes exist at the Saline Valley Warm Springs Area; they are discussed under historical resources and ethnographic resources sections. Environmental consequences from each of the five alternatives to these resources were evaluated based on their potential to cause impacts to the integrity of the properties as they relate to their potential eligibility to the NRHP.



## Types of Impacts on Cultural Resources

**Physical Destruction/Damage/Disturbance.** A number of direct physical impacts could occur to cultural resources ranging from disturbance, to removal or destruction of a contributing feature of an eligible property. For archeological sites, artifacts can be removed through collecting and looting activities or moved from one place to another. Even if a curious hiker picked up an artifact, examined it, and then dropped back on the ground nearby, its contextual information is lost, and it loses its ability to convey certain information about the archeological site.

**Changes in the Character of Property Use and Visual Features.** Changes to a site could alter the use or affect the visual elements of a historic resource that contribute to its eligibility to the NRHP. For example, if the property is eligible as a recreational resource, changes that affect its recreational use could impact the eligibility of the site as a whole or of certain contributing features to the site. Similarly, removal of vegetation where vegetation is considered a contributing feature might visually affect the character of the site.

**Loss of Integrity of Association and Relationship to Cultural Groups.** For ethnographic resources, such as Traditional Cultural Properties (TCPs) and areas of ethnographic significance for tribes, certain impacts can affect the integrity of association and the integrity of relationship to the particular cultural group that is tied to the property. If certain traditional cultural practices cannot be practiced or are adversely impacted at a site, this may limit the ability of the site to help to maintain the cultural traditions of the group.

**Viewshed Impacts.** Impacts to the viewshed of a historic property, both looking toward a historic property and looking at the view from a historic property, can affect the integrity of setting, feeling, and association of a historic site, cultural landscape, or ethnographic resource.

## Section 106 of the National Historic Preservation Act of 1966

Consultation under section 106 of the National Historic Preservation Act (NHPA) is described in the “Consultation and Coordination” chapter. Under section 106 of the NHPA changes to NRHP-eligible cultural resources resulting from implementation of a project are referred to as “effects,” and may be considered as “no effect,” “no adverse effect,” or “adverse effect.” Effects can be beneficial, as well as adverse.

### Alternative 1: No-Action Alternative

For alternative 1, the no-action alternative, future visitor use would continue at the Saline Valley Warm Springs Area as it is today, including fees, length and location of stays, use of campfires, and the airstrip. While the current tubs would remain, no additional tubs would be built, and no development would be allowed at Upper Spring (NPS 2002a). Unrestricted dispersed camping, including car camping in backcountry areas, would continue. Only minimal control of nonnative and invasive plants, such as removing young palms, would occur. For archeological sites, NPS monitoring would continue. The camp host and visitors would continue to maintain the tubs infrastructure with NPS oversight.

**Archeological Resources.** Under alternative 1, archeological sites that have been recorded in the past would continue to see the same threats from heavy use that they face now, namely disturbed context, collecting, and serious physical damage. Bonstead noted in 2013 that the archeological sites previously recorded at Lower and Palm springs have “been destroyed through visitor use (human and burro).” Car camping activities would continue in the 119 acres of camping areas, as discussed in the “Soils and

Vegetation” section and presented in appendix C. Visitors to the Saline Valley Warm Springs Area can unknowingly impact archeological resources from activities such as driving through the Saline Valley Warm Springs Area, moving rocks to create fire rings and art, and dragging Warm Springs Road with a heavy tire or other device. Continued visitor use in the current manner in the Saline Valley Warm Springs Area would allow easy access for hikers into more remote, designated wilderness areas where more intact archeological sites may be located, thereby providing a potential for impacts on these sites.



*Bathtub and shower at Lower Spring, contributing elements to the area of historic significance for the recreational users*

**Historical Resources.** Impacts from alternative 1 on the area of historic significance for the recreational users could occur but would be negligible, as the significance is tied to the site’s recreational and social history, both of which would remain the same under the no-action alternative. Existing nonnative and invasive vegetation (including the palms and the lawn at Lower Spring) would remain in place, as would communal spaces that lend the site significance under social history. No new tubs can be constructed, and no development can occur at Upper Spring; these restrictions were already in place per the Death Valley GMP (NPS 2002a).

**Ethnographic Resources.** For some members of the Tribe, the current usage of the Saline Valley Warm Springs Area has a “significant impact from escalating recreational use, inappropriate behavior, and the construction of soaking pools and the development as a spa-like setting” on the area of ethnographic significance for the Tribe (Rucks 2016). The diversion of the natural spring water, the presence of nonnative species, and the choice of some visitors to practice clothing optional recreation at the Saline Valley Warm Springs Area affect what members of the Tribe consider a sacred place. As the current management of the area would continue under alternative 1, these adverse impacts would continue. Although Upper Spring remains undeveloped and retains much of its natural and ethnographic integrity, camping with vehicles occurs at Upper Spring presently and visitors do soak in the Upper Spring source

spring, although at a much lower density and frequency than at Palm Spring or Lower Spring. Alternative 1 would continue to have an adverse impact on Upper Spring, as under this alternative there is little park oversight due to the remoteness of the Saline Valley Warm Springs Area.

**Cumulative Impacts.** The no-action alternative would allow continued use of the Saline Valley Warm Springs Area, thus current impacts on cultural resources would continue. This would include the disturbance of archeological resources and behavior and recreation activities that are contrary to the Tribe's use of the Saline Valley Warm Springs Area as a sacred place.

Of the past, present, or reasonably foreseeable projects that could have a detectable impact on resources affected by the Saline Valley Warm Springs Management Plan, the Saline Valley Road Borrow Sites and Gravel Management Plan (NPS 2011a) could have an impact on cultural resources, specifically archeological resources. This project would allow for the issuance of a permit to Inyo County for use of existing borrow pits along Saline Valley Road. Subsurface sites or artifacts could be damaged or destroyed during excavation; however, because the borrow sites have been previously used and the ground previously disturbed, there is only a small potential for impacts to archeological resources.

Routine road maintenance by Inyo County could also have an impact on archeological resources. The maintenance generally involves grading the Saline Valley Road, the main road that leads to the Saline Valley Warm Springs Area, but Inyo County must also restore the road after heavy rains. These maintenance activities could damage or destroy resources, but Saline Valley Road has been previously disturbed and the potential for additional impacts on archeological resources is minimal. Considered together, there would be no meaningful additive or interactive effects among this project on cultural resources and the proposed actions under alternative 1 that would constitute a significant cumulative impact.

## Alternative 2: Regulatory Compliance Alternative

Alternative 2, the regulatory compliance alternative, would have similar impacts on cultural resources as the no-action alternative. This alternative retains much of the existing use of the Saline Valley Warm Springs Area but brings the actions and conditions into compliance with NPS, state, and federal regulations. To the extent possible, the existing features at the Saline Valley Warm Springs Area would be made accessible and usable to those with disabilities. Unrestricted dispersed camping, including car camping in backcountry areas, would continue. All user-constructed fire rings at campsites would be removed and only the use of NPS-provided structures would be allowed, such as fire enclosures, grate, grills, or firepans. The communal fire ring at Lower Spring would remain. Under alternative 2, the nonnative invasive palm trees that die naturally at Lower Spring and Palm Spring would not be replaced, but the existing palm trees at Upper Spring would be removed. Additional artistic fencing would be installed around the source springs to exclude feral burros from accessing the springs. Non-historic artwork would be removed from all designated wilderness areas and manipulation of natural or cultural resources for the purpose of art would be prohibited. The vehicle support facility would be removed.

The area of historic significance for recreational users and the area of ethnographic significance for the Tribe would be managed as such by the National Park Service and documentation of and mitigation for the impacts to elements of these resources would be completed. Art at the Saline Valley Warm Springs Area that is determined to be NRHP-eligible would be managed as such. NPS monitoring of archeological resources would continue.

**Archeological Resources.** Under alternative 2, visitor use would remain almost identical to current conditions; therefore, the impacts on archeological resources would continue to occur. The National Park Service would install artistic fencing around the source springs to keep the feral burros from the springs.

Feral burros may spend time trailing along the fence line. Prior to installation of the fencing, the National Park Service would conduct archeological surveys and consult with the State Historic Preservation Officer (SHPO). The fencing would be placed in areas void of resources; therefore, installation of the fence and trailing by feral burros would not affect archeological resources. Alternative 2 would prohibit visitors from manipulating natural or cultural resources for art, preventing further damage to archeological resources, but because the Saline Valley Warm Springs Area has been previously disturbed, this would only result in a slight beneficial impact. The other changes initiated by alternative 2 would have no impact to archeological resources at the Saline Valley Warm Springs Area.

**Historical Resources.** Alternative 2 would begin a program of removing the nonnative invasive palm trees at Lower Spring and Palm Spring as they die naturally, per NPS *Management Policies 2006* (NPS 2006, section 4.4.4.2). As the age of the palms at Lower Spring could not be determined definitively, it remains unknown if they are a contributing feature to the area of historic significance for the recreational users. The palm trees at Palm Spring are a contributing feature of the site; this area is named for the palms. The gradual removal of palm trees would diminish this visual feature of the Saline Valley Warm Springs Area. The conflicting dates for the presence or absence of palms at Lower Spring, based on photographs, oral histories, and written archival sources seem to indicate that trees have been both present and absent in this location. It seems likely that they have been planted, have died, or have been removed, and then replanted possibly several times by either Tribal members, ranchers, or recreational users. Lightning strikes may also have killed palm trees at certain times, as mentioned by visitors (New South 2015).

Alternative 2 would add more artistic fencing around the source springs at both Lower Spring and Palm Spring to limit access of the feral burros. This would not have a visual impact effect at Lower Spring, as the artistic fencing style would be similar to the current fencing. The fencing is not considered a contributing feature of the area of historic significance for the recreational users. It is, however, a sympathetic addition to the setting and feeling and was recommended for re-evaluation as a contributing resource when it reaches 50 years of age (New South 2015). The addition of artistic fencing at Palm Spring would be considered an adverse visual impact, as the feeling of this site is more open and there is currently no fencing in this location. Under alternative 2, all non-historic artwork would be removed in wilderness areas, including the Upper Peace Sign, which is not part of the area of historic significance for the recreational users. Therefore, this action would not cause an adverse impact on historical resources.

Alternative 2 calls for the facilities, including the tubs, to be made accessible and usable to all. While this would be considered a physical impact to the tubs, it may not necessarily be adverse depending on the type of alteration. The recreational user group has made a number of changes to the tubs over time and these have not affected the integrity of materials, design, or workmanship.

**Ethnographic Resources.** As management of the area would continue in an almost identical manner under alternative 2, the impacts described for alternative 1 would continue with some differences. Alternative 2 would begin a program of removing the palm trees at Lower and Palm Springs as they die naturally, and the few palms present at Upper Spring would be removed, per NPS *Management Policies 2006* (NPS 2006, section 4.4.4.2). This restoration effort, which would result in more natural vegetation, would have beneficial impacts, as part of the reason the Tribe considers this an area of ethnographic significance is that they see it as their obligation to protect and restore the natural environment of the springs (Rucks 2016). The area of ethnographic significance for the Tribe would also benefit from the removal of the vehicle support facility at Lower Spring and non-historic artwork in designated wilderness under alternative 2, as it would restore a more natural look to sections of the landscape. The addition of more artistic fencing under alternative 2 would constitute more development at the springs and therefore have an adverse visual impact on the area of ethnographic significance for the Tribe.

**Cumulative Impacts.** Alternative 2 would have no additional adverse impacts on archeological resources, as the visitor use, and therefore disturbance of archeological sites, would be the same as under current conditions. The effects on the area of historic significance for the recreational users would be slight and would include the removal of nonnative invasive palm trees and addition of artistic fencing, all of which would result in visual impacts on the area of historic significance for the recreational users. The area of ethnographic significance for the Tribe would benefit from efforts to restore native vegetation communities and exclude nonnative wildlife from the area and the removal of the vehicle support facility and non-historic artwork from designated wilderness areas. There are two current projects that have a detectable effect on cultural resources: the Saline Valley Road Borrow Sites and Gravel Management Plan (NPS 2011a) and routine road maintenance by Inyo County. These projects are described for alternative 1. Considered together, there would be no meaningful additive or interactive effects among these projects and the proposed actions under alternative 2 that would constitute a significant cumulative effect.

### Alternative 3: Community Engagement Alternative

Alternative 3, the community engagement alternative, aims to provide a greater level of natural resource protection by engaging user groups in the management of the Saline Valley Warm Springs Area while retaining use of the tubs. Camping areas would be designated under this alternative. Changes to the current policy would include delineation of roadways and camping areas, prohibiting camping within 200 feet of source springs, and designated overflow walk-in campsites with defined parking areas. Only authorized firepans and NPS-provided fire enclosures, grates, or grills would be allowed, but the communal fire ring would remain at Lower Spring. The palm trees would be managed as described for alternative 2, but under alternative 3, the lawn at Lower Spring would be removed and the area allowed to naturally revegetate or be replanted with native vegetation. Additionally, the Tribe would be engaged to incorporate traditional ecological knowledge to help manage the vegetation throughout the Saline Valley Warm Springs Area. Artistic fencing would be added to surround the source springs, tubs, and riparian areas to prevent access by feral burros. The piping at Burro Spring would be removed and all non-historic artwork would be removed from the designated wilderness and backcountry areas. The permanent housing for the camp host at Lower Spring would be removed under alternative 3, as would the vehicle support facility. To the extent possible, existing features would be made accessible and usable to those with disabilities.

The area of historic significance for the recreational user and the area of ethnographic significance for the Tribe would be managed as described for alternative 2. In addition, there would be increased education and monitoring by NPS-trained site stewards. Topics covered by the increased education efforts would include resource protection, the relationship with the Tribe, and the history of Saline Valley.

**Archeological Resources.** Under alternative 3, visitor use would remain similar to that described for alternative 2; however, because there would be increased education and monitoring by the National Park Service and NPS-trained site stewards, impacts on archeological resources in the immediate vicinity and broader area would be considered beneficial. The National Park Service would install artistic fencing around the source springs, tubs, and riparian areas under alternative 3. As stated under alternative 2, the National Park Service would conduct archeological surveys and consult with the SHPO prior to the installation of the fencing. Installation of the fence and trailing by feral burros would not affect archeological resources.

**Historical Resources.** The addition of artistic fencing around the source springs, tubs, and riparian areas to limit access of the feral burros could diminish the expansive views of the surrounding desert and mountains, which are important features of the site's setting and feeling. The fencing installed under alternative 3 would be similar to the artistic fencing currently at Lower Spring and, as it is in close



proximity, would blend with the existing setting. As stated for alternative 2, the impact would be greater at Palm Spring due to the open nature of that area.

Nonnative invasive palm trees at Palm Spring and Lower Spring, which are considered contributing features of the area of historic significance for the recreational users, would be removed as they die naturally, thus impacting this feature. In addition, the removal of the lawn, a contributing feature of the area of historic significance for the recreational users, could diminish the ability of recreational users to use this as a gathering point and activity area. Although making rock



*Source spring at Palm Spring*

alignments is a pastime for certain visitors to the springs, the removal of this non-historic artwork would not affect the integrity of setting or feeling at the site under Criterion A for social history.

**Ethnographic Resources.** Management of the Saline Valley Warm Springs Area would continue in a similar manner to current conditions under alternative 3; therefore, adverse impacts on the area of ethnographic significance for the Tribe would continue. However, the extension of the camping buffer to 200 feet surrounding the source springs would restrict recreational camping activities in the immediate locations of the source springs, providing a beneficial impact.

Alternative 3 would begin a program of removing the nonnative invasive palm trees at Lower and Palm Springs as they die naturally, and the few palms present at Upper Spring would be removed, per NPS *Management Policies 2006* (NPS 2006, section 4.4.4.2). Alternative 3 would also remove the grass lawn at Lower Spring to allow native plants to revegetate the area. These are all beneficial impacts. The addition of more artistic fencing under alternative 3 around the source springs, tubs, and riparian areas would constitute more development at the springs and therefore have an adverse visual impact on the area of ethnographic significance for the Tribe. However, over time, this burro exclusion fencing, combined with the gradual removal of nonnative flora would return the vegetation to a more natural state that is more sympathetic to the area of ethnographic significance for the Tribe. These restoration efforts, which would result in more natural vegetation, would have beneficial impacts, as part of the reason the Tribe considers this an area of ethnographic significance is that they see it as their obligation to protect and restore the natural environment of the springs (Rucks 2016). The area of ethnographic significance for the Tribe would also benefit from the removal of non-historic artwork throughout the Saline Valley Warm Springs Area and in designated wilderness and the removal of the permanent camp host housing and the vehicle support facility. Alternative 3 would have a beneficial effect on Upper Spring, as camping would be restricted to designated areas that would not be closer than 200 feet to a water source. This eliminates the fenced area entirely at Upper Spring and areas adjacent to the fencing for camping.

**Cumulative Impacts.** Alternative 3 would have a slight beneficial impact on archeological resources, as there would be increased education and monitoring by the National Park Service and NPS-trained site stewards. The effects on the area of historic significance for the recreational users would include the removal of palm trees and the lawn and addition of fencing around the source springs, tubs, and riparian

areas, all of which would diminish the visual features of the area of historic significance for the recreational users. The area of ethnographic significance for the Tribe would benefit from efforts to restore native vegetation communities, the exclusion of nonnative wildlife from the area, and the removal of permanent camp host housing and vehicle support facility from Lower Spring and non-historic artwork throughout the Saline Valley Warm Springs Area. There are two current projects that have a detectable effect on cultural resources: the Saline Valley Road Borrow Sites and Gravel Management Plan (NPS 2011a) and routine road maintenance by Inyo County. These projects are described for alternative 1. Considered together, there would be no meaningful additive or interactive effects among these projects and the proposed actions under alternative 3 that would constitute a significant cumulative effect.

## Alternative 4: Restoration Alternative

The restoration alternative would remove nearly all signs of development at the Saline Valley Warm Springs Area and restore the area, as close as possible, to natural conditions. Dispersed camping would be allowed, as long as campers are more than 200 feet from the source springs. No campfires would be permitted and the vault toilets would be removed. All campsite elements, the airstrip, water diversions, tubs, piping, artistic fencing, campground and campsite improvements, and artwork would be destroyed and removed. Nonnative vegetation would be removed, and native plant growth encouraged with the engagement of the Tribe to incorporate traditional ecological knowledge. Fencing would be installed at the designated wilderness boundary to prevent access by feral burros to the springs. Designation and documentation of the area of historic significance for the recreational users would be completed prior to any removal or demolition. The natural and ethnographic landscape of the area of ethnographic significance for the Tribe would be restored.

The area of ethnographic significance for the Tribe would be managed as such by the National Park Service and the Tribe, and documentation of and mitigation for the effects to the area of historic significance to the recreational users would be completed. NPS monitoring of archeological resources would continue, and in addition, there would be increased education and monitoring by NPS-trained site stewards.

**Archeological Resources.** Under alternative 4, visitation would be reduced dramatically. While this would likely result in a beneficial impact on the remaining archeological resources at the Saline Valley Warm Springs Area and in the surrounding area, it is possible that the isolation of the site could lead to more artifact collecting activities, as there are fewer visitors to monitor the activities of others. The National Park Service would install wire fencing at the wilderness boundary. This fence would keep the feral burros from the springs and vegetated areas, but the feral burros would likely spend time trailing along the fence line. Using information gathered during archeological surveys and consultation with the SHPO, the National Park Service would install the fence to avoid impacts to archeological resources.

**Historical Resources.** Alternative 4 would result in the complete physical removal and destruction of the area of historic significance for the recreational users. All contributing and non-contributing features, such as historic tubs, piping, communal activity areas, camping areas, planted vegetation, artwork, the airstrip, and visitor facilities (including the vault toilets), would be removed. The National Park Service would consult with the SHPO and complete documentation and mitigation of the adverse impacts to the Saline Valley Warm Springs Area prior to removal, but alternative 4 would have a significant adverse impact on the area of historic significance for the recreational users.

**Ethnographic Resources.** Alternative 4 would have significant beneficial impacts on the area of ethnographic significance for the Tribe, as it would eventually restore all three springs to their natural and ethnographic state by removing nonnative plant species and by removing entirely the features of the area of historic significance for the recreational users. The installation of the fencing at the wilderness



boundary to prevent access by feral burros would have a slight adverse impact as it would be located outside of the viewshed of the springs. The fence would be constructed of materials that would blend into the landscape as much as possible, as described in the “Alternatives” chapter.

The site has not been fully evaluated as an area of ethnographic significance for the recreational users, but if it were determined to be as significant as a TCP in the future, alternative 4 would result in a significant adverse impact to the resource. The potential adverse impacts to the user groups that would result from alternative 4 are discussed in more detail in the “Visitor Use and Experience” section.

**Cumulative Impacts.** Archeological resources would benefit from a reduction of visitation under alternative 4. However, fewer visitors, combined with a lowered sense of community could encourage certain visitors to collect artifacts from archeological sites. Alternative 4 would have significant adverse impacts on the area of historic significance for the recreational users and significant beneficial impacts on the area of ethnographic significance for the Tribe from removal of all development. There are two current projects that have a detectable effect on cultural resources: the Saline Valley Road Borrow Sites and Gravel Management Plan (NPS 2011a) and routine road maintenance by Inyo County. These projects are described for alternative 1. Considered together, there would be no meaningful additive or interactive effects among these projects and the proposed actions under alternative 4 that would constitute a significant cumulative effect.

## Alternative 5: Preferred Alternative

As it applies to cultural resources, alternative 5 (the preferred alternative) would be similar to alternative 3. Alternative 5 would establish camping zones for designated dispersed camping, walk-in camping with a parking area, and areas of no camping. Under alternative 5, the buffer around the source springs would remain the same as current conditions (100 feet), and the National Park Service would install artistic wooden fencing around the source springs at Lower and Palm Springs. The fence at Upper Spring would be replaced and expanded to protect the warm and cold source springs. The lawn at Lower Spring would be retained and native tree species would be planted so that when the existing mature palm trees die naturally and are removed, the native species would be mature enough to provide shade for visitors. Finally, the existing features at the Saline Valley Warm Springs Area would be made accessible and usable to those with disabilities to the extent practical, while preserving potential significant historical features.

**Archeological Resources.** When considering archeological resources, alternative 5 would have similar impacts to alternative 3, as the fencing around the source springs at Lower and Palm Springs and the expanded fencing at Upper Spring would be installed after archeological surveys and consultation with the SHPO were complete. The fencing would be placed in areas devoid of resources. The added education and monitoring efforts by the National Park Service and NPS-trained site stewards would be beneficial to archeological resources at the Saline Valley Warm Springs Area and beyond.

**Historical Resources.** Alternative 5 would remove palm trees from Lower and Palm Springs after they die naturally, the same as alternatives 2 and 3; however, this alternative would plant native tree species so that they would be mature enough to provide shade for visitors by the time the palm trees die naturally and are removed. The nonnative invasive palms trees at Palm Spring and Lower Spring are considered contributing features of the area of historic significance for the recreational users and removing them would impact this feature of the site. Alternative 5 would retain the Lower Spring lawn, a contributing feature of the area of historic significance for the recreational users and would allow recreational users to continue to use this as a gathering point and activity area.

The fencing at Lower and Palm Springs would be the same as described for alternative 2. The artistic wooden fencing around the source springs at Lower Spring would not have a visual impact effect, as the artistic fencing style would be similar to the current fencing. As stated, the fencing is a sympathetic addition to the setting and feeling at the site and was recommended for re-evaluation as a contributing resource when it reaches 50 years of age (New South 2015). The addition of artistic fencing at Palm Spring would be considered an adverse visual impact, as the feeling of this site is more open and there is currently no fencing in this location.

To the extent practical, while preserving potential significant historical features, Alternative 5 would make the facilities accessible.

**Ethnographic Resources.** Alternative 5 would have similar impacts on the area of ethnographic significance for the Tribe as alternatives 2 and 3. Alternative 5 would result in reduction of nonnative species with the removal of the palm trees at Lower and Palm Springs as they die naturally and the addition of native shade trees, as well as the removal of all palm trees at Upper Spring. This restoration effort, which would result in more natural vegetation, would have beneficial impacts, as part of the reason the Tribe considers this an area of ethnographic significance is that they see it as their obligation to protect and restore the natural environment of the springs (Rucks 2016).

The addition of artistic fencing around the source springs (the same as alternative 2) would constitute more development at the springs and therefore have an adverse visual impact on the area of ethnographic significance for the Tribe. The expansion of fencing at Upper Spring would add more development, but the fence would protect the water of both the warm and cold source springs and the vegetation from burro grazing and trampling. Restricting camping to designated zones, continuing to restrict camping within 100 feet of the source springs and prohibiting driving in all areas except Warm Springs Road and access roads for camping areas would provide beneficial impacts.

**Cumulative Impacts.** Under alternative 5, there would be a slight beneficial impact on archeological resources, as there would be increased education and monitoring by the National Park Service and NPS-trained site stewards. Under alternative 5, the effects on the area of historic significance for the recreational users would include the removal of nonnative invasive palm trees and addition of fencing around the source springs, all of which would result in visual impacts on the area of historic significance for the recreational users. The area of ethnographic significance for the Tribe would benefit from efforts to restore native vegetation communities and the exclusion of nonnative wildlife from the area. There are two current projects that have a detectable effect on cultural resources: the Saline Valley Road Borrow Sites and Gravel Management Plan (NPS 2011a) and routine road maintenance by Inyo County. These projects are described for alternative 1. Considered together, there would be no meaningful additive or interactive effects among these projects and the proposed actions under alternative 5 that would constitute a significant cumulative effect.

## **Conclusion**

Archeological sites, although already heavily impacted within the area of ethnographic significance for the Tribe and the area of historic significance for the recreational users, would likely benefit from the increasing controls placed on the Saline Valley Warm Springs Area if alternatives 3, 4, or 5 were enacted. This would be of particular benefit to identified sites and isolated artifact finds in the developed area; however, it could also benefit identified sites located throughout the Saline Valley Warm Springs Area around the springs by reducing visitor traffic in the area. Due to anticipated decreased visitation resulting in more isolation, alternative 4 could lead to more artifact collection by visitors.

Under alternative 1, the area of historic significance for the recreational users would continue in virtually the same way that it does today. Alternatives 2, 3, and 5 each alter camping patterns, vegetation, and recreational activity to some manner; these alternatives would have impacts on the area of historic significance for the recreational users to a degree. However, although integrity would be decreased in certain areas, particularly setting and feeling, the site would retain its ability to convey its historic significance. Alternative 4 would result in significant adverse effects due to complete site destruction and removal.

Current conditions under alternative 1 present adverse impacts on the area of ethnographic significance for the Tribe due to the types of recreational activities occurring at a sacred place to the Tribe. Alternatives 2, 3, and 5 would provide some return to native vegetation and the removal of non-historic artwork, which is a beneficial impact. Alternative 3 and 5 would reduce the footprint for camping at the Saline Valley Warm Springs Area, and alternative 3 would further restrict camping within 200 feet of the source springs, which would allow the sources immediate environs to have less activity than at present. Alternative 4, which results in the complete removal of the area of historic significance for the recreational users and full restoration of the natural and ethnographic landscape, including fencing to exclude feral burros at the wilderness boundary, would result in a significant beneficial impact to the area of ethnographic significance for the Tribe. Alternatives 2, 3, 4, and 5 would provide some level of fencing around the springs, which reduces access by feral burros, a beneficial impact, while also introducing (in the case of alternatives 2, 3, and 5) an additional adverse visual impact close to the springs.

## WILDERNESS CHARACTER

### Methodologies

When evaluating impacts on designated wilderness from the alternatives, the National Park Service considered the qualities of wilderness character, as presented in the following section. The extent to which the wilderness character qualities are degraded, preserved, or improved is analyzed for each alternative.

### Types of Impacts on Wilderness Character

**Untrammeled.** An untrammeled wilderness is one in which ecological systems and their biological and physical components are autonomous, or free from human intervention. By contrast, human actions that restrict, manipulate, or attempt to control the natural world within wilderness degrade the untrammeled quality. Trammeling actions include the removal of nonnative species, intervention in the behavior or lives of native plants and animals, projects to restore the natural conditions of wilderness, and interference in natural processes and energy flows. These actions may be temporary, but while they are in effect, they affect the untrammeled quality of wilderness.

**Natural.** An undegraded natural wilderness quality shows minimal effects of modern civilization upon the ecological systems and their biological and physical components. A natural wilderness comprises landforms, soils, water, habitats, species, and terrestrial food webs that are largely intact in their natural state and not influenced by human activities and external threats. Scientific activities, such as the removal of scientific specimens, invasive scientific methods, or the introduction or augmentation of wildlife to replace depleted populations, affect the natural quality.

**Undeveloped.** The *Wilderness Act* states that wilderness is “an area of undeveloped federal land retaining its primeval character and influence, without permanent improvements or human habitation,” with “the imprint of man’s work substantially unnoticeable.” The undeveloped quality of wilderness is impacted by

the presence of structures and installations and by the use of motor vehicles or motorized equipment. These developments are also prohibited by section 4 (c) of the *Wilderness Act*, and are only permissible if they are “necessary to meet minimum requirements for the administration of the area” as wilderness.

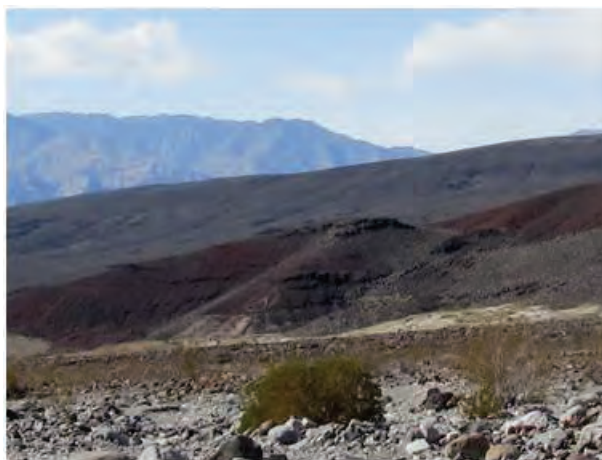
**Solitude or Primitive and Unconfined Type of Recreation.** Wilderness provides outstanding opportunities for recreation in an environment that is relatively free from the encumbrances of modern society, and for the experience of the benefits and inspiration derived from self-reliance, self-discovery, physical and mental challenge, and freedom from societal obligations. This quality focuses on the tangible aspects of the setting that affect the opportunity for people to directly experience wilderness.

**Other Features of Value.** Wilderness preserves other tangible features that are of scientific, educational, scenic, or historic value. In Death Valley National Park, this quality includes the intangible and symbolic values of the Tribe (NPS 2013a). This quality is preserved or improved when these resources are preserved and their loss or impacts to such features degrade this quality of wilderness character (Landres et al. 2015).

## Alternative 1: No-Action Alternative

Under alternative 1, the no-action alternative, all visitor activities at the Saline Valley Warm Springs Area would continue. Wilderness character could continue to be affected through visitor activities. As presented in figure 2 (appendix A), Lower Spring is fairly centered in the backcountry area. Palm Spring and the Chicken Strip airstrip are closer to the wilderness boundary, and Upper Spring is very closely surrounded by wilderness. Topography and terrain play a role in limiting visitor use activities in these areas, especially closer to the wilderness boundary. Camping at the Saline Valley Warm Springs Area is unrestricted and dispersed. Visitors generally camp close to the developed areas, which are all located within the backcountry area; however, visitors may spread out into wilderness, particularly during times of high visitation, as described in the “Additional Context for Assessing the Impacts” section in the beginning of this chapter. In Death Valley National Park, visitors are able to camp in the backcountry and in designated wilderness. Visitors camping in backcountry can obtain a voluntary permit from any visitor center or ranger station. Camping in the wilderness is allowed along dirt roads at least one mile away from any paved road or “day use only” dirt road with vehicles parked immediately adjacent to the roadway to minimize impact (NPS 2016b). Although prohibited intrusions into wilderness by vehicles are not common, they would adversely affect the *natural*, and *solitude or primitive and unconfined recreation* qualities of wilderness character.

Visitors to the Saline Valley Warm Springs Area often enter the wilderness to participate in recreational activities. Adverse impacts to wilderness character could occur from visitor activities within the backcountry indirectly affecting the experience of wilderness visitors. Use of the facilities, high levels of visitation, and increased noise could affect the *solitude or primitive and unconfined recreation* quality of wilderness for other wilderness visitors and the *intangible and symbolic values of the Timbisha Shoshone Tribe*, especially during high-use times, such as Presidents Day and Thanksgiving.



Upper peace sign, constructed in the 1990s

Visitors to the Saline Valley Warm Springs Area create artwork by collecting rocks of different colors and constructing art on the desert floor. One piece of art, the lower peace sign, was constructed in the 1960s (New South 2015). The peace sign was made by removing the top layer of soil and rock by walking the area repeatedly or by using hand tools and exposing the different colored surface below (Bonstead 2011). Visitors have maintained the peace sign and a social trail has formed due to the number of people that visit the peace sign; both the peace sign and the trail are in wilderness. Visitors commonly create new artwork in the art board area (appendix C).



*Lower peace sign, constructed in the 1960s*

Occasionally, visitors venture into wilderness to create new art. An example is the second peace sign. The upper peace sign was constructed in the 1990s. This piece of artwork was likely constructed in the same way as the lower peace sign (Bonstead 2011). Because wilderness should “generally appear to have been affected primarily by the forces of nature, with the imprint of man’s work substantially unnoticeable,” the creation of new art installations in wilderness and the continued presence of art installations currently in wilderness would adversely impact wilderness character (16 US Code [USC] 1131-1136).

The Chicken Strip airstrip would remain open for use by pilots under alternative 1. Although the airstrip is located within the backcountry area, it is located just 0.1 mile east of the wilderness boundary and planes must fly over designated wilderness areas to reach the airstrip. The presence of small aircraft over wilderness, including its noise, would create adverse impacts on the *natural*, and *solitude or primitive and unconfined recreation* qualities of wilderness and *the intangible and symbolic values of the Timbisha Shoshone Tribe*. While the presence of small aircraft, including noise, detracts from wilderness quality. The Saline Valley Warm Springs Area is located within the training area for pilots from the Naval Air Weapons Station China Lake, and the naval jets have similar types of impacts on wilderness character, although with much higher intensity.

**Cumulative Impacts.** Of the past, present, or reasonably foreseeable projects that could have a detectable impact on resources affected by the Saline Valley Warm Springs Management Plan, Inyo County ATV Adventure Trails of the Eastern Sierra Project (Inyo County 2014) could have an impact on designated wilderness. This project allows Inyo County to designate certain county roads as combined-use routes to link existing OHV trails and trailheads on BLM or USFS lands to create a unified OHV trail system. Included in this trail system is 11.6 miles of Death Valley Road outside and west of Death Valley National Park. Death Valley Road is already paved; therefore, inclusion of this road would not involve modification of designated wilderness. However, OHV use could stray into the park and onto Saline Valley Road, as the boundaries are not clear in the northwest corner of park. If this illegal use of OHV vehicles were to occur, they would have an adverse impact on the *natural*, and *solitude or primitive and unconfined recreation* qualities of wilderness.

The no-action alternative would allow continued use of the Saline Valley Warm Springs Area and current impacts on the qualities of wilderness would continue, including prohibited vehicle use in wilderness, indirect impacts on wilderness users from crowds and noise in the backcountry area, and creation of artwork in wilderness. Considered together, there would be no meaningful additive or interactive effects

among the Adventure Trails project and the proposed actions under alternative 1 that would constitute a significant cumulative effect.

## Alternative 2: Regulatory Compliance Alternative

Alternative 2 would have similar impacts on wilderness character as the no-action alternative, as this alternative retains much of the existing use of the Saline Valley Warm Springs Area. Alternative 2 would provide beneficial effects on wilderness character by removing any existing non-historic artwork in wilderness and enforcing the prohibitions of any manipulation of natural or cultural resources for the purpose of art and of any new art in designated wilderness. The lower peace sign would remain in wilderness because it is a contributing element to the potential Saline Valley Warm Springs Historic Site; this designation is discussed further in the “Historical Resources” section of the “Affected Environment” chapter. Because wilderness should “generally appear to have been affected primarily by the forces of nature, with the imprint of man’s work substantially unnoticeable,” the continued presence of lower peace sign currently in wilderness would adversely impact wilderness character (16 USC 1131-1136). By removing some artwork, alternative 2 would create fewer impacts on the *intangible and symbolic values of the Timbisha Shoshone Tribe* than expected under alternative 1. Visitors’ use of the facilities, the crowds, and the associated noise would continue to adversely affect the *solitude or primitive and unconfined recreation* quality for people visiting the wilderness areas surrounding the Saline Valley Warm Springs Area. Because use and visitation are expected to remain consistent with current conditions, the intensity of the impact would be the same as expected under alternative 1, with the greatest impacts occurring during times of high visitation.

**Cumulative Impacts.** Of the past, present, or reasonably foreseeable projects that have a detectable effect on resources affected by the Saline Valley Warm Springs Management Plan, Inyo County ATV Adventure Trails of the Eastern Sierra Project (Inyo County 2014) could have an impact on designated wilderness. This project is described for alternative 1. Alternative 2 would allow for continued use of the Saline Valley Warm Springs Area, similar to current conditions; however, all non-historic artwork would be removed from wilderness and no new artwork would be allowed, providing a small beneficial impact on wilderness character. The lower peace sign, part of the historical landscape, would remain in wilderness and continue to adversely impact wilderness character. Considered together, there would be no meaningful additive or interactive effects among these projects and the proposed actions under this alternative that would constitute a significant cumulative effect.

## Alternative 3: Community Engagement Alternative

Alternative 3 would have the same impacts on wilderness character as alternative 2 for artwork. All art except the historic lower peace sign would be dismantled and the rocks scattered, and new artwork in wilderness would be prohibited.

Alternative 3 would have beneficial effects on the *solitude or primitive and unconfined recreation* quality of wilderness character in the management of camping at the Saline Valley Warm Springs Area. This alternative would create designated camping areas and additional designated overflow walk-in camping areas for times of heavier use. These designated areas would eliminate visitors spreading into wilderness areas for camping and affecting visitors in wilderness areas adjacent to the Saline Valley Warm Springs Area. However, the prohibited use of off-road vehicles is expected to continue because of the absence of physical barriers and lack of personnel that provide enforcement. While these intrusions are not common, they would have an adverse impact on the *natural* quality of wilderness character. Additionally, the use of the facilities, crowds, and noise from visitors would continue to have an impact on the *solitude or primitive and unconfined recreation* quality of wilderness, as described for alternative 1.

Alternative 3 could create an agreement with the user groups at the Saline Valley Warm Springs Area to help protect park resources. The National Park Service would also monitor the conditions at the Saline Valley Warm Springs Area, which would trigger response actions by park management to restrict use of the Saline Valley Warm Springs Area if prohibited intrusions in wilderness were observed. With the help of volunteers, the National Park Service would be able to better monitor the conditions at and beyond the wilderness boundary. If violations were observed, the National Park Service would be able to take actions to better protect wilderness character. This program would result in a long-term beneficial effect on the wilderness character. Additionally, this alternative would increase education on the campground boards and through the campground host. Topics covered by the increased education efforts would include Leave No Trace® camping practices, resource protection, and the history of Saline Valley. These actions would help to decrease adverse impacts on wilderness character.

**Cumulative Impacts.** Of the past, present, or reasonably foreseeable projects that have a detectable effect on resources affected by the Saline Valley Warm Springs Management Plan, Inyo County ATV Adventure Trails of the Eastern Sierra Project (Inyo County 2014) could have an impact on designated wilderness. This project is described for alternative 1. Alternative 3 would allow for continued use of the Saline Valley Warm Springs Area, similar to current conditions and remove non-historic art and prohibit the installation of any new artwork in wilderness, similar to alternative 2. Additional benefits of alternative 3 would include designated camping areas and agreements with the user groups to help protect resources of the Saline Valley Warm Springs Area. Considered together, there would be no meaningful additive or interactive effects among these projects and the proposed actions under this alternative that would constitute a significant cumulative effect.

## Alternative 4: Restoration Alternative

Under alternative 4, visitation would be expected to be lower than that under the other alternatives due to removal of the developed features of the Saline Valley Warm Springs Area. The restoration alternative would also remove all artwork in the Saline Valley Warm Springs Area and in designated wilderness. The removal of all artwork in wilderness would benefit wilderness character because wilderness should “generally appear to have been affected primarily by the forces of nature, with the imprint of man’s work substantially unnoticeable” (16 USC 1131-1136). The removal of the lower peace sign under this alternative would reduce adverse impacts on the *intangible and symbolic values of the Timbisha Shoshone Tribe*.

Camping would be dispersed and managed as in other backcountry areas of the park. While visitors could violate camping regulations and venture into wilderness via vehicle, the frequency of this action would be small due to the expected lower visitation rates. Prohibited off-road vehicle use is also expected to continue, though at a reduced rate. These intrusions would continue to have an adverse impact on the *natural, and solitude or primitive and unconfined recreation* qualities of wilderness character; however, the frequency would be lower than that of current conditions.

Under alternative 4, the use of the backcountry area would be consistent with that in other parts of the park due to lower visitation at the Saline Valley Warm Springs Area and removal of the developed features. Visitors would not likely arrive in large groups and would not produce a large amount of noise. This would result in a beneficial impact on the *solitude or primitive and unconfined recreation* quality for people visiting the wilderness areas when compared to current conditions.

The Chicken Strip airstrip would be decommissioned under alternative 4, eliminating the presence of small personal aircraft near the Saline Valley Warm Springs Area, thus removing impacts on the *natural, and solitude or primitive and unconfined recreation* qualities of wilderness and *the intangible and symbolic values of the Timbisha Shoshone Tribe*.



The construction of a burro exclusion fence, which would be placed at the backcountry boundary, adjacent to wilderness, could impact the scenic views from wilderness. Because the fence would not be placed in wilderness, would not impede the movement of wildlife species over the landscape, and would not impact users' ability to access wilderness, this potential impact is not expected to affect wilderness character. In addition, the National Park Service could specify the use of materials in the project plans that would blend the fence into the landscape and reduce visual impacts.

**Cumulative Impacts.** Of the past, present, or reasonably foreseeable projects that have a detectable effect on resources affected by the Saline Valley Warm Springs Management Plan, Inyo County ATV Adventure Trails of the Eastern Sierra Project (Inyo County 2014) could have an impact on designated wilderness. This project is described for alternative 1. Alternative 4 would remove most of the development from the Saline Valley Warm Springs Area and restore it to more natural conditions, resulting in beneficial impacts on the surrounding wilderness. The construction of a burro fence adjacent to wilderness is not expected to impact any of the qualities of wilderness character. Considered together, there would be no meaningful additive or interactive effects among these projects and the proposed actions under this alternative that would constitute a significant cumulative effect.

## Alternative 5: Preferred Alternative

In the context of wilderness character, the impacts of alternative 5 would be the same as those described for alternative 3. By removing all non-historic artwork from wilderness, alternative 5 would create fewer impacts on the *intangible and symbolic values of the Timbisha Shoshone Tribe* than expected under alternative 1.

Visitation is expected to remain constant, but greater management of camping areas and driving would reduce impacts on the *solitude or primitive and unconfined recreation* and the natural qualities of wilderness character. It is expected, however, that some off-road driving would occur due to the absence of physical barriers and lack of personnel that provide enforcement.

Alternative 5 would increase education on the campground boards, through the campground host, and through communication with the user groups. The user groups would also protect park resources through monitoring efforts, helping the National Park Service respond to changing conditions within and outside of the Saline Valley Warm Springs Area. These actions would help to decrease adverse impacts on wilderness character.

**Cumulative Impacts.** Of the past, present, or reasonably foreseeable projects that have a detectable effect on resources affected by the Saline Valley Warm Springs Management Plan, Inyo County ATV Adventure Trails of the Eastern Sierra Project (Inyo County 2014) could have an impact on designated wilderness. This project is described for alternative 1. Alternative 5 would have the same impacts on wilderness character as alternative 3, except for the burro exclusion fence, which would not impact wilderness character. Considered together, there would be no meaningful additive or interactive effects among these projects and the proposed actions under this alternative that would constitute a significant cumulative effect.

## Conclusion

Under all of the alternatives, wilderness character in the Saline Valley Warm Springs Area would continue to be affected by visitor activities. Alternatives 2, 3, and 5 would prohibit creation of new artwork and would remove non-historic art in designated wilderness, resulting in a beneficial effect on wilderness character over the long term. Under alternative 4, the impacts from camping, driving, and off-road vehicle use in designated wilderness would be reduced because the visitation to the Saline Valley

Warm Springs Area would likely be lower. Adverse impacts could occur under alternative 4, which proposes the placement of a wire wildlife exclusion fence at the wilderness boundary, outside of wilderness, which could affect the scenic values of wilderness for some users. All alternatives would have a slight adverse impact on the *intangible and symbolic values of the Timbisha Shoshone Tribe* through the continued presence of visitors near the wilderness area.

## VISITOR USE AND EXPERIENCE

### Methodologies

Visitors travel to the Saline Valley Warm Springs Area for a variety of reasons based on personal goals and interests and the feeling they experience during their visit is the result of multiple actions and encounters. This analysis considers how the proposed alternatives would affect how people use the Saline Valley Warm Springs Area, as well as how the alternatives would alter visitors' experiences. Although several factors contribute to the quality of experience, the proposed actions would affect visitor use and experience primarily through the presence or absence of the soaking tubs and associated facilities and the level of freedom to use the Saline Valley Warm Springs Area as desired.

The impact analysis for visitor use and experience is based on current conditions at the Saline Valley Warm Springs Area, which provides information on impacts on park resources. The description of current conditions was drawn from several site visits, park staff information, and information provided by visitors during public comment periods and interviews.

The analysis identifies impacts on the general recreational uses at the Saline Valley Warm Springs Area, a developed backcountry campground. Recreational use of the Saline Valley Warm Springs Area includes activities such as soaking, camping, and use of the Chicken Strip airstrip. Visitors have a variety of desired recreational experiences, which may include solitude, communal recreation, and spiritual experience. Some visitors travel to Saline Valley via small airplane, simply to use the Chicken Strip, a backcountry airstrip. These visitors may visit the soaking tubs, recreate in the surrounding areas, and camp; however, many pilots are only interested in landing on and taking off from the backcountry airstrip. The desired experiences of the visitors who travel to the soaking tubs and camp at the Saline Valley Warm Springs Area can vary greatly. Some visitors seek the Saline Valley Warm Springs Area for the communal experiences, such as the high-visitation weekends (Presidents Day and Thanksgiving weekends), where large groups of people come together for community meals, competitive sports games (e.g., golf and softball), singing, and storytelling. Other visitors travel to the Saline Valley Warm Springs Area for a more spiritual experience, seeking a quiet camping experience and soaking in the natural spring waters. Desired conditions differ for all visitors and cannot be easily categorized; however, by examining these recreational uses, the impacts of the alternatives on recreational visitor use and experience can be captured. The National Park Service recognizes that these recreational uses may seem broad, but the use of these categories helps to classify the impacts of the alternatives on the visitors without confusing the analysis.

The Saline Valley Warm Springs Area was historically used by the Tribe, and potentially other tribes, for traditional tribal uses, such as collecting vegetation, hunting, performing ceremonies, seeking connection to nature, and using the natural spring waters for healing. The development of the area interrupted the tribal uses, as the diversion of natural springs waters into cement tubs, the parties, the introduced nonnative plants, and the clothing optional recreation are generally in disagreement with tribal uses. The National Park Service recognizes that tribal members may continue to use the Saline Valley Warm Springs Area and be affected by the current use and would be affected by the alternatives; however, tribal members are not simply visitors to Death Valley National Park. As discussed throughout this plan/EIS,

the National Park Service is authorized to enter into a cooperative agreement with the Tribe by the Timbisha Shoshone Homeland Act of 2000 (Public Law 106-423). As such, the Tribe has a unique role that differs substantially from other visitors. Impacts on tribal uses of the Saline Valley Warm Springs Area are discussed in detail in the “Ethnographic Resources” section of this chapter.

## Alternative 1: No-Action Alternative

Visitor use and experience at the Saline Valley Warm Springs Area under the no-action alternative would reflect a continuation of current management, maintenance of existing opportunities, and current levels of access. Visitors would continue to be able to camp unrestricted at the springs without a permit. Campfires in user-created fire rings built with rocks or NPS-provided fire enclosures, grates, or grills would not be restricted. While the visitors and volunteers would not be allowed to construct new tubs at the springs per the Superintendent’s Compendium, all current water diversions would continue, the users and camp host would be responsible for maintenance and cleaning the facilities, and visitors could continue to create new artwork. The vault toilets would remain in their current locations; the visitors would continue to clean the facilities and the NPS maintenance staff would continue to pump the toilets once or twice a year. Use of the Chicken Strip airstrip would continue with two sets of tiedowns, and maintenance of the airstrip would be performed by Recreational Aviation Foundation (RAF) in coordination with the National Park Service.



*Artwork of a bat at the art board / rock alignment area at Lower Spring*

Under the no-action alternative, the camp host position would remain. The camp host site would retain the permanent housing, water feature, plumbing, drainage ditch, solar array, government vehicle, and personal items. The vehicle repair support services provided by the current camp host would be available to visitors. The camp host responsibilities would continue, and the camp host would continue to work with the National Park Service and specifically the Death Valley National Park rangers to monitor the visitors and resources.



*Sign at the Chicken Strip airstrip*

The trends for vegetation and wildlife communities at the Saline Valley Warm Springs Area would remain unchanged. Native, nonnative, and nuisance species would persist and thrive on the diverted water (plants and wildlife) and intentional and accidental feedings (wildlife).

Under alternative 1, the recreation opportunities, atmosphere, and sense of community created by the development at the Saline Valley Warm Springs Area would be retained. Visitor use and experience at would continue essentially unchanged from the current situation. The development in the Saline Valley Warm Springs Area would continue to provide a unique experience in a very remote area of the park with a potential for communal or solitary experiences, based on the time of visit. Visitors would continue to be able to soak in the tubs whether for spiritual and healing purposes or for social reasons. All current forms of recreation allowed at the Saline Valley Warm Springs Area would continue, including camping, soaking, hiking, gathering around a communal campfire, softball games, and creating artwork. Solitude could be attained by the time of visit and campsite selection under alternative 1.

Under alternative 1, visitors would continue to be able to access the Saline Valley Warm Springs Area via the Chicken Strip airstrip using small private planes and they would be able to camp with their planes directly at the airstrip, if they desire. The Chicken Strip is the last backcountry airstrip remaining in the park and provides a unique and challenging aviation experience. As such, retaining the use of the Chicken Strip under alternative 1 would be beneficial for the visitor use and experience for those visitors who seek this type of recreation or those visitors who enjoy watching the aircraft fly into the Saline Valley Warm Springs Area.

Based on comments received during the public scoping, alternatives development, and draft plan/EIS comment periods, visitors have differing opinions on items such as the presence of nonnative species and the camp host position, but overall, the lack of change to the Saline Valley Warm Springs Area experience under this alternative would continue to benefit those visitors that seek the area for recreation. For visitors seeking solitude and a spiritual experience, the continuation of all recreation activities could have an adverse impact, as a quieter visit must be planned around the weekends and holidays that attract larger crowds.

Because the activities at the Saline Valley Warm Springs Area are not in compliance with some NPS, state, and federal regulations, the National Park Service could curtail some practices. Restrictions on recreation activities at the Saline Valley Warm Springs Area could result in adverse impacts on visitor use and experience.

**Cumulative Impacts.** Few past, present, or reasonably foreseeable projects have a detectable effect on visitor use and experience. One project that may affect visitor use and experience is the Saline Valley Road Borrow Sites and Gravel Management Plan (NPS 2011a) that was approved in 2011. This project would allow for the issuance of a permit to Inyo County for use of existing borrow pits along Saline Valley Road. The excavation activities along Saline Valley Road for this project could interrupt access and create a slight short-term adverse impact on visitors during construction activities. However, once construction is complete, repairs to Saline Valley Road would provide long-term beneficial effects from



improved infrastructure and easier access to the Saline Valley Warm Springs Area. These beneficial and adverse impacts would affect access to the springs.

The Inyo County ATV Adventure Trails of the Eastern Sierra Project (Inyo County 2014) allows Inyo County to designate certain county roads as combined-use routes to link existing OHV trails and trailheads on BLM or USFS lands to create a unified OHV trail system. Included in this trail system is 11.6 miles of Death Valley Road outside and west of Death Valley National Park. Death Valley Road is already paved; therefore, inclusion of this road would not involve construction, habitat modification, or addition of impervious surfaces. The ATV Adventure Trails Project would have a slight impact on visitor experience in the form of increased traffic on Death Valley Road.

The no-action alternative would allow continued use of the Saline Valley Warm Springs Area under current management practices. Depending on the intention of the visit, this alternative would have adverse or beneficial impacts on the user groups experience. The continued use of the developed areas and the airstrip would provide beneficial effects on the use and experience at the Saline Valley Warm Springs Area. Considered together, there would be no meaningful additive or interactive effects among these projects on visitor use and experience and the proposed actions under alternative 1 that would constitute a significant cumulative effect.

## Alternative 2: Regulatory Compliance Alternative

Alternative 2 would have similar impacts on visitor use and experience as the no-action alternative, as this alternative retains much of the existing use of the Saline Valley Warm Springs Area but brings the actions and conditions into compliance with NPS, state, and federal regulations.

Camping regulations under alternative 2 would be similar to those described for alternative 1 with few differences. Alternative 2 would implement a mandatory no-cost permit system modeled after the Visitor Use Permit System proposed in the *Death Valley National Park Wilderness and Backcountry Stewardship Plan* (NPS 2013a), and an overnight camping fee could be implemented in the future. Visitors would be able to have campfires at their campsites, but the National Park Service would remove user-created fire rings, encourage visitors to use NPS-provided firepans or other fire enclosures, and require visitors to haul ash and charcoal from the Saline Valley Warm Springs Area with other trash. The camp host and visitors currently clean and maintain the tubs and water diversion infrastructure. Under alternative 2, the National Park Service would enter into an MOU with one or more user groups for maintenance of these features. The Chicken Strip airstrip would continue to be used in the same manner as under current conditions; however, visitors who camp at the Chicken Strip would be required to pack out their waste. At the Saline Valley Warm Springs Area, the number of vault toilets and the frequency at which they are pumped would remain the same, but visitors would be encouraged to pack out their waste. Although presently not allowed, one practice popular among the visitors is creating new artwork. Under alternative 2, manipulation of natural or cultural resources for the purpose of art would be



*Trailer at the camp host site at Lower Spring*

prohibited. Additionally, all non-historic artwork would be removed from wilderness and no new artwork would be created in wilderness.

Under alternative 2, the camp host position would remain the same as described for alternative 1. The vehicle support facility would be removed, and emergency vehicle assistance should not be expected by the visiting public. The removal of the vehicle support facility could adversely affect some visitors that experience vehicle issues while traveling to or from the Saline Valley Warm Springs Area; however, this aspect of alternative 2 would make the Saline Valley Warm Springs Area consistent with the rest of Death Valley National Park. These restrictions would change camping at the Saline Valley Warm Springs Area slightly for visitors, though they would not significantly alter the experience for most users.

Alternative 2 would work to reduce the presence of nonnative plants at the Saline Valley Warm Springs Area. All nonnative invasive palm trees would be removed from Upper Spring and as the nonnative invasive palms die naturally at Palm Spring and Lower Spring, these areas would be allowed to naturally revegetate, per *NPS Management Policies 2006* (section 4.4.4.2). These palms create shade for the soaking tubs and the presence of the palms is held in high regard with recreational users. Removal of the palm trees would result in an adverse effect on the experience for these users. However, some visitors support NPS efforts to control nonnative species in the park and would benefit from the removal of the palm trees.

Under alternative 2, the use of the Saline Valley Warm Springs Area would only differ slightly from use under current conditions. Removing user-created fire rings, requiring the use of NPS-provided structures (enclosures, grills, grates, or firepans), requiring visitors to pack out ash and charcoal, and limiting the creation of new art in the wilderness would align Saline Valley with other camping opportunities at other developed backcountry campgrounds in the park.

Visitors would be more involved with upkeep of the Saline Valley Warm Springs Area through an MOU with the National Park Service for maintenance of the tubs, hauling out ash and charcoal with other trash upon leaving the area, and packing out waste from campsite at the Chicken Strip. Being involved in the maintenance of the Saline Valley Warm Springs Area could create a greater sense of community for some visitors. Although several small changes may produce adverse impacts, overall alternative 2 would continue to be beneficial for those that seek a recreational experience at the Saline Valley Warm Springs Area. For those seeking solitude and a spiritual experience, the continuation of most recreation activities could have an adverse impact, as a quieter visit must be planned around the weekends and holidays that attract larger crowds.

**Cumulative Impacts.** Few past, present, or reasonably foreseeable projects have a detectable effect on visitor use and experience. These projects include the Saline Valley Road Borrow Sites and Gravel Management Plan (NPS 2011a) and the Inyo County ATV Adventure Trails of the Eastern Sierra Project (Inyo County 2014). These projects are described for alternative 1. Alternative 2 would allow for continued use of the Saline Valley Warm Springs Area, similar to current conditions, with added elements for resource protection. Overall, the impacts on the three user groups would be the same as those described for alternative 1. The continued use of the developed areas and the airstrip would provide beneficial effects on the use and experience of the Saline Valley Warm Springs Area. Considered together, there would be no meaningful additive or interactive effects among these projects and the proposed actions under alternative 2 that would constitute a significant cumulative effect.

### Alternative 3: Community Engagement Alternative

Alternative 3 would continue to allow use of the tubs at the Saline Valley Warm Springs Area; however, in addition to the compliance changes described for alternative 2, this alternative would make some

substantial changes to provide a greater level of natural resource protection by engaging user groups in the management of the Saline Valley Warm Springs Area.

Alternative 3 would change the camping experience for visitors. Unlike alternatives 1 and 2, this alternative would designate camping areas where visitors could drive in with their vehicles. When these designated camping areas are full during times of higher use, visitors would park their vehicles in a designated parking area and use the overflow walk-in camping areas. These designated camping areas would be at least 200 feet from the source springs. Additional tie-downs could be provided at the Chicken Strip to accommodate more aircraft at a given time; however, visitors would not be allowed to camp at the airstrip with their airplanes. Similar to alternative 2, this alternative would implement a mandatory no-cost permit system and an overnight camping fee could be implemented in the future.

Under alternative 3, the National Park Service could install additional toilets at Lower Spring or Palm Spring, if necessary, and the National Park Service could use a contractor to pump the existing toilets more often under this alternative. These additions would benefit visitors to the Saline Valley Warm Springs Area on high-use weekends, such as Thanksgiving and Presidents Day, as the current vault toilets often become full during high visitation periods.

All non-historic artwork would be removed from the developed areas and wilderness, and restrictions on creating new artwork would be enforced so that natural or cultural resources would not be manipulated for the purpose of art. Only the bat pole that marks the entrance to the Saline Valley Warm Springs Area on South Pass and the lower peace sign would remain.



*The Crystal Pool and visitors at Lower Spring*

Alternative 3 would also incorporate more education for the visitors through various media and through interpretive signs on campground boards and engagement by the camp host. The education efforts would include topics such as Leave No Trace® camping practices, resource protection, the relationship with the Tribe, and the history of Saline Valley.

The camp host position would change under alternative 3. The assigned camp host would hold the position for a one-season term and would have to reapply annually to retain the position. The camp host would be required to provide his or her own housing. Current features

of the camp host site that would be retained include the water feature, plumbing, drainage ditch, power system, and government vehicle. The camp host would check visitors' compliance with the park entrance fee in addition to other duties. The camp host would continue to work with park rangers and resource staff in enforcing park rules.

Nonnative species control would be a priority under alternative 3. A wildlife exclusion fence installed around the source springs, soaking tubs, and riparian areas that would eliminate feral burros from these



areas. In addition to the nonnative plant efforts described for alternative 2, alternative 3 would remove the lawn at Lower Spring and either allow the area to naturally revegetate or replant the area with native grasses. Establishment of thresholds for use and overuse and a monitoring and response program would further protect native communities and involve the user groups in the restoration activities.

Recreation experiences at the Saline Valley Warm Springs Area would change considerably under alternative 3 from current conditions due to changes in camping restrictions, the ability to recreate freely, restrictions on creation of new artwork, and efforts to remove nonnative species. These changes could have adverse or beneficial impacts on the use and experience of the Saline Valley Warm Springs Area depending on the visitors' desired experience. The restrictions that would be implemented under alternative 3 would alter the uninhibited atmosphere of the Saline Valley Warm Springs Area as it has been since development started. For visitors seeking this experience, their experience would be adversely impacted. These changes would also have an adverse impact on those wishing for a more solitary experience, as the designated camping areas would create a more developed feel and restrict the ability to camp in a more isolated location within the Saline Valley Warm Springs Area. Further, for those seeking solitude and a spiritual experience, the continuation of most recreation activities could have an adverse impact, as a quieter visit must be planned around the weekends and holidays that attract larger crowds.

The efforts of the National Park Service to reduce nonnative species could enhance or degrade the visitors' experience. As stated under alternative 2, visitors have differing desires for the vegetation and wildlife communities at the Saline Valley Warm Springs Area; some visitors enjoy the shade provided by the nonnative invasive palms and enjoy the presence of the feral burros while others would prefer a more natural environment. Additionally, the removal of the water diversion at Burro Spring could alter a popular camping area for visitors over time by potentially reducing or eliminating the line of mesquite that is sustained by this diversion. This would negatively affect the camping experience. However, as explained in the "Soils and Vegetation" section, it is likely that the existing mesquite trees would persist. Alternative 3 would encourage the user group to help the National Park Service monitor use and overuse, allowing the visitors to play a larger part in maintaining the area, which could enhance the sense of community and the visitor experience.



*Upper Spring with native and nonnative vegetation species*

Alternative 3 would also change how visitors use the Chicken Strip. The airstrip would remain open and there would be an opportunity to add more tiedowns, but visitors would not be able to camp next to their airplanes. For visitors that wish to camp, they would have to walk to the designated camping area to set up their tents. As such, alternative 3 would allow more pilots to use the Chicken Strip during a given period, which would be a benefit to those pilots that enjoy visiting the Saline Valley Warm Springs Area during high-use periods. However, some pilots may be averse to leaving their aircraft to camp in another portion of the Saline Valley Warm Springs Area.

**Cumulative Impacts.** Few past, present, or reasonably foreseeable projects have a detectable effect on visitor use and experience. These projects include the Saline Valley Road Borrow Sites and Gravel Management Plan (NPS 2011a) and the Inyo County ATV Adventure Trails of the Eastern Sierra Project (Inyo County 2014). These projects are described for alternative 1. Alternative 3 allows visitors to

continue to use the Saline Valley Warm Springs Area for soaking and recreation, the same as alternative 1, but the National Park Service would work towards creating a more natural environment around the developed areas by excluding feral burros, limiting camping areas, removing nonnative species, and creating a monitoring and response program. Considered together, there would be no meaningful additive or interactive effects among these projects and the proposed actions under alternative 3 that would constitute a significant cumulative effect.

## **Alternative 4: Restoration Alternative**

The restoration alternative would remove all development at the Saline Valley Warm Springs Area to include the soaking tubs, sinks, and showers and associated infrastructure, all vault toilets, all artwork, and the Chicken Strip airstrip.

Camping at the Saline Valley Warm Springs Area under this alternative would be the same as camping in other undeveloped backcountry areas of the park. A mandatory no-cost permit system would be put in place. Visitors would have to set up camp at least 200 feet away from water sources, soaking in the source springs would be prohibited, and campfires would be prohibited, consistent with other backcountry camping areas in Death Valley National Park.

This alternative would not retain the services of a camp host; therefore, the camp host site would be entirely removed, and vehicle support services would no longer be available.

The goal of alternative 4 would be to return the Saline Valley Warm Springs Area as to as natural a state as possible. A wildlife exclusion fence would be installed around the area along the wilderness boundary. This fence would keep feral burros from entering the vegetated areas. The National Park Service would remove all nonnative species, plant native species natural distribution patterns, and monitor the native species for success. The National Park Service would also create a monitoring and response program to avoid the re-establishment of these species by cooperation with outside organizations.

Alternative 4 would completely alter the visitor experience at the Saline Valley Warm Springs Area. With the removal of all of the tubs, associated development, and the Chicken Strip, the Saline Valley Warm Springs Area would be very similar to other undeveloped backcountry camping areas throughout Death Valley National Park and would no longer hold special value to many of the regular visitors. The removal of the development at the Saline Valley Warm Springs Area would remove a unique experience for many visitors. This change would affect those visitors who come for a communal recreation experience, as well as those who enjoy the springs for a more spiritual experience, as using the soaking tubs is a common desire to most people who visit the area. The Chicken Strip also represents a unique experience. Death Valley National Park has two additional airports, Furnace Creek and Stovepipe Wells, but these airports have asphalt runways, are located in more developed areas of the park, and do not offer pilots the same backcountry experience as the Chicken Strip airstrip. For those visitors seeking communal recreational opportunities, alternative 4 would represent a significant adverse impact.

Once restored to natural conditions, the Saline Valley Warm Springs Area would represent another unique recreational opportunity. The Saline Valley Warm Springs Area setting is not available anywhere else in the park. The remote area with natural warm springs surrounded by native vegetation communities and associated wildlife communities would create a backcountry camping experience that could not be paralleled in the park and possibly in the surrounding lands. For visitors seeking a more natural and solitary recreational experience, alternative 4 would provide significant beneficial impacts.

**Cumulative Impacts.** Few past, present, or reasonably foreseeable projects have a detectable effect on visitor use and experience. These projects include the Saline Valley Road Borrow Sites and Gravel

Management Plan (NPS 2011a) and the Inyo County ATV Adventure Trails of the Eastern Sierra Project (Inyo County 2014). These projects are described for alternative 1. Alternative 4 would remove all infrastructure and restore the Saline Valley Warm Springs Area, which would have a significant adverse impact on visitors that seek the Saline Valley Warm Springs Area for activities such as communal activities, soaking in the tubs, and landing at the Chicken Strip airstrip. For visitors seeking solitude and a traditional backcountry camping experience, alternative 4 would result in significant beneficial effects. Considered together, there would be no meaningful additive or interactive effects among these projects and the proposed actions under alternative 4 that would constitute a significant cumulative effect.

## **Alternative 5: Preferred Alternative**

In the draft plan/EIS, alternative 5 was similar to alternative 3 in the context of visitor use and experience; however, the National Park Service made some changes to alternative 5 after analyzing the public comments on the draft plan/EIS. This alternative works to combine the necessary compliance changes described for alternative 2 and a greater level of natural resource protection while retaining some of the features that were identified as important by the user groups during the draft plan/EIS review. The following paragraphs detail where alternative 5 differs from alternative 3 and the resulting impacts on visitor use and experience.

Alternative 5 would establish camping zones to include a designated dispersed camping area where visitors would be able to camp with their vehicles, overflow walk-in camping with an associated parking area, and areas of no camping for protection of resources. Under alternative 5, Warm Springs Road would be delineated and access roads to the designated dispersed camping area and the overflow parking area would be established. Driving would be prohibited elsewhere in the Saline Valley Warm Springs Area. Alternative 5 would maintain a camping buffer around source springs of 100 feet to protect the water quality. Visitors who fly into the Saline Valley Warm Springs Area and use the Chicken Strip airstrip would be allowed to camp with their aircraft under alternative 5. Although alternative 5 would change how some visitors use the Saline Valley Warm Springs Area and would diminish the feeling of unrestricted recreation, the core recreational uses of the Saline Valley Warm Springs Area would be allowed to continue, resulting in an overall beneficial impact to visitors.

Alternative 5 would not implement a mandatory camping permit or an overnight camping fee. Instead of requiring permits or registrations, the National Park Service would gather data on visitor use patterns through formal visitor use studies, which could include ways to count visitors at both high and low use periods. These data would help the National Park Service understand current visitor use trends and impacts. The park entrance fee would apply for all visitors to the Saline Valley Warm Springs Area.

All non-historic artwork would be removed from designated wilderness. New art in non-wilderness areas would be allowed, as long as natural and cultural resources are not manipulated, the art is not a permanent fixture, and the art is removed from the Saline Valley Warm Springs Area when the visitor creating the art leaves. Creating art at the Saline Valley Warm Springs Area is a common activity and many visitors describe the area as inspiration for artwork. The allowance of art under alternative 5 would be a continued benefit for some visitors.

Alternative 5 would remove nonnative palm trees after they die naturally, as described for alternative 2. All palm trees at Upper Spring would be removed. Native species would be planted so that they would be mature enough to provide shade for visitors by the time the existing mature palm trees are removed. Additionally, the lawn at Lower Spring would be retained within its current footprint. This alternative would rely heavily on the user groups for maintenance of the existing mature palm trees and the lawn. Volunteers, including camp hosts and visitors, would be required to trim palm fronds, pull young palm trees, and maintain the lawn without allowing it to expand. Onsite monitoring, completed by the National

Park Service and through an MOU with user groups, would help NPS management respond to changing conditions by restricting visitor use if damage to natural and cultural resources were to occur in certain areas. Participating in the protection of resources would provide an enhanced experience for some visitors. The management of nonnative species under alternative 5 would not drastically change the conditions at the Saline Valley Warm Springs Area, as the lawn would be available for recreation activities and the palm trees and, in the future, native trees would continue to provide shade in the developed areas, resulting in continued beneficial impacts for visitors.

The fencing under alternative 5 would be the same as described for alternative 2 – only surrounding the source springs at Lower and Palm Springs. This fencing would prohibit burros from drinking from the source springs, protecting the water quality, while not affecting visitors' viewshed or ability to move around the Saline Valley Warm Springs Area. The fencing at Upper Spring would be replaced and expanded to protect the native vegetation and the source springs from burro damage.

As described for alternative 3, the recreation experiences would change considerably due to changes in camping restrictions, the ability to recreate freely, and restrictions on new artwork could cause adverse impacts for visitors. Alternative 5 would have a large volunteer component, which would allow the visitors to remain personally invested in the maintenance of the Saline Valley Warm Springs Area, including management of vegetation, facilities, and other visitors, education, and resource protection. These activities would help the National Park Service monitor use and overuse of the area. Ultimately, however, the effect on visitor use and experience would depend on a visitor's desired experience.

**Cumulative Impacts.** Few past, present, or reasonably foreseeable projects have a detectable effect on visitor use and experience. These projects include the Saline Valley Road Borrow Sites and Gravel Management Plan (NPS 2011a) and the Inyo County ATV Adventure Trails of the Eastern Sierra Project (Inyo County 2014). These projects are described for alternative 1. Alternative 5 would allow visitors to continue to use the Saline Valley Warm Springs Area for soaking and recreation, the same as alternative 1, but the National Park Service would work towards creating a more natural environment around the developed areas by excluding feral burros from the developed area, limiting camping areas, removing nonnative species, and creating a monitoring and response program. Considered together, there would be no meaningful additive or interactive effects among these projects and the proposed actions under alternative 5 that would constitute a significant cumulative effect.

## **Conclusion**

Under alternatives 1, 2, 3, and 5 the Saline Valley Warm Springs Area would continue to provide unique visitor experiences. Alternative 1 would allow the continuance of the recreational activities at the springs, including use of the Chicken Strip airstrip. Alternative 2 would not differ except for enforcement of prohibitions on new artwork, removal of the vehicle support facility, and efforts to reduce nonnative species at the springs. Under alternatives 1 and 2, there would be beneficial effects on experiences for those that seek communal recreation. Those seeking solitude with soaking opportunities could achieve their desired experience depending on the time of visit and campsite selection; however, during periods of high use, there would be a continued adverse impact on these visitors' experiences. Alternatives 3 and 5 would allow recreational activities at the Saline Valley Warm Springs Area but would make considerable changes to camping regulations, recreation activities, and the approach to nonnative species. These alternatives would change the recreation experience due to the restrictions; some visitors would consider their experience degraded from these changes, while other visitors may consider the restrictions a benefit. Under alternative 4, the development at the Saline Valley Warm Springs Area would be removed. Because the environment and atmosphere of the springs, which is unique to Death Valley National Park, would be completely changed, the adverse impacts on experiences for communal recreation or those seeking to soak in the natural spring waters would be significant and adverse. The Saline Valley Warm

Springs Area would be restored to natural conditions under alternative 4; therefore, the impacts on natural backcountry camping experience would be beneficial and significant.

## HUMAN HEALTH AND SAFETY

This section presents an evaluation of the alternatives as they relate to health and safety impacts on the park's visitors.

### Methodologies

The analysis of effects on human health and safety considered recreation and other activities at the Saline Valley Warm Springs Area. Impacts on park visitors were analyzed quantitatively using information from relevant studies, personal communication, and professional judgment to predict changes in human health and safety.

### Types of Impacts on Health and Safety

The Saline Valley Warm Springs Area is in a remote location of Death Valley National Park. Visitors that want to visit the springs have to be committed to long travel and be prepared with supplies. While at the Saline Valley Warm Springs Area, there are some factors that could affect the health and safety of the visitors. These factors are discussed in this section.

**Water Contaminants.** Natural springs are used for recreational soaking and health purposes; however, natural untreated water can expose users to items of health concern, including bacteria, amebae, radon, and arsenic. Due to high levels of minerals and elevated temperatures, hot springs are ideal for pathogen growth (Yoder et al. 2004). *Legionella*, a non-fecal bacterium, can be found in a variety of water environments and thrives in temperatures above 25°C and *Naegleria*, a free-living amoeba, prefers thermal waters with temperatures up to 46°C (WHO 2006). Another potential contaminant found in natural hot springs is arsenic. Arsenic is often associated with geothermal waters and is common in southwestern United States (Smedley and Kinniburgh 2002). Coso Hot Springs, located in Inyo County, is one hot spring with elevated levels of arsenic (Welch, Lico, and Hughes 1988). Ingestion of arsenic has proven to cause various forms of cancer (Smith et al. 1992). Visitors can reduce their exposure to these contaminants by spending less time in natural spring water, refraining from immersing their heads in the water, and avoiding ingestion of the water.

**Nuisance Wildlife.** Normal wildlife behavior can be altered as a result of human presence and especially with the presence of human food. Wildlife that learn to depend on developed areas can become habituated to humans and ultimately become a nuisance. Poor food storage and deliberate feeding exasperates habituation. At the Saline Valley Warm Springs Area, feral burros are known to raid campsites in search of food. These feral burros do not have a fear of humans and are often present among the visitors' campsites. Recently, visitors to the springs have indicated that coyotes have become accustomed to visiting the campsites in search of food with a dwindling concern for human presence. Other nuisance species include ravens and various rodents.



*Grackles in a drainage area at Palm Spring*

In addition to searching for human food, feral burros and other habituated wildlife contribute to the degradation of water quality from the introduction of pathogens from their waste. The source springs are not protected from runoff and potentially contaminated water could be diverted to the soaking tubs, showers, or the sinks where visitors wash their dishes. Presence of animal waste at the campsites can lead to an increase in insects and rodents, which could potentially carry diseases such as hantavirus.

**Flood Risk.** Under the present hydrologic and sediment regime, drainage patterns around the developed areas of the Saline Valley Warm Springs Area indicate that flood runoff is derived from three watersheds in the Saline Range to the north and northeast; these drainages are presented in figure 9 (appendix A) and described in detail in the “Human Health and Safety” section in the “Affected Environment” chapter and in the Floodplains Statement of Findings (appendix G).

Visitors who camp at Lower Spring would be subject to flash floods. While there is not a reliable history of the flash floods that have occurred at the Saline Valley Warm Springs Area, there are anecdotal accounts of several flash floods since people started regularly visiting the area in the late 1940s (New South 2015). Flash floods occur regularly in deserts, as the soils do not readily absorb the water from storms and the vegetation is sparse. When there is a flash flood emergency, visitors can go to the higher ground located on the bluff east of the springs known to visitors as the art gallery.

**Hazardous Materials.** The camp host and regular visitors to the Saline Valley Warm Springs Area retain a supply of automobile repair and service items and cleaning supplies. These items are classified as hazardous materials, as they could pose a threat to human health if not used, stored, and disposed of properly. The Occupational Safety and Health Administration has standards that describe safe handling of hazardous materials. Automobile repair and service items, such as gasoline and lubricants, would be covered under Occupational Safety and Health Administration Standard 1926.152 “Flammable Liquids” and Occupational Safety and Health Administration Standard 1910 Subpart H “Hazardous Materials.” For all hazardous materials on site, Safety Data Sheets should be available to those people using them. These Safety Data Sheets include information such as the physical, health, and environmental hazards and safety precautions for handling and storing the chemical.

## Alternative 1: No-Action Alternative

Under alternative 1, the no-action alternative, all visitor activities at the Saline Valley Warm Springs Area would continue. The health and safety of the visitors would continue to be affected by their use of the facilities provided.



**Water Use.** Visitors to the Saline Valley Warm Springs Area would continue to use the soaking tubs, the dishwashing stations, and, indirectly, the settling pond. The water from the source springs would continue to be diverted to the soaking tubs, showers, and sinks. This water would not be tested for pathogens, chemicals, or bacteria. The sinks currently have signs that identify the water at the sinks as nonpotable and these signs would remain. The sinks and tubs would drain to the settling pond, which, although a potential drowning hazard, would remain unfenced. The recreational water use at the Saline Valley Warm Springs Area presents potential for adverse impacts on the health and safety of the visitors.

**Habituated Wildlife.** The habituation of wildlife can cause a host of threats to human health and safety including direct conflict with animals, animal waste in the camping areas, potential damage of supplies, and loss of food. Under alternative 1, visitors to the Saline Valley Warm Springs Area would continue to store their food individually, as they deem sufficient. Food left out or otherwise stored improperly would be subject to wildlife that has become habituated to human food. When wildlife forage for food, they could damage visitors' possessions in the process or leave visitors without sufficient food for the duration of their trip. Visitors are required to remove their campfire waste and to pack out their trash, including food waste. Any lapse in good campsite housekeeping, such as leaving food or other trash, could further perpetuate the habituation of wildlife. The dishwashing sinks provide another opportunity for visitors to inadvertently provide food for wildlife. Lower Spring currently has signage warning visitors of the consequences of feeding the wildlife, and the camp host and regular visitors work to educate new visitors about good housekeeping practices.

During the public scoping and alternative comment periods, visitors to the Saline Valley Warm Springs Area commented on the presence of feral burros, coyotes, and ravens. The commenters noticed an increase in rodents and insects at the campsites and attributed this change to the increased waste from habituated animals.

**Flood Risk.** Because there would not be a change in camping trends and the number of visitors to the Saline Valley Warm Springs Area is expected to remain constant, the risks to human safety from flash



*Improperly stored gasoline cans at camp host site*



*Vehicle repair supplies at the camp host site*



*Bleach and cleaning supplies at Lower Spring*



flooding is expected to continue. During times of potential flash floods, the camp host would personally communicate with each visitor to warn them of flood warnings and instruct them where higher ground is located. Flash floods could damage visitors' camping equipment and vehicles, ruin food, and destroy or move personal belongings.

**Hazardous Materials.** All activities at the Saline Valley Warm Springs Area would continue, including use of the automobile support facility by the camp host and other visitors. There are many items used for vehicle repair that could cause health hazards, including batteries, fluids such as lubricants and solvents, and gasoline. These items are not in a proper storage container and could result in environmental or health hazards if the contents spill or leak.

The visitors continually bring bleach to clean the soaking tubs and vault toilets. The camp host and visitors participate in the cleaning activities in accordance with guidelines for cleaning established by the current camp host. The bleach and other cleaning supplies are not stored properly and empty bottles are not disposed of properly.

**Accessibility.** The Saline Valley Warm Springs Area does not contain any design features that aid in accessibility, as defined by the 2010 *Americans with Disabilities Act Standards for Accessible Design*. Under alternative 1, there would be no modifications to the tubs, walkways, or other features of the Saline Valley Warm Springs Area. During the public scoping and alternative comment periods, several commenters noted that, due to previous injuries or other disabilities, the Chicken Strip airstrip is the only way they could travel to the Saline Valley Warm Springs Area because the drive was too harsh. Visitors would be able to continue to travel to the Saline Valley Warm Springs Area via airplane under alternative 1.

**Cumulative Impacts.** Of the past, present, or reasonably foreseeable projects that could have a detectable effect on resources affected by the Saline Valley Warm Springs Management Plan (presented in the "Cumulative Effects" section of this chapter), none would have an effect on human health and safety. Therefore, there would be no meaningful additive or interactive effects from these projects and the proposed actions under alternative 1 that would constitute a significant cumulative effect.

## Alternative 2: Regulatory Compliance Alternative

**Water Use.** The use of water under alternative 2 would be the same as described for alternative 1 for bathing, soaking, and washing dishes; however, the National Park Service would consult with the Office of Public Health to develop and an approach for and implement water quality monitoring of the source springs. The settling pond would be fenced under this alternative, reducing the potential for a visitor to fall into the pond. The source springs would be fenced with artistic wooden fencing to prohibit feral burros from drinking from source springs, resulting in a slight improvement from contamination from feral burros.

**Habituated Wildlife.** Alternative 2 would provide additional education to visitors on the issues associated with providing food to wildlife through online resources, direct interactions with the camp host, and increased signage at the Saline Valley Warm Springs Area. Visitors would be responsible for properly storing their food and keeping a clean campsite, as described under alternative 1, but the education would be expected to lower the possible instances of visitors providing food to wildlife. This would indirectly benefit health and safety as it would reduce the number of food-habituated animals. Additionally, a filtration system would be added to the dishwashing sinks, which would reduce the food scraps available to wildlife.

**Flood Risk.** The potential for flash floods would not change under alternative 2; however, the increased education would increase the visitors' knowledge of the risks associated with flash flood and the location of the higher ground. The increased education would allow the visitors to act quicker during a weather emergency, reducing the potential for impacts on visitor safety.

**Hazardous Materials.**

Alternative 2 would reduce the impacts on health and safety from hazardous materials. The vehicle support facility would be removed, and emergency vehicle assistance should not be expected by the visiting public. Removal of the facility would

reduce the amount of hazardous

substances that would be stored at the Saline Valley Warm Springs Area. Visitors would continue to bring bleach and other cleaning supplies; however, these products and any hazardous materials used for emergency vehicle repairs would be used and/or stored according to Occupational Safety and Health Administration regulations.

**Accessibility.** Under alternative 2, the Saline Valley Warm Springs Area would be made as accessible as possible to allow access for those with disabilities. This would be a beneficial effect on the safety of those visitors with disabilities. The Chicken Strip airstrip would remain open, allowing shorter travel time for those visitors with injuries or disabilities who have access to airplane travel.

**Cumulative Impacts.** Of the past, present, or reasonably foreseeable projects that could have a detectable effect on resources affected by the Saline Valley Warm Springs Management Plan (presented in the "Cumulative Effects" section of this chapter), none would have an effect on human health and safety. Therefore, there would be no meaningful additive or interactive effects from these projects and the proposed actions under this alternative that would constitute a significant cumulative effect.

## Alternative 3: Community Engagement Alternative

Under alternative 3, the impacts on human health and safety for flood risk, hazardous materials, and accessibility would be the same as described for alternative 2.

**Water Use.** Water use and risks under alternative 3 would be similar to those described for alternative 2; however, source springs, tubs, and riparian areas would be fenced with artistic creosote fencing to exclude feral burros from these areas. The fence would prohibit feral burros from drinking from source springs. The fence would also keep terrestrial wildlife excrement further from the source springs. Ultimately, the fencing would improve water quality from reducing potential for contamination from wildlife.



*Feral burros in campsites at Burro Spring Camping Area*

**Habituated Wildlife.** Under alternative 3, visitors would have access to more information on the dangers of providing food to wildlife, as described under alternative 2. However, alternative 3 would also give the National Park Service the option of installing food storage boxes at the Saline Valley Warm Springs Area to reduce the human food available to wildlife. The addition of education and the possibility of adding food storage boxes would reduce the incidences of habituated wildlife, thus reducing the adverse effects of wildlife depending on humans for food. Additionally, the installation of wooden fencing around the source springs, tubs, and riparian areas would keep feral burros from these areas where visitors are often concentrated.

**Cumulative Impacts.** Of the past, present, or reasonably foreseeable projects that could have a detectable effect on resources affected by the Saline Valley Warm Springs Management Plan (presented in the “Cumulative Effects” section of this chapter), none would have an effect on human health and safety. Therefore, there would be no meaningful additive or interactive effects from these projects and the proposed actions under alternative 3 that would constitute a significant cumulative effect.

## Alternative 4: Restoration Alternative

**Water Use.** Water use in developed tubs and other infrastructure at the Saline Valley Warm Springs Area under alternative 4 would be eliminated. The tubs, showers, and sinks would be removed; the settling pond would also be removed. The potential health risks from recreational water use would be eliminated.

**Habituated Wildlife.** Alternative 4 would remove all facilities from the Saline Valley Warm Springs Area, which is expected to reduce visitation and the visitors’ length of stay. With fewer campers, there is a smaller chance of wildlife becoming food-habituated. A fence would be installed along the wilderness boundary that would keep feral burros from the entire developed area. With less human food available, wildlife is likely to resume natural foraging behaviors. The adverse effects from wildlife raiding campsites, eliminating in camping areas, and exposing humans to potential disease would be greatly reduced under this alternative.

**Flood Risk.** The potential for flash floods would not change under alternative 4; however, because visitation would be reduced under this alternative, camping would be less concentrated. Visitors would have access to information on flood risks through online resources prior to visiting the Saline Valley Warm Springs Area. There would be a greater adverse impact on visitor safety under this alternative because visitors would not have the camp host to warn of impending weather emergencies, but this scenario is consistent with the level of support given to backcountry campers in other parts of the park.

**Hazardous Materials.** All vehicle repair services and features at the Saline Valley Warm Springs Area would be removed, which would eliminate the need for the hazardous materials discussed for alternatives 1, 2, and 3. Alternative 4 would have a beneficial effect on visitor health and safety because visitors would not have the potential to encounter these substances while at the Saline Valley Warm Springs Area.

**Accessibility.** Under alternative 4, there would be no added features to increase accessibility, and the Chicken Strip airstrip would be removed. There would be a slight adverse impact from the removal of the airstrip for visitors who cannot handle the long drive to the Saline Valley Warm Springs Area, but this change would make the Saline Valley Warm Springs Area as accessible as other parts of the park.

**Cumulative Impacts.** Of the past, present, or reasonably foreseeable projects that could have a detectable effect on resources affected by the Saline Valley Warm Springs Management Plan (presented in the “Cumulative Effects” section of this chapter), none would have an effect on human health and safety. Therefore, there would be no meaningful additive or interactive effects from these projects and the proposed actions under this alternative that would constitute a significant cumulative effect.

## Alternative 5: Preferred Alternative

Under alternative 5, the impacts on human health and safety for water use, flood risk, hazardous materials, and accessibility would be similar to those described for alternative 2.

**Water Use.** Under alternative 5, visitors would be able to use the tubs, showers and sinks as they currently do; however, the water from the dishwashing stations and showers would be diverted to subterranean systems—one for Lower Spring and one for Palm Spring—instead of flowing to the settling pond and a wash south of the Wizard Pool. The wastewater would be treated in the subterranean systems instead of becoming available to the environment. The settling pond would be fenced to reduce the potential for a visitor to fall into the pond. The National Park Service would install artistic wooden fencing around the source springs and consult with the Office of Public Health to develop and an approach for and implement water quality monitoring of the source springs.

**Habituated Wildlife.** Under alternative 5, visitors would have access to more information on the dangers of providing food to wildlife through education efforts. The National Park Service would also work with the user groups to monitor resources at the Saline Valley Warm Springs Area, including wildlife activity, and increase education both at the site and through communications with the user groups members. The subterranean systems for treating wastewater would eliminate food scraps at the dishwashing stations, reducing the potential for habituated wildlife.

**Accessibility.** Under alternative 5, the Saline Valley Warm Springs Area would be made as accessible as practical to allow access for those with disabilities without creating impacts on potentially significant historical features.

## Conclusion

Under alternatives 1, 2, 3, and 5, human health and safety in the Saline Valley Warm Springs Area would continue to be affected through recreational water use, habituated wildlife, flood risk, and hazardous materials. Alternative 2 would provide beneficial effects on health and safety by bringing the actions and conditions into compliance with NPS, state, and federal regulations. Alternative 2 would provide more education, conduct water quality monitoring, reduce human food available to wildlife, restrict feral burros from drinking from the source springs, and increase accessibility. Alternative 3 would be similar to alternative 2, except this alternative would install burro exclusion fences that would keep the feral burros from areas that contain the source springs, soaking tubs, and riparian areas. Alternatives 3 and 5 would have the added benefit of installing food storage boxes if deemed necessary, which would help reduce food habituation further. Alternative 5 would install subterranean systems for the treatment of wastewater from the dishwashing stations, which would reduce the human food available for wildlife at the Saline Valley Warm Springs Area and reduce the risk of contaminated water from entering the environment. Under alternative 4, safety concerns from recreational water use and hazardous materials would be eliminated. Habituation of wildlife would be reduced due to the burro exclusion fence and the lower visitor numbers expected with this alternative. There would be risk associated with flash flood and accessibility; however, alternative 4 would create a backcountry scenario at the Saline Valley Warm Springs Area that is consistent with the rest of the backcountry camping areas throughout the park. Recreational activities at the Saline Valley Warm Springs Area are not currently posing significant threats to the health and safety of the visitors. Alternatives 2, 3, and 5 include elements that would improve conditions for protecting visitors, and alternative 4 would create a recreation scenario at the Saline Valley Warm Springs Area that is consistent with other backcountry areas of the park. Therefore, it can be concluded that the effects from the action alternatives would not produce significant impacts on health and safety.

## **SUSTAINABILITY AND LONG-TERM MANAGEMENT**

In accordance with NEPA, and as further explained in the *National Park Service NEPA Handbook* (NPS 2015a), consideration of long-term impacts and the effects of foreclosing future options should be included in any NEPA document. For each alternative considered in a NEPA document, considerations of sustainability must demonstrate the relationship between local short-term uses of the environment and the maintenance and enhancement of long-term productivity.

The National Park Service must consider whether the effects of the alternatives involve tradeoffs between the long-term productivity and sustainability of park resources and the immediate short-term use of those resources. It must also consider whether the effects of the alternatives are sustainable over the long term without causing adverse environmental effects for future generations (NEPA section 102[c][iv]).

### **Relationship of Local Short-term Uses versus Long-term Productivity**

Alternatives 1, 2, 3, and 5 would trade long-term productivity for short-term use of park resources. Visitor activities (e.g., diverting water from source springs, dispersed camping, and watering the lawn) at the Saline Valley Warm Springs Area would continue to adversely affect wildlife and wildlife habitat at the expense of the long-term productivity and sustainability of these resources. Alternative 2 would take steps to reduce nonnative plants and effects from nonnative wildlife. Alternatives 3 and 5 would further protect native habitats by limiting camping areas, monitoring plans, and resource stewardship efforts. Alternatives 1, 2, 3, and 5 would provide degraded experiences for some park visitors.

For alternative 4, there would be a short-term commitment of human resources during restoration activities that would enhance the long-term productivity of park vegetation and habitat in the Saline Valley Warm Springs Area and result in sustainable use of the resources in that area. This alternative would require more resources than alternatives 1, 2, 3, and 5 due to the intense restoration efforts, which would require commitment of park personnel time. For this management alternative to be sustainable, it would require long-term monitoring to protect park resources. Alternative 4 would completely change the experience for those that visit the park solely for the unique opportunities available at the Saline Valley Warm Springs Area.

### **Irreversible and Irretrievable Commitment of Resources**

Alternatives 1, 2, 3, and 5 would cause impacts to wildlife, wildlife habitat, wilderness, and ethnographic resources, from continued use of the Saline Valley Warm Springs Area for recreation similar to current conditions; however, these impacts are not regarded as irreversible or irretrievable. Under alternative 4, the natural resources would benefit from restoration efforts, but would adversely affect the Saline Valley Warm Springs Historic Site. The implementation of alternative 4 would require intensive consultation and negotiation with the Tribe, Advisory Council on Historic Preservation, and SHPO to resolve adverse effects to historic resources. The National Park Service would complete documentation and mitigation of the Saline Valley Warm Springs Historic Site prior to removal, but alternative 4 would have irreversible and irretrievable impacts on the historic site.

### **Adverse Environmental Effects that Cannot be Avoided**

Use of the Saline Valley Warm Springs Area under alternatives 1, 2, 3, and 5 would adversely affect ethnographic resources. The nature of the Saline Valley Warm Springs Area currently and the continuation of its use under these alternatives would inherently affect the visitors who value the site for

## ENVIRONMENTAL CONSEQUENCES

its ethnographic values. Conversely, alternative 4 would adversely affect the Saline Valley Warm Springs Historic Site since all of the development would be removed.



# CONSULTATION AND COORDINATION



WIZARD POOL PALM TREES AT PALM SPRING





# **CONSULTATION AND COORDINATION**

## **INTRODUCTION**

The intent of the National Environmental Policy Act of 1969, as amended (NEPA) is to encourage the participation of federal and state-involved agencies and affected citizens in the assessment procedure, as appropriate. As part of the NEPA process, issues associated with the proposed action were identified during scoping meetings with National Park Service (NPS) staff, coordination with other affected agencies, and public meetings, as well as through public comments.

This chapter describes the consultation that occurred during development of this Saline Valley Warm Springs Final Management Plan and Environmental Impact Statement (plan/EIS), including consultation with stakeholders and other agencies. This chapter also includes a description of the public involvement process and a list of the recipients of the draft document. The public involvement activities for this plan/EIS fulfill the requirements of NEPA, section 106 of the National Historic Preservation Act of 1966 (NHPA), and NPS Director's Order 12 (NPS 2011b) and accompanying NPS NEPA Handbook (NPS 2015b).

## **THE SCOPING PROCESS**

Scoping is an effort to involve agencies and the public in determining the scope of issues to be addressed in an environmental document. Scoping includes consultation with all interested parties or any agency with jurisdiction by law or expertise to obtain early input. Among other tasks, scoping determines important issues and eliminates issues determined to be unimportant; allocates assignments among the interdisciplinary team members and/or participating agents; identifies related projects and associated documents; identifies other permits, surveys, consultations, etc., required by other agencies; and helps determine a schedule that allows for adequate time to prepare and distribute the environmental document for all interested parties to review before a final decision is made.

The National Park Service divides the scoping process into two parts: internal scoping and external (or public) scoping. Internal scoping for the plan/EIS involved discussions among NPS personnel and the interdisciplinary planning team regarding the purpose of and need for the management actions, issues, management alternatives, mitigation measures, the analysis boundary, appropriate level of documentation, available references and guidance, and other project-related topics.

Public scoping is the early involvement of the interested and affected public in the environmental analysis process. The public scoping process helps ensure that people have an opportunity to comment and contribute early in the decision-making process. For this plan/EIS, project information was distributed to individuals, agencies, and organizations early in the scoping process, and people were given opportunities to express concerns or views and to identify important issues or suggest other alternatives.

Taken together, internal and public scoping are essential elements of the NEPA process. The following sections describe the various ways scoping was conducted for this plan/EIS.

### **Internal Scoping**

The internal scoping process began with scoping meetings conducted on February 28 and 29, 2012, with staff members from Death Valley National Park (the park), NPS Environmental Quality Division, Pacific West Region, and contractor personnel in attendance. The internal scoping meeting began with a

presentation on the process and background of NEPA. During the remaining days the National Park Service identified the purpose of and need for action, management objectives, issues, and impact topics. Park resources, possible alternative elements, and the project schedule were also discussed.

An internal alternatives development meeting was held on June 25 and 26, 2013, with staff members from the park, the Timbisha Shoshone Tribe (the Tribe), Bureau of Land Management (BLM) Ridgecrest Field Office, Inyo County, and contractor personnel in attendance. The purpose of the meeting was to discuss the elements of the alternatives and to work together to develop additional alternative elements to represent a full range of alternatives for managing the Saline Valley Warm Springs Area.

## Public Scoping

Public scoping began with the May 29, 2012 release of a public scoping newsletter to the public for review and comment. The newsletter included a description of the purpose and need, project description and background, project objectives, and a list of issues and impact topics. The newsletter also provided information on upcoming public scoping meetings. The newsletter was sent to individuals, businesses, agencies, and organizations on the park's email distribution list. The National Park Service also issued a news release inviting the public to comment at the scoping meetings. On June 5, 2012, the notice of intent to prepare an environmental impact statement was published in the *Federal Register* (77 FR 33237-33239; Vol. 77, No. 108). The notice of intent summarized the proposed action and explained how to comment on the action. This publication initiated the 60-day public scoping comment period, which ran from June 5, 2012 until August 6, 2012, during which members of the public were able to submit their comments on the proposed management plan.

The National Park Service held public scoping meetings on June 12, 13, and 14, 2012 in Bishop, Ridgecrest, and Victorville, California, respectively. Each meeting had an open house format with NPS staff members present to visit with the workshop participants, answer questions, and address concerns. Posters, handouts, and newsletters were made available at each public meeting. The public was invited to submit comments on the scope of the project and potential alternatives through August 6, 2012. A total of 46 participants attended the public scoping meetings.

During the entire public scoping period, over 540 pieces of correspondence were received from over 43 states and 3 countries (United States, Mexico, and the Netherlands) and entered into the Planning, Environment, and Public Comment (PEPC) site either from direct entry by the commenter, or uploading of emails, faxes, transcripts, and hard copy letters by NPS staff. Approximately 311 letters (61%) were submitted by individuals living in California. The NPS PEPC database was used for management of the comments. Comments were analyzed through the use of a standard NPS-wide process to compile and correlate similar public comments into a format to be used by decision makers and the project team. Comment analysis assisted the team in organizing, clarifying, and addressing technical information pursuant to NEPA regulations. It also aided in identifying the topics and issues relevant for consideration in the plan/EIS. A coding structure was developed during the internal scoping process to help sort comments into logical groups by topics and issues. A summary of the comments can be found in the *Public Scoping Comment Summary Report* dated November 2012 (NPS 2012c), which is located on the NPS PEPC website. This report included the number and type of comments received, a summary of the substantive comments received, and a list of the organization or groups that participated in the public scoping effort.

The PEPC website listed six topic questions to prompt responses from the public. The public comments received were in response to those questions, as well as from observations on other issues pertaining to the management at the Saline Valley Warm Springs. The topics that received the majority of the comments were in response to the questions presented and include expressions of opinion on appropriate

recreation activities, feral burro population, management of the Chicken Strip airstrip, and management of camping at the springs.

## **Public Alternative Development Workshops**

After the internal and public scoping meetings, the National Park Service held another set of public meetings regarding alternatives on February 4, 5, and 6, 2014, in Death Valley, Lone Pine, and Ridgecrest, California, respectively. A total of 78 participants attended the public scoping meetings.

The public was invited to submit comments on alternatives from January 23, 2014 to March 28, 2014. During the public comment period, 774 separate pieces of correspondence from 35 states and 4 countries (United States, Canada, Austria, and the Netherlands) were received. The correspondence resulted in 1,704 substantive comments. The majority of correspondences were at least partly supportive of the no-action alternative; however, many commenters suggested their own changes to the alternatives.

## **Public Comments on the Draft Plan/EIS**

On May 4, 2018, a Notice of Availability for the draft plan/EIS was published in the Federal Register, beginning the comment period that extended through July 2, 2018, resulting in a 60-day comment period, 15 days longer than the required 45-day comment period for EISs.

The National Park Service held three open houses between Sunday, May 27 and Wednesday, May 30, 2018 in the following locations: the Saline Valley Warm Springs Area; Ridgecrest, California; and Bishop, California. Additionally, the National Park Service conducted an online webinar on May 31, 2018. The meetings and webinar were announced through a press release, Facebook post, email, and on the PEPC website on May 4, 2018, providing advance notice of these meetings and webinar. There were 140 attendees at the open house meetings and 34 people that attended the webinar.

The public was encouraged to submit their comments on the draft plan/EIS. The National Park Service received 382 pieces of correspondence from 27 states, the District of Columbia, and 3 countries (United States, Italy, and the Thailand), which resulted in 789 substantive comments. Topics that rose to importance for many commenters included the management of the palm trees and lawn; the burro exclusion fencing; the permit and fee system; the removal of the automobile repair facility; the cooperative agreement with the Tribe, art, and other aspects of cultural resources; and the camping restrictions.

The National Park Service prepared a comment summary report to summarize the comments received on the draft plan/EIS, created concern statements that represent the major themes of the public comments, and responded to those concern statements. The comment summary report is included as appendix H.

## **AGENCY AND TRIBAL GOVERNMENT SCOPING**

### **Cooperating Agencies**

In a letter dated April 3, 2012, the National Park Service invited the following agencies and tribe to become cooperating agencies for this plan/EIS: the Tribe; BLM, Ridgecrest Field Office; Inyo County Planning Department; Inyo County Board of Supervisors; and Inyo National Forest. The National Park Service received a letter of acceptance from the Inyo County Board of Supervisors on July 17, 2012. The Tribe and BLM signed a memorandum of understanding (MOU) with the National Park Service for the plan/EIS process on April 17, 2013 and May 23, 2013, respectively.

## Agency Meetings

The National Park Service met with the cooperating agencies on June 12 and 13, 2012 during the scoping process. On June 12, 2012, the National Park Service met with members of the Tribe at the Timbisha Shoshone Tribal Office and gave an overview of the project, describing the background of the Saline Valley Warm Springs Area, the purpose and need of the plan/EIS, and the potential issues. At this meeting, the Tribe identified the Saline Valley Warm Springs Area as a culturally significant area for the Tribe and expressed interest in being involved in alternatives development. Also, on June 12, the National Park Service provided an overview of the project via PowerPoint presentation at the Inyo County Board of Supervisors meeting in Independence, California. Issues discussed at this meeting include the tubs as “pools” under state law and potential alternative means for managing the Saline Valley Warm Springs Area. On June 13, the National Park Service met with representatives of the BLM, Ridgecrest Field Office in Ridgecrest, California and provided an overview of the project. The National Park Service identified the need for any available information from the BLM for topics such as archeology, hydrology, and history of the tubs.

On May 18, 2013, the National Park Service sent letters to the BLM, Inyo County, and the Tribe, inviting them to attend the alternatives development meetings to be held June 25 and 26, 2013. Representatives from the two agencies and the Tribe attended these meetings and participated in the development of the preliminary alternatives for the plan/EIS. On November 7, 2013, the National Park Service sent a letter to the cooperating agencies, asking for their input and comments on the preliminary alternatives. The National Park Service received comments from Inyo County and the Tribe on December 16 and 18, 2013, respectively. The preliminary alternatives were refined based on the agencies comments.

## Endangered Species Act Section 7 Consultation

Consultation with US Fish and Wildlife Service has been implemented as required by the Endangered Species Act and the Magnuson-Stevens Fishery Conservation and Management Act.

The National Park Service initiated consultation with the US Fish and Wildlife Service with a letter dated October 1, 2012. On May 23, 2013, the US Fish and Wildlife Service sent an initial response letter regarding the project. The letter noted that the federally listed southwestern willow flycatcher and least Bell’s vireo, as well as the candidate species yellow-billed cuckoo, could be affected by the management plan. In further discussions regarding special-status species on July 7, 2016, the National Park Service and the US Fish and Wildlife Service reached the decision that due to the lack of quality habitat, these bird species are unlikely to occur at the Saline Valley Warm Springs Area, resulting in a determination of *no adverse effect* on the aforementioned species.

## Section 106 of the National Historic Preservation Act Consultation

Section 106 of the NHPA requires federal agencies to consider the effects of their undertakings on historic properties, seeking to accommodate historic preservation concerns with the needs of federal undertakings through consultation between the agency and parties with an interest in the effects of the undertaking (Title 36 of the Code of Federal Regulations [CFR], section 800). The National Park Service is preparing a separate Assessment of Effects document to satisfy section 106 of the NHPA requirements pursuant to 36 CFR 800.8(c).

A consultation letter was sent to California State Historic Preservation Officer (SHPO) and the Advisory Council on Historic Preservation on January 10, 2013, describing the proposed project. Additionally, the National Park Service initiated consultation with the Tribe and other affiliated tribes with letters dated

October 21, 2013. The Advisory Council on Historic Preservation responded in a letter dated September 2, 2014, acknowledging initiation of the consultation process. This correspondence can be found in appendix I.

The National Park Service conducted a historic Determination of Eligibility (DOE) study of the Saline Valley Warm Springs Area (New South 2015), which identified one National Register of Historic Places (NRHP)-eligible historic site: The Saline Valley Warm Springs Historic Site. On April 25, 2016, the National Park Service sent letters to the SHPO and the Tribe, requesting review and concurrence of the historic DOE.

The National Park Service completed a draft DOE report to identify ethnographic resources in the Saline Valley Warm Springs Area and to evaluate the site's NRHP eligibility. This DOE considered the potential significance of the site from the perspective of the Tribe and documented that the warm springs of Saline Valley (warm springs) are eligible for listing on the NRHP under Criterion A as an area of significance to the Tribe. As of September 2017, consultations with the SHPO, tribes, and the public are ongoing.

The National Park Service sent a letter to the SHPO on May 23, 2017, seeking to re-initiate consultation with the SHPO. This letter explains that the National Park Service initially intended to combine the NEPA and section 106 compliance into one document but had since decided to conduct a separate, concurrent section 106 compliance action. The letter described the NPS preferred alternative, detailed the Area of Potential Effect, identified future actions needing further section 106 consultation, and described the consultation process with the Tribe. The SHPO responded in a letter dated July 20, 2017, which acknowledged the re-initiation of consultation and other information and concurred with the NPS definition of the Area of Potential Effect.

The National Park Service sent a consultation package with the identification of historic properties (including archeological surveys and DOE documents for the historic and ethnographic sites) and the assessment of effect to the SHPO on February 15, 2018. Per 36 CFR 800, "Protection of Historic Properties," the SHPO had 60 days from the time the package arrived to respond formally. The National Park Service did not receive a formal response but sent another letter in July 2018, requesting SHPO comments or concurrence by the end of August 2018. The National Park Service did not receive a formal response; therefore, in accordance with 36 CFR 800.5(c)(1), the National Park Service would proceed with the undertaking once a decision is made. The National Park Service completed consultation with the SHPO under section 106 of the NHPA.

## **LIST OF RECIPIENTS**

Upon publication of the Notice of Availability of the draft plan/EIS in the *Federal Register*, a press release will be issued announcing the availability of the document for public review. Notice will be provided to interested individuals and organizations via the park website, email, social media, or postcard. Copies of the document will be available at local libraries and the document will also be provided to the following:

## Agencies

- Bureau of Land Management, Ridgecrest Field Office
- California Department of Fish and Game
- California Department of Transportation
- California State Clearinghouse
- California State Parks
- Inyo County Board of Supervisors
- Inyo County Planning Department
- US Fish and Wildlife Service

## Indian Tribes

- Timbisha Shoshone Tribe
- Big Pine Band of Owens Valley
- Bishop Paiute Tribe
- Fort Independence Community of Paiute
- Kern River Paiute Council
- Lone Pine Paiute Shoshone Reservation

## Organizations and Partners

- Amargosa Conservancy
- California Desert Protection League
- California Native Plant Society
- Center for Biological Diversity
- Death Valley 49ers, Inc.
- Death Valley Natural History Association
- Desert Protective Council
- Furnace Creek Inn & Ranch Resort
- High Desert Multiple Use Coalition
- Lone Pine Chamber of Commerce
- National Parks Conservation Association
- Native American Rights Fund
- Panamint Springs Resort
- Saline Preservation Association
- Sierra Club

## Libraries

- Amargosa Valley Library
- Bishop Branch Library
- Independence Central Library
- Lone Pine Branch Library
- Ridgecrest Branch Library



## **LIST OF PREPARERS AND CONSULTANTS**

### **US Department of the Interior, National Park Service**

- Terry Baldino, Chief of Interpretation (former), Death Valley National Park
- Lucy Bambrey, Project Manager (former), Environmental Quality Division
- Kathy Billings, Superintendent (former), Death Valley National Park
- Charlie Callagan (former), Wilderness Coordinator, Death Valley National Park
- Cheryl Chipman, Management Assistant/Public Information Officer (former), Death Valley National Park
- Jane Cipra, Botanist (former), Death Valley National Park
- Mike Cipra, Environmental Protection Specialist (former), Death Valley National Park
- Sarah Craighead, Superintendent (former), Death Valley National Park
- Kelly Daigle, Project Manager, Environmental Quality Division
- Blair Davenport, Cultural Resources Manager (former), Death Valley National Park
- Richard Friese, Hydrologist, Death Valley National Park
- Kelly Fuhrmann, Chief of Resources Management (former), Death Valley National Park
- Josh Hoines, Chief of Resource Management, Death Valley National Park
- Amanda Landon, Compliance Archeologist, Death Valley National Park
- Linda Manning (former), Wildlife Specialist, Death Valley National Park
- Karen McKinlay-Jones, Chief of Visitor and Resource Protection, Death Valley National Park
- Joe Neubauer, Project Manager (former), Environmental Quality Division
- Jonathan Penman-Brotzman, Compliance Manager (former), Death Valley National Park
- Brad Phillips, Outdoor Recreation Planner (former), Pacific West Region
- Wanda Raschkow (former), Archeologist, Death Valley National Park
- Mike Reynolds, Superintendent, Death Valley National Park
- Abby Wines, Management Assistant, Death Valley National Park

### **EA Engineering, Science, and Technology, Inc.**

- Suzanne Boltz, Project Manager
- Lisa Methratta, PhD, Ecologist (former EA employee)
- Christine Papageorgis, PhD, Chief Scientist (former EA employee)
- Sarah Sa, GIS Coordinator (former EA employee)
- Anita Struzinski, Environmental Scientist

## **New South Associates**

- Julie Coco, Cultural Resources
- Joe Josephs, Cultural Resources

## **The Final Word**

- Juanita Barboa, Technical Editor
- Sherrie Bell, Technical Editor



# REFERENCES, GLOSSARY, AND INDEX



CRYSTAL POOL AT LOWER SPRING





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## GLOSSARY

**Archeological Resources** – Historic and prehistoric deposits, sites, features, structure ruins, and anything of a cultural nature found within, or removed from, an archeological site.

**Backcountry** – Primitive, undeveloped portions of a park. Backcountry is not a legal designation, like wilderness.

**Beat Movement** – A social and literary movement that questioned the conformity, materialism, and capitalism. The Beat Generation rebelled against consumer culture and reserved nature of the previous generation, instead embracing creative movements, a back to nature aesthetic, and visiting the wild and unspoiled places of the world.

**Cryptobiotic Soils** – A biological soil crust composed of living cyanobacteria, green algae, brown algae, fungi, lichen, and/or mosses. Commonly found in arid regions and contribute to the well-being of other plants by stabilizing soil surfaces, retaining moisture, and fixing atmospheric nitrogen.

**Cultural Landscape Inventory** – Database containing information on the historically significant landscapes within the national park system. This evaluated inventory identifies and documents each landscape's location, size, physical development, condition, landscape characteristics, character-defining features, as well as other valuable information useful to park management.

**Cultural Resources** – Those tangible and intangible aspects of cultural systems, both living and dead, that are valued by or representative of a given culture or that contain information about a culture. They include but are not limited to sites, structures, districts, objects, and historic documents associated with or representative of peoples, cultures, and human activities and events, either in the present or in the past. Cultural resources also can include primary written and verbal data for interpretation and understanding of those tangible resources.

**Designated Camping** – Overnight use of an agency-defined, established campsite that has been pre-identified as a suitable camping location. Such campsites may or may not include associated facilities (e.g., fire pits, toilets, tables, etc.).

**Dispersed Camping** – Overnight use of a self-contained camp site selected by the user within general parameters established by the agency (e.g., must be certain distance from road or water).

**Ethnographic Resources** – Landscapes, objects, plants and animals, or sites and structures that are important to a people's sense of purpose or way of life.

**Feral** – An animal that is not native to an area, but one that is also not domesticated or cultivated. Feral animals are descended from domesticated animals.

**Habituated Wildlife** – Wildlife that has become accustomed to human activity. These animals have lost their fear of humans and often expect to obtain food or other resources from humans.

**Hippie Movement** – This movement followed the Beat Movement and had roots in earlier counterculture movements, such as the Nudist Movement. The Hippie Movement coincided with, and in many cases comingled with, the Anti-War Movement, the Feminist Movement, the Civil Rights Movement, and the Environmental Movement. The hippies were dissatisfied and disillusioned with mainstream American

culture. Several events defined the Hippie Movement, including the Human Be-In in Golden Gate Park in San Francisco, California and the Woodstock Music Festival in Bethel, New York.

**Invasive Species** – A species that is nonnative to the ecosystem under consideration and whose introduction causes or is likely to cause economic or environmental harm or harm to human health. Invasive species can be plants, animals, or other organisms (such as microbes). Human actions are the primary means of invasive species introductions.

**Leave No Trace®** – A program that teaches visitors to enjoy the outdoors responsibly. The Leave No Trace® program is founded on seven principles that help avoid impacts to wild places and protect them for future generations.

**Merry Pranksters** – A group of people that followed the author Ken Kesey. The group lived communally and took an extended road trip, promoting the positive benefits of LSD to transform the political and social landscape.

**Monitoring** – The general purpose of monitoring is to detect changes or trends in a resource (differs from inventory on the temporal scale). Further defined as the collection and analysis of repeated observations or measurements to evaluate changes in condition and progress toward meeting a management objective. Monitoring is often done by sampling the same sites over time, and these sites may be a subset of the sites sampled for the initial inventory.

**Natural Quality of Wilderness** – Wilderness ecological systems are substantially free from the effects of modern civilization. This quality is preserved when there are only indigenous species and natural ecological conditions and processes and may be improved by controlling or removing non-indigenous species or by restoring ecological conditions.

**Naturist Movement** – This movement began in Germany at the beginning of the twentieth century as a backlash against industrialism and urbanism such as tight living quarters, unhealthy air, restrictive clothing, and unsanitary living conditions. Nudism as a practice was seen to be part of a healthier lifestyle that also included vegetarianism, abstinence from alcohol and tobacco, naturopathic medicine, and more exposure to fresh air and sunlight.

**Nonnative Species** – Species of plants or wildlife that are not native to a particular area and often interfere with natural biological systems.

**Other Features of Wilderness** – This quality captures important elements or “features” of a particular wilderness that are not covered by the other four qualities. Typically these occur in a specific location, such as archaeological, historical, or paleontological features; some, however, may occur over a broad area such as an extensive geological or paleontological area, or a cultural landscape. This quality may or may not occur within a specific wilderness, and is therefore different from the other four qualities that, by law, occur in every wilderness. This quality is preserved when these “other features of value” are preserved. For the Death Valley National Park wilderness, this is the intangible and symbolic values of the Timbisha Shoshone Tribe.

This quality captures important elements or “features” of a particular wilderness that are not covered by the other four qualities. Typically these occur in a specific location, such as archaeological, historical, or paleontological features; some, however, may occur over a broad area such as an extensive geological or paleontological area, or a cultural landscape. This quality may or may not occur within a specific wilderness, and is therefore

different from the other four qualities that, by law, occur in every wilderness. This quality is preserved when these “other features of value” are preserved.

**Settling Pond** – Serves as a reservoir for the runoff water from the pools and dishwashing sink, as water source for the vegetation in Lower Spring camping area, and as a landscape feature on the lawn. The pond and plants act as a biological filter for the wastewater, with the fish in the pond eating any organic waste.

**Solitude, or Primitive and Unconfined Recreation Quality of Wilderness** – Wilderness provides outstanding opportunities for recreation in an environment that is relatively free from the encumbrances of modern society, and for the experience of the benefits and inspiration derived from self-reliance, self-discovery, physical and mental challenge, and freedom from societal obligations. This quality focuses on the tangible aspects of the setting that affect the opportunity for people to directly experience wilderness. The quality is preserved or improved by management actions that reduce visitor encounters, reduce signs of modern civilization inside wilderness, remove agency-provided recreation facilities, or reduce management restrictions on visitor behavior.

**Toxicant** – A toxic substance that is introduced into the environment, such as pesticides, cleaners, or fertilizers.

**Traditional Cultural Property (TCP)** – Traditional cultural resource that is eligible for or listed on the National Register of Historic Places as a historic property.

**Undeveloped Quality of Wilderness** – Wilderness is essentially without permanent improvements or the sights and sounds of modern human occupation. This quality is preserved or sustained when nonconforming uses are not used by the agency for administrative purposes or by others authorized or not authorized by the agency. It is improved when the prohibited use is removed or reduced.

**Untrammeled Quality of Wilderness** – Wilderness is essentially unhindered and free from the intentional actions of modern human control or manipulation. This 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, installing water catchments, or removing predators) are not taken.

**Visitor Experience** – The perceptions, feelings, and reactions a park visitor has in relationship with the surrounding environment.

**Visitor Use** – Refers to the types of recreation activities visitors participate in, numbers of people in an area, their behavior, the timing of use, and distribution of use within a given area.

**Wilderness** – Federal land that is part of the National Wilderness Preservation System as designated by the United States Congress.

**Wilderness Character** – The combination of biophysical, experiential, and symbolic ideals that distinguishes wilderness from other lands. These ideals combine to form a complex and subtle set of relationships between the land, its management, and the meanings people associate with wilderness. Note: The Wilderness Act does not define “wilderness character” and despite a rich legislative history on many aspects of the Wilderness Act, the Congressional committees that developed and debated the Wilderness Act of 1964 did not discuss the meaning of this phrase.

## GLOSSARY

**Wilderness Values** – Those values identified in the Wilderness Act Section 2(c) (4) which states that wilderness “may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value.”

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# FIGURES

A



VIEW OF MOUNTAINS FROM THE LAWN AT LOWER SPRING



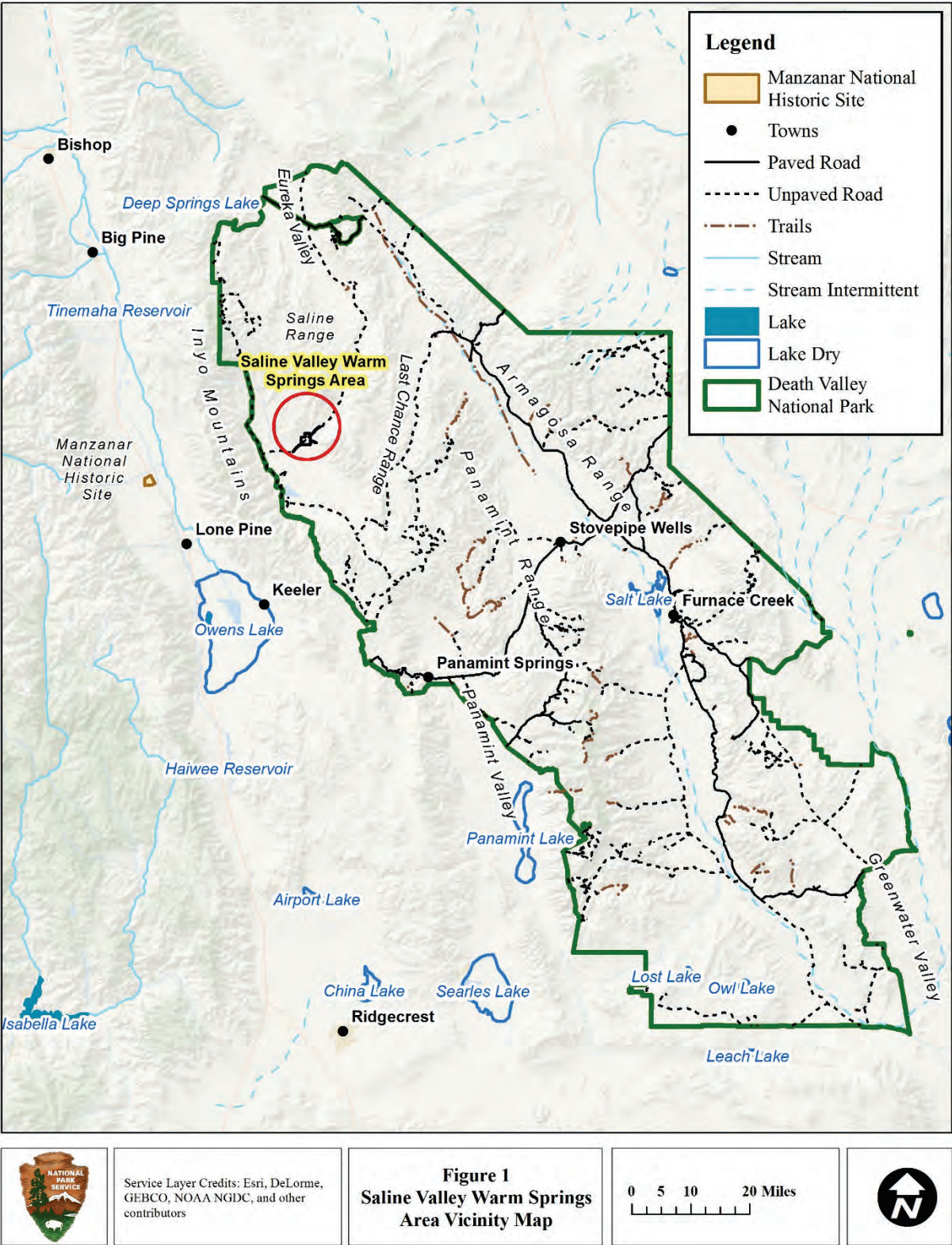


## **APPENDIX A**

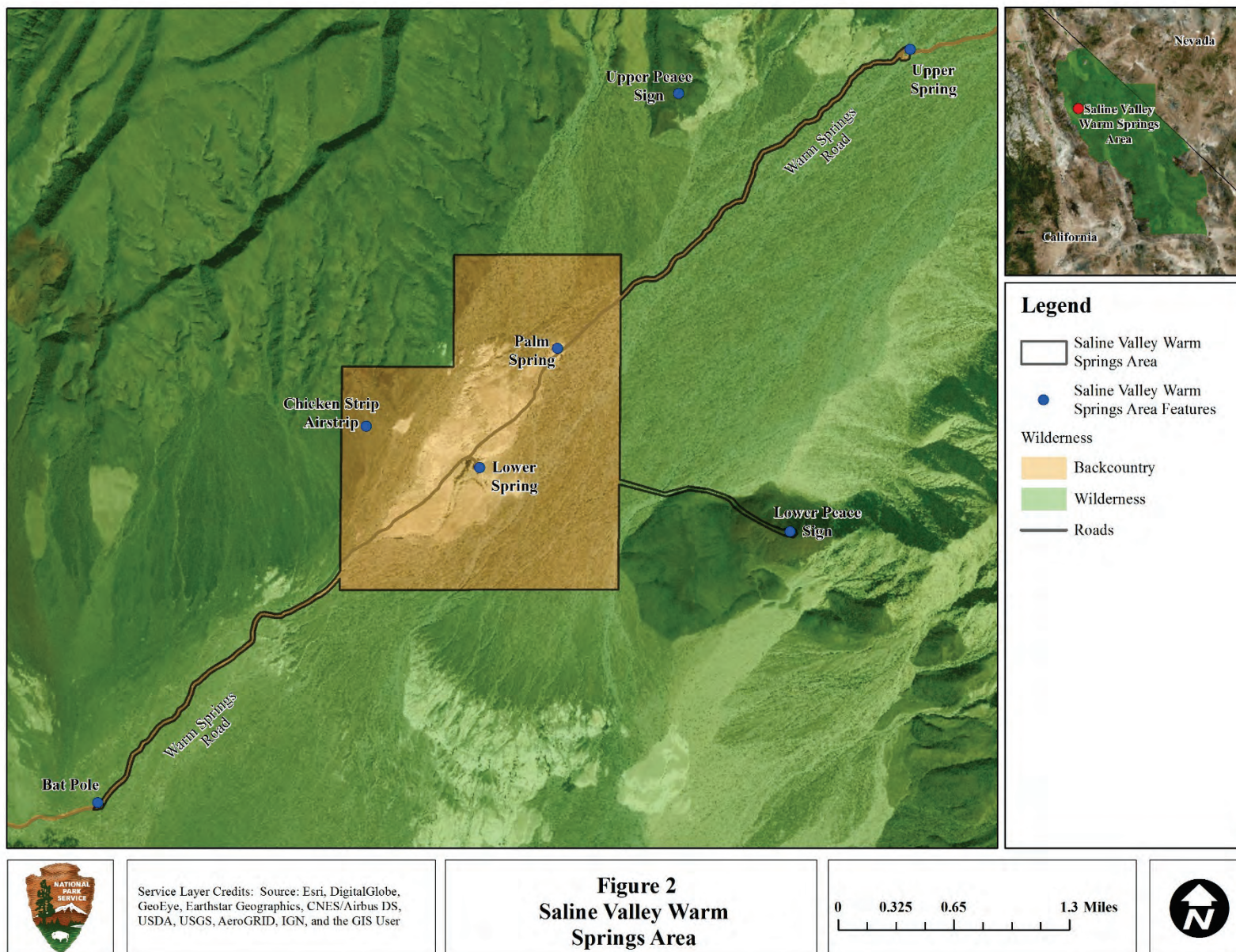
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### **FIGURES**

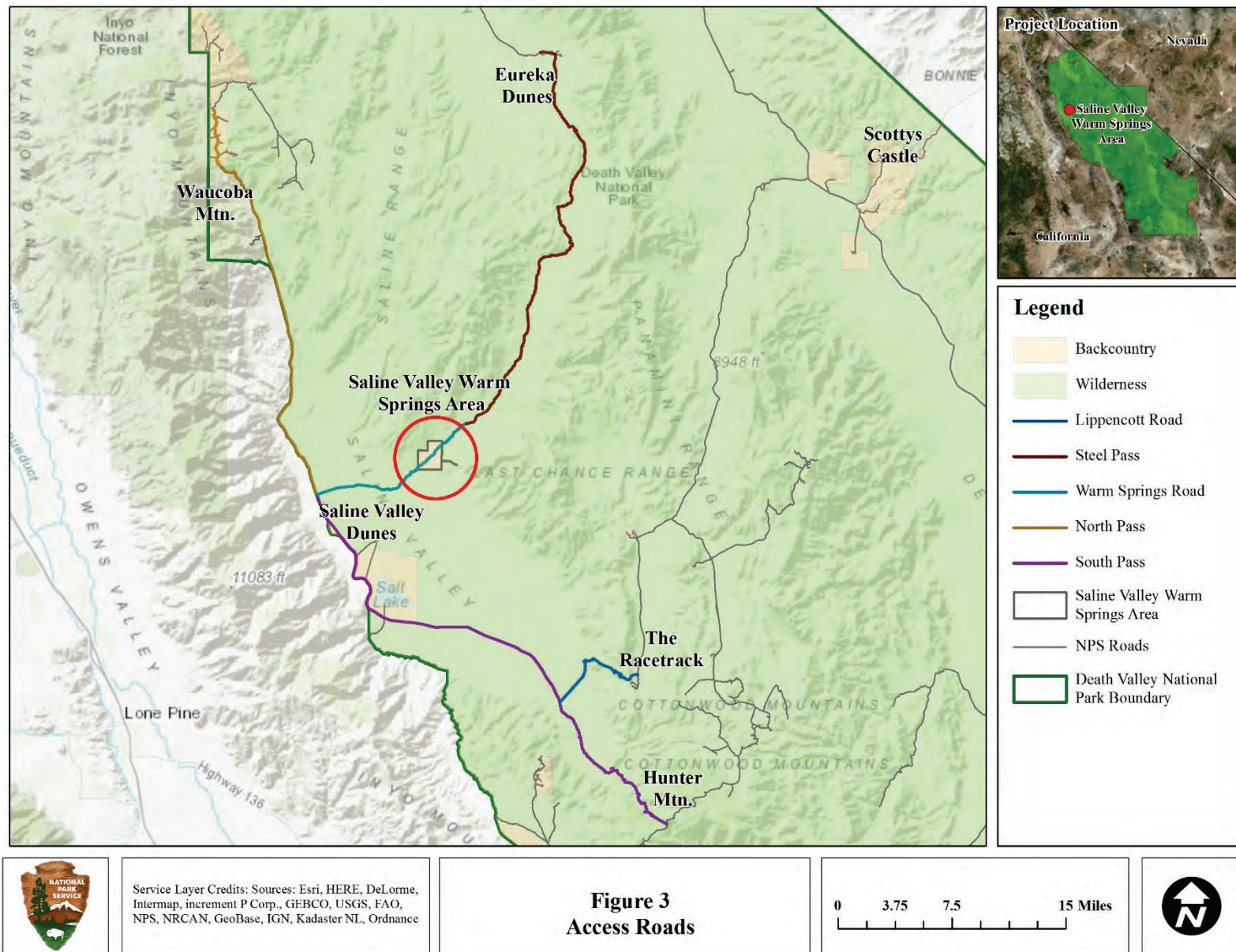




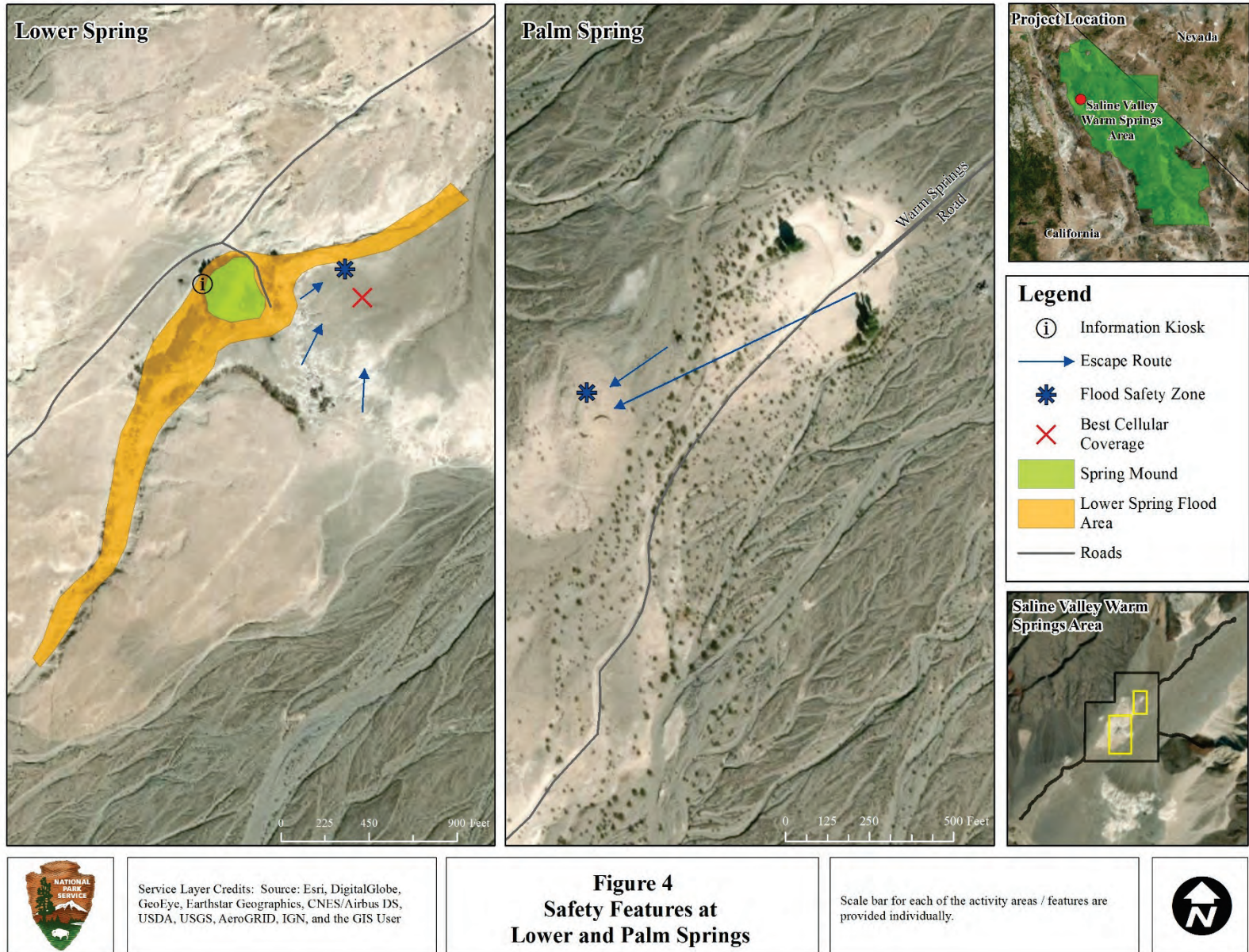
















*Lower Spring – Warm source spring with the Sunrise Pool in the background*



*Lower Spring – Cool Pool with the piping from the cold source spring on the right*



*Lower Spring – Piping junction box from the warm source spring to water features*



*Lower Spring – Ditch that drains the Sunrise Pool and the Cool Pool to the settling pond*



*Lower Spring – Crystal Pool with hose that drains water to the settling pond*



*Lower Spring – Lawn with hosing and settling pond in the background*

**FIGURE 5A. PHOTOGRAPHS DEPICTING THE SOURCE SPRINGS AND WATER DIVERSION FEATURES OF THE LOWER SPRING AND PALM SPRING AREAS**





*Lower Spring – Settling pond and the Children's Play Tub in the background*



*Lower Spring – Wildlife trough and surrounding vegetation that are fed by a hose from Burro Spring*



*Palm Spring – Northern warm source spring with diversion pipe*



*Palm Spring – Wash south of the Wizard Pool where water drains*



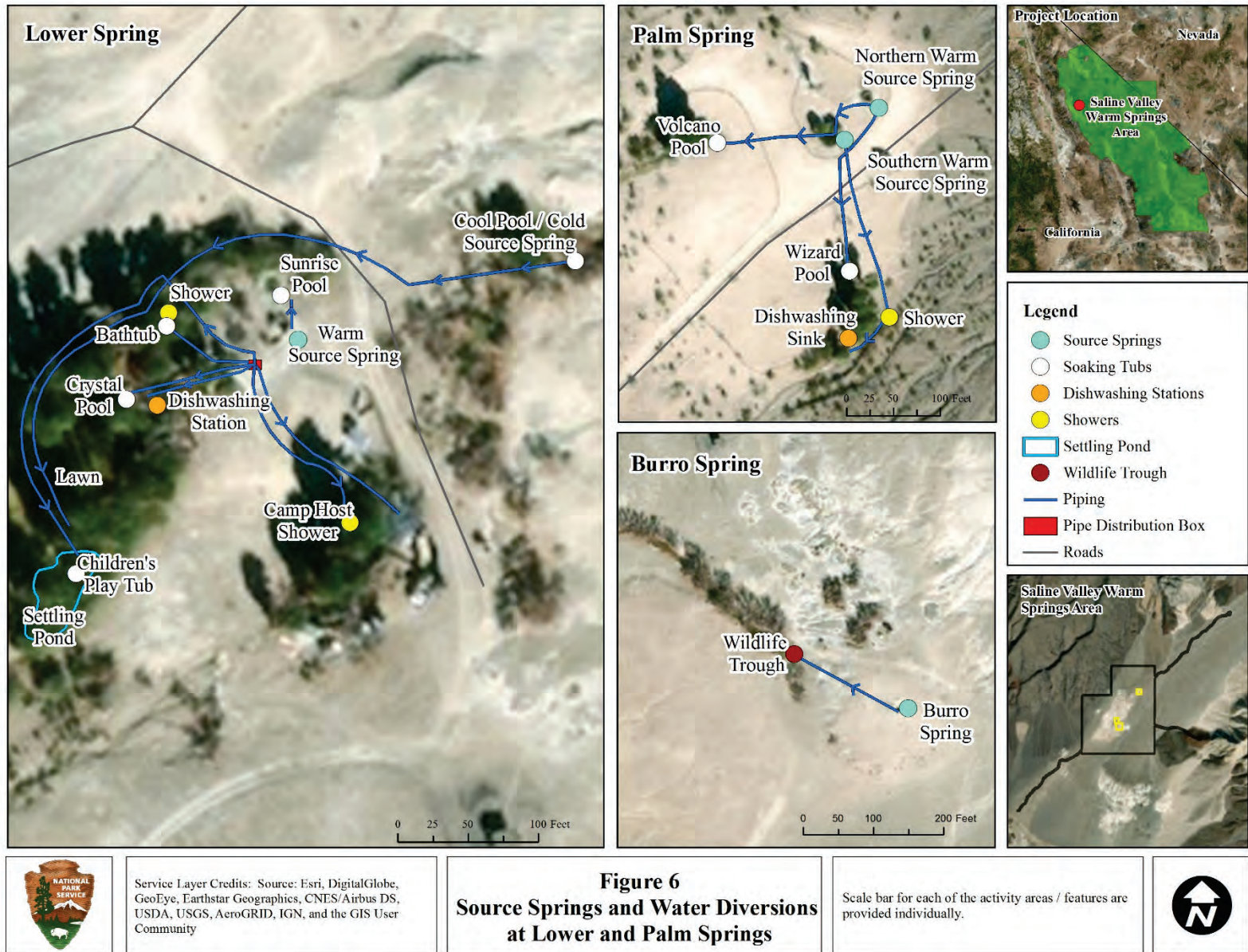
*Palm Spring – Wash south of the Wizard Pool that drains the shower and the dishwashing sink*



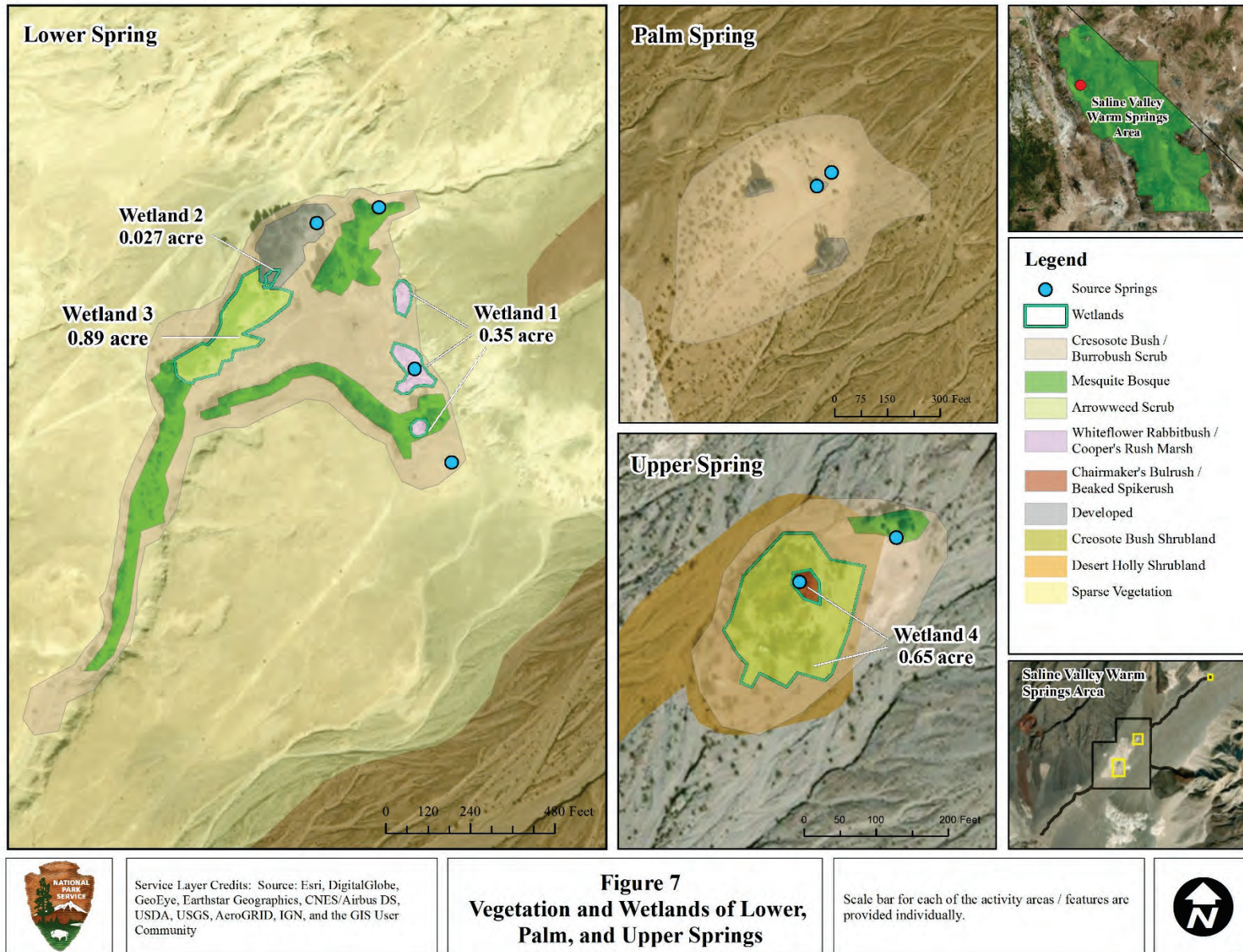
*Palm Spring – Drainage from the Volcano Pool that drains water to a grove of nonnative invasive palm trees*

**FIGURE 5B. PHOTOGRAPHS DEPICTING THE SOURCE SPRINGS AND WATER DIVERSION FEATURES OF THE LOWER SPRING AND PALM SPRING AREAS**

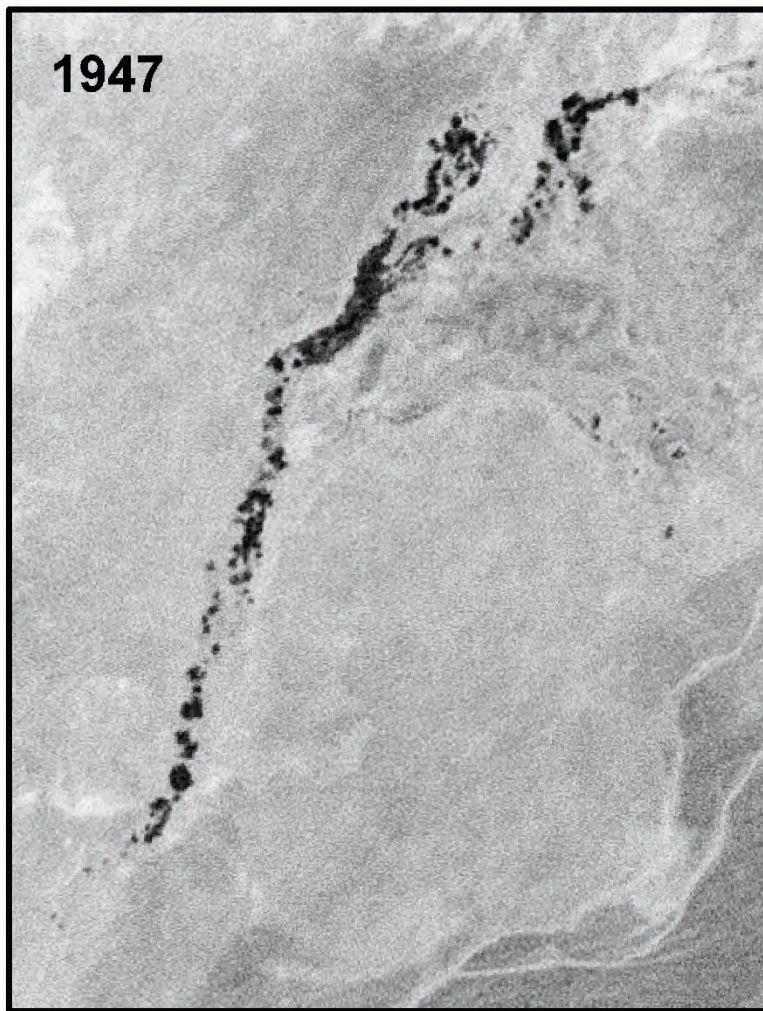












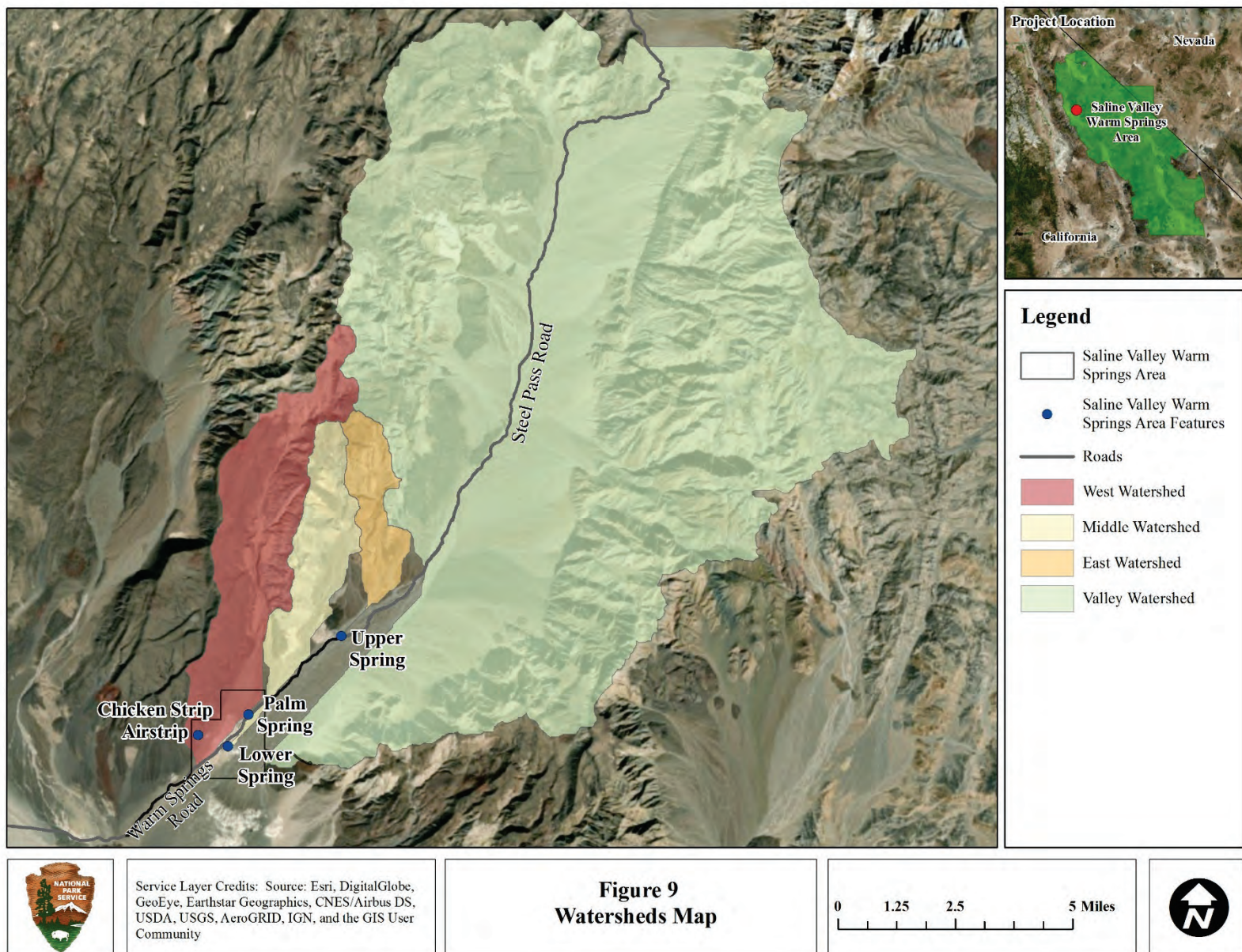
1947 photograph credit: US Geological Survey  
2016 photograph credit: Google Earth

**Figure 8**  
**Comparison of Vegetation at Lower Spring**  
**1947 and 2016**

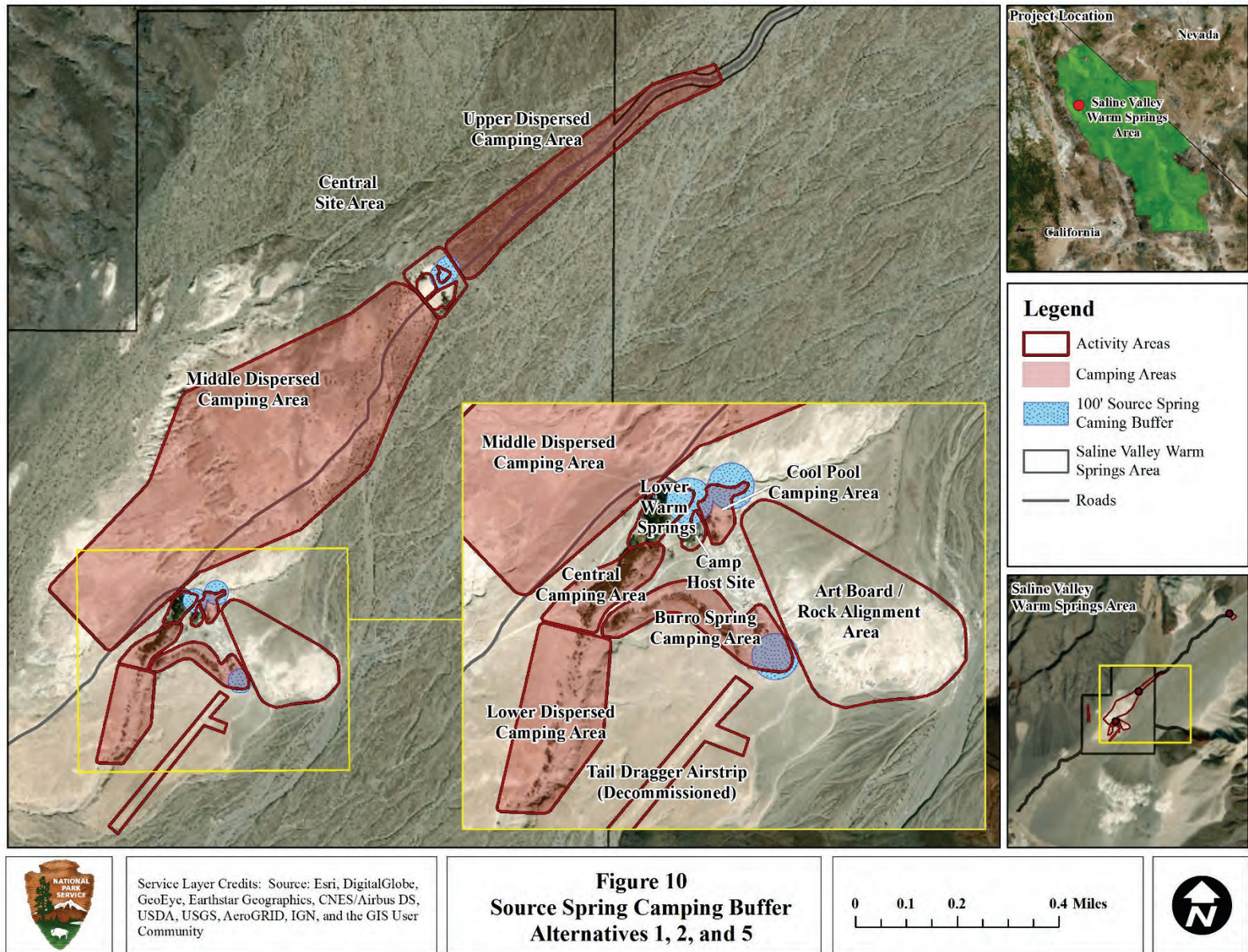
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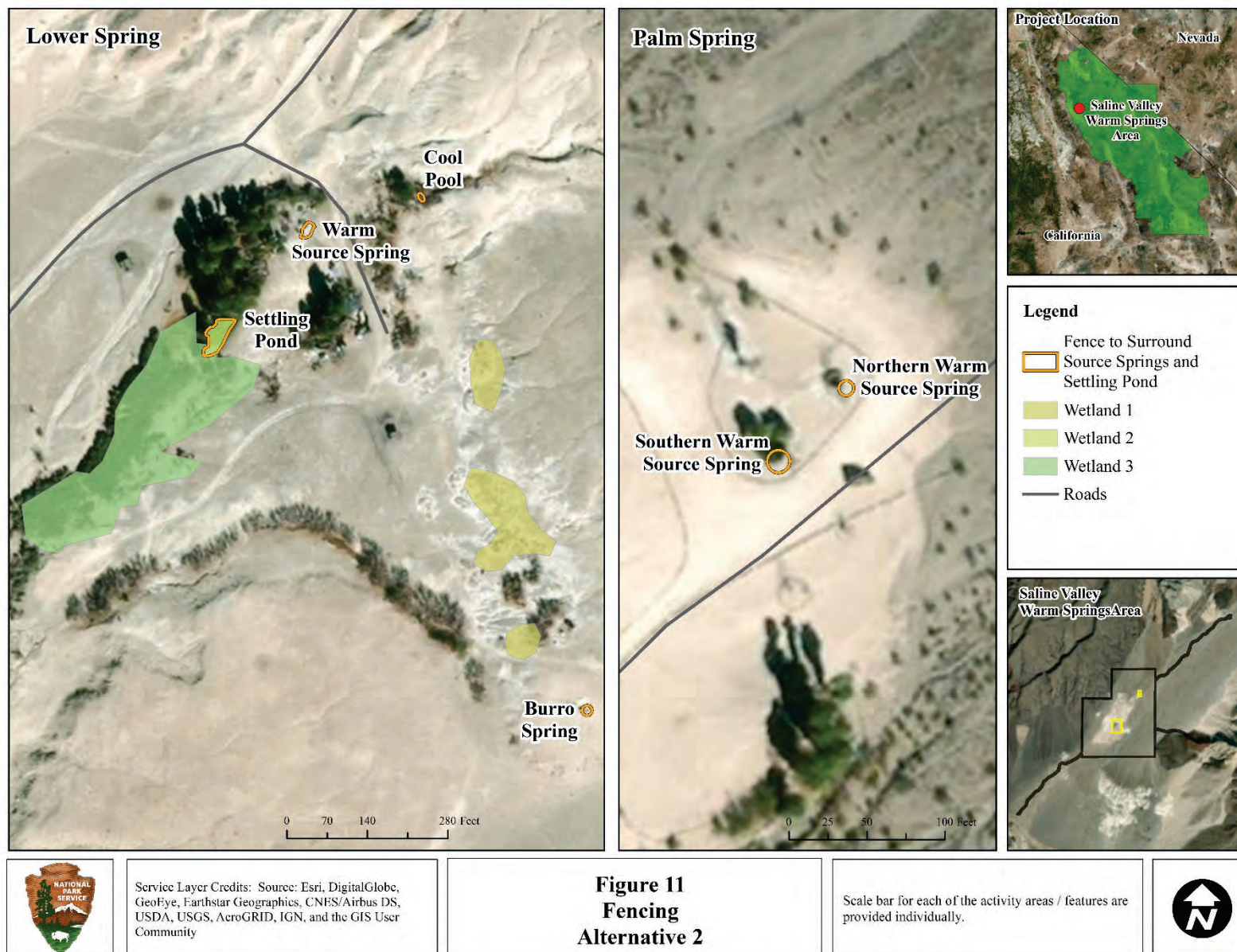




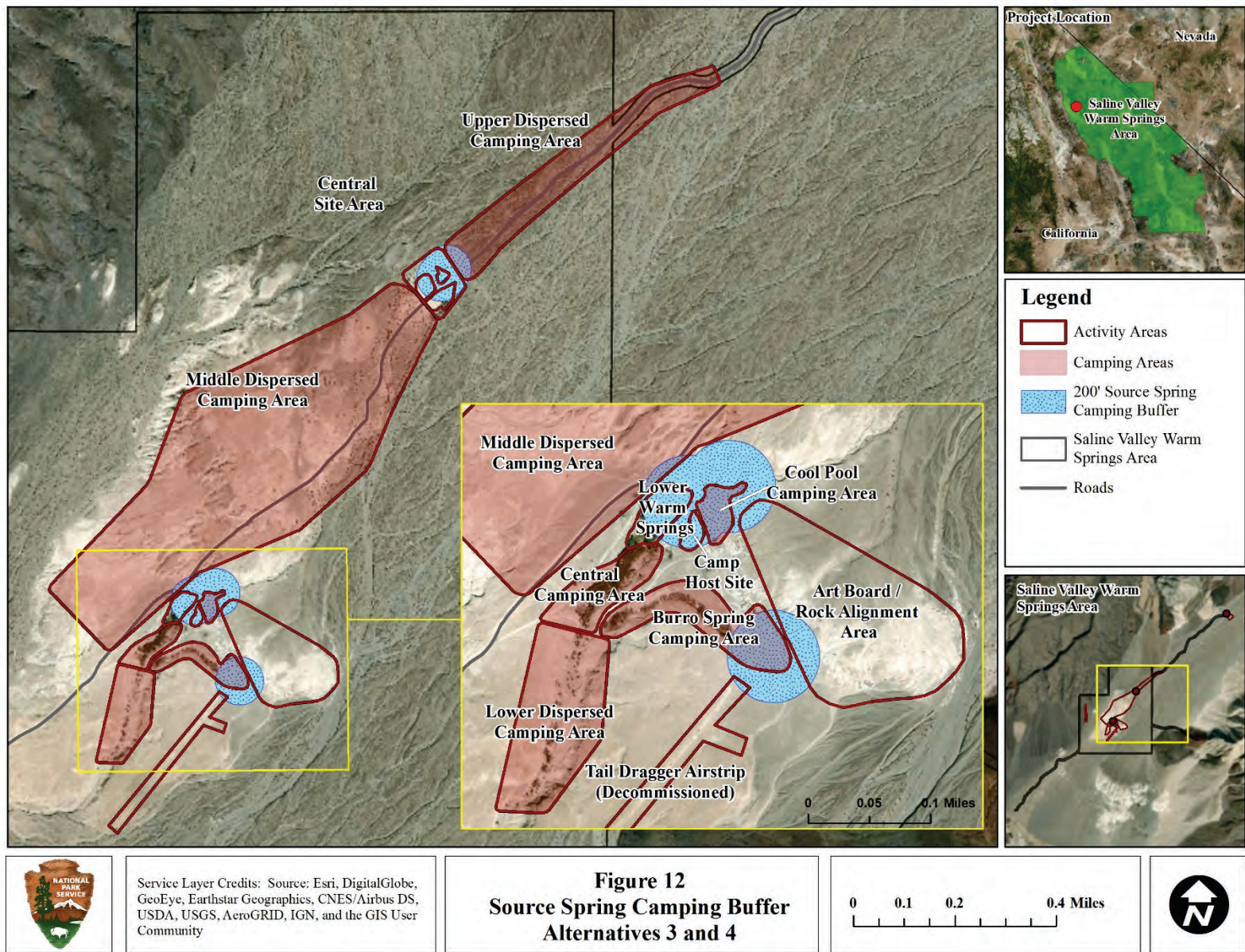




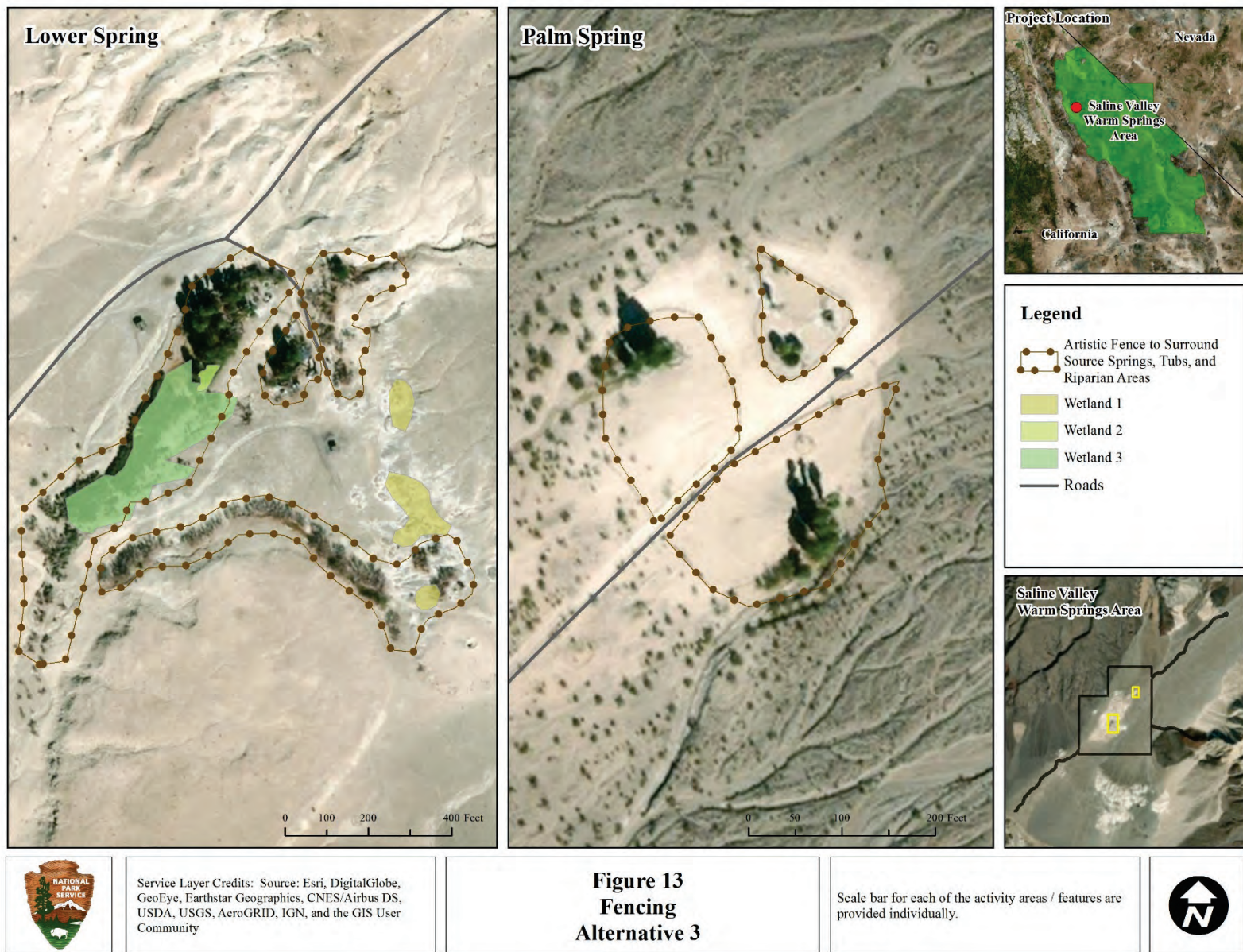




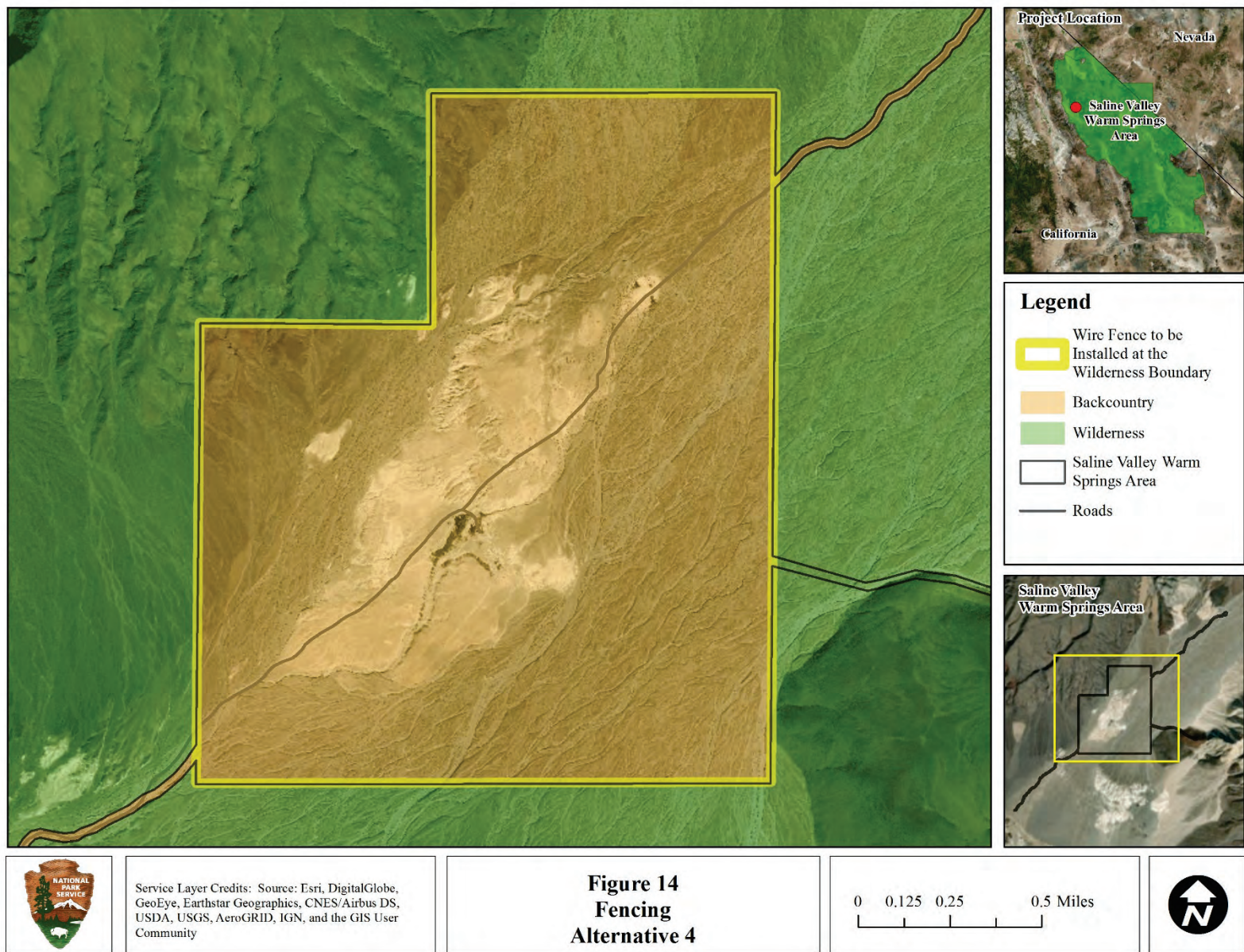




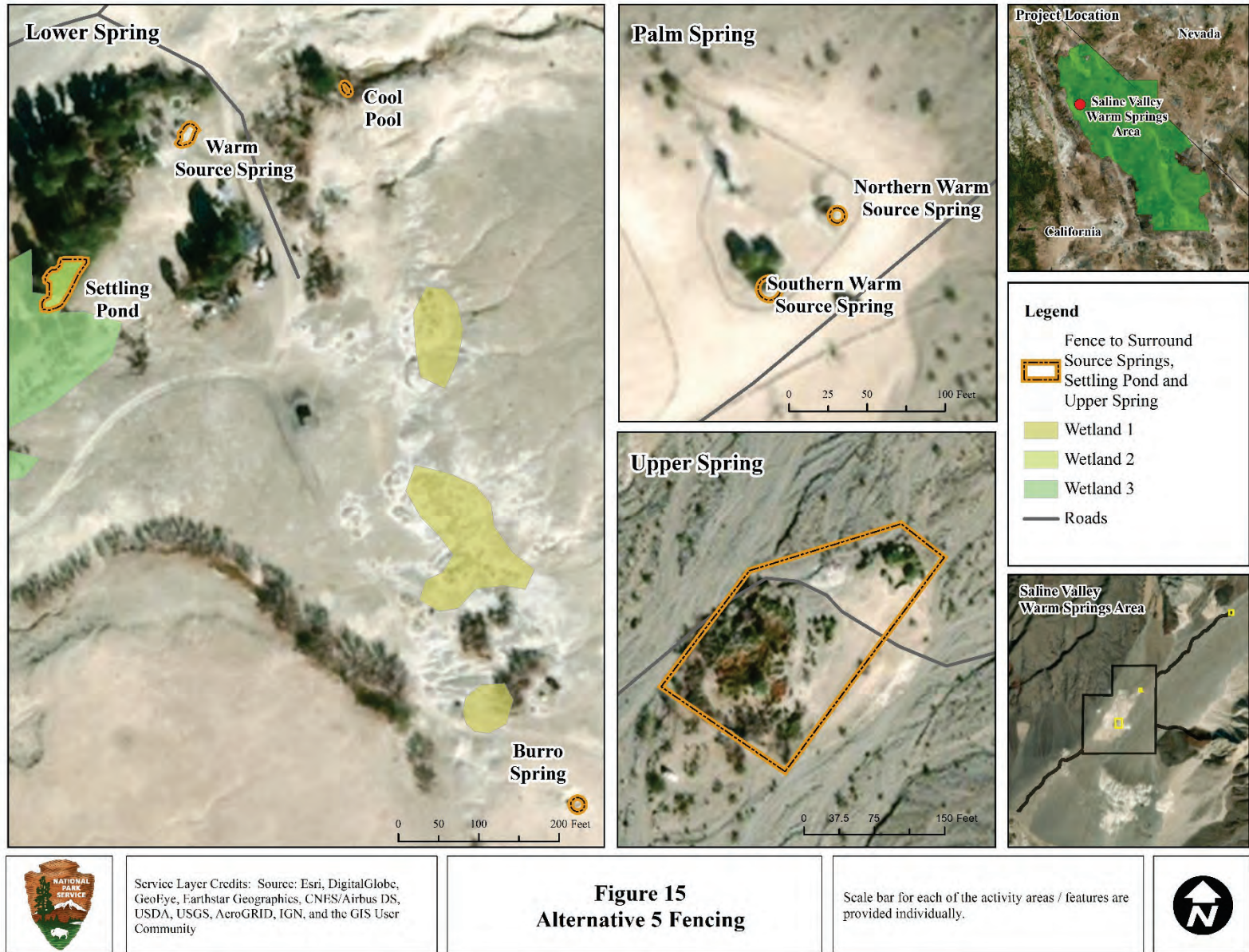














# COOPERATING AGENCY CORRESPONDENCE

B



VEGETATION AND SOURCE SPRING AT UPPER SPRING



## **APPENDIX B**

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### **COOPERATING AGENCY CORRESPONDENCE**



## COOPERATING AGENCIES

This appendix contains correspondence between the National Park Service and the cooperating agencies. In letters dated April 3, 2012, the National Park Service formally invited the Timbisha Shoshone Tribe (the Tribe), the Inyo County Board of Supervisors, the Inyo County Planning Director, the Bureau of Land Management (BLM) Ridgecrest Field Office, and Inyo National Forest to participate as cooperating agencies in the Saline Valley Warm Springs Final Management Plan and Environmental Impact Statement (plan/EIS) process. The plan has the potential to affect all of these agencies for the following reasons:

- The Saline Valley Warm Springs Area is located within the Timbisha Shoshone Natural and Cultural Preservation Area, as defined by the Timbisha Shoshone Homeland Act of 2000 (Public Law 106-423).
- Saline Valley is located within Inyo County, where residents and visitors can explore all points of the county. Saline Valley and the Saline Valley Warm Springs Area are important to the history and culture of Inyo County.
- Saline Valley was under the management of the BLM before the California Desert Protection Act was enacted in 1994.
- The Saline Valley Warm Springs Area is located approximately 5.5 miles east of the Death Valley National Park boundary. As neighboring agencies to the park, BLM and US Forest Service (USFS) managed lands could be affected by the outcome of the plan.

The request to add these agencies as cooperating agencies was based on their expertise and local knowledge of the resources within Saline Valley that could be affected by the proposed plan. The Tribe, the Inyo County Board of Supervisors, and BLM each accepted the invitation to participate as a cooperating agency. The USFS did not officially respond to the invitation.

The warm springs of Saline Valley <sup>1</sup> (the warm springs) are identified in the *2000 Timbisha Shoshone Homeland Legislative Environmental Impact Statement: Timbisha Shoshone Homeland* as a special use area within the Timbisha Shoshone Natural and Cultural Preservation Area due to the historic relationship of the Tribe to the area. While the authority to manage the land within the Timbisha Shoshone Natural and Cultural Preservation Area would remain with the National Park Service, the National Park Service is authorized to enter into a cooperative agreement with the Tribe by the Homeland Act “for the purpose of providing training on the interpretation, management, protection, and preservation of the natural and cultural resources of the areas designated for special uses by the Tribe” (NPS 2000).

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<sup>1</sup> In the ethnographic determination of eligibility, the area of significance is called the Saline Valley Warm Springs or the *Ko o’* Warm Springs (preferred by the Tribe). The geographic extent of the ethnographic site varies from the Saline Valley Warm Springs Area in this plan/EIS.



## REFERENCES

National Park Service (NPS)

2000    *Legislative Environmental Impact Statement: Timbisha Shoshone Homeland*. November.

## **BUREAU OF LAND MANAGEMENT**





## United States Department of the Interior

NATIONAL PARK SERVICE  
Death Valley National Park  
P.O. Box 579  
Death Valley, California 92328



IN REPLY REFER TO:  
RM A.2.

April 3, 2012

Carl Symons, Acting Field Manager  
Ridgecrest Field Office  
Bureau of Land Management  
300 S. Richmond Rd.  
Ridgecrest, CA 93555

**Re: Saline Valley Warm Springs Management Plan/EIS**

Dear Carl:

The National Park Service (NPS) is beginning preparation of a Management Plan and Environmental Impact Statement (EIS) for the Saline Valley Warm Springs area of Death Valley National Park. Currently, the Warm Springs area is not included in the park's General Management Plan published in 2002. This effort will result in a comprehensive management plan for resources in and visitor use of Saline Valley Warm Springs. Public scoping for the plan and EIS will likely begin in June 2012 and the plan will be completed no earlier than 2015.

The NPS is inviting the Bureau of Land Management to be a cooperating agency on the EIS process to provide information in your areas of technical expertise, which will assist the NPS in making a more informed decision. The NPS will be inviting several other government agencies to participate in the development of the EIS as cooperating agencies, including Inyo County, California; the Inyo National Forest; and the Timbisha Shoshone Tribe.

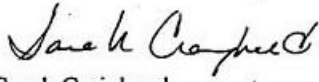
Please let us know if you would like to participate as a cooperating agency in the development of the Saline Valley Warm Springs Management Plan and EIS by filling out and returning the enclosed form.

Public scoping meetings for this new management plan and EIS will likely begin in Bishop on the evening of Tuesday, June 12. The NPS also intends to convene a meeting for Cooperating Agencies in Bishop, California during working hours on June 12. On the evening of Wednesday, June 13, the NPS will likely host a public scoping meeting in Ridgecrest, California. The NPS intends to convene a meeting for Cooperating Agencies in Ridgecrest, California during working hours on June 13 as well. Another public scoping meeting will likely occur in Victorville, California on the evening of Thursday, June 14.

If you have questions, please contact Kelly Fuhrmann, Chief of Resources Management at (760)786-3253 or Mike Cipra, Environmental Protection Specialist at (760)786-3227. Thank you in advance for completing and returning the enclosed form by no later than April 30th, 2012.

We appreciate your continued interest and participation in Death Valley National Park's planning processes.

Sincerely,

A handwritten signature in cursive script, reading "Sarah Craighead".

Sarah Craighead  
Superintendent

Enclosure: Cooperating Agency Interest Form

cc: Mike Cipra, Environmental Protection Specialist  
Kelly Fuhrmann, Resources Division Chief



## **INYO COUNTY**





## United States Department of the Interior

### NATIONAL PARK SERVICE

Death Valley National Park  
P.O. Box 579  
Death Valley, California 92328



IN REPLY REFER TO:  
RMA.2.

April 3, 2012

Josh Hart, Planning Director  
Inyo County Planning Dept.  
PO Box L  
Independence, CA 93526

**Re: Saline Valley Warm Springs Management Plan/EIS**

Dear Josh:

The National Park Service (NPS) is beginning preparation of a Management Plan and Environmental Impact Statement (EIS) for the Saline Valley Warm Springs area of Death Valley National Park. Currently, the Warm Springs area is not included in the park's General Management Plan published in 2002. This effort will result in a comprehensive management plan for resources in and visitor use of Saline Valley Warm Springs. Public scoping for the plan and EIS will likely begin in June 2012 and the plan will be completed no earlier than 2015.

The NPS is inviting Inyo County to be a cooperating agency on the EIS process to provide information in your areas of technical expertise, which will assist the NPS in making a more informed decision. We have also sent a copy of this letter to the Inyo County Board of Supervisors. The NPS will be inviting several other government agencies to participate in the development of the EIS as cooperating agencies, including BLM, the Inyo National Forest, and the Timbisha Shoshone Tribe.

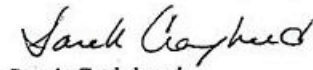
Please let us know if you would like to participate as a cooperating agency in the development of the Saline Valley Warm Springs Management Plan and EIS by filling out and returning the enclosed form.

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If you have questions, please contact Kelly Fuhrmann, Chief of Resources Management at (760)786-3253 or Mike Cipra, Environmental Protection Specialist at (760)786-3227. Thank you in advance for completing and returning the enclosed form by no later than April 30th, 2012.

We appreciate your continued interest and participation in Death Valley National Park's planning processes.

Sincerely,

A handwritten signature in cursive script, appearing to read "Sarah Craighead".

Sarah Craighead  
Superintendent

Enclosure: Cooperating Agency Interest Form

cc: Mike Cipra, Environmental Protection Specialist  
Kelly Fuhrmann, Resources Division Chief



## United States Department of the Interior

### NATIONAL PARK SERVICE

Death Valley National Park  
P.O. Box 579  
Death Valley, California 92328



IN REPLY REFER TO:  
RM A.2.

April 3, 2012

Inyo County Board of Supervisors  
163 May Street  
Bishop, CA 93514

**Re: Saline Valley Warm Springs Management Plan/EIS**

Dear Inyo County Board of Supervisors:

The National Park Service (NPS) is beginning preparation of a Management Plan and Environmental Impact Statement (EIS) for the Saline Valley Warm Springs area of Death Valley National Park. Currently, the Warm Springs area is not included in the park's General Management Plan published in 2002. This effort will result in a comprehensive management plan for resources in and visitor use of Saline Valley Warm Springs. Public scoping for the plan and EIS will likely begin in June 2012 and the plan will be completed no earlier than 2015.

The NPS is inviting Inyo County to be a cooperating agency on the EIS process to provide information in your areas of technical expertise, which will assist the NPS in making a more informed decision. The NPS will be inviting several other government agencies to participate in the development of the EIS as cooperating agencies, including BLM, the Inyo National Forest; and the Timbisha Shoshone Tribe.

Please let us know if you would like to participate as a cooperating agency in the development of the Saline Valley Warm Springs Management Plan and EIS by filling out and returning the enclosed form.


Public scoping meetings for this new management plan and EIS will likely begin in Bishop on the evening of Tuesday, June 12. The NPS also intends to convene a meeting for Cooperating Agencies in Bishop, California during working hours on June 12. On the evening of Wednesday, June 13, the NPS will likely host a public scoping meeting in Ridgecrest, California. The NPS intends to convene a meeting for Cooperating Agencies in Ridgecrest, California during working hours on June 13 as well. Another public scoping meeting will likely occur in Victorville, California on the evening of Thursday, June 14.

If you have questions, please contact Kelly Fuhrmann, Chief of Resources Management at (760)786-3253 or Mike Cipra, Environmental Protection Specialist at (760)786-3227. Thank you in advance for completing and returning the enclosed form by no later than April 30th, 2012.



We appreciate your continued interest and participation in Death Valley National Park's planning processes.

Sincerely,

  
Sarah Craighead  
Superintendent

Enclosure: Cooperating Agency Interest Form

cc: Mike Cipra, Environmental Protection Specialist  
Kelly Fuhrmann, Resources Division Chief



**BOARD OF SUPERVISORS  
COUNTY OF INYO**

P. O. BOX N • INDEPENDENCE, CALIFORNIA 93526  
TELEPHONE (760) 878-0373 • FAX (760) 878-2241  
e-mail: [pgunsolley@inyocounty.us](mailto:pgunsolley@inyocounty.us)

MEMBERS OF THE BOARD  
LINDA ARCULARIUS  
SUSAN CASH  
RICK PUCCI  
MARTY FORTNEY  
RICHARD CERVANTES

KEVIN D. CARUNCHIO  
*Clerk of the Board*

PATRICIA GUNSOLLEY  
*Assistant Clerk of the Board*

July 17, 2012

Attn.: Saline Valley Management Plan  
Ms. Sarah Creighead, Superintendent  
Death Valley National Park  
P.O. Box 579  
Death Valley, CA 92328

**Re: Saline Valley Warm Springs Management Plan and Environmental Impact Statement**

Dear Ms. Craighead,

On behalf of the Inyo County Board of Supervisors, thank you for inviting us to participate as a Cooperating Agency in developing the Saline Valley Warm Springs Management Plan and associated Environmental Impact Statement (EIS). We are pleased to accept this offer, and the Board has authorized me to sign the Memorandum of Understanding (MOU) provided by the Park effectuating the Cooperating Agency status. We request additional language be added to the MOU, and our staff will be working with your staff to incorporate this language.

We have reviewed the scoping information provided by the Park, and we agree with the proposed scope of the EIS. We know that there is a highly involved group of users that recreate at the warm springs, and we encourage the Park to involve them in the process. As you know, Inyo County encourages access to its natural wonders, and we encourage the Park to strive to maintain and increase access to the project area through this process. The Saline Valley and the planning area are important to the County's history and culture – please address these issues in your process as well. Our General Plan provides the County's vision for access issues, as well as other topics that might be relevant to the Plan; the General Plan may be viewed online at [http://inyoplanning.org/general\\_plan/goals.htm](http://inyoplanning.org/general_plan/goals.htm).

Thank you. If you have any questions, please contact the County's Administrative Officer at (760) 878-0292 or by email at [kcarunchio@inyocounty.us](mailto:kcarunchio@inyocounty.us).

Sincerely,

A handwritten signature in cursive script that reads "Marty Fortney".

Supervisor Marty Fortney, Chairperson  
Inyo County Board of Supervisors



**TIMBISHA SHOSHONE TRIBE**







## United States Department of the Interior

### NATIONAL PARK SERVICE

Death Valley National Park  
P.O. Box 579  
Death Valley, California 92328



IN REPLY REFER TO:  
RM A.2.

April 3, 2012

George Gholson, Chairman  
Timbisha Shoshone Tribe  
621 W. Line St.  
Suite 190  
Bishop, CA 93514

**Re: Saline Valley Warm Springs Management Plan/EIS**

Dear Chairman Gholson:

The National Park Service (NPS) is beginning preparation of a Management Plan and Environmental Impact Statement (EIS) for the Saline Valley Warm Springs area of Death Valley National Park. Currently, the Warm Springs area is not included in the park's General Management Plan published in 2002. This effort will result in a comprehensive management plan for resources in and visitor use of Saline Valley Warm Springs. Public scoping for the plan and EIS will likely begin in June 2012 and the plan will be completed no earlier than 2015.

The NPS is inviting the Timbisha Shoshone Tribe to be a cooperating agency on the EIS process to provide information in your areas of technical expertise, which will assist the NPS in making a more informed decision. The NPS will be inviting several other government agencies to participate in the development of the EIS as cooperating agencies, including BLM, the Inyo National Forest, and Inyo County.

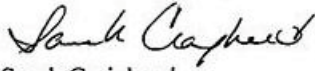
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If you have questions, please contact Kelly Fuhrmann, Chief of Resources Management at (760)786-3253 or Mike Cipra, Environmental Protection Specialist at (760)786-3227. Thank you in advance for completing and returning the enclosed form by no later than April 30th, 2012.

We appreciate your continued interest and participation in Death Valley National Park's planning processes.

Sincerely,

A handwritten signature in cursive script, appearing to read "Sarah Craighead".

Sarah Craighead  
Superintendent

Enclosure: Cooperating Agency Interest Form

cc: Mike Cipra, Environmental Protection Specialist  
Kelly Fuhrmann, Resources Management Chief

## **US FOREST SERVICE**





## United States Department of the Interior

### NATIONAL PARK SERVICE

Death Valley National Park  
P.O. Box 579  
Death Valley, California 92328



IN REPLY REFER TO:  
RM A.2.

April 3, 2012

Ed Armenta  
U.S. Forest Service  
Inyo National Forest Supervisors Office  
351 Pacu Lane  
Bishop, CA 93514

**Re: Saline Valley Warm Springs Management Plan/EIS**

Dear Ed:

The National Park Service (NPS) is beginning preparation of a Management Plan and Environmental Impact Statement (EIS) for the Saline Valley Warm Springs area of Death Valley National Park. Currently, the Warm Springs area is not included in the park's General Management Plan published in 2002. This effort will result in a comprehensive management plan for resources in and visitor use of Saline Valley Warm Springs. Public scoping for the plan and EIS will likely begin in June 2012 and the plan will be completed no earlier than 2015.

The NPS is inviting the Inyo National Forest to be a cooperating agency on the EIS process to provide information in your areas of technical expertise, which will assist the NPS in making a more informed decision. The NPS will be inviting several other government agencies to participate in the development of the EIS as cooperating agencies, including BLM, the Timbisha Shoshone Tribe, and Inyo County.

Please let us know if you would like to participate as a cooperating agency in the development of the Saline Valley Warm Springs Management Plan and EIS by filling out and returning the enclosed form.

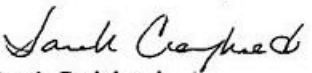
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We appreciate your continued interest and participation in Death Valley National Park's planning processes.

Sincerely,

  
Sarah Craighead  
Superintendent

Enclosure: Cooperating Agency Interest Form

cc: Mike Cipra, Environmental Protection Specialist  
Kelly Fuhrmann, Resources Management Chief



# SALINE VALLEY WARM SPRINGS AREA ACTIVITY AREAS AND FEATURES

# C



FOLK ART AT LOWER SPRING





## **APPENDIX C**

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### **SALINE VALLEY WARM SPRINGS AREA ACTIVITY AREAS AND FEATURES**





## General Setting of the Saline Valley Warm Springs Area

The Saline Valley Warm Springs Area is comprised of three distinct areas, the Lower Spring area, the Palm Spring area, and the Upper Spring area. This appendix presents maps, photographs, and descriptions of the features of the Saline Valley Warm Springs Area and can be used as a guide to the many features that are discussed throughout the Saline Valley Warm Springs Final Management Plan and Environmental Impact Statement (plan/EIS).

Four source springs are associated with Lower Spring; two are associated with Palm Spring; and two are associated with Upper Spring (NPS 2012; Friese 2015). The source springs emerge from fill in the structural basin of Saline Valley between the Last Chance and Saline ranges. Past overflow from the source springs deposited minerals near the orifices, resulting in elevated crater-like spring mounds. The temperatures of the source springs range from 61.2°F to 117.0°F and the flow ranges from less than 1 liter per minute to 30 liters per minute.

The Lower Spring area (also known as Lower Spring) is the first area encountered if driving in from the west side of Saline Valley. Lower Spring is the most developed and includes the following features: Cool Pool, Sunrise Pool, Crystal Pool, Children's Play Tub, communal fire pit, library, shower, bathtub, sink for dishwashing, maintained lawn, settling pond, and the camp host site. It is also the site of many of the communal activities, such as group fires, communal dinners, and singing.

The two main soaking tubs (the Crystal Pool and the Sunrise Pool) are concrete-lined. The smaller Children's Play Tub is made of galvanized aluminum and is shaped to look like a barrel. The tubs are filled by diverting water from the source springs, or natural geothermal springs, to the soaking tubs by buried pipe. The tubs have valves that control the flow of water from the source springs, as well as drains so that the soaking tubs can be drained and cleaned. The soaking tubs typically have continuous flow of water from the source springs and the overflow from the soaking tubs is directed through channels into the settling pond. The main source of water is the warm source spring; water from the Cool Pool is directed to the sprinkler for the lawn and the dishwashing station. Signs are posted at the source springs to discourage people from soaking in the warm source spring and the Cool Pool. Lower Spring has two showers, a bathtub, and dishwashing sinks. All of these features drain into the settling pond, which is located adjacent to the lawn.

In recent years, the camp host position has been staffed by volunteers through the Volunteers-in-Parks program. Currently the camp host site includes living quarters and an ad hoc vehicle support facility; these are located adjacent to the soaking tubs at Lower Spring. A National Park Service (NPS) trailer used for storage is parked just south of the automotive emergency assistance shop. In addition, a set of three free-standing solar panels located to the northwest of the camp host site provide power to the site's generator. Two NPS vault toilets are situated at Lower Spring, a two-stall toilet west of the lawn and a one-stall toilet southeast of the camp host site.

Burro Spring is also located at Lower Spring. Water from Burro Spring is led by a hose to a trough approximately 180 feet northwest to provide water for feral burros. The overflow from the trough waters a line of mesquite trees (*Prosopis* sp.) west of Burro Spring.

The Palm Spring area is the next area encountered, approximately one-half mile northeast from Lower Spring. There is much less vegetation near Palm Spring compared to Lower Spring, and unlike the Lower Spring, Palm Spring does not have a maintained lawn. Palm Spring consists of two soaking tubs that are fed by two source springs, the northern and southern warm source springs. The Wizard Pool is a hexagon-shaped pool, approximately 9 feet wide that is located south of the source springs. The Volcano Pool is

named for its shape—steep sloped sides embedded with pumice and rock; this tub is approximately 9×12 feet wide and is located west of the source springs. Palm Spring also has a shower and dishwashing station. The runoff from these features drains to a wash; this runoff evaporates quickly, and the wash is generally dry. These features are south of the Wizard Pool. There is a one-stall vault toilet at Palm Spring located southwest of the Volcano Pool. Palm Spring currently has a camp host during the winter months when visitor use is high.

Approximately 3 miles to the northeast of Palm Spring via Warm Springs Road is the Upper Spring area. Upper Spring is undeveloped and enclosed by a metal chain-linked fence. The fence was originally installed to keep grazing cattle out of the Saline Valley Warm Springs Area to protect a test population of desert pupfish (*Cyprinodon macularius*) but currently serves to exclude feral burros. The entrance is designed to be narrow with sharp turns to inhibit feral burros from accessing the spring. A portion of the fence was removed by visitors and has been replaced by several strands of barbed wire. Upper Spring is within the road corridor of backcountry, but the boundaries of the road are not defined. Upper Spring is used by visitors but at a much lower frequency than Palm Spring and Lower Spring. There are no shower, dishwashing, or toilet facilities at Upper Spring.

Visitors use the Saline Valley Warm Springs Area throughout the year but the cooler months, October to May, receive the highest use; holidays are times of especially heavy use. Presidents Day and Thanksgiving weekends are traditional heavy use periods for the Saline Valley Warm Springs Area. Regular visitors to the Saline Valley Warm Springs Area organize a communal Thanksgiving Day meal and have observed this tradition for several years. Between 200 and 400 people and more than 100 vehicles have been observed during heavy use weekends.

There is a small, unimproved landing strip to the west of Lower Spring, referred to as the Chicken Strip. In past years, there were up to three landing strips for small planes, but the Suicide Strip and the Crosswinds Strip have been decommissioned. Historically, the landing strips were used by miners and prospectors to access Saline Valley. The Chicken Strip is the only remaining active landing strip and is open, special regulation pending. It is approximately 1,400 feet long and 35 feet wide. The strip has a tie-down area large enough to accommodate five small planes. The Chicken Strip is maintained by the community of recreational pilots who use it. The Recreational Aviation Foundation (RAF), an organization of private pilots, is active in the promotion of the continued use of the Chicken Strip. In 2017, the National Park Service renewed a memorandum of understanding (MOU) with RAF that allows RAF to maintain the Chicken Strip, in addition to the two other airstrips within the park, at no cost to the National Park Service. Maintenance activities include leveling the surface, removing stones and debris, and packing the surface. Per 36 Code of Federal Regulations (CFR) 2.17, the use of aircraft on lands and waters within the park other than at locations designated by special regulation is prohibited. The National Park Service is proposing a special regulation to designate the Chicken Strip airstrip as a location available for the operation of aircraft, consistent with the preferred alternative in this plan/EIS. The proposed rule would authorize an exemption to 36 CFR 2.17(a)(1),

**Distinct Areas within the  
Saline Valley Warm Springs Area**



**Lower Spring Area** – Lower Spring is the first area encountered if driving in from the west side of Saline Valley. Lower Spring is the most developed and is the site of many of the communal activities that occur, such as group fires, communal dinners, and singing. Lower Spring has three soaking tubs, vault toilets, a communal fire pit, a library, a shower, a bathtub, a sink for dishwashing, a maintained lawn, a settling pond, and the camp host encampment. The Lower Spring activity areas and features are described on pages C-9 through C-15 and presented in figures C-2 through C-4.



**Palm Spring Area** – Palm Spring is the next area encountered, approximately one-half mile northeast from Lower Spring. There is much less vegetation at Palm Spring compared to Lower Spring, and unlike the Lower Spring, Palm Spring does not have many other features. Palm Spring consists of two soaking tubs that are fed by two source springs, a shower, a dishwashing station, and a one-stall vault toilet. The Palm Spring activity areas and features are described on pages C-19 through C-20 and presented in figure C-5.

**Upper Spring Area** – Approximately 3 miles to the northeast of Palm Spring is the Upper Spring area. Upper Spring is used by visitors but at a much lower frequency than Palm Spring and Lower Spring. There are no shower, dishwashing, or toilet facilities at Upper Spring. The water from the source spring is not diverted and the majority of the vegetation at Upper Spring is native. The Lower Spring features are described on page C-9 and presented in figure C-6.





***Cool Pool Camping Area*** – The Cool Pool Camping Area is situated around the Cool Pool, which is east of the developed area of Lower Spring (figures C-2 and C-3). Vegetation in this area includes nonnative invasive palm and mesquite trees, which provide some shade to campers. Use of the Cool Pool Camping Area dates back to the mid-1950s, and aerial photography shows campers in this area as early as the 1960s (New South 2015).

***Central Camping Area*** – The Central Camping Area is located southwest of the developed portion of Lower Spring (figure C-2). It is bordered on the west by Warm Springs Road and on the east by the Burro Spring Camping Area. Visitors camp on either side of the arrowweed that grows in this area. The Central Camping Area was likely used as the original camping area and can be dated to the mid- to late-1950s (New South 2015).

***Burro Spring Camping Area*** – This camping area surrounds a line of native mesquite trees that grow as a result of water diverted by a hose from Burro Spring, which is located southeast of the developed area of Lower Spring (figure C-2). The mesquite provides some shade to visitors who camp in this area. The water diversion occurred in the 1990s and visitors likely started using this area regularly for dispersed camping after 1994 (New South 2015).

***Lower Dispersed Camping Area*** – This camping area is primarily used as overflow camping during the peak season and by visitors seeking solitude. It is located southwest of the Central Camping Area (figure C-2). This area seems to have gained popularity in the late 1970s as the number of guests at special holiday events increased (New South 2015).

***Middle Dispersed Camping Area*** – The Middle Dispersed Camping Area is the largest camping area at the Saline Valley Warm Springs Area. It is located between Lower Spring and Palm Spring (figure C-4). Warm Springs Road travels through this camping area, and visitors pull their vehicles off the road to desired camping spots. Several “unofficial campground roads” are visible in the Middle Dispersed Camping Area.

***Upper Dispersed Camping Area*** – The Upper Dispersed Camping Area is the narrow area northeast of Palm Spring that surrounds Warm Springs Road (figure C-5). The terrain in this area restricts visitors from camping too far from the road. The Upper Dispersed Camping Area was used historically by those seeking solitude and use likely began in the 1950s or 1960s (New South 2015).

## **Lower Spring Features**



***Lower Spring Cold Source Spring / Cool Pool*** – Water from the cold water source feeds into the Cool Pool, which is not used for soaking. Water from the Cool Pool is diverted to the dishwashing sink and the sprinkler for the lawn at Lower Spring.



***Lower Warm Spring Warm Source Spring*** – The warm source spring is in the center of Lower Spring. This spring is in relatively natural state. The spring mound surrounding the spring has been heightened with large rocks embedded in concrete to restrict access to the spring. Water from the warm source spring is diverted to the Crystal Pool, the Sunrise Pool, the bathtub, the shower, and the dishwashing sink.

***Burro Spring*** – Burro Spring is located in the western portion of Lower Spring. Water from Burro Spring is led by a hose to a trough to provide water for wildlife. The overflow from the trough waters a line of mesquite trees west of Burro Spring.







***Sunrise Pool*** – The Sunrise Pool was the second developed feature at the Saline Valley Warm Springs Area; it was constructed in 1965 (New South 2015). Visitors enjoy the Sunrise Pool specifically for its view of the sunrise to the east and unobstructed view of the night sky. The Sunrise Pool is often called the “Dolly Pool” after a long-time visitor to the Saline Valley Warm Springs Area. Flat rocks have been cemented to the ground surrounding the Sunrise Pool and several benches made of larger rocks are found near the soaking tub.

***Crystal Pool*** – The Crystal Pool was built in 1972-1973 (New South 2015). This is the largest soaking tub within the Saline Valley Warm Springs Area, and it is in the center of the Lower Spring area. The Crystal Pool is named as such from the crystals and geodes that are embedded in the east wall and bottom of the tub. There is a footbath to the south of the tub for visitors to wash their feet prior to entering and a seat inside the perimeter of the pool. Nonnative invasive palm trees shade the Crystal Pool and for additional coverage from the sun, visitors have hung a shade cloth above the tub.



***Children's Play Tub*** – The Children's Play tub is surrounded by the settling pond and was built in the 1990s to give children their own tub for soaking (New South 2015). The Children's Play Tub is accessed by a small boardwalk. The tub is small and designed to look like a barrel. There is a separate shower located at the Children's Play Tub and a seat for adults, so they can supervise children while in the soaking tub.



**Bathtub** – The bathtub is the first known development at the Saline Valley Warm Springs Area. It likely was installed some time in between 1933 and 1947 (New South 2015). The original metal tub has been covered in concrete, both on the inside and surrounding the outside of the tub. The bottom of the tub is tiled with flat colored rocks.



**Shower** – The shower is comprised of a porcelain bathtub embedded in the ground with an overhead shower head that is fed by water diverted from the warm source spring. Visitors are asked to use the shower to rinse off prior to entering the soaking tubs. The shower is thought to have been installed after 1977 (New South 2015).

**Dishwashing Area** – The dishwashing area was originally built in the 1960s but was moved to its current location in 1971 (New South 2015) and consists of a double porcelain sink and a countertop area. The water for the sink is diverted from the Cool Pool and the warm source spring. The faucets are signed with a warning that the water is untreated and should not be consumed. A small shelf behind the sink holds numerous cleaners and washing tools such as brushes and sponges. The wastewater from the sink is discharged to the settling pond.







***Settling Pond*** – The settling pond receives water from the soaking tubs when they are emptied for cleaning and wastewater from the dishwashing sink. The pond contains koi and mosquitofish that have been brought in by visitors. The settling pond, constructed circa 1976, and the plants act as a biological filter and the fish eat the organic waste that enters the pond (New South 2015).

***Lawn*** – The lawn at Lower Spring is located between the communal fire pit and the settling pond. The lawn is sustained by visitor-supplied grass seed and fertilizer and by the water diverted from the Cool Pool and dates back to the late 1950s or early 1960s (New South 2015). There is an artistic-styled fence made of creosote branches surrounding the lawn to prohibit access by the feral burros. The lawn is shaded by the nonnative invasive palm trees and is a communal gathering place for visitors.



***Lower Spring Palm Trees*** – The nonnative invasive palms have been present at both the Lower and Palm springs since the 1960s. Planting efforts took place in the mid-1980s at the Lower Spring (New South 2015).



**Library and Recycling Area** – The library and recycling area is adjacent to the communal campfire circle and was created after 1968 (New South 2015). This area contains a multitude of informational signage, including information on camping, trash handling, quiet hours, feral burros, and food storage. Visitors can take or leave books in the cabinet.



**Communal Campfire Circle** – The communal campfire circle is the site of social gatherings including live music, singing, dancing, and storytelling; it was constructed in 1964 (New South 2015). The fire pit is slightly recessed with a grate to hold wood for the fire. Six handmade wooden benches surround the fire pit and a wood storage area exists beyond the campfire circle. There is a variety of artwork that adorns the campfire circle area, including items made of metal, glass, bone, and wire.

**Camp Host Site** – Located east of the Central Springs Area and south of the Cool Pool Camping Area, the camp host site consists of both indoor and outdoor living space, including two trailers, a workshop area, and an open area with solar panels. The workshop contains a very large assortment of tools, welding supplies, old tires, and spare parts. The camp host site is surrounded by a variety of fencing for privacy and to exclude the feral burros. This compound can be dated back to 1985.





***Art Board / Rock Alignment*** – A range of subjects for rock alignment artwork can be found throughout the Saline Valley Warm Springs Area. The Art Board / Rock Alignment Area is located east of the Burro Spring Camping Area and contains a large collection of visitor artwork. Community members remember that this site has always been a place for people to come and express or amuse themselves, though there is no evidence for how long this has been occurring (New South 2015).

***Saline Valley Warm Springs Sign*** – When driving into the Saline Valley Warm Springs Area from the west side of Saline Valley, there is a wooden plank sign at the entrance to Lower Spring that reads “Saline Warm Springs, Drive Slowly, Firearms Prohibited.” This sign was installed by the National Park Service after Saline Valley was incorporated into the park in 1994 (New South 2015).



***Fencing*** – The lawn at Lower Spring is surrounded by creosote branches that have been bent into an artistic fence. The fencing keeps vehicles and feral burros from entering the communal area of Lower Spring.



**Boneyard** – The boneyard is a storage yard for maintenance equipment and tools that is located behind the dishwashing area.



**Ball Field / Balcony** – Located west of the Central Site Area, there is a softball field used for an annual softball game between the communities of Lower Spring and Palm Spring. This area is also used as a more secluded camping area. The date for this area is undetermined; however, the softball game has been on-going since the mid-1960s.

**Vault Toilets** – The National Park Service added the vault toilets at the Saline Valley Warm Springs Area in the 1990s. Previously, a system of outhouses was managed by visitors of the Saline Valley Warm Springs Area. Toilet paper, cleaning supplies, and hand sanitizer are all donated by visitors to the springs. One vault toilet is located immediately west of the entrance to the developed area of Lower Spring, and the second is located in between the Camp Host Compound and the Burro Spring Camping Area. At Palm Spring, one vault toilet is located southwest of the soaking tubs.







## **Palm Spring Features**



***Palm Spring Source Springs*** – There are two source springs located at the center of Palm Spring (figure C-5). Large rocks surround both source springs to prevent vehicle access. The northern warm source spring is the water source for the Volcano Pool and the Wizard Pool, and the southern warm source spring supplies water to the shower and the dishwashing sink.



***Volcano Pool*** – This pool, named for its steep sloping sides embedded with pumice and rock, was built between December 1967 and January 1968 (New South 2015). The Volcano Pool is located due west of the source springs. Three benches and numerous boulders are situated around the soaking tub and a small grove of nonnative invasive palm trees grows directly adjacent to it.

***Wizard Pool*** – The Wizard Pool was named for its builder, Walt the Wizard, on his birthday in 1978 (New South 2015). Walt, a professional contractor, and built the soaking tub in the shape of a hexagon, recessed into the ground surrounded by a rock patio with three benches. Directly south of the tub is a grove of 15 nonnative invasive palm trees with a small lawn below them. This lawn is not watered like the lawn at Lower Spring. It persists on the runoff from the Wizard Pool.







***Palm Spring Palm Trees*** – The Palm Spring area is named for the nonnative invasive palm trees that were said to have been planted by a doctor around 1943 (New South 2015). There are two small groves at Palm Spring, one by each soaking tub, but the groves are dense and provide shade for visitors.

***Shower*** – Located on the eastern side of the site, the shower area at Palm Spring consists of a wooden deck platform, a steel pipe with a shower nozzle and a wooden bench. The construction date for the shower is unknown (New South 2015).



***Dishwashing Area*** – Adjacent to the Wizard Pool at the southern end of the nonnative invasive palm trees is the dishwashing area. Drainage water from the sink flows into the palm oasis. The construction date for the dishwashing area is undetermined (New South 2015).



## **Upper Spring Features**



***Upper Spring Source Springs*** – Two source springs are located at Upper Spring that have water year-round. These source springs have mud bottoms and mostly natural aquatic vegetation, though nonnative invasive palm trees and several nonnative grass species also occur.



***Upper Spring Palm Trees*** – The nonnative invasive palm trees that occur at Upper Spring have not been deliberately planted; the seeds have been spread naturally, most likely by birds or other wildlife.

***Fencing*** – The Upper Spring area is surrounded by a chain-link and wire fence that was added under management of the Bureau of Land Management in the 1980s. The fence was intended to restrict feral burro access and to protect desert pupfish that had been introduced to the site; however, the reintroduction effort was not successful (New South 2015). Portions of the chain-link fence have been damaged and have been replaced with barbed wire.





## **Airstrips**





***Chicken Strip Airstrip*** – The Chicken Strip is a small, unimproved landing strip large enough to accommodate five small planes. The Chicken Strip is the only active landing strip in Saline Valley. There are several airplane tiedowns at the airstrip, and pilots often camp next to their airplanes. The National Park Service and RAF signed an MOU in 2012 that allows members of this group to maintain the Chicken Strip at no cost to the National Park Service.



***Tail Dragger Airstrip (Decommissioned)*** – The Tail Dragger Airstrip was the first airstrip established at the Saline Valley Warm Springs Area. Constructed sometime in the 1950s-1960s, the unpaved strip lies just south of Burro Spring. The abandoned airstrip is marked by three large “X” rock alignments on the landing strip that are painted white.



## **Other Features**





**Bat Pole** – The Bat Pole is located on Warm Springs Road, approximately 4.5 miles from the intersection with Saline Valley Road. The Bat Pole indicates to visitors that they have arrived at the Saline Valley Warm Springs Area. Previously referred to as the painted pole, community members date it back to 1967. At approximately 20 feet tall, the bat pole has evolved into a sculpture containing multiple artistic elements; those elements likely added after 1994 led to it being called the Bat Pole (New South 2015).



**Lower Peace Sign** – Constructed in the 1960s, the Lower Peace Sign is the largest piece of folk art at the Saline Valley Warm Springs Area. It was likely created by removing the top layer of soil and rock to expose the different colored surface below. This peace sign was placed as an anti-war statement to the military pilots that routinely fly over Saline Valley from the nearby China Lake Naval Air Weapons Station. The sign has been actively maintained by warm spring visitors since its creation (New South 2015).

**Upper Peace Sign** – This large peace sign was constructed sometime in the 1990s between Palm Spring and Upper Spring. It has been speculated that the Upper Peace Sign was likely constructed by walking the design repeatedly or by using hand tools (New South 2015).

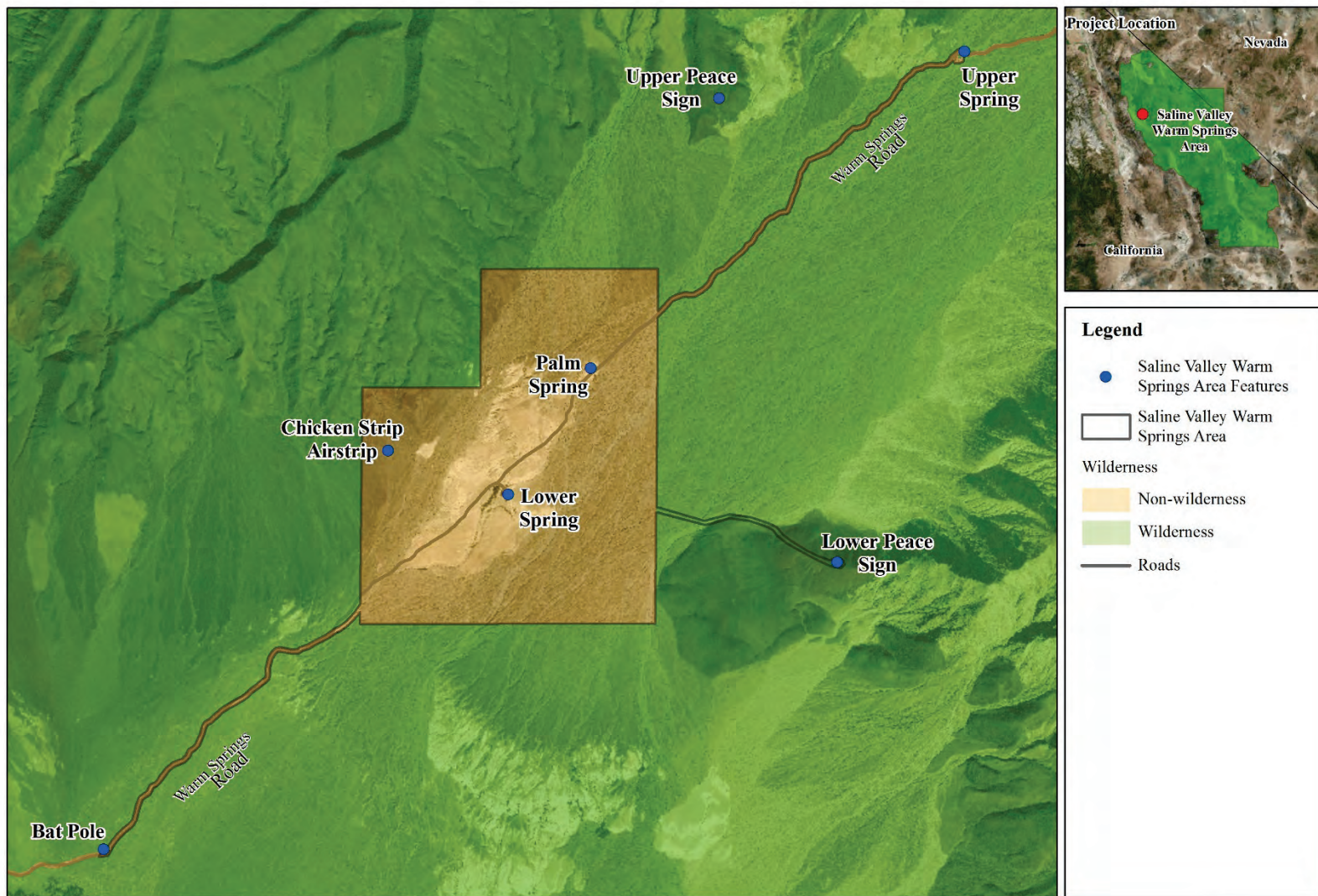




## **Saline Valley Warm Springs Area Figures Showing Activity Areas and Features**







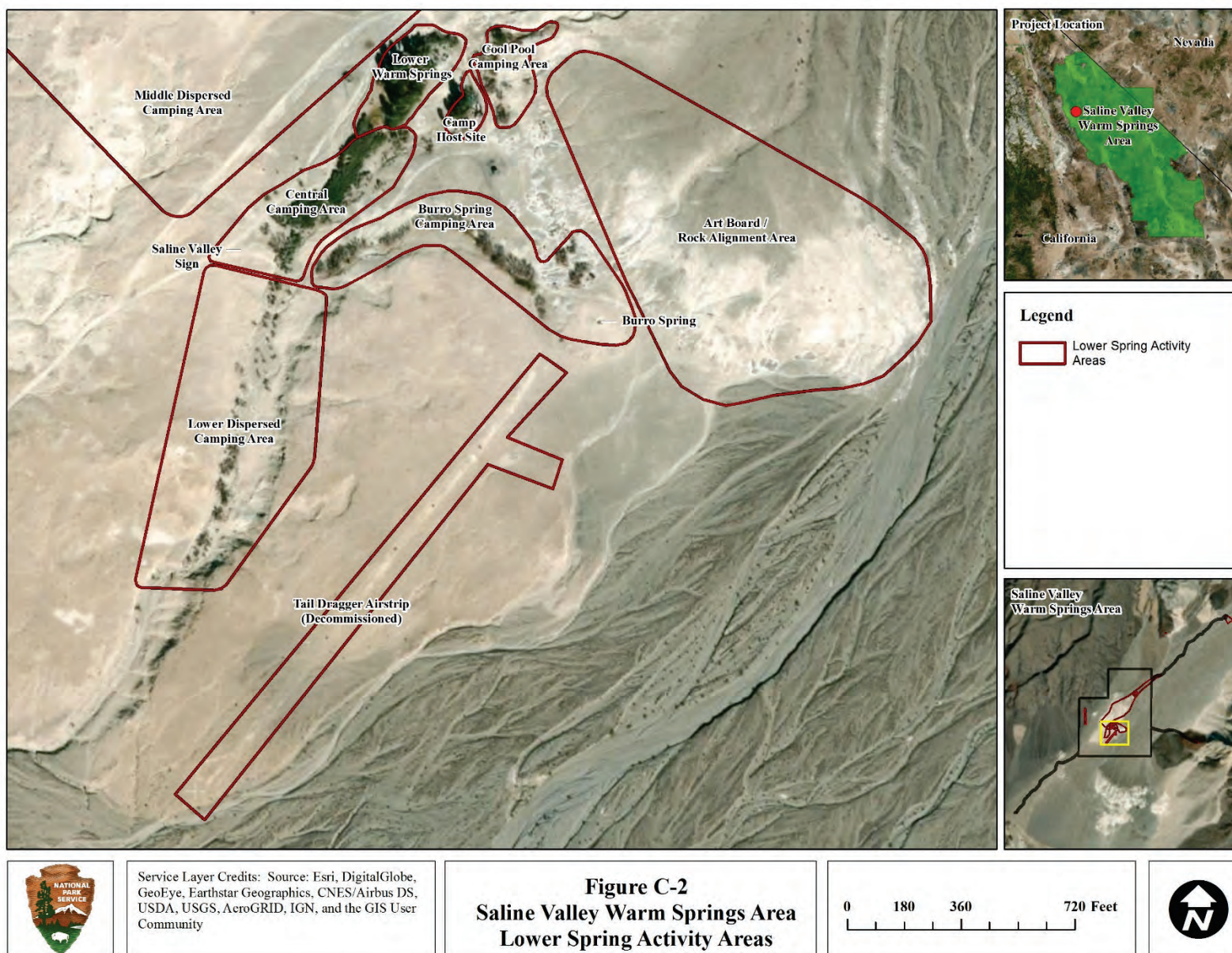
Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

**Figure C-1**  
**Saline Valley Warm Springs Area**

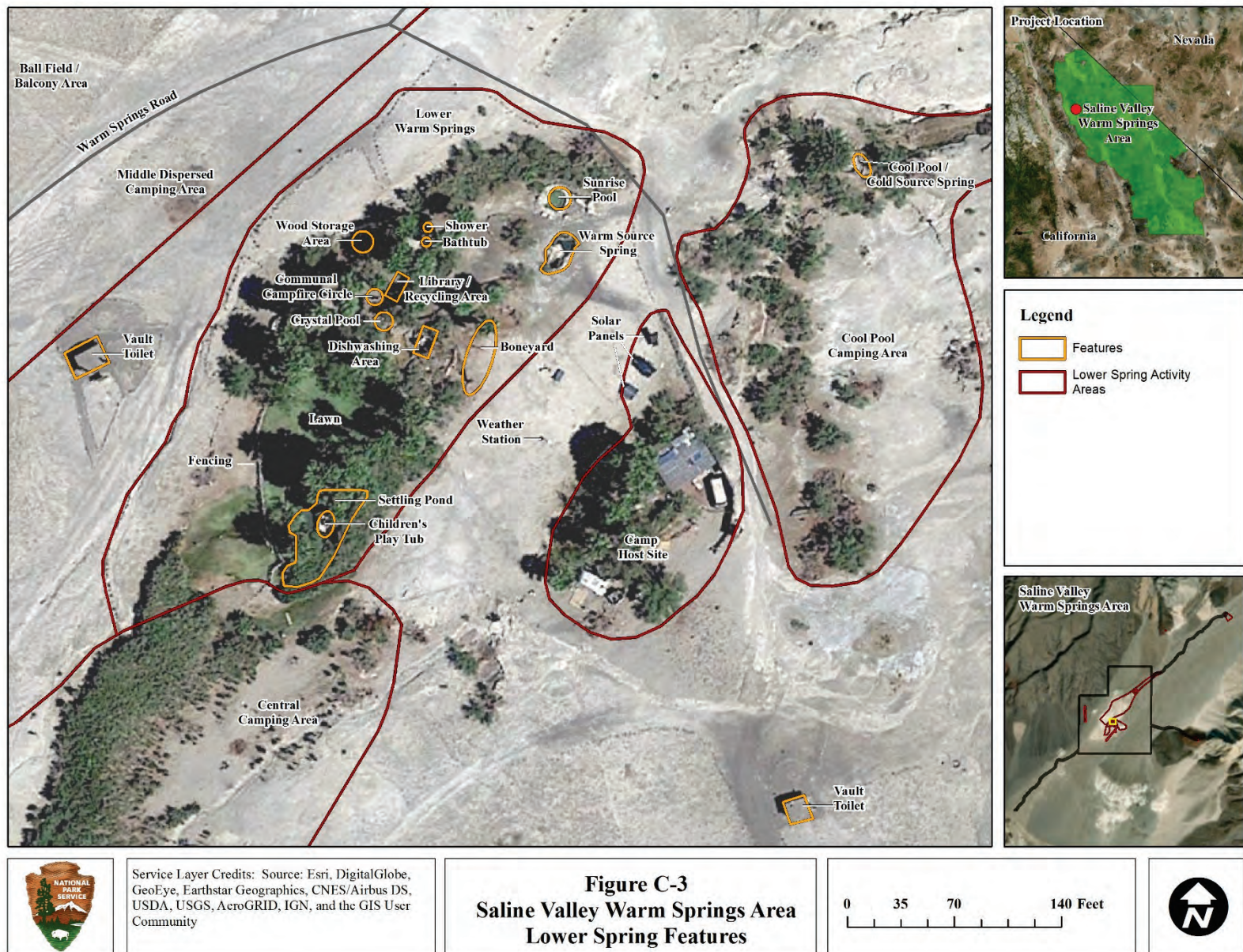
0 0.325 0.65 1.3 Miles



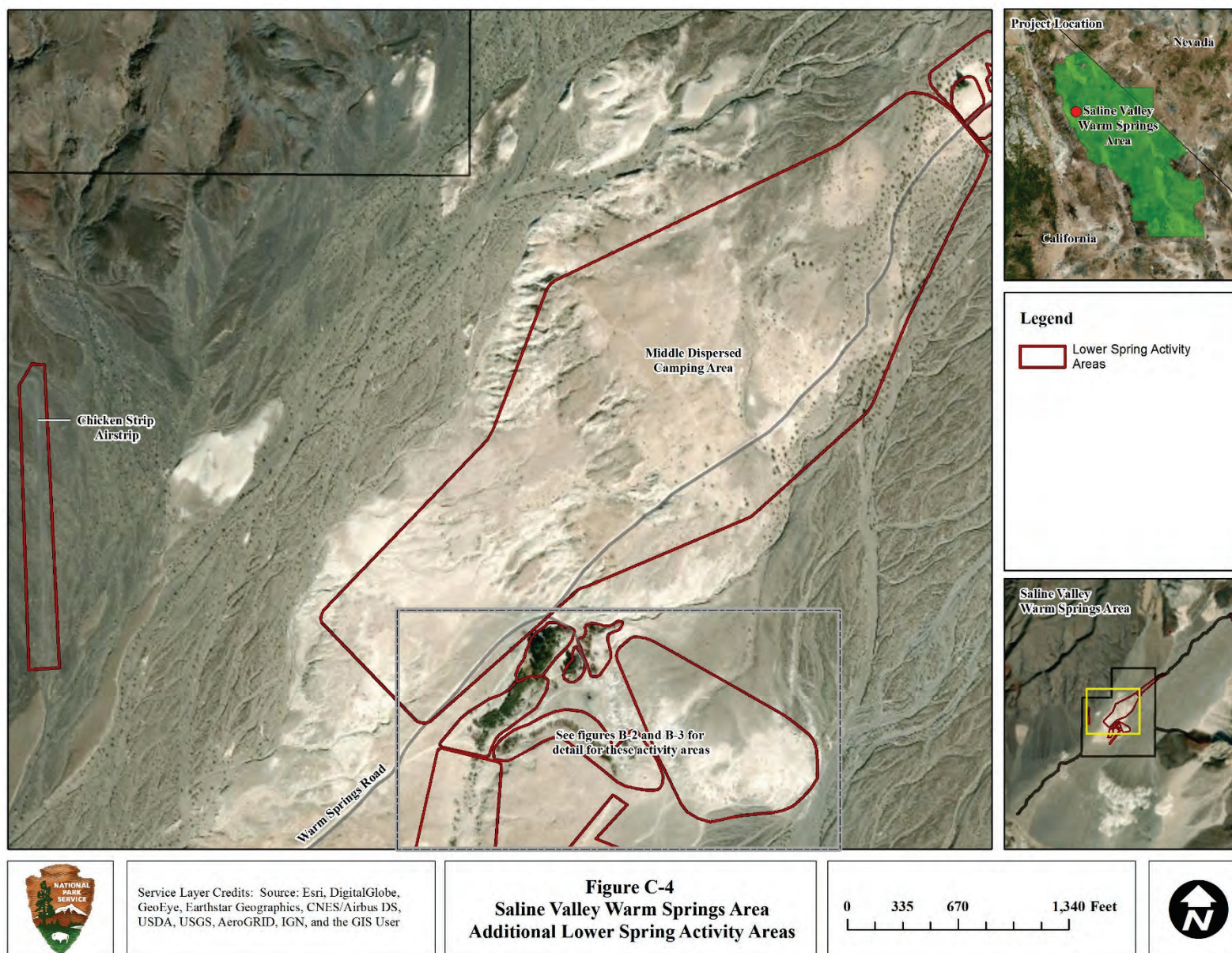




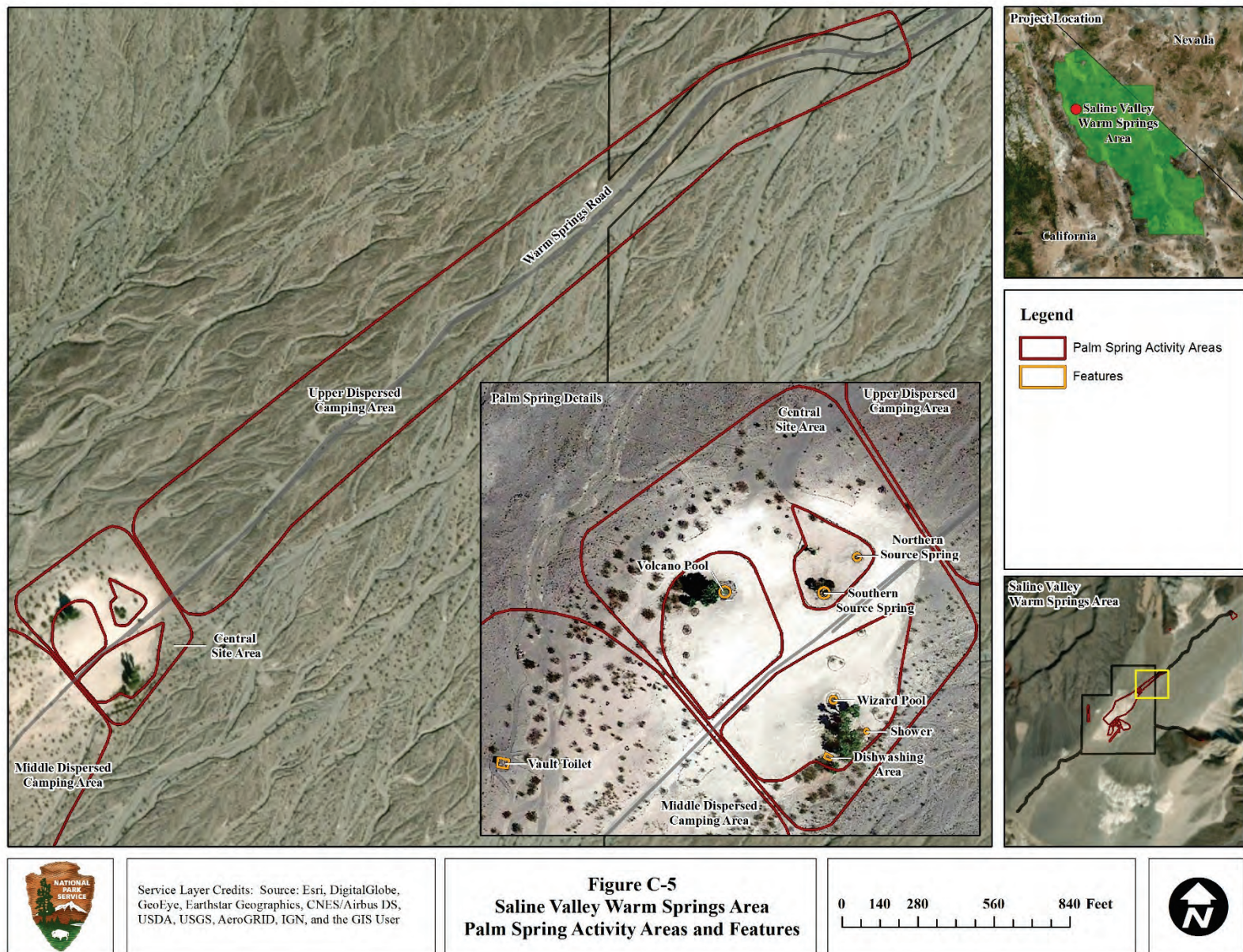




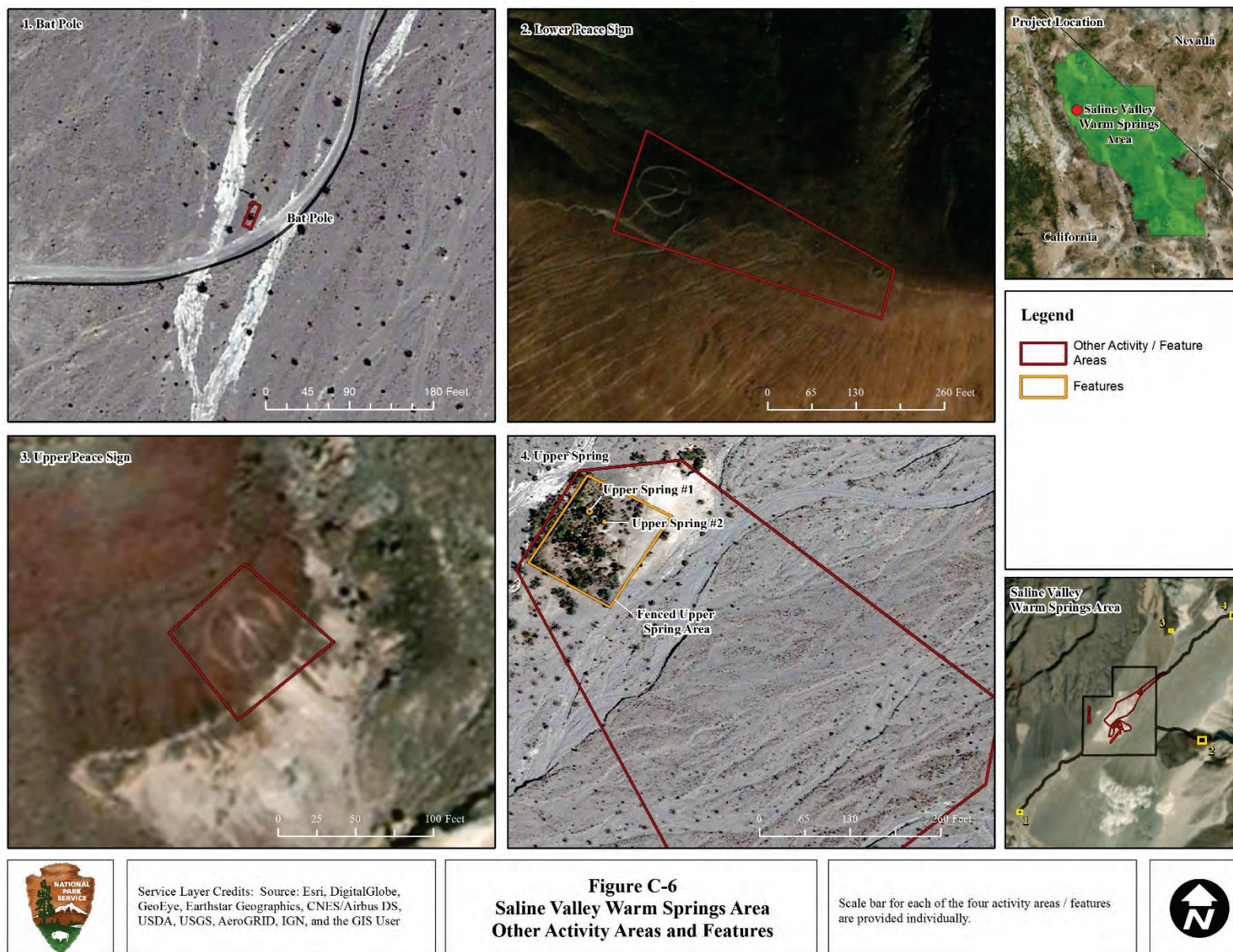














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# ISSUES AND IMPACT TOPICS ELIMINATED FROM FURTHER CONSIDERATION

D



TRAILER AT THE CAMP HOST SITE AT LOWER SPRING



## **APPENDIX D**

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### **ISSUES AND IMPACT TOPICS ELIMINATED FROM FURTHER CONSIDERATION**





## **ISSUES AND IMPACT TOPICS ELIMINATED FROM FURTHER CONSIDERATION**

The following resources were dismissed from further detailed analysis while drafting this Saline Valley Warm Springs Management Plan and Environmental Impact Statement (plan/EIS). The National Park Service determined that each of the alternatives would have minimal impacts on these resources in the study area, the resources were not present in the study area, and either the impacts are similar across the action alternatives or impacts on the resource are thoroughly analyzed and described under another resource topic. The following resources were dismissed from further analysis in this plan/EIS.

### **Geologic Resources (Geology, Paleontology, Rare and Unique Geologic Features, Prime and Unique Farmlands)**

The National Park Service has the responsibility to preserve and protect geologic resources as integral components of park natural systems, including rare and unique geologic features. Paleontological resources, including both organic and mineralized remains in body or trace form, will be protected, preserved, and managed for public education, interpretation, and scientific research (NPS 2006). Because the Saline Valley Warm Springs Area has been disturbed repeatedly since the late 1940s, additional impacts to geologic and paleontological resources are not anticipated; therefore, this topic was dismissed from further analysis.

The Farmland Protection Policy Act (Title 7 of the United States Code [USC], section 4201 et seq.) was passed to address the effects of federal programs on the conversion of farmland to nonagricultural uses. In support of this legislation, the Department of the Interior issued several memoranda to guide its agencies in addressing prime and unique farmlands in the National Environmental Policy Act of 1969, as amended (NEPA) process. Prime farmlands are those lands that have the best combination of physical and chemical characteristics for producing food, feed, fiber, forage, oilseed, and other agricultural crops with minimum inputs of fertilizer, pesticides, and labor, and without intolerant soil erosion. Unique farmlands are those that are used for the production of specific high-value food and fiber crops. Prime and unique agricultural lands were dismissed without analysis because these lands do not exist in the Saline Valley Warm Springs Area.

### **Floodplains**

Executive Order 11988, “Floodplain Management” directs all federal agencies to avoid long- and short-term impacts associated with occupancy, modification, and development of floodplains when possible. National Park Service (NPS) Director’s Order 77-2 implements Executive Order 11988 and established NPS policy to preserve floodplain values and minimize potentially hazardous conditions associated with flooding.

At the time of the development of this plan/EIS, a full floodplain analysis of the Saline Valley Warm Springs Area had not been completed. Death Valley National Park (park) staff determined the watersheds or drainage areas of the Saline Valley Warm Springs Area by examining digital elevation models and current drainage patterns. The alternatives for this plan would not have an appreciable effect on the overall floodplains functions or values; however, the area and visitors would be subject to flooding from storm events. A floodplains statement of findings was produced to address the potential safety risks to visitors of the Saline Valley Warm Springs Area due to flooding (appendix G). The analysis will help predict smaller flood events; however, larger storm events, such as 500-year events, would inundate the

entire valley. The safety concerns are also addressed in the “Health and Safety” section, but impacts on floodplains functions and values were dismissed from further analysis in this plan/EIS.

## Water Resources

The National Park Service manages watersheds as complete hydrologic systems in order to minimize human-caused disturbance to the natural upland processes that deliver water, sediment, and wood debris to streams (NPS 2006). The National Park Service protects watershed and stream features primarily by avoiding impacts on watershed and riparian vegetation and by allowing natural fluvial processes to proceed unimpeded. Parks are also tasked with maintaining the natural integrity of thermal systems (NPS 2006).

Visitors of Saline Valley Warm Springs Area have altered the natural flow of the geothermal springs since sometime between 1933 and 1947 when the first developed tub was installed (New South 2015). As the visitors increased development at the Saline Valley Warm Springs Area, the infrastructure (pipes and valves) that feed the constructed tubs has increased as well. The diversion of water from the natural source springs to the soaking tubs, showers, bathtub, dishwashing stations, and sprinkler system for the Lower Spring lawn does not affect the natural flow or the quality of the source spring water. For these reasons, water resources was dismissed from detailed analysis.

## Special-Status Species

Section 7 of the federal Endangered Species Act requires that a federal agency consult with the US Fish and Wildlife Service and the National Marine Fisheries Service on any action that may affect endangered or threatened species or candidate species, or that may result in adverse modification of critical habitat. An environmental assessment or an EIS may provide sufficient information to serve as a biological assessment for section 7 purposes. If a separate biological assessment is prepared, it must be part of any NEPA document.

In section 7 consultation, the US Fish and Wildlife Service identified three wildlife species that may occur in the Saline Valley Warm Springs Area. Southwestern willow flycatcher (*Empidonax traillii extimus*) and least Bell’s vireo (*Vireo bellii pusillus*) are federally listed as endangered, and yellow-billed cuckoo (*Coccyzus americanus*) is a federally listed threatened species. Southwestern willow flycatcher and Bell’s vireo require dense willow thickets for nesting and roosting (Zeiner et al. 1990). Yellow-billed cuckoo requires at least 25 acres of willow-dominated habitat for nesting and roosting (Zeiner et al. 1990). The habitat at the Saline Valley Warm Springs Area is too sparse to support these species and it would be highly unlikely for them to occur at the site; therefore, these special-status species were dismissed from further analysis in this plan/EIS. If any riparian vegetation were scheduled for removal due to management actions under this plan, surveys for these three bird species would be conducted and time of year restrictions would be followed to avoid impacts. Consultation between the US Fish and Wildlife Service and the National Park Service is discussed in the “Consultation and Coordination” chapter and the consultation letters are included in appendix I.

It is NPS policy to inventory, monitor, and manage state and locally listed species in a manner similar to its treatment of federally listed species to the greatest extent possible. In addition, the National Park Service will inventory native species that are of special management concern to parks (such as rare, declining, sensitive, or unique species and their habitats) and will manage them to maintain their natural distribution and abundance (NPS 2006). Two plant species of management concern in the Saline Valley Warm Springs Area could be affected by management activities, Cooper’s rush (*Juncus cooperi*) and whiteflower rabbitbrush (*Chrysothamnus albidus*). These species are addressed in the “Wetlands” sections of the “Affected Environment” and “Environmental Consequences” chapters.

## Cultural Landscapes

Cultural landscapes are expressions of human manipulation and adaptation of the land. NPS policy is to treat cultural landscapes to preserve significant physical attributes, biotic systems, and uses when those uses contribute to historic significance. Treatment decisions will be based on a cultural landscape's historical significance over time, existing conditions, and use. Treatment decisions will consider both the natural and built characteristics and features of a landscape, the dynamics inherent in natural processes and continued use, and the concerns of traditionally associated peoples (NPS 2006).

As of September 2017, the National Park Service completed draft determination of eligibility (DOE) reports to identify historic and ethnographic resources, which include cultural landscape features in the Saline Valley Warm Springs Area, and to evaluate the National Register of Historic Places (NRHP) eligibility of the site. As stated in the "Issues and Impact Topics Retained for Detailed Analysis" section, the National Park Service is treating the site, including cultural landscape resources, as eligible for listing in the NRHP. Although portions of the study area are considered historic and the study area is part of a larger ethnographic site, these aspects are analyzed in "Historic and Prehistoric Resources" and "Ethnographic Resources" respectively. Therefore, cultural landscapes, as a separate impact topic, will not be carried forward for detailed analysis in the "Environmental Consequences" chapter.

## Environmental Justice

Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," requires federal agencies to make achieving environmental justice part of their mission. Specifically, each agency must identify and address "disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations."

The Saline Valley Warm Springs Area is located in a remote area of the park, far from population centers. The proposed action will not disproportionately affect low-income or minority populations; therefore, this topic was dismissed without analysis.

## Urban Quality and Gateway Communities

According to the NPS *Management Policies 2006* (NPS 2006), a gateway community is a community close to a unit of the national park system whose residents and elected officials are often affected by the decisions made in the course of managing the park, and whose decisions may affect the resources of the park. Gateway communities usually offer food, lodging, and other services to park visitors. They also provide opportunities for employee housing and a convenient location to purchase goods and services essential to park administration (NPS 2006).

Saline Valley has four gateway communities: Lone Pine, Big Pine, Bishop, and Ridgecrest. These communities are located in Owens Valley to the west of Saline Valley. Lone Pine is the closest, located just west of Steel Pass. Big Pine and Bishop are located northwest of this entrance, and Ridgecrest is located southwest. Visitors to Saline Valley likely represent only a small portion of persons using services at these two gateway communities. Because of this, Urban Quality and Gateway Communities is dismissed as an impact topic.

## Visual Resources

Part of the mission of the National Park Service, as stated in the Organic Act of 1916, is to protect the scenery unimpaired for the enjoyment of future generations (54 USC § 100101(a) et seq.), and NPS *Management Policies 2006* includes scenic views in the definition of park resources (NPS 2006). The visual landscape includes factors such as landform, land cover, night sky, and air quality. The plan would have some effect on visual resources at the Saline Valley Warm Springs Area, as perceived by the users of the springs; however, the impact would extend to features of the landscape that would not routinely be analyzed under this resource topic, including nonnative vegetation and wildlife and various pieces of artwork. The perception of visual resources is addressed under visitor experience. Any resources determined to have cultural significance are discussed under cultural resources. For these reasons, the topic of visual resources was not carried forward for further analysis.

## Soundscapes

Natural soundscape resources encompass all the natural sounds that occur in parks, including the physical capacity for transmitting those natural sounds and the interrelationships among park natural sounds of different frequencies and volumes. The National Park Service will take action to prevent or minimize all noise that through frequency, magnitude, or duration adversely affects the natural soundscape or other park resources or values, or that exceeds levels that have been identified through monitoring as being acceptable to or appropriate for visitor uses at the sites being monitored (NPS 2006).

Vehicle noise is generally not an issue because most of the park is undeveloped and well away from traffic and its noise (NPS 2002). However, nearby off-highway vehicle open areas and mining operations cause noise in some areas of the park. A more widespread noise impact is caused by the frequent low-level military overflights from China Lake Naval Air Weapons Station that occur in the Panamint and Saline Valleys.

Disruptions to the soundscape at the Saline Valley Warm Springs Area would result from visitors' vehicles used to drive to the site, unauthorized off-road vehicles used for recreation, and small aircraft landing at the Chicken Strip. The impacts from these sources are minimal, as the interruptions in the natural soundscape are episodic and temporary; therefore, soundscapes was dismissed from further analysis.

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# VISITOR USE PERMIT SYSTEM AND FORMAL VISITOR USE STUDIES

# E



ARTWORK AT LOWER SPRING





## **APPENDIX E**

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### **VISITOR USE PERMIT SYSTEM AND FORMAL VISITOR USE STUDIES**



## **VISITOR USE PERMIT SYSTEM AND FORMAL VISITOR USE STUDIES**

Three alternatives in the Saline Valley Warm Springs Final Management Plan and Environmental Impact Statement (plan/EIS), alternatives 2, 3, and 4, include the concept of a mandatory no-cost permit system for overnight stays at Saline Valley Warm Springs Area. This permitting system was modeled after the Visitor Use Permit system proposed in the Death Valley National Park Wilderness and Backcountry Stewardship Plan (NPS 2013). For alternative 5, the preferred alternative, the National Park Service would gather data on visitor use patterns through visitor use studies. These strategies are explained in this appendix.

### **VISITOR USE PERMIT SYSTEM IMPLEMENTATION STRATEGY (ALTERNATIVES 2, 3, AND 4)**

The National Park Service would phase in a mandatory no-cost permit system for all overnight camping in the primitive camping areas at Saline Valley Warm Springs Area under alternatives 2, 3, and 4. The permit application would include a proposed itinerary disclosure to aid in search and rescue, as well as to inform visitor use statistics. Permit terms and conditions would apply. Permits would be issued through multiple venues, including via the internet and in person at visitor contact stations both inside and outside of the park. The National Park Service could implement an overnight camping fee in the future. The exact fee would be determined based on National Park Service (NPS) policy and comparability study, and this would include an independent public process to implement.

### **Permit Implementation Program**

#### **Phase One: Develop and Establish a Multi-Access-Point, No-Cost Permit System**

Representatives from the Interpretation, Resources Management, and Visitor Protection Divisions would work with the Interdisciplinary Team Program Manager and Wilderness Coordinator to establish a no-cost online permit system that would provide the necessary visitor safety and resource protection information for overnight camping in primitive campgrounds. The permit application would include a proposed itinerary disclosure to aid in search and rescue, as well as to inform visitor use statistics. Permits would be date and party specific, but not location specific.

Simultaneous to the roll-out of the no-cost online permit system, no-cost permits would be made available at the Furnace Creek Visitor Center and the Stovepipe Wells Visitor Contact Station, in an electronic format, a hard copy format, or both. Permits may be made available at the Scotty's Castle Visitor Center and the Lone Pine Visitor Center, depending on availability of staff and overall feasibility. Backcountry patrol rangers would be supplied with hard copy permit forms and associated information, in order to facilitate the issuance of no-cost permits and dissemination of visitor safety and resource protection information. All personally identifiable information associated with permits would be managed as per NPS policy. The data regarding permits issued from all sources would be compiled semi-annually by the wilderness coordinator for consideration in Phase 2.

The data gathered in the implementation of the permit system would be stored by appropriate Death Valley National Park (park) staff, and all personal information would be maintained under procedures to ensure privacy and confidentiality. The no-cost, mandatory permit system would be maintained for 3 years, with the goal of educating park visitors about the regulations to promote visitor safety and resource protection. At the end of 3 years, the National Park Service would move to Phase Two of the permit system.



## Phase Two: Evaluation

To commence the evaluation phase, appropriate park staff would convene an Interdisciplinary Team to review the data gathered during the first 3 years of mandatory permit implementation. The Interdisciplinary Team would consist of Park Fee Manager, at least one other representative of the Visitor Protection Division, and at least one representative of the Interpretation Division.

The Interdisciplinary Team would conduct a two-part analysis. That analysis would focus on the following:

- the effectiveness of the permit system in achieving its goal of educating park visitors about the regulations to promote visitor safety and resource protection at the Saline Valley Warm Springs Area, and
- the concentration of park visitor use at the Saline Valley Warm Springs Area, and whether there are visitor use conflicts or resource impact concerns associated with that use.

The Interdisciplinary Team would document the results of both analyses and use them to decide about the need, appropriateness, and feasibility of implementing a fee-based permit system modeled on (or adapted from) the no-cost permit system the National Park Service implemented for three years. When considering a fee system, the Interdisciplinary Team would examine staffing levels and follow the guidance of NPS *Management Policies 2006* that “no fees will be collected in circumstances in which the costs of collection would exceed revenue.” If fees have been recommended for the other primitive campgrounds, then they should also be considered at the Saline Valley Warm Springs Area to promote consistency across the park’s backcountry areas. The Interdisciplinary Team would prepare a report for the park Superintendent and provide a recommendation about whether to modify or maintain the permit system. This recommendation should address the issue of fees.

## Phase Three: Implementation

The National Park Service would implement the decision of the park Superintendent, as advised by the Interdisciplinary Team, regarding the future direction of the permit system. The options could include, but are not limited to the following:

- maintain the pilot, mandatory no-cost permit program with no or negligible modifications
- maintain the pilot, mandatory no-cost permit program with minor modifications, to include fees for the Saline Valley Warm Springs Area and would provide a useful management tool for reducing visitor use conflicts and resource management damage or adverse impacts and potential seasonal use allocations when visitor use exceeds capacity.

If any fee system is implemented, it would be according to applicable laws and NPS policy, which would involve a comparability study for similar recreational facilities in the region and an open process to include input from the interested public. The park Environmental Protection Specialist would maintain the administrative record for this process.

## FORMAL VISITOR USE STUDIES (ALTERNATIVE 5)

The draft plan/EIS included the mandatory no-cost permit system as part of alternative 5. The intention of the mandatory no-cost permit was to collect data on visitor use and distribute information on the Saline Valley Warm Springs Area. Currently, the NPS camp host informally collects information on visitor use.

During the public comment process, the National Park Service learned that visitors often collect informal visitation data as well; however, these data do not provide the National Park Service with the consistent visitor information needed to determine visitation trends. Due to the comments received and the need for reliable data, the National Park Service revised the preferred alternative in this final plan/EIS to include formal visitor use studies, which could include ways to count visitors at both high and low use periods. These data would help the National Park Service understand current visitor use trends and impacts. The National Park Service would monitor the data collection and if it were determined that the data collected were not accurate or appropriate, the National Park Service would consider requiring visitors to register or to obtain a permit to camp at the Saline Valley Warm Springs Area. Further, if the National Park Service were to change the requirements park-wide for developed backcountry campgrounds in the future, these changes would also apply to camping at Saline Valley Warm Springs Area.

## REFERENCES

National Park Service (NPS)

- 2006    *Management Policies 2006*. National Park Service, Washington, D.C.
- 2013    *Death Valley National Park Final Wilderness and Backcountry Stewardship Plan and Environmental Assessment and Finding of No Significant Impact*. July.



# VEGETATION AND WILDLIFE IN THE SALINE VALLEY WARM SPRINGS AREA

F



TEPEE AT A CAMPSITE AT LOWER SPRING





## **APPENDIX F**

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### **VEGETATION AND WILDLIFE IN THE SALINE VALLEY WARM SPRINGS AREA**



## VEGETATION PRESENT IN THE SALINE VALLEY WARM SPRINGS AREA

Table F-1 presents the results of a 2012 survey of the vegetation surrounding the Lower, Palm, and Upper Springs areas in 2012. This table also identifies native and nonnative species.

**TABLE F-1. VEGETATION SPECIES PRESENT AT LOWER, PALM, AND UPPER SPRINGS**

Family	Scientific Name	Common Name	Native
<b>Lower Spring</b>			
Arecaceae	<i>Phoenix dactylifera</i>	Date palm	
Arecaceae	<i>Washingtonia filifera</i>	California fan palm	
Cyperaceae	<i>Eleocharis rostellata</i>	Beaked spikerush	x
Cyperaceae	<i>Schoenoplectus americanus</i>	Chairmaker's bulrush	x
Poaceae	<i>Agrostis stolonifera</i>	Creeping bentgrass	
Poaceae	<i>Bromus tectorum</i>	Cheatgrass	
Poaceae	<i>Cynodon dactylon</i>	Bermudagrass	
Poaceae	<i>Distichlis spicata</i>	Saltgrass	x
Poaceae	<i>Polypogon monspeliensis</i>	Annual rabbitsfoot grass	
Poaceae	<i>Secale cereale</i>	Cereal rye	
Poaceae	<i>Stenotaphrum secundatum</i>	St. Augustine grass	
Juncaceae	<i>Juncus</i> sp. <sup>a</sup>	Rush	x
Typhaceae	<i>Typha</i> sp.	Cattail	x
Agavaceae	<i>Agave</i> sp.	Agave	
Asteraceae	<i>Ambrosia dumosa</i>	Burrobush	x
Asteraceae	<i>Chrysothamnus albidus</i> <sup>b</sup>	Whiteflower rabbitbrush	x
Asteraceae	<i>Pluchea sericea</i>	Arrowweed	x
Boraginaceae	<i>Heliotropium curassavicum</i>	Salt heliotrope	x
Capparaceae	<i>Cleomella obtusifolia</i>	Mojave cleomella	x
Tamaricaceae	<i>Tamarix ramosissima</i>	Saltcedar	
Saururaceae	<i>Anemopsis californica</i>	Yerba mansa	x
Fabaceae	<i>Prosopis glandulosa</i> var. <i>torreyana</i>	Western honey mesquite	x
Fabaceae	<i>Prosopis pubescens</i>	Screwbean mesquite	x
Geraniaceae	<i>Erodium cicutarium</i>	Redstem stork's bill	
Viscaceae	<i>Phoradendron californicum</i>	Mesquite mistletoe	x
Zygophyllaceae	<i>Larrea tridentata</i>	Creosote bush	x

Family	Scientific Name	Common Name	Native
<b>Palm Spring</b>			
Arecaceae	<i>Phoenix dactylifera</i>	Date palm	
Arecaceae	<i>Washingtonia filifera</i>	California fan palm	
Cyperaceae	<i>Eleocharis rostellata</i>	Beaked spikerush	x
Poaceae	<i>Cynodon dactylon</i>	Bermudagrass	
Poaceae	<i>Polypogon monspeliensis</i>	Annual rabbitsfoot grass	
Asteraceae	<i>Ambrosia dumosa</i>	Burrobush	x
Asteraceae	<i>Centaurium exaltatum</i>	Desert centaury	x
Boraginaceae	<i>Heliotropium curassavicum</i>	Salt heliotrope	x
Capparaceae	<i>Cleomella obtusifolia</i>	Mojave cleomella	x
Primulaceae	<i>Anagallis arvensis</i>	Scarlet pimpernel	
Fabaceae	<i>Prosopis glandulosa</i> var. <i>torreyana</i>	Western honey mesquite	x
Geraniaceae	<i>Erodium cicutarium</i>	Redstem stork's bill	
Zygophyllaceae	<i>Larrea tridentata</i>	Creosote bush	x
<b>Upper Spring</b>			
Arecaceae	<i>Washingtonia filifera</i>	California fan palm	
Cyperaceae	<i>Eleocharis rostellata</i>	Beaked spikerush	x
Cyperaceae	<i>Schoenoplectus americanus</i>	Chairmaker's bulrush	x
Poaceae	<i>Cynodon dactylon</i>	Bermudagrass	
Poaceae	<i>Polypogon monspeliensis</i>	Annual rabbitsfoot grass	
Asteraceae	<i>Pluchea sericea</i>	Arrowweed	x
Boraginaceae	<i>Heliotropium curassavicum</i>	Salt heliotrope	x
Chenopodiaceae	<i>Atriplex hymenelytra</i>	Desertholly	x
Saururaceae	<i>Anemopsis californica</i>	Yerba mansa	x
Fabaceae	<i>Prosopis pubescens</i>	Screwbean mesquite	x
Lythraceae	<i>Lythrum californicum</i>	California loosestrife	x
Zygophyllaceae	<i>Larrea tridentata</i>	Creosote bush	x

- a Based on habitat and vegetative characteristics, the *Juncus* sp. is most likely Cooper's rush (*Juncus cooperi*); however, at the time of vegetation surveys, the inflorescences of the plants have been grazed by wildlife, making positive identification impossible.  
California Native Plant Society Rank: 4.3 = Plant of limited distribution - a watch list; not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known)
- b California Native Plant Society Rank: 4.2 = Plant of limited distribution - a watch list; moderately endangered in California (20–80% occurrences threatened / moderate degree and immediacy of threat)

## WILDLIFE THAT OCCURS OR COULD POTENTIALLY OCCUR IN SALINE VALLEY

Table F-2 provides a list of wildlife species that are known to occur or could potentially occur at Saline Valley.

**TABLE F-2. WILDLIFE SPECIES OBSERVED OR EXPECTED TO OCCUR WITHIN SALINE VALLEY**

Family	Scientific Name	Common Name
<b>Mammals</b>		
Sciuridae – Squirrels	<i>Ammospermophilus leucurus</i>	White-Tailed Antelope Squirrel
	<i>Spermophilus tereticaudus</i>	Round-Tailed Ground Squirrel
Geomyidae -- Pocket Gopher	<i>Thomomys bottae</i>	Botta's Pocket Gopher
Heteromyidae – Kangaroo Rat	<i>Dipodomys merriami</i>	Merriam's Kangaroo Rat
	<i>Dipodomys deserti</i>	Desert Kangaroo Rat
	<i>Chaetodipus formosus mohavenensis</i>	Long-Tailed Pocket Mouse
	<i>Perognathus longimembris</i>	Little Pocket Mouse
	<i>Chaetodipus penicillatus</i>	Desert Pocket Mouse
Cricetidae – Mice, Rats, Voles	<i>Neotoma lepida</i>	Desert Woodrat
	<i>Onychomys torridus</i>	Southern Grasshopper Mouse
	<i>Peromyscus crinitus</i>	Canyon Mouse
	<i>Peromyscus eremicus</i>	Cactus Mouse
	<i>Peromyscus maniculatis</i>	Deer Mouse
	<i>Reithrodontomys megalotis</i>	Western Harvest Mouse
Muridae – Mice	<i>Mus musculus</i>	House Mouse
Leporidae – Hares, Rabbits	<i>Lepus californicus</i>	Black-Tailed Jackrabbit
	<i>Sylvilagus audubonii</i>	Desert Cottontail
Molossidae – Free-tailed bats	<i>Tadarida brasiliensis</i>	Brazilian Free-Tailed Bat
Vespertilionidae – Bats	<i>Antrozous pallidus</i>	Pallid Bat
	<i>Lasionycteris noctivagans</i>	Silver-Haired Bat
	<i>Lasiurus cinereus</i>	Hoary Bat
	<i>Myotis californicus</i>	California Myotis
	<i>Myotis ciliolabrum</i>	Western Small-Footed Myotis
	<i>Myotis thysanodes</i>	Fringed Myotis
	<i>Parastrellus hesperus</i>	Western Pipistrelle
	<i>Corynorhinus townsendii</i>	Townsend's Big-Eared Bat
Felidae – Cats	<i>Felis concolor</i>	Mountain Lion
	<i>Lynx rufus</i>	Bobcat
Canidae – Dogs, Foxes	<i>Canis latrans</i>	Coyote
Mustelidae – Skunks and Kin	<i>Taxidea taxus</i>	Badger
Equidae – Horses and Their Allies	<i>Equus assinus</i>	Feral Burro
Bovidae – Mountain Sheep	<i>Ovis canadensis nelsoni</i>	Nelson's Bighorn Sheep



## APPENDICES

Family	Scientific Name	Common Name
<b>Birds</b>		
Ardeidae -- Egrets	<i>Bubulcus ibis</i>	Cattle Egret
Threskiornithidae -- Ibises	<i>Plegadis chihi</i>	White-Faced Ibis
Cathartidae – American Vultures	<i>Cathartes aura</i>	Turkey Vulture
Accipitridae – Hawks	<i>Accipiter cooperii</i>	Coopers Hawk
	<i>Aquila chrysaetos</i>	Golden Eagle
	<i>Buteo jamaicensis</i>	Red–Tailed Hawk
	<i>Buteo lineatus</i>	Red–Shouldered Hawk
	<i>Buteo swainsoni</i>	Swainson's Hawk
	<i>Circus cyaneus</i>	Northern Harrier
Falconidae – Falcons	<i>Falco mexicanus</i>	Prairie Falcon
Charadriidae – Plovers	<i>Charadrius alexandrinus nivosus</i>	Western Snowy Plover
Columbidae – Doves	<i>Zenaida asiatica</i>	White–Winged Dove
	<i>Zenaida macroura</i>	Mourning Dove
Cuculidae – Cuckoos	<i>Geococcyx californianus</i>	Greater Roadrunner
Strigidae – Typical Owls	<i>Bubo virginianus</i>	Great Horned Owl
Caprimulgidae -- Nighthawks	Chordeiles sp.	Nighthawks, Poorwills
Tyrannidae – Tyrant Flycatchers	<i>Lanius ludovicianus</i>	Loggerhead Shrike
	<i>Myiarchus cinerascens</i>	Ash–Throated Flycatcher
	<i>Sayornis saya</i>	Say's Phoebe
	<i>Tyrannus verticalis</i>	Western Kingbird
Corvidae – Crows, Jays	<i>Corvus corax</i>	Common Raven
	<i>Quiscalus mexicanus</i>	Great–Tailed Grackle
Hirundinidae – Swallows	<i>Tachycineta thalassina</i>	Violet–Green Swallow
Alaudidae – Larks	<i>Eremophila alpestris</i>	Horned Lark
Troglodytidae – Wrens	<i>Salpinctes obsoletus</i>	Rock Wren
Muscicapidae – Kinglets, Thrushes	<i>Polioptila caerulea</i>	Blue–Gray Gnatcatcher
	<i>Sialia currucoides</i>	Mountain Bluebird
Mimidae – Thrashers	<i>Mimus polyglottis</i>	Northern Mockingbird
	<i>Toxostoma bendirei</i>	Bendire's Thrasher
Motacillidae – Pipits	<i>Anthus rubescens</i>	American Pipit
Sturnidae – Starlings	<i>Sturnus vulgaris</i>	European Starling
Parulidae – Wood Warblers	<i>Dendroica coronata</i>	Yellow–Rumped Warbler
	<i>Geothlypis trichas</i>	Common Yellowthroat
	<i>Vermivora celata</i>	Orange–Crowned Warbler
	<i>Wilsonia pusilla</i>	Wilson's Warbler
Cardinalidae – Cardinals	<i>Guiraca caerulea</i>	Blue Grosbeak
	<i>Passerina amoena</i>	Lazuli Bunting

Appendix F: Vegetation and Wildlife in the Saline Valley Warm Springs Area

Family	Scientific Name	Common Name
Emberizidae – American Sparrows	<i>Melospiza melodia</i>	Song Sparrow
	<i>Zonotrichia atricapilla</i>	Golden–Crowned Sparrow
	<i>Zonotrichia leucophrys</i>	White–Crowned Sparrow
Icteridae – Blackbirds	<i>Euphagus cyanocephalus</i>	Brewer's Blackbird
Passeridae – weaver finches	<i>Passer domesticus</i>	House Sparrow
<b>Amphibians</b>		
Bufoidea – True toads	<i>Bufo punctatus</i>	Red Spotted Toad
<b>Reptiles</b>		
Crotaphytidae -- Collared and Leopard Lizards	<i>Crotaphytus bicinctores</i>	Great Basin Collared Lizard
	<i>Gambelia wislizenii</i>	Long-Nosed Leopard Lizard
Iguanidae – Iguanids	<i>Callisaurus draconoides</i>	Zebra–Tailed Lizard
	<i>Dipsosaurus dorsalis</i>	Desert Iguana
	<i>Phrynosoma platyrhinos</i>	Desert Horned Lizard
	<i>Sceloporus magister</i>	Desert Spiny Lizard
	<i>Uta stansburiana</i>	Desert Side–Blotched Lizard
Gekkonidae – Geckos	<i>Coleonyx v. variegatus</i>	Desert Banded Gecko
Teiidae – Whiptails and Their Allies	<i>Cnemidophorus tigris</i>	Great Basin Whiptail
Leptotyphlopidae – Slender Blind Snakes	<i>Leptotyphlops humilis</i>	Western Blind Snake
Colubridae – Colubrids	<i>Pituophis melanoleucus deserticola</i>	Gopher Snake
	<i>Chionactis occipitalis</i>	Western Shovel–Nosed Snake
	<i>Hypsiglena torquata</i>	Desert Night Snake
	<i>Masticophis flagellum</i>	Coachwhip
	<i>Phyllorhynchus decurtatus</i>	Spotted Leaf–Nosed Snake
	<i>Salvadora hexalepis</i>	Western Patch–Nosed Snake
	<i>Sonora semiannulata</i>	Western Ground Snake
Viperidae – Rattlesnakes	<i>Crotalus cerastes</i>	Mojave Sidewinder
	<i>Crotalus stephensi</i>	Panamint Rattlesnake
<b>Invertebrates</b>		
Gastropoda (Class) – Snails and Slugs	<i>Pyrgulopsis owensensis</i>	Owens Valley Spring–Snail
	<i>Pyrgulopsis wongi</i>	Wong's Springsnail
Lepidoptera	<i>Danaus plexippus</i>	Monarch Butterfly

Modified from NPS 2000.

## REFERENCES

National Park Service (NPS)

- 2000 Legislative Environmental Impact Statement for the Timbisha Shoshone Homeland.  
November.



# FLOODPLAIN STATEMENT OF FINDINGS

G



SOURCE SPRING AND SUNRISE POOL AT LOWER SPRING







## **APPENDIX G**

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### **FLOODPLAINS STATEMENT OF FINDINGS**



**Statement of Findings for  
NPS Directors Order 77-2, "Floodplain Management"**

**Death Valley National Park**

**Saline Valley Management Plan**

**Death Valley, California**

_____ Recommended:	_____ Superintendent Death Valley National Park	_____ Date
_____ Certification of Technical Adequacy and Servicewide Consistency:	_____ Chief, Water Resources Division	_____ Date
_____ Concurrence:	_____ Regional Safety Officer, Pacific West Region	_____ Date
_____ Approved:	_____ Regional Director , Pacific West Region	_____ Date



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## ACRONYMS AND ABBREVIATIONS

MOU	Memorandum of Understanding
NPS	National Park Service
park plan/EIS	Death Valley National Park Management Plan and Environmental Impact Statement
SOF	statement of findings
Tribe	Timbisha Shoshone Tribe

## STATEMENT OF FINDINGS

### INTRODUCTION

Pursuant to Executive Order 11988, “Floodplain Management” and Director’s Order 77-2: *Floodplain Management*, flooding hazards have been evaluated related to the proposed alternatives for the project. It is National Park Service (NPS) policy to preserve floodplain values and minimize potentially hazardous conditions associated with flooding. This statement of findings (SOF) describes the proposed project, project site, floodplain determination, use of floodplain, investigation of alternatives, flood risks, and mitigation for the continued use of facilities within the floodplain.

### PROJECT AREA

The National Park Service prepared a management plan and environmental impact statement (plan/EIS) to consider the environmental consequences related to the management of the Saline Valley Warm Springs Area of Death Valley National Park (the park) (figure G-1). The Saline Valley Warm Springs Area is in the northwestern portion of the park and bounded by the Saline Range of mountains to the north, the Last Chance Range to the east, and the Inyo Mountains to the west. The National Park Service has defined the Saline Valley Warm Springs Area as approximately 1,100 acres of backcountry surrounded by designated wilderness. It has not been formally or systematically developed for use by the National Park Service but does have a number of user developed and maintained structures and facilities. This non-wilderness area, along with several additional features, comprises the area analyzed for this plan/EIS (figure G-1).

### PREFERRED ALTERNATIVE

The preferred alternative aims to engage user groups in the management of the area to provide visitors with the types of experiences they currently value while protecting park resources and ensuring compliance with applicable NPS, state, and federal regulations. The user groups would be engaged in carrying out many of the actions needed to protect human health and park resources through memoranda of understanding (MOUs) that could identify responsibilities for maintenance of facilities, maintenance of the airstrip, and maintenance and protection of natural and cultural resources.

In an effort to protect the health and safety of the Saline Valley Warm Springs Area visitors, the preferred alternative would require the National Park Service to consult with the Office of Public Health to develop an approach for water quality monitoring, add signs at the sinks to inform visitors of nonpotable water, incorporate a subterranean system for treating wastewater, and make the tubs accessible, to the extent practical while still preserving potential significant historical features. Further actions to protect public health would include fencing the source springs and the settling pond. This would prevent feral burro access to water sources and protect visitors, especially children, from accidental drowning. The vehicle support facility would be removed (when the current camp host leaves or three years, whichever happens first), and emergency vehicle assistance should not be expected by the visiting public. All hazardous materials used or stored at the vehicle support facility would be removed from the site.

The preferred alternative would also take steps to improve and restore the natural and cultural environments by controlling nonnative plant species, removing user-created fire rings, requiring visitors to haul out ash and charcoal, requiring visitors to either use vault toilets or pack out their waste, encouraging the use of NPS-provided firepans or other fire enclosures at the campsites, and treating the Saline Valley Warm Springs Area as an area of ethnographic and historic significance for the Timbisha

Shoshone Tribe (the Tribe) and recreational users, respectively. The preferred alternative would establish an onsite monitoring and response program for the protection of natural and cultural resources and include the option to install food storage boxes to deter wildlife habituation. This alternative includes restoration measures, such as removing the diversion piping from Burro Spring. The National Park Service would gather data on visitor use patterns through formal visitor use studies to understand current visitor use trends and impacts, prohibit the manipulation of natural or cultural resources for the purpose of art, and remove all non-historic art from wilderness.

Three distinct camping zones would be established under the preferred alternative: designated dispersed camping (with car camping), overflow walk-in camping with a separate designated parking area, and no camping areas. Visitors would be unable to camp within 100 feet of the source springs. Visitors with small aircraft would continue to be able to land at the Chicken Strip airstrip (special regulation pending), camping would be allowed at the Chicken Strip, and additional tiedowns could be added. The preferred alternative would expand education through various media focused on regulatory, health and safety, and compliance information. Education would include signage and information to inform visitors on wayfinding, promoting preparedness for entering potentially harsh desert conditions, and removal of vehicle repair services. At the Saline Valley Warm Springs Area, education would include additional signs on campground boards and engagement by the volunteer camp host, and tribes would be engaged to incorporate traditional ecological knowledge. The preferred alternative incorporates community engagement in the management of the site through MOUs with interested user groups to include invasive plant removal, monitoring of the conditions at Upper Spring, campsite management, and archeological resource and wilderness boundary monitoring.

The National Park Service is legally mandated to create a cooperative agreement with the Tribe by the Timbisha Shoshone Homeland Act of 2000 (Public Law 106-423) “for the purpose of providing training on the interpretation, management, protection, and preservation of the natural and cultural resources of the areas designated for special uses by the Tribe.” Cooperative agreements are defined as understandings that ensure proposed Tribal activities are compatible with the purpose and values for which Death Valley National Park was established. A cooperative agreement for tribal use of the Saline Valley Warm Springs Area would agree with objectives described in this plan/EIS and will comply with applicable state and federal laws. The cooperative agreement would also formally recognize the contributions by the Tribe to the history, culture, and ecology of Death Valley National Park and the surrounding area and could create a richer visitor experience through potential interactions with the Tribe.

## **REGULATORY FLOODPLAIN**

Following Director’s Order 77-2, this NPS action in a floodplain location, namely providing and/or supporting visitor services, is a Class I Action and subject to 100-year floodplain compliance. Additionally, in a flash flood prone area such as this, human presence constitutes a Class III action and requires an additional standard to ensure visitor and employee safety. To protect human life, the National Park Service is required to mitigate for human safety up to the level of an extreme event such as the probable maximum flood or the extreme flood.

## **JUSTIFICATION FOR USE OF THE FLOODPLAINS**

The Saline Valley Warm Springs Area is a popular destination where visitation is tied to the location of the springs. Under the preferred alternative, the Saline Valley Warm Springs Area would be retained in its current location. The warm springs at Saline Valley (the warm springs) are located in the arid Death Valley Wash drainage subbasin. Ephemeral streams that flow in response to moderate to heavy precipitation can produce widespread flash floods across the low-lying drainage basin. Therefore, the site

is very likely within a regulatory floodplain. The reasoning for retaining the site within a potential regulatory floodplain is as follows:

- The development at the Saline Valley Warm Springs Area was in place when the National Park Service took over management and ownership of Saline Valley.
- Due to the unique setting, relocating this recreational area elsewhere in the park is not possible.
- Under the preferred alternative, the impacts on the potential regulatory floodplain would be minimal with little to no change in the ability of the area to convey floodwaters or in the value and function of the area.

## **INVESTIGATION OF ALTERNATIVE SITES**

Because this multi-use recreational area is dependent upon the warm springs located in Saline Valley, it would be impossible to relocate the Saline Valley Warm Springs Area elsewhere in Death Valley National Park.

## **FLOOD CONDITIONS AT THE SALINE VALLEY WARM SPRINGS AREA**

At the time of the development of this plan/EIS, a full floodplain analysis of the Saline Valley Warm Springs Area had not been completed. However, based on existing conditions, it appears that the site is likely located within both the 100-year floodplain and the greater magnitude, extreme floodplain.

Under the present hydrologic and sediment regime, drainage patterns around the developed areas of the warm springs indicate that flood runoff is derived from three watersheds in the Saline Range to the north and northeast; the dominant drainage for the entire valley is located well to the southeast of the developed areas (figure G-2).

The source springs at the Lower Spring and Palm Spring are the areas where development is concentrated and therefore most visitors congregate. The source springs are crater-like in appearance and are surrounded by mineralized mounds that are resistant to erosion. The mounds are a result of aggradation, which is an increase in the land elevation from mineral precipitation. This is a result of the mineralized mounds being more resistant to erosion than the surrounding soil. The spring mounds have become high points in relation to the surrounding valley.

The Saline Valley Warm Springs Area is comprised of three distinct areas, the Lower Spring area, the Palm Spring area, and the Upper Spring area. The Lower Spring area (also known as Lower Spring) is the first area encountered if driving in from the west side of Saline Valley. Lower Spring is the most developed and includes the following features: Cool Pool, Sunrise Pool, Crystal Pool, Children's Play Tub, communal fire pit, library, shower, bathtub, sink for dishwashing, maintained lawn, settling pond, the camp host encampment, and two vault toilets. It is also the site of many of the communal activities that occur, such as group fires, communal dinners, and singing.

The Palm Spring area is the next area encountered, approximately one-half mile northeast from Lower Spring. There is much less vegetation in the vicinity of Palm Spring compared to Lower Spring, and unlike the Lower Spring, Palm Spring does not have a maintained lawn. Palm Spring consists of two soaking tubs that are fed by two source springs, the northern warm source spring and the southern warm source spring. Palm Spring also has a shower, dishwashing station, and one vault toilet.

Approximately 3 miles to the northeast of Palm Spring is the Upper Spring area. Upper Spring is undeveloped and enclosed by a metal chain-linked fence, initially installed to keep grazing cattle out of the Saline Valley Warm Springs Area but currently serves to exclude feral burros. Upper Spring is used by visitors but at a much lower frequency than Palm Spring and Lower Spring. There are no shower, dishwashing, or toilet facilities at Upper Spring.

The runoff to the north of Lower and Palm Springs is derived from the West Watershed that flows to the southwest out of the Saline Range then into the valley. This watershed has a contributing area of 8.1 square miles above the intersection of the drainage and Warm Springs Road (figure G-2). The drainage patterns indicate that the developed areas of Lower and Palm Springs have not been affected by recent flooding from the West Watershed. However, the Chicken Strip airstrip is within the watershed, and there is some evidence of flooding across the mid-southern portion of the airstrip.

The Middle Watershed flows to the southwest out of the Saline Range then into the valley and has a contributing area of 3.6 square miles (figure G-2). The watershed drains around the southeast of Palm Spring, and the drainage patterns indicate that the developed areas at Palm Spring have not been subjected to recent flooding. However, the expansion of the camping area has probably resulted in impromptu campsites being located within flood zones. The dominant drainage of the Middle Watershed continues along the southeast side of the spring deposits before it turns to the west towards Lower Spring. Drainage patterns and anecdotal evidence indicate that a significant amount of the developed area in Lower Spring is subject to flooding (figure G-3). As runoff enters Lower Spring, the focused channel flow spreads out around the highest parts of the spring mound. A small levee was built east of the Cool Pool at Lower Spring following a flood event in 2002. This feature diverts some of the southwesterly flow to the southeast. The energy of the runoff is further dissipated by the concentration of manmade features and vegetation surrounding Lower Spring, but below the developed area the flow becomes refocused in the drainage. There are numerous campsites that are subject to flooding below the developed area at Lower Spring. These campsites are rarely occupied during the summer when flooding is most likely. Higher ground can be found immediately to the southeast and northwest of the drainage.

The East Watershed is located above Upper Spring and has a contributing area of 2.1 square miles (figure G-2). The watershed flows south out of the Saline Range and then southwest down the valley. There is no indication that the elevated spring mound area has been subject to recent flooding.

## **ASSOCIATED FLOOD RISK**

The locations of watersheds were overlain with the proposed actions to determine potential impacts to human life and health, NPS investment, and natural/beneficial floodplain values. No construction or capital improvements would occur in the watersheds under the preferred alternative; therefore, there would be no potential impacts to NPS investment. Very limited development coupled with light visitor use would limit the potential impact to natural and beneficial floodplain values. Potential impacts under the preferred alternative would be to human health and safety of the visitors and employees at the Saline Valley Warm Springs Area, as flood events could occur while visitors are camping, resulting in risks to life and property.



## MITIGATION MEASURES

As described in the previous section, potential impacts during flood events would be to human health and safety on the visitors to the Saline Valley Warm Springs Area. When weather conditions present potential flooding, the following would occur:

- NPS staff would remain in direct contact with the camp host with the most current predicted conditions.
- The camp host would attempt to personally communicate with each camper to make visitors aware of the potential danger.
  - In all scenarios, the camp host would inform visitors of the locations of higher safe ground. At Lower Spring, higher safe ground is the bluff east of the developed area known as the art board or rock alignment area, and the higher safe ground at Palm Spring is the bluff southwest of the soaking tubs (figure G-3). These are large areas where visitors to the Saline Valley Warm Springs Area create artwork.
  - If flooding is imminent, campers would be requested to immediately move to the higher safe ground areas.
- If an impending flood emergency is identified, the camping areas on lower grounds would be closed to all visitors.
- The camp host would remain in contact with NPS staff to determine when the weather event was over and when campers could safely return to lower ground.

In addition to these steps, signage would be posted at the Saline Valley Warm Springs Area, depicting the higher safe ground areas and outlining the flood emergency plans. The signage would also document the potential for flooding on Warm Springs Road during rain events, as drainage patterns indicate that Warm Springs Road is subject to flooding above and below the Saline Valley Warm Springs Area. Visitors attempting to evacuate the area using Warm Springs Road are likely to encounter flooded roadways.

The camp host has the capacity to directly contact the Inyo County Sheriff's Office for emergencies, such as law enforcement, emergency medical, and search and rescue events. The art board at Lower Spring and the portion of Bat Rock Road approximately 1 mile west of the Saline Valley Warm Springs Area have limited cell coverage, and some users have success using portable cellular booster equipment. Additionally, the Saline Valley Warm Springs Area has technology in place to aid in the event of an emergency, including:

- NPS base station radio
- NPS vehicle radio
- NPS handheld Bendix King radio
- NPS satellite phone
- NPS Weather Station

## CONCLUSION

The National Park Service has determined that there are no alternate sites in Death Valley National Park for a recreational area equivalent to the Saline Valley Warm Springs Area due to the unique setting and

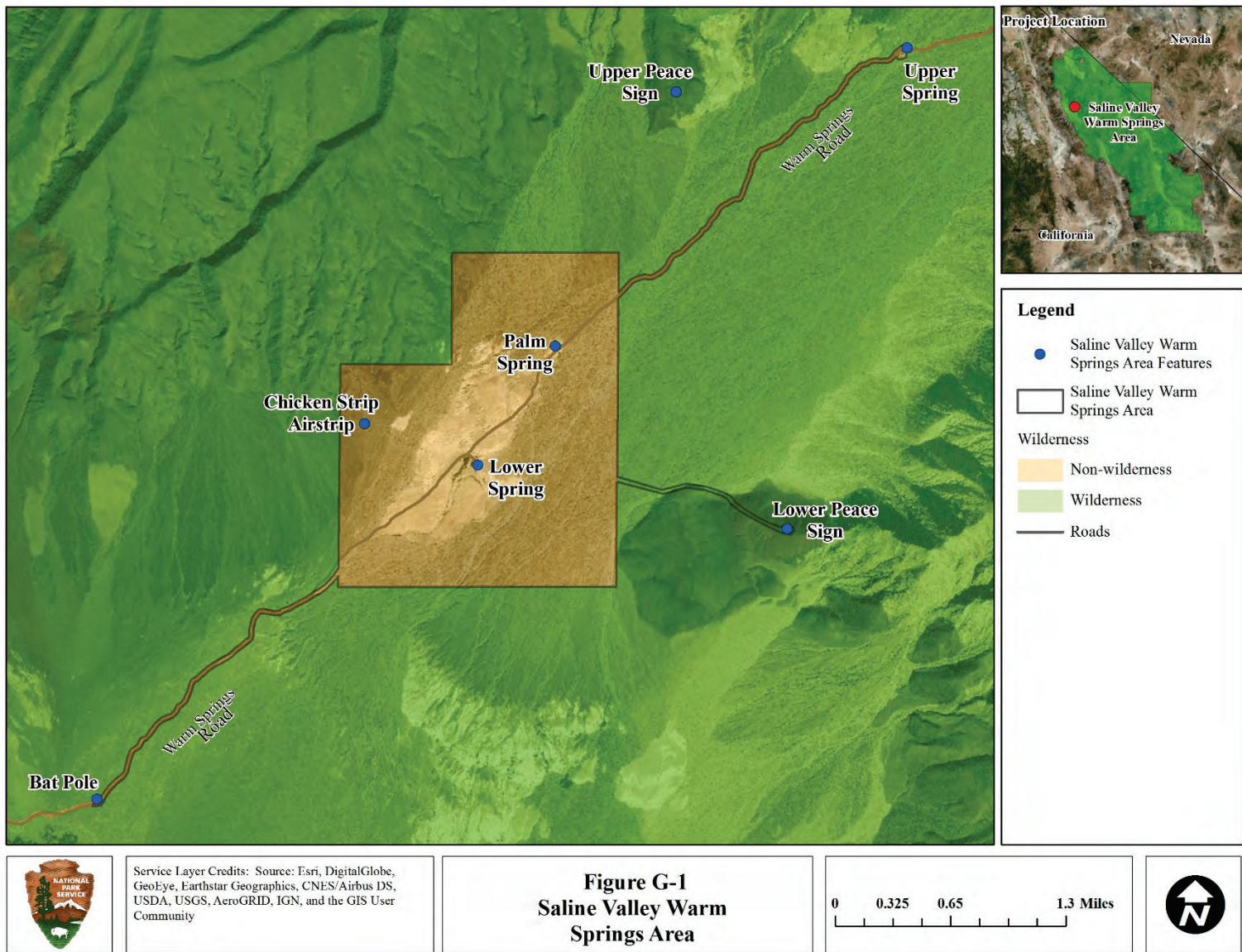
characteristics of Saline Valley. Under the preferred alternative, there would be no potential impacts to NPS investment, as no construction or capital improvements would occur in the watersheds. The preferred alternative would have no significant effects on natural or beneficial floodplain values.

The protection of visitors, volunteers, and park staff at the Saline Valley Warm Springs Area is a high priority to Death Valley National Park. Camping and other recreational activities would be allowed to continue at the Saline Valley Warm Springs Area, but the National Park Service would continue to make visitors aware of the potential for flooding in the area. With the help of signage and the camp host, visitors would be made aware of the locations of higher safe ground. The camp host would aid in communication with visitors of this remote area when rain events have the potential for safety concerns.

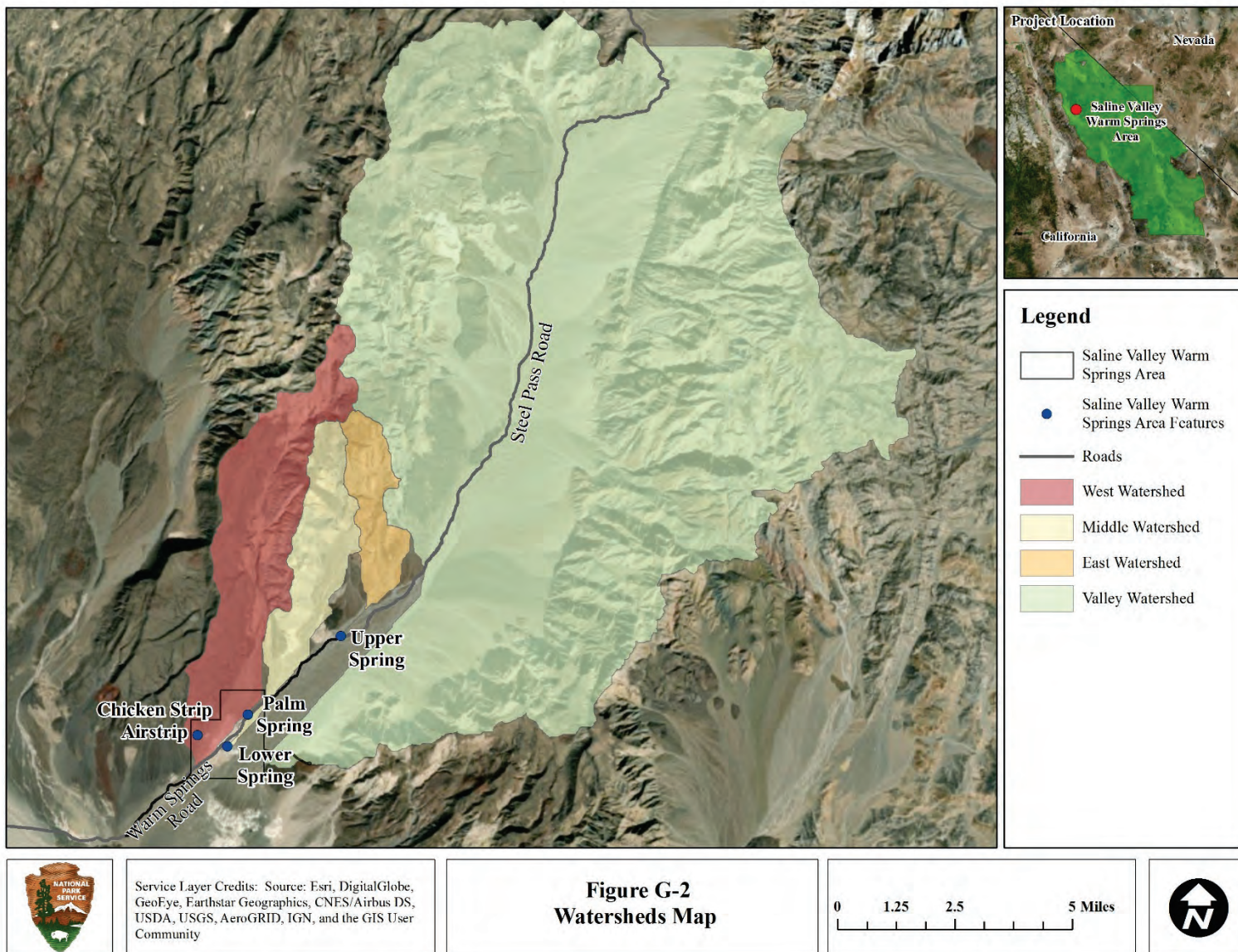
## REFERENCES

National Park Service (NPS)

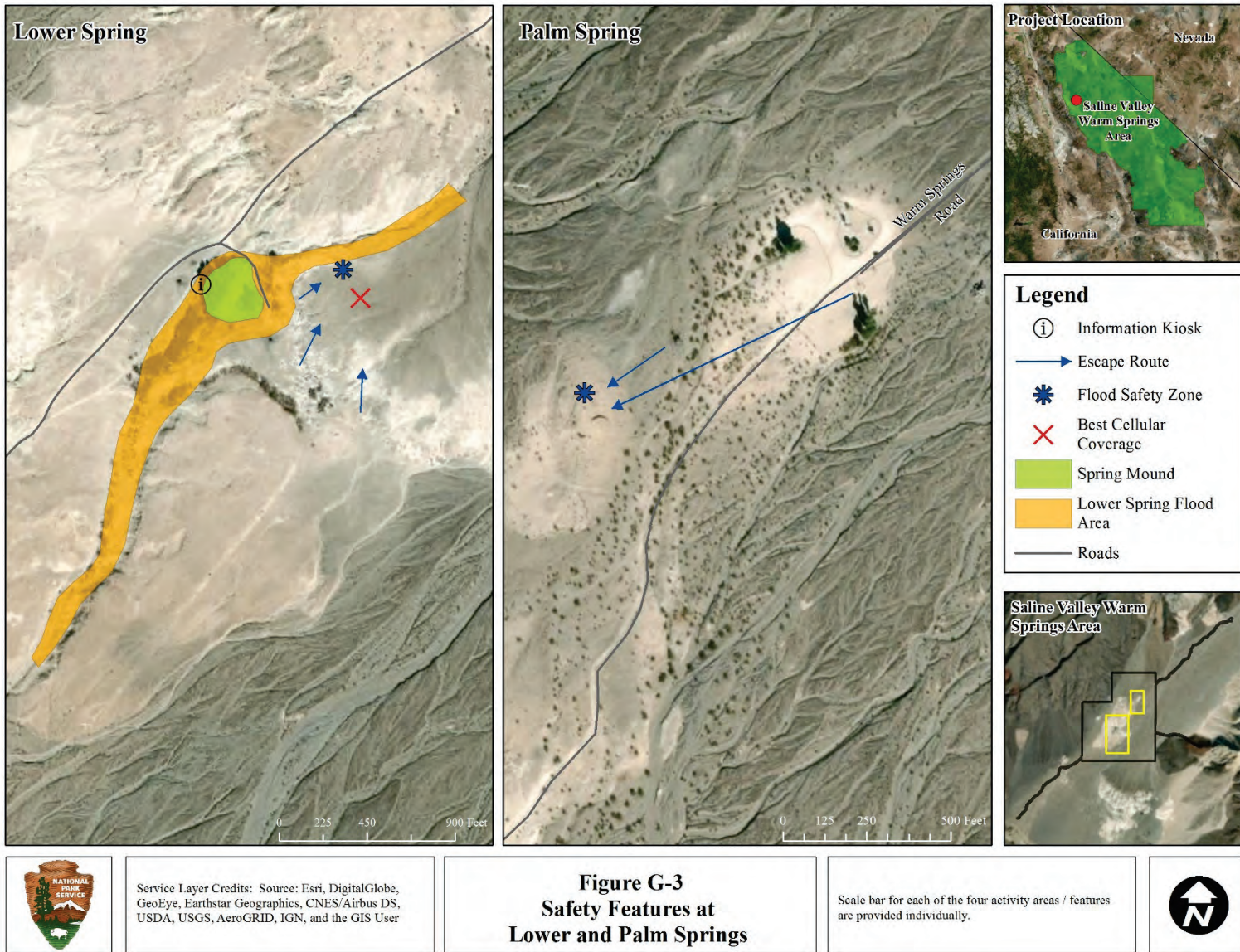
2003 National Park Service Director's Order #77-2: *Floodplain Management*. September 2003.















# COMMENT SUMMARY REPORT

# H



VOLCANO POOL AT PALM SPRING



## **APPENDIX H**

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### **COMMENT SUMMARY REPORT**





**Death Valley National Park  
California, Nevada**

**National Park Service  
US Department of the Interior**



## **SALINE VALLEY WARM SPRINGS MANAGEMENT PLAN AND ENVIRONMENTAL IMPACT STATEMENT**

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### **Public Comment Summary Report**

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## ACRONYMS AND ABBREVIATIONS

CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CLI	Cultural Landscape Inventory
DOE	Determination of Eligibility
Homeland Act	Timbisha Shoshone Homeland Act of 2000
MOU	memorandum of understanding
NEPA	National Environmental Policy Act of 1969, as amended
NHPA	National Historic Preservation Act
NPS	National Park Service
NRHP	National Register of Historic Places
OSHA	Occupational Safety and Health Administration
park	Death Valley National Park
PEPC	Planning, Environment and Public Comment
plan/EIS	Saline Valley Warm Springs Management Plan and Environmental Impact Statement
SHPO	State Historic Preservation Officer
SPA	Saline Preservation Association
TCP	Traditional Cultural Property
Tribe	Timbisha Shoshone Tribe
USC	US Code

## INTRODUCTION

The National Park Service prepared the Saline Valley Warm Springs Management Plan and Environmental Impact Statement (plan/EIS) for the Saline Valley Warm Springs Area located in the northwestern portion of Death Valley National Park (the park). Pursuant to the National Environmental Policy Act of 1969, as amended (NEPA) and its implementing regulations, the National Park Service (NPS) must assess and consider substantive comments on the draft plan/EIS and provide responses to concerns raised in these comments.

This comment analysis report provides a summary of the public comments received during the public review of the draft plan/EIS and includes National Park Service responses to substantive comments. On May 4, 2018, the National Park Service released the draft plan/EIS for public review and comment. The draft plan/EIS included a description of the history of the Saline Valley Warm Springs Area, the key issues in consideration of managing the Saline Valley Warm Springs Area, the alternatives proposed, and the resources that could be affected, and an analysis of the impacts of the alternatives on these resources. The draft plan/EIS was available for public review until July 2, 2018. During the comment period, three public meetings and one webinar were held to discuss the draft plan/EIS. The public was encouraged to submit their comments on the draft plan/EIS electronically through the NPS Planning, Environment and Public Comment (PEPC) website. Public comments were also accepted in writing at the public meetings, and by mailing and emailing comments to the park. All comments not received directly through the PEPC system were transcribed into the PEPC system for analysis (tables 1 and 2 in attachment A). A summary of the public involvement process from scoping through the preparation of the final plan/EIS are summarized in attachment B.

## DEFINITION OF TERMS

Primary terms used in this document are defined below.

**Correspondence:** A correspondence is the entire document received from a commenter. It can be in the form of a letter, email, written comment form, note card, or petition. Each piece of correspondence is assigned a unique identification number in the PEPC system.

**Comment:** A comment is a portion of the text within a correspondence that addresses a single subject. It could include information such as an expression of support or opposition to the use of a potential management tool, additional data regarding an existing condition, or suggestions for additional considerations in the impact analysis. Comments were determined to be substantive or non-substantive using section 4.6 of the NPS NEPA Handbook as guidance.

**Substantive comment:** A substantive comment is defined as a comment that does one or more of the following:

- Question, with reasonable basis, the accuracy of information in the NEPA document;
- Question, with reasonable basis, the adequacy of the environmental analysis;
- Present reasonable alternatives other than those presented in the NEPA document; or
- Cause changes or revisions in the proposal.

In other words, substantive comments raise, debate, or question a point of fact or analysis.



**Non-substantive comment:** Comments in favor of or against the proposed action or alternatives, or comments that only agree or disagree with NPS policy, are not considered substantive. The National Park Service read and considered all substantive and non-substantive comments in the process of preparing the final plan/EIS; however, non-substantive comments do not require a response.

**Concern Statement:** A concern statement is a written summary that captures the concern or topic of a group of similar comments. Some groups of comments may be further separated into several concern statements to provide a better focus on the content of the comments.

**Response:** A response has been prepared for each unique, substantive idea or issue raised in the comments. Some responses may be reflected as edits to the text of the final plan/EIS if needed to clarify existing information or add new information.

## PUBLIC COMMENT ANALYSIS

The NPS PEPC database was used to manage the comments. The database stores the full text of all correspondence and allows each comment to be coded by topic. The database produces tallies of the total number of correspondences and comments received, can sort and report comments by a particular topic, and provides demographic information on the source of each correspondence. During the public comment period, the National Park Service received 382 pieces of correspondence from 27 states, the District of Columbia, and 2 other countries.

Comment analysis is a process used to compile and combine similar public comments into a format that can be used by decision makers and the project team. Comment analysis helps the project team in organizing, clarifying, and addressing technical information pursuant to NEPA regulations. It also aids in identifying the topics and issues to be evaluated and considered throughout the planning process.

A coding structure was developed to capture the content of all the comments received and to help sort comments into logical groups by topic and issue. The coding structure was derived from an analysis of the range of topics from comments received from members of the public. Analysis of the public comments involved assigning codes to comments made in the letters, written comment forms, and PEPC comment entries. All comments were read and analyzed in the process of preparing the final plan/EIS. All substantive comments were summarized by developing concern statements. A response was prepared for each concern statement. If changes to the draft plan/EIS were warranted to address a concern, the response provides a brief summary of how the final plan/EIS was changed to address that concern. If the information requested or suggested was already included in the draft plan/EIS, the response guides readers to the appropriate location(s) within the final plan/EIS. These concerns and corresponding responses are listed in the following section.

## SUBSTANTIVE PUBLIC COMMENTS WITH NPS RESPONSES

### ACCESSIBILITY

**Concern Statement 1:** Commenters suggested the National Park Service should refrain from making changes to the Saline Valley Warm Springs Area for accessibility reasons. Commenters stated that the area surrounding the soaking tubs is currently level and wheelchair accessible, and visitors help one another if necessary. One commenter suggested adding a non-metal railing to assist with accessibility.

**Response:** *NPS Management Policies 2006* states that “all practicable efforts will be made to make NPS facilities, programs, services, employment, and meaningful work opportunities accessible and usable by all people, including those with disabilities” (section 1.9.3). Mandates

come from laws, including the Architectural Barriers Act of 1968, the Rehabilitation Act of 1973, the Equal Employment Opportunity Act of 1972, and the Americans with Disabilities Act of 1990. As stated in *NPS Management Policies 2006*, “the National Park Service will provide persons with disabilities the highest feasible level of physical access to historic properties that is reasonable, consistent with the preservation of each property’s significant historical features” (section 5.3.2).

The soaking tubs are all considered elements that contribute to the Saline Valley Warm Springs Area’s potential historical significance. Access modifications for persons with disabilities would be designed and installed to least affect the features of a property that contribute to its significance. For these reasons, the text of the preferred alternative has been changed from “To the extent possible, facilities would be made accessible” to “To the extent practical, while preserving potential significant historical features, facilities would be made accessible.” Lastly, the National Park Service would consider the use of non-metal materials to assist with accessibility once a decision is made.

## ALTERNATIVES

**Concern Statement 2:** Commenters suggested that the draft plan/EIS does not clearly state why alternative 1 is out of compliance or how health and safety is currently being compromised. Commenters stated that the plan/EIS should analyze only what is proposed to change at the Saline Valley Warm Springs Area.

**Response:** Recreational use of water at the Saline Valley Warm Springs Area raises some health and safety concerns, including the potential for exposure to pathogens in the pools such as *Legionella*, a non-fecal bacterium, and *Naegleria*, a free-living amoeba. Additional concerns include the methods to clean and treat the tubs, the dishwashing and showering stations, and the resulting gray and blackwater discharges, as well as the fluids (e.g., gasoline, lubricants) and batteries stored at the Saline Valley Warm Springs Area and used for vehicle repairs. The dishwashing and shower stations have the potential to release untreated wastewater into the environment, and visitors could be exposed to hazardous chemicals from the techniques used to clean the tubs and from storage of cleaning and vehicle repair materials.

*NPS Management Policies 2006* and Director’s Order 83: *Public Health* guide NPS management actions related to public health. As noted in the Director’s Order, the National Park Service must comply with federal and state regulations for human health and safety concerning the recreational use of water and wastewater, which include appropriate water quality monitoring and use and storage of hazardous materials. Because alternative 1, the no-action alternative, does not meet these requirements, it is out of compliance with state and federal regulations.

The analysis of alternatives is based on a “full and fair” evaluation of the impacts of each alternative on affected resources. The no-action alternative provides a benchmark for the decision maker to compare what would happen to the environment if current management were to continue, versus what would happen to the environment if one of the action alternatives were selected for implementation. If the National Park Service considered only those actions that would be different from current practice, this analysis would not be complete, and it would not meet the requirements of NEPA and its implementing regulations (40 Code of Federal Regulations [CFR] parts 1500-1508) or associated guidance related to the National Park Service.

The analysis in the plan/EIS focuses on important issues, which can be problems, concerns, conflicts, or benefits that would result if the alternatives are implemented. When describing issues

in the plan/EIS, the National Park Service did so in terms of the relationship between the potential impact of an action and the specific resource that would be affected. In this way, reviewers can compare impacts on park resources from each alternative in full, not just the impacts of what may change at the site.

**Concern Statement 3:** Commenters suggested that the current range of alternatives is inadequate, that the way the actions are grouped in the alternatives is confusing, and a new alternative should be developed using elements of alternatives 1, 2, and 3 that would be less restrictive than alternative 5. Another commenter suggested an evaluative and flexible process for management in which the National Park Service would manage the area adaptively based on changes at the Saline Valley Warm Springs Area from implementation of the plan.

**Response:** The alternatives in this plan are distinguished based on differences in their approach to resolving the purpose and need for action and the environmental impacts of implementing them. All elements presented in the alternatives are considered in the range of reasonable alternatives, and the impacts of these alternative elements are evaluated in the “Environmental Consequences” chapter of the plan/EIS.

A preferred alternative is the alternative that would best accomplish the purpose and need of the plan consistent with the NPS statutory mission and responsibilities, while also considering economic, environmental, technical, and other factors. The National Park Service does not believe that a new grouping of elements from alternatives 1, 2, and 3 would present a substantively different alternative, as the elements only differ slightly across the alternatives. Additionally, the preferred alternative suggested by commenters could be a combination of elements analyzed in the plan/EIS. After reviewing public comments on the draft plan/EIS, the National Park Service decided to make some changes to the preferred alternative, including removing the need for permits, reducing the fencing, and retaining the lawn, thus making the preferred alternative less restrictive. The specifics of these changes are discussed further in the “Alternatives” chapter of the final plan/EIS and under the appropriate concern statements in this report.

As stated in the “Alternatives” chapter of the plan/EIS and described in the response to concern statement 2, the no-action alternative could result in noncompliance with federal and state regulations for human health and safety. For this reason, the no-action alternative cannot be selected as the preferred alternative. Alternative 2, the Regulatory Compliance Alternative, contains all of the elements necessary to bring the area into compliance with applicable federal and state health, safety, and environmental law, including NPS regulations and policies, while retaining much of the existing conditions at the site. Under NEPA, the National Park Service is not required to analyze every possible element or combination of elements. Further, the plan/EIS identifies the alternatives considered but dismissed, including full development of the Saline Valley Warm Springs Area. The dismissed alternatives are also considered part of the range of alternatives. For these reasons, the National Park Service believes the range of alternatives is sufficient under NEPA.

The National Park Service would continue to monitor the conditions at the Saline Valley Warm Springs Area after a decision is made and implementation of that decision is underway and would make changes necessary to protect park resources and values. The National Park Service does not believe formal adaptive management is appropriate for this plan/EIS.

**Concern Statement 4:** Commenters suggested a number of implementation-level details to be included in the plan. These details include the commissioning of visitor use studies, studies on the human value of

the Saline Valley Warm Springs Area, retaining a septic engineer to install a filtering system for dishwater, tracking vehicle breakdowns near the springs, establishing a forum with users and the Timbisha Shoshone Tribe (the Tribe) to share resources, making signage around the area discreet, and holding workshops on desert-specific wilderness camping. Commenters stated that the thresholds for overuse should be reconsidered or established with the help of Saline Preservation Association (SPA) but would likely be needed only for times of heavy use.

**Response:** The plan/EIS is an analytical document that should inform decision makers and the public of the environmental effects of the proposal and those of the reasonable alternatives. Suggestions proposed by commenters, such as retaining a septic engineer, tracking vehicle breakdowns, establishing forums, decreasing the size of signage, or holding workshops, are not generally actions subject to analysis in a NEPA document and therefore have not been added to the final plan/EIS. The National Park Service would, however, carefully consider these suggestions during the implementation of the selected action.

Based on public comment, the National Park Service decided to change some elements of the preferred alternative. The National Park Service would complete studies related to visitor use in the area rather than issuing permits or requiring visitors to register when they arrive. This is described in detail in the response to concern statement 23 and has been changed in the final plan/EIS. A goal for the Saline Valley Warm Springs Area is to manage and protect the natural and cultural resources while maintaining the historic values of the site. The National Park Service would accomplish this through onsite monitoring with the help of the user groups, which would be included as an element of a memorandum of understanding (MOU). The management of resources through onsite monitoring replaces that element of alternative 5 that would establish thresholds for use and overuse and has been changed in the final plan/EIS.

## AUTOMOTIVE REPAIR FACILITY

**Concern Statement 5:** One commenter suggested phasing out the vehicle repair equipment over a 5-year period to ease visitors into a “no help” situation. Commenters suggested the NPS vehicle support facility should be downsized and cleaned up to be more environmentally and aesthetically friendly. Others recommended removing the NPS vehicle support facility, noting that visitors should not expect help from the NPS vehicle support facility and should be prepared for possible vehicle problems. Commenters stated the National Park Service should install signs alerting visitors of the dangers of traveling into the backcountry and wilderness. Commenters stated that removing the NPS vehicle support facility could adversely affect human health and safety, and this should be disclosed in the plan.

**Response:** All backcountry visitors should have a plan for what to do in case of an emergency. The best insurance for a safe and enjoyable trip rests with the visitors’ ability to exercise good judgment, avoid unnecessary risks, and assume responsibility for one’s safety while in the backcountry. Visitors venturing into the backcountry in Death Valley National Park, including the Saline Valley Warm Springs Area, should be prepared to be self-sufficient in the case of a vehicle breakdown.

The National Park Service intends to allow the vehicle assistance facility to remain until either the current camp host leaves or 3 years from the approval of the final plan/EIS, whichever happens first. Signs, social media, and communications from user groups would be used to inform the public that vehicle assistance would no longer be available on site. The National Park Service may also post additional signage to educate visitors, to help with wayfinding, and to alert visitors of the dangers of backcountry travel. Additional signage is discussed fully in the response to concern statement 16. The impacts associated with the removal of the vehicle assistance shop

are discussed in the “Visitor Use and Experience” section of the “Environmental Consequences” chapter.

## CAMPING AND CAMP AREAS

**Concern Statement 6:** Commenters stated the dispersed camping format at the Saline Valley Warm Springs Area should remain in place and that designated campsites would restrict the number of users, eliminate group camping, and harm the community feel of the area. Commenters suggested the National Park Service should designate camping areas by physical delineation (e.g., signage, rocks) but should retain dispersed camping. Commenters believe creating designated campsites could cause more sprawl when campsites are completely occupied when visitors arrive. The overflow camping areas should allow car camping to enhance visitor safety and prevent improper food storage. Commenters suggested that the restricted camping buffer around the source springs should be 100 feet, not 200 feet as stated in the draft plan/EIS.

**Response:** A range of camping opportunities exists in Death Valley National Park, including developed campgrounds, remote dispersed camping along backcountry roads, and wilderness camping. The Saline Valley Warm Springs Area is a developed backcountry campground, similar to Thorndike and Mahogany Flats.

The purpose of designating camping areas is to reduce impacts from off-road driving. The Saline Valley Warm Springs Area would contain the following camping zones under the preferred alternative:

1. A designated dispersed camping area would allow visitors to camp next to their vehicles. Specific campsites would not be designated under the preferred alternative.
2. Additional camping would be allowed in an overflow camping area. The National Park Service would delineate a parking area where visitors would park their vehicles and walk to the overflow camping area. In this manner, Saline Valley Warm Springs Area would differ from other backcountry camping areas in the park, which follow the guidelines set in the 2016 Superintendent’s Compendium: “Camping in the wilderness or backcountry is permitted greater than one mile from the nearest paved road, developed area, or dirt roads that are closed to camping, provided that the camp is at least 100 feet from a flowing stream, spring, or other natural bodies of open water, and is not otherwise closed to camping.”
3. There would be areas beyond the designated dispersed camping and overflow camping zones where no camping would be allowed.

The National Park Service presumes that the overflow camping area would be needed most during high-use weekends, such as Presidents’ Day and Thanksgiving. Area use maps depicting the zones of designated dispersed camping, overflow camping, parking for overflow camping, and no camping would be posted at the campground and would be available online. Visitors should arrive at the Saline Valley Warm Springs Area prepared with appropriate supplies and food storage in case they are unable to camp with their vehicles.

The final plan/EIS has been edited to clarify the use of camping zones in Table 1: Elements of the Alternatives and in the narrative of the alternatives in the “Alternatives” chapter. The impacts on visitors from reduced circulation via vehicle have been added to the “Visitor Use and Experience” section of the “Environmental Consequences” chapter.



Limiting areas where visitors can camp next to their vehicles at the Saline Valley Warm Springs Area would reduce impacts on natural and cultural resources from off-road driving. Visitors should use only Warm Springs Road to access the designated dispersed camping area and when driving through the Saline Valley Warm Springs Area. Warm Springs Road connects to Saline Valley Road and gives visitors access to Lower, Palm, and Upper Springs. Additional text discussing the impacts of off-road driving has been added to the “Environmental Consequences” chapter in the “Soils and Vegetation,” “Wildlife,” “Cultural Resources,” and “Wilderness” sections.

The designated dispersed camping area would be delineated in some manner to be determined at the time of implementation. Although the National Park Service would engage with the user groups when identifying boundaries of the camping zones, a separate NEPA process would not be required.

The final plan/EIS has been edited to state that the camping buffer around source springs would be 100 feet. This change has been made in the description of the preferred alternative and throughout the document.

**Concern Statement 7:** Commenters stated proposed fire enclosures should be non-anchored, heavy, fire pans or metal boxes, and there must be enough to accommodate all campers. Other commenters think that only the communal campfire should be allowed at the site. Commenters stated safely packing out campfire ashes should be encouraged.

**Response:** The National Park Service would likely provide fire grates throughout the designated camping areas, similar to other developed campgrounds in the park. The grates would likely be anchored in place to reduce theft. However, the National Park Service would consider the suggestions made by commenters and other options available at the time of implementation. As stated in the plan/EIS under the preferred alternative, visitors would be required to pack out their ashes.

## CHICKEN STRIP AIRSTRIP

**Concern Statement 8:** Commenters stated that the National Park Service should allow visitors to camp with their airplanes and that additional camping should be made available at the Chicken Strip. Commenters stated that the airstrip should not be developed but additional parking should be provided. One commenter would prefer to exclude camping on the airstrip to keep it open for landing. Commenters stated that the details of the proposed rule and why it is needed for the Chicken Strip airstrip should have been included in the draft plan/EIS. Several commenters suggested that the Taildragger Strip be reopened. Lastly, commenters suggested the Chicken Strip should be identified as primitive on maps.

**Response:** As stated in the “Alternatives” chapter of the plan/EIS, the preferred alternative would continue to allow camping at the airstrip and allow for additional aircraft tie downs with NPS approval. The tie downs would allow visitors to safely secure airplanes after landing at the Saline Valley Warm Springs Area via the Chicken Strip airstrip. The National Park Service does not intend to develop the airstrip further at this time. Under alternative 3, the National Park Service analyzed the impacts of keeping the airstrip open but without the allowance for camping. The impacts of this action are described in the “Environmental Consequences” chapter of the document. While this element is not currently part of the preferred alternative, it is considered as part of the range of reasonable alternatives considered and analyzed in the document.

The National Park Service manages aircraft use under 36 CFR 2.17, “Aircraft and Delivery.” The proposed rule for the airstrip would authorize an exemption to 36 CFR 2.17(a)(1), which prohibits operation or use of an aircraft on lands or waters within national parks other than at locations designated pursuant to a special regulation. The modification would authorize Saline Valley Warm Springs Airfield, also known as the Chicken Strip. While the plan/EIS discloses the environmental effects of both closing and retaining the airstrip, additional information on the need for the proposed rule has been added to the “Alternatives” chapter in the final plan/EIS. The reopening of the Taildragger Strip is outside the scope of this plan/EIS and would require an additional rulemaking process as defined by 36 CFR 2.17 (a)(1); therefore, the National Park Service will not consider the reopening of the Taildragger Strip in this plan/EIS. The National Park Service would review and consider adding the Chicken Strip to primitive park maps.

## CONSULTATION AND COORDINATION

**Concern Statement 9:** Commenters stated the comment period should have been extended and public meetings should have been held in higher visitation periods. Commenters suggested the public meetings should have been scheduled at high use times at the Saline Valley Warm Springs Area and after the National Park Service has provided details on the cooperative agreement with the Tribe. Commenters stated additional meetings should have been held in Furnace Creek, Stovepipe Wells, Lone Pine, and Los Angeles.

**Response:** Per the regulations under NEPA, public comment periods are required to be open for 45 days following publication of the draft plan/EIS. The National Park Service voluntarily opened the public comment period for 60 days to allow the public more time to review and comment on the draft plan/EIS. The Notice of Availability for the publication of the draft plan/EIS, which also announced the public comment period, was published on May 4, 2018, for a 60-day public comment period. Shortly before publication of the draft plan/EIS, the Department of Interior issued Secretarial Order 3355: Streamlining National Environmental Policy Act Reviews and Implementation of Executive Order 13807, “Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure Projects,” which requires all in-progress EISs be completed by April 27, 2019. When determining whether to extend a comment period, the National Park Service considered the length of the original comment period, the time frame in which a decision is needed, and any extenuating circumstances that would warrant additional time. Because the comment period was 15 days longer than standard NPS practice and new constraints were placed on the project schedule, the National Park Service chose not to extend the comment period.

Although public meetings are not required, it is standard NPS practice to hold public meetings to present information on the draft plan/EIS and to solicit comments. The National Park Service chose to hold three open houses; one at the Saline Valley Warm Springs Area on May 27, 2018, one in Ridgecrest, California on May 29, 2018, and one in Bishop, California on May 30, 2019. Additionally, the National Park Service conducted an online webinar on May 31, 2018. The meetings and webinar were announced through a press release, Facebook post, email, and on the PEPC website on May 4, 2018, providing advance notice of these meetings and webinars by three weeks. The release of an EIS and timing of public meetings is dependent on factors including review by the project team, Regional Office, NPS leadership, Department of Interior, coordination with the US Environmental Protection Agency, and publication of the notice the Federal Register. While timing of these steps may coincide with high visitation periods at parks, they often do not. The National Park Service worked diligently to prepare and release the draft plan/EIS and provided four opportunities for public involvement, including one online for those who were unable to attend a meeting in person.

Concerning the cooperative agreement with the Tribe, Death Valley National Park has and will continue to work with the Tribe to develop this agreement, separate from this NEPA process. The cooperative agreement process is discussed in detail in the response to concern statement 12.

**Concern Statement 10:** Commenters stated the National Park Service did not analyze the scoping period comments quantitatively; therefore, the public was not able to determine how many people were in support or in opposition to certain ideas presented by the National Park Service. Commenters stated this should be done for the draft plan/EIS comments.

**Response:** Public comments for scoping, alternatives development, and the draft plan/EIS were reviewed and analyzed consistent with NPS and Council on Environmental Quality (CEQ) NEPA guidance. Commenting is not a form of “voting” but rather a way for the public to provide substantive feedback on the critical issues, environmental analysis, reasonable alternatives, and accuracy of information the National Park Service has presented. Substantive comments raise, debate, or question a point of fact or analysis. Comments that merely support or oppose a proposal or only agree or disagree with NPS policy are not considered substantive.

## CULTURAL RESOURCES AND ART

**Concern Statement 11:** Commenters stated the language in the draft plan/EIS regarding the cooperative agreement between the National Park Service and the Tribe should be expanded; the final plan/EIS should define what low impact, ecologically sustainable traditional practices are, what tribal cultural resources are, and what impacts are currently occurring to those resources. One commenter suggested removing the language about the degradation of *puha* unless there is science to support the statement.

**Response:** The National Park Service cannot share all information regarding the Saline Valley Warm Springs ethnographic site<sup>1</sup>, tribal cultural resources, impacts to those resources, or Tribal practices. Section 304 of the National Historic Preservation Act (NHPA) directs the National Park Service to “withhold from disclosure to the public, information about the location, character, or ownership of a historic resource if the Secretary and the agency determine that disclosure may (1) cause a significant invasion of privacy; (2) risk harm to the historic resources; or (3) impede the use of a traditional religious site by practitioners.” Further, section 9(a) of the Archeological Resources Protection Act states that “information concerning the nature and location of any archaeological resource for which the excavation or removal requires a permit or other permission under this chapter or under any other provision of federal law may not be made available to the public under subchapter II of chapter 5 of title 5 or under any other provision of law unless the federal land manager concerned determines that such disclosure would—(1) further the purposes of this chapter or chapter 3125 of title 54, and (2) not create a risk of harm to such resources or to the site at which such resources are located.”

The Saline Valley Warm Springs ethnographic site has cultural and historical significance derived from the historical, ethnographic, and archeological records that were documented based on the National Register of Historic Places (NRHP) criteria, not from a specific group’s religion. Death Valley National Park is not required to explain *puha* to the public further than already disclosed in the draft plan/EIS. Further, *puha* does not need to have science to support its existence for the

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<sup>1</sup> In the ethnographic DOE, the area of significance is called the Saline Valley Warm Springs or the *Ko o’* Warm Springs (preferred by the Tribe). The geographic extent of the ethnographic site varies from the Saline Valley Warm Springs Area in this plan/EIS; therefore, the National Park Service is using the term “*Saline Valley Warm Springs Ethnographic Site*” to clearly distinguish the area of significance to the Tribe from the area addressed in this plan/EIS.

National Park Service to analyze effects the Saline Valley Warm Springs Area and NPS proposed actions may have on the ethnographic site to which *puha* contributes.

**Concern Statement 12:** Commenters expressed mixed concerns about the appropriateness of exclusive use of the Saline Valley Warm Springs Area by the Tribe. Commenters suggested that the National Park Service consult with the Tribe for restoration actions, that the Upper Spring be made available to the Tribe for traditional use, and that the National Park Service should consider limiting access to Upper Spring to allow for Tribal uses. Some commenters recommended that Upper Spring be restored to natural conditions, including removal of the palm trees; however, one commenter requested that Upper Spring remain unchanged from current conditions. One commenter suggested periodic closures at Lower Spring for exclusive tribal use; however, other commenters expressed concern about the influence of the Tribe on the management of the Palm and Lower Springs and potential development of the Saline Valley Warm Springs Area by the Tribe for commercial purposes. Commenters suggested the Tribe should share information as part of outreach efforts to help educate other users on the environment of the springs and the Tribe's relationship to the area. Commenters suggested the National Park Service should remove language pertaining to the cooperative agreement from the plan/EIS or state that the cooperative agreement does not exist yet. Commenters stated that the National Park Service should allow the public to provide comments on the cooperative agreement once the process begins.

**Response:** Saline Valley Warm Springs is identified as a special use area for the Tribe in the *2000 Final Legislative Environmental Impact Statement: Timbisha Shoshone Homeland* (NPS 2000) and the Timbisha Shoshone Homeland Act of 2000 (Homeland Act; Public Law 106-423). The Tribe has a historic relationship with the Saline Valley Warm Springs; the area has been used by the older generation of contemporary tribal members for healing and medicinal purposes. Members of the Tribe are authorized to use special use areas for "low impact, ecologically sustainable, traditional practices pursuant to a jointly established cooperative agreement between the Tribe, and the National Park Service, and the Bureau of Land Management, as appropriate" (Public Law 106-423). The National Park Service is authorized to enter into a cooperative agreement with the Tribe by the Homeland Act (Public Law 106-423) "for the purpose of providing training on the interpretation, management, protection, and preservation of the natural and cultural resources of the areas designated for special uses by the Tribe." The National Park Service is directed by the Homeland Act to accommodate access to and use of the Saline Valley Warm Springs Area by the Tribe for traditional cultural and religious activities in a manner consistent with the American Indian Religious Freedom Act (Title 42 of the United States Code [USC], section 1996 et seq.). Any cooperative agreement for tribal use of the warm springs would agree with the objectives described in the plan/EIS and will comply with applicable state and federal law. Any cooperative agreement would also formally recognize the contributions by the Tribe to the history, culture, and ecology of Death Valley National Park and the surrounding area and could create a richer visitor experience through potential interactions with the Tribe.

Separate from this plan/EIS and planning process, the National Park Service has engaged in government-to-government consultation regarding a cooperative agreement with the Tribe. This process is ongoing and is not expected to be completed before a record of decision is signed for this plan/EIS.

The National Park Service would work towards restoring Upper Spring to its natural condition, cooperating with the Tribe, as stated in the plan/EIS in the "Alternatives" chapter. When implemented, the cooperative agreement could include exclusive or nonexclusive use of the Upper Spring by the Tribe at certain times. However, if exclusive use was granted to the Tribe, other visitors may be restricted from the Upper Spring exclusive use area but would still be able

to camp and use different portions of the Saline Valley Warm Springs Area, such as Lower and Palm Springs.

Development of the cooperative agreement would not be a public process and would not be subject to public comment, but the agreement would be a public document. The Tribe is not required to share traditional information with the National Park Service or the public; however, if the Tribe would like to share information, the National Park Service would help distribute the information to the public appropriately, as the National Park Service has done on previous occasions. Language has been added to the “Purpose of and Need for Action” chapter regarding the status of the cooperative agreement with the Tribe.

Lands held in trust for the Tribe offer the Tribe opportunities for development. The Saline Valley Warm Springs Area is not held in trust but is a special use area, as defined above, which allows for use by Tribal members for low impact, ecologically sustainable, traditional practices. Further, in the EIS process, the National Park Service considered the potential for an intensive development alternative, but this alternative was dismissed because it would not meet the purpose and need of the plan (“Alternatives” chapter). Lastly, commercial use was also dismissed as a management option for the Saline Valley Warm Springs Area. Commercial use and development would not be included in the cooperative agreement with the Tribe.

**Concern Statement 13:** Commenters stated the National Park Service should wait to move forward with the plan/EIS process until the Cultural Landscape Inventory (CLI) and Report are prepared and the State Historic Preservation Officer (SHPO) has made a decision on the Determination of Eligibility (DOE) for historic resources. If this is not possible, commenters stated the National Park Service should continue to treat the Saline Valley Warm Springs Area as if it is a historic site. Further, commenters stated some of the elements of the preferred alternative would affect elements of the Saline Valley Warm Springs Historic Site and should be reconsidered. Commenters stated that as part of the section 106 process and the DOE process, the SHPO should be soliciting input from the public to make a determination on the eligibility of Saline Valley Warm Springs Historic Site for listing on the NRHP. Additionally, commenters stated it is incumbent on the National Park Service to make the public aware of opportunities to comment on the section 106 or DOE process.

**Response:** The National Park Service completed consultation with the SHPO under section 106 of the NHPA. The National Park Service sent a consultation package with the identification of historic properties (including archeological surveys and DOE documents for the historic and ethnographic sites) and the Assessment of Effect to the SHPO on February 15, 2018. Per 36 CFR 800, “Protection of Historic Properties,” the SHPO had 60 days from the time the package arrived to respond formally. The National Park Service did not receive a formal response but sent another letter in July 2018, requesting SHPO comments or concurrence by the end of August 2018. The National Park Service did not receive a formal response at the time of completing this report; therefore, in accordance with 36 CFR 800.5(c)(1), the National Park Service will proceed with the undertaking and will provide a record of the finding to the public on request, consistent with confidentiality provisions of 36 CFR 800.11(c). The National Park Service will continue to treat the Saline Valley Warm Springs Area Historic Site as eligible for listing on the NRHP for this project and future projects. A CLI and Cultural Landscape Report would be appropriate to complete in the future to provide guidance on how to maintain the cultural landscape at the Saline Valley Warm Springs Area but are not necessary for completion of the plan/EIS, provided that impacts to the cultural landscape are considered.

The National Park Service will continue to seek SHPO concurrence on the Saline Valley Warm Springs Historic Site’s eligibility via section 110 of the NHPA, which directs federal agencies to



establish a historic preservation program for the identification, evaluation, and protection of historic properties. The NRHP form and the CLI may be developed in coordination with the Saline Valley Warm Springs Area user groups through interviews and public review. Once complete the NRHP form and CLI would be submitted to the SHPO for review and concurrence. If the Saline Valley Warm Springs Historic Site is determined eligible for listing on the NRHP in consultation with the SHPO, Death Valley National Park would then work with the Saline Valley Warm Springs Area user groups to submit the documentation to the National Register for listing.

The National Park Service examined the preferred alternative actions identified as potentially having adverse impacts to the Saline Valley Warm Springs Historic Site in the draft plan/EIS. The palm trees at Palm Spring are contributing features to the historical district. New South (2015) was unable to determine whether the Lower Spring palm trees date to the period of significance due to conflicting reports, so those palm trees are being treated as contributing for this undertaking. To clarify, the National Park Service would not remove the palms from Lower Spring or Palm Spring. Instead, the National Park Service would remove palm tree seedlings and replace them with native species. The native species would be compatible with the historical district and the ethnographic district, per the Secretary of the Interior Standards, to avoid adverse impacts to either district. The mature palm trees would be allowed to remain in place and would be removed after they die naturally. The lawn at Lower Spring is also considered to be a contributing element to the Saline Valley Warm Springs Historic Site. In the draft plan/EIS, the preferred alternative stated that the lawn would be removed and allowed to naturally revegetate or would be replanted with native vegetation. Under the preferred alternative, the National Park Service would retain the lawn with the understanding that it must be managed within the current footprint, thus reducing adverse impacts on the Saline Valley Warm Springs Historic Site.

In the draft plan/EIS, the National Park Service considered a 200-foot camping buffer from the source springs, resulting in the potential for adverse effect to the Saline Valley Warm Springs Historic Site by eliminating contributing camping areas. The preferred alternative in the final plan/EIS has been revised to reduce the buffer to 100 feet from the source springs, consistent with 2016 Superintendent's Compendium. Because of this change, several contributing camping areas would not be affected at all and the impacts on other contributing areas would be greatly reduced.

The National Park Service reconsidered how it would handle existing non-historic art and the creation of new art based on feedback from Saline Valley Warm Springs Area user groups. Instead of removing all non-historic art and prohibiting all new art, the National Park Service would remove all non-historic art from wilderness, would allow current art to remain in non-wilderness, and would allow new art in non-wilderness but would prohibit the manipulation of natural or cultural resources for the purposes of art. The National Park Service encourages visitors to create art while in the park; however, the art should not involve manipulating natural or cultural resources, should not be a permanent fixture, and should be removed from the Saline Valley Warm Springs Area when the visitor creating the art leaves.

These clarifications and changes have been made to the final plan/EIS in the in the alternative narrative in the executive summary and in the "Alternatives" chapter. The analysis was also edited to reflect these changes.

Finally, section 106 requires that agencies provide the public with information about an undertaking and its effects and seek public comment. Section 106 encourages agencies to use their own procedures implementing NEPA to satisfy the section 106 general public outreach requirements, provided they include adequate opportunities for public involvement. The NPS

provided more than adequate opportunities for public involvement, as described under concern statement 9.

**Concern Statement 14:** Commenters stated the National Park Service should give equal importance to the modern cultural history, including historic residency at the site, as it does the history for the Tribe. As written, commenters suggested the draft plan/EIS does not fully capture the nature of the importance of the Saline Valley Warm Springs Area as a counterculture stronghold and as a spiritual site. Commenters suggested that because the Saline Valley Warm Springs Area is dynamic, the 50-year criteria for identifying historic features is invalid. Commenters suggested the plan is deficient in that it characterized the Saline Valley Warm Springs Area as a recreational destination, rather than spiritual and cultural destination. Commenters stated the “Irreversible and Irretrievable Commitments of Resources” section should be revised to include the loss of historic resources, such as recreational freedom, communal recreational experiences, and solitude experience, from the preferred alternative.

**Response:** The National Park Service proposes to evaluate, separate from this NEPA process, the Saline Valley Warm Springs Historic Site as a Traditional Cultural Property (TCP) in the NRHP registration form and CLI discussed in response to concern statement 13. According to National Register Bulletin 38: *Guidelines for Evaluating and Documenting Traditional Cultural Properties*, TCPs derive their significance from “the role the property plays in a community’s historically rooted beliefs, customs, and practices.” These property types are eligible for inclusion in the NRHP because of their “association with cultural practices or beliefs of a living community that (a) are rooted in that community’s history and (b) are important in maintaining the continuing cultural identity of the community.” Based on feedback from the public and the Saline Valley Warm Springs Area user groups, the National Park Service agrees that in this case, spiritual and artistic features of the Saline Valley Warm Springs Area that have not yet reached 50 years in age could be important contributing features to the TCP.

The National Park Service acknowledges that removing all non-historic art and prohibiting all new art could adversely affect the spiritual and cultural experience that is important to Saline Valley Warm Springs Area user groups. Instead, based on feedback from the public and the Saline Valley Warm Springs Area user groups, the National Park Service would remove all non-historic art from wilderness, would allow current art to remain in non-wilderness, and would allow new art in non-wilderness but would prohibit the manipulation of natural or cultural resources for the purposes of art. The ways in which existing art in non-wilderness is managed and how new art in non-wilderness may be permitted would be addressed in an MOU between the National Park Service and the Saline Valley Warm Springs Area user groups.

The National Park Service does not believe that proposed alternative elements in the plan/EIS would result in irreversible or irretrievable commitments of resources. The National Park Service has taken into account the effects the plan/EIS would have on the sense of recreational freedom, communal recreational experiences, and solitude experience on the site, and has reconsidered actions identified as potentially having an adverse effect to the proposed historic TCP and user experience. The following changes and clarifications have been made in the final plan/EIS:

- Non-historic art would be allowed to remain in non-wilderness areas and new art in non-wilderness areas would be allowed, as long as natural and cultural resources are not manipulated, the art is not a permanent fixture, and the art is removed from the Saline Valley Warm Springs Area when the visitor creating the art leaves.

- The area around source springs where camping is prohibited would be reduced from 200 feet to 100 feet to bring the camping buffer in line with the 2016 Superintendent's Compendium and to reduce the impact the buffer would have on the user experience.
- Palm tree seedlings would be removed and replaced by native species. Once the existing mature palm trees die naturally, they would be removed, by which time the native species should have matured sufficiently to provide shade to visitors.
- The lawn would be retained but would be managed so that it does not expand from its current footprint.

## DISHWASHING STATIONS AND WASTEWATER MANAGEMENT

**Concern Statement 15:** Commenters disagree with removal of the dishwashing system and believe the dishwashing stations are culturally important and that suggested filters are not necessary. Commenters question who would supply and maintain the filters and clean the food debris out of the filter and haul it out of the Saline Valley Warm Springs Area. Suggestions regarding the dishwashing stations include separating wastewater from other waters and discharging into separate septic systems, consultation with a professional plumber, and moving the stations near the toilets for use of a common septic system that can be pumped at the same time.

**Response:** The dishwashing stations at the Saline Valley Warm Springs Area generate wastewater. To comply with applicable laws, policies and regulations, the National Park Service must implement corrective actions to address wastewater from the dishwashing stations, as well as other sources including the showers and tubs.

The preferred alternative in the final plan/EIS has been changed to note that wastewater would need to be treated. Based on suggestions by the Lahontan Regional Water Quality Control Board, the treatment method would be subterranean, such as a leach field or a septic system, and would be determined at the time of implementation.

The final plan/EIS is not required to include implementation-level details, such as who would supply or maintain filters or who would haul filter debris out of the area, but the results of wastewater discharge planning would determine the level of effort required to safely discharge gray water based on treatment regulations. A septic system or other subterranean solution would be handled under a separate NEPA process and would require additional section 106 consultation with the California SHPO before implementation.

## EDUCATION AND SIGNAGE

**Concern Statement 16:** Some commenters wish to see minimal signage regarding the Saline Valley Warm Springs Area to keep the experience primitive and to refrain from advertising the Saline Valley Warm Springs Area. Other commenters state that signage should be increased, including signs on the roads indicating the danger of traveling in the backcountry, identifying turns for Saline Valley, and explaining protocols of Death Valley National Park. Commenters also suggested signs at the Saline Valley Warm Springs Area, including what is expected of visitors, what is and is not permitted at the site, information on Leave No Trace® camping, and the history of the Saline Valley Warm Springs Area (both ethnographic and historic). One commenter suggested adding braille to the signage. Several commenters suggested having an interpretation plan and possible volunteer monitors that could engage with visitors.

**Response:** The National Park Service may post additional signage to educate visitors and to help with wayfinding. Signage would describe the Saline Valley Warm Springs Area, the potential

conditions a visitor could encounter, the distance to the Saline Valley Warm Springs Area, what types of vehicles would be most appropriate for travel to the Saline Valley Warm Springs Area, and what is expected of visitors. The educational signage would intend to encourage visitors to be self-reliant and independent when visiting the Saline Valley Warm Springs Area. The signage would provide clear communication and would be placed at the junctions of major roads and the turn-offs leading to the Saline Valley Warm Springs Area. The level of detail for signage, including content, would be decided at the time of implementation, but signs would provide enough information to set realistic expectations to allow visitors to make informed decisions and to be self-reliant in the backcountry. Additional education measures would include regular updates on the park's website, ongoing communication with the user groups and encouraging the user group representatives to engage other visitors. The National Park Service would follow the standards presented in the Programmatic Accessibility Guidelines for National Park Service Interpretive Media (Harpers Ferry Center 2017) when developing interpretive media so that visitors' experiences in the Saline Valley Warm Springs Area can be safe and meaningful.

## FERAL BURROS AND FENCING

**Concern Statement 17:** Commenters suggested fencing elements of the other alternatives should be used in the preferred alternative instead of fencing the entire developed area. Commenters stated that fencing would help to manage the burros at the Saline Valley Warm Springs Area. Some commenters identified issues associated with the fencing options, including intrusions on the viewshed, restriction of visitor movement at the site, cost of construction and ongoing maintenance, impacts on natural and cultural resources, and potential vandalism.

**Response:** Separate from this planning process, Death Valley National Park entered into an agreement with Peaceful Valley Donkey Rescue, a nonprofit organization that will round up and remove 2,500 feral burros from Death Valley National Park and relocate them to offsite adoption facilities and sanctuaries. Many commenters stated that with the burro removal efforts, the fencing proposed under the preferred alternative would not be necessary. Based on public comments, the National Park Service decided to change the preferred alternative fencing to artistic fencing to surround only the source springs, as in alternative 2. These changes were made in the final plan/EIS in the alternative narrative in the executive summary and in the "Alternatives" chapter. The analysis was also edited to reflect the change in fencing.

Although the National Park Service expects the burro removal efforts to be successful, there remains a possibility of burros returning to the area since the National Park Service borders Bureau of Land Management land with different management strategies. If burros stay at the Saline Valley Warm Springs Area or if burros are removed, and other burros move into the area, the fencing would help to protect the water quality of the source springs. The fencing would not keep the burros out of visitors' camps. Based on public comment, this appears to be a consequence that visitors are willing to tolerate to avoid additional fencing at the Saline Valley Warm Springs Area, which would affect the viewshed and other resources. The National Park Service would continue to monitor the conditions at the Saline Valley Warm Springs Area. If the burro removal is not successful and the burros continue to affect the resources, the National Park Service would reconsider one of the fencing options that would exclude the burros from the Saline Valley Warm Springs Area.

In addition to fencing the source springs at Lower and Palm Springs, the National Park Service would replace the fencing at Upper Spring to restrict burros and facilitate restoration. The National Park Service would consult with the Tribe to determine the type and extent of the fencing. This change has been added to the alternative narrative in the executive summary and the

“Alternatives” chapter. The analysis in the “Environmental Consequences” chapter was also edited to reflect this addition.

**Concern Statement 18:** Some commenters prefer that the burros be allowed to remain in Saline Valley, but if the herd must be removed, birth control or the agreement between the National Park Service and the Peaceful Valley Donkey Rescue would eliminate the need for a large burro exclusion fence. Other commenters agree that the burros should be removed. Commenters believe the National Park Service should focus on an educational campaign that encourages proper food storage and that this could be accomplished through signage, pamphlets, posts on social forums, and installation of food boxes. For those that do not follow the guidelines, commenters suggested the National Park Service should issue fines.

**Response:** Burros are nonnative animals to Death Valley National Park that cause damage to native vegetation, spring ecosystems, and compete with native wildlife (e.g., bighorn sheep, desert tortoise) for limited resources.

In 2005, the National Park Service reduced feral burro numbers park-wide to an estimated 200-400 animals. Since that time, no burros have been removed from Death Valley National Park. Invasive burros increase their population numbers by approximately 20 percent each year, and park staff now estimate between 2,000 and 4,000 burros may occur within the park. The National Park Service proposed to install fencing to prevent burros from affecting visitors to the Saline Valley Warm Springs Area, either from contamination of springs and the lawn or through direct interactions, such as raiding camps and cars for food. During the public comment period, the National Park Service heard from the public that burros are a part of the experience, and they should not be fenced out of the entire area. Based on this feedback, the National Park Service has updated the preferred alternative to include only artistic fencing around the source springs at Lower Spring and Palm Spring. The fencing would be for the protection of water quality. Upper Spring was identified as an important area by Tribal Elders who asked that the fence be fixed and enlarged to protect both the cold and warm springs from burros at Upper Spring. While the National Park Service is undertaking other efforts to reduce burro numbers throughout the park and hopes to reduce burro numbers successfully, there is no guarantee of success. The National Park Service, through analysis in the plan/EIS, would revisit the discussion of fencing the entire Saline Valley Warm Springs Area if it is needed in the future should visitors or resources become affected by burros. It is worth noting that some commenters would prefer that the burros are removed from the Saline Valley Warm Springs Area.

The National Park Service would consider using signage and other methods to encourage proper food storage. Improper food storage is a citable offense.

## HUMAN HEALTH AND SAFETY

**Concern Statement 19:** Commenters stated that water quality testing would most likely be expensive and difficult to complete due to the need to transport samples to testing labs. Some commenters stated that the National Park Service should conduct regular water testing and invest in signage to warn of the potential dangers of the recreational use of untreated water and to warn against consuming the spring water. Other commenters stated the National Park Service should consult with the County Environmental Health Department on waste water management practices.

**Response:** The National Park Service recognizes the logistic challenges presented by safely managing a remote site like the Saline Valley Warm Springs Area and is consulting with state and local authorities to craft appropriate mechanisms and best practices for compliance with



applicable public health requirements. The National Park Service would comply with NPS Director's Order 83: *Public Health* and would work with all relevant authorities having jurisdiction under the guidance of that document.

**Concern Statement 20:** Commenters suggested the efforts by the National Park Service to improve the natural conditions at the Saline Valley Warm Springs Area could increase risks to human health and safety, namely reducing shade for camping. Another concern is the danger of flash floods; this could be reduced by restoring the diversion dams above the springs. Commenters stated that metal storage lockers or buildings should be used for bleach and any other materials that are identified as hazardous, and safety information for each substance should be available onsite. Some commenters support fencing the settling pond, but others question the need for the fencing.

**Response:** The National Park Service recognizes the value of shade to visitors. Based on public comment, the National Park Service would like to clarify its preferred approach to the management of the non-native palm trees around the springs. Palm tree seedlings would be removed and replaced by native species. The mature palm trees would be allowed to die naturally, and only then would they be removed. By this time, the native species should have matured sufficiently to provide shade to visitors. For additional information about management of the non-native vegetation, please refer to concern statement 29.

Flash floods would remain a risk to visitors camping in the Saline Valley Warm Springs Area. Installation of a diversion dam would not be consistent with NPS policy related to hydrologic features. To help mitigate the risk to visitors from flash flood events, the National Park Service would implement efforts to increase visitor awareness of the risk associated with a flash flood event and where and when to seek higher ground.

The National Park Service would consult, as appropriate, with local and state regulators related to the cleaning of the pools. Any hazardous materials, such as cleaning materials, would be stored and labeled consistent with Occupational Safety and Health Administration (OSHA) requirements. All hazardous materials associated with the vehicle repair facility would be stored according to OSHA requirements until the repair facility is removed. As noted in the plan/EIS, the National Park Service could enter into a management agreement with the Saline Preservation Association or other user groups to assist with the management of the Saline Valley Warm Springs Area. Proper storage of cleaning materials would be part of this agreement.

The settling pond would be fenced so that its continued use is in compliance with Director's Order 83: *Public Health*.

## LAW ENFORCEMENT AND NPS STAFFING

**Concern Statement 21:** Some commenters want to see an increase in NPS presence at the Saline Valley Warm Springs Area, including overnight stays and the staffing of a year-round ranger, to aid the camp host in tasks such as collecting proposed camping fees. They stated law enforcement presence is important on high-use weekends and this may be of greater need following changes in the management of the Saline Valley Warm Springs Area. One commenter stated that an increased NPS presence would have adverse impacts on the volunteerism that is common at the Saline Valley Warm Springs Area.

**Response:** The National Park Service would like to increase the presence of paid NPS-staff at the Saline Valley Warm Springs Area, to provide interpretation, public assistance, and other services. However, decisions about how to allocate park staff's time are made by park management while balancing competing needs in the entire park, which is nearly the size of the State of Connecticut.

As described in the response to concern statement 25, the National Park Service intends to enter into an MOU with the Saline Valley Warm Springs Area user groups to help with maintenance and stewardship of the site.

## NPS CAMP HOST

**Concern Statement 22:** Commenters submitted many implementation-level suggestions regarding the NPS camp host. Commenters stated that the current NPS camp host housing should be cleaned up but should be able to remain in place while the current NPS camp host is at the Saline Valley Warm Springs Area; however, when he leaves, the trailer should be removed. Other suggestions on housing include: allowing a permanent housing structure to remain, placing the trailer on a cement pad to deter pests, placing solar panels on the roof, and installing wind-driven generators. Suggestions for a long-term NPS camp host noted that the job requires knowledge of the site, its history, and the infrastructure and that shorter-term hosts would not provide the necessary stability. Some commenters stated that the National Park Service could offer incentives, such as a salary or vacation time, to attract the right applicant. Other commenters prefer several approved NPS camp hosts that rotate every couple of months, stating that a suitable long-term host would be difficult to find and that a host with a long tenure could develop an unwarranted sense of ownership. Commenters suggested when it is time for a new NPS camp host, the National Park Service should involve the long-time users in the decision, and one commenter suggested having the new NPS camp host intern with the current camp host prior to taking over the role. Commenters stated that there should be NPS camp hosts at both Lower Spring and Palm Spring.

**Response:** The National Park Service would retain a year-round camp host at Lower Spring and a seasonal camp host at Palm Spring. The National Park Service may consult with the user groups when considering the camp host positions. Although choosing a camp host is a park decision and not a public process, the National Park Service would explain the hiring process to the user groups and check references of the potential camp hosts with the user groups, as appropriate.

The current NPS camp host housing would remain until either the current camp host leaves or 3 years from the approval of the plan/EIS, whichever happens first. When the current NPS camp host leaves his position, the camp host housing and the automotive repair facility would be removed. The NPS camp hosts would provide their own temporary housing, and the water feature, drainage ditch, and plumbing at Lower Spring would be retained. The National Park Service would allow for a power system that complies with applicable regulations and the cultural landscape, and the camp host would retain a government vehicle. The NPS camp hosts would be allowed personal items that comply with the park's housekeeping policy. Additionally, the term of employment for the NPS camp host would be one year with the possibility for reinstatement, but the camp host would have to reapply for the position each year. The text in the final plan/EIS regarding the Lower Springs camp host site has not been changed.

## PERMITS AND FEES

**Concern Statement 23:** Comments questioned the need for permits given the low number of visitors. Although some commenters agreed that permits might be necessary during high-use weekends, others are concerned that permits would affect traditional uses of the Saline Valley Warm Springs Area during high-use weekends when the sense of community is established among the visitors or would be a violation of user privacy. Commenters are concerned that obtaining permits would be too challenging due to the location of the Saline Valley Warm Springs Area, lack of connectivity, and visitors changing plans due to weather conditions. Some commenters suggested that a sign-in log be used, and other suggested that a visitor use study should be completed prior to implementing a permit system.

**Response:** As stated in the response to concern statement 6, the Saline Valley Warm Springs Area is a developed backcountry campground, similar to Thorndike and Mahogany Flats. Currently, these types of campgrounds in Death Valley National Park do not require visitors to obtain a permit or registration. Under the preferred alternative in the draft plan/EIS, the intention of the mandatory no-cost permit was to collect data on visitor use and distribute information on the Saline Valley Warm Springs Area. Currently, the NPS camp host informally collects information on visitor use. During the public comment process, the National Park Service learned that visitors often collect informal visitation data as well; however, these data do not provide the National Park Service with the consistent visitor information needed to determine visitation trends.

Based on public comment, the National Park Service changed the preferred alternative. Instead of permits or registrations, the National Park Service would gather data on visitor use patterns through formal visitor use studies, which could include ways to count visitors at both high and low use periods. These data would help the National Park Service understand current visitor use trends and impacts. The National Park Service would monitor the data collection and if it were determined that the data collected were not accurate or appropriate, the National Park Service would consider requiring visitors to register or to obtain a permit to camp at the Saline Valley Warm Springs Area. Further, if the National Park Service were to change the requirements park-wide for developed backcountry campgrounds in the future, these changes would apply to camping at the Saline Valley Warm Springs Area.

The final plan/EIS reflects this change in the alternative narrative in the executive summary and the “Alternatives” chapter. The analysis in the “Environmental Consequences” chapter was also edited to reflect this change.

**Concern Statement 24:** Commenters requested more information on how the funds from a proposed camping fee would be used, how this would be enforced, and how a fee would affect the Saline Valley Warm Springs Area experience for users. Commenters stated that a fee would discourage volunteerism by visitors. Commenters suggested improvements for the collection of park entrance fees. Commenters cited 36 CFR 71.9, stating that this regulation would require the National Park Service to provide potable water, trash containers, and personnel onsite to collect a camping fee.

**Response:** All visitors to Death Valley National Park must pay the park entrance fee. In certain areas of the park, recreation fees are also collected. National Park Service entrance and recreation fees are used for:

- facility repair, maintenance, and enhancement;
- habitat restoration and protection of resources;
- law enforcement;
- direct operating or capital costs to pay for fee collection and campground staff; and
- emergency medical services.

Specifically, Death Valley National Park has recently used fee money to fund critical projects that improve visitor services and protect natural and cultural resources in the park. Examples of this work include repairing Scotty’s Castle and restoring visitor access after a devastating storm and improving accessibility for visitors with disabilities at Dante’s View through a partnership with the Fund for People in Parks and the Death Valley Natural History Association. Death Valley National Park’s general operating budget funds most services within the park, and the National

Park Service is limited in the way fees can be used. Although user fees could be used to supplement current services, the fees would not cover all the services provided to a particular area.

To clarify, 36 CFR 71.9, “Establishment of Recreation Use Fees” would not apply to the Saline Valley Warm Springs Area. If a permitting system were implemented in the future at the Saline Valley Warm Springs Area, an overnight camping fee would be implemented in conjunction with the permit, as cost recovery for the permit system, similar to parks that charge for a backcountry permit. As stated, the National Park Service does not intend to charge a camping fee at the Saline Valley Warm Springs Area or any of the other developed backcountry campgrounds, nor is a permit system being put in place at this time. However, the National Park Service could implement both permits and fees in the future for all developed backcountry campgrounds, if monitoring determines these actions are necessary.

The language in the final plan/EIS (“Alternatives” chapter) stating that overnight camping fees could be implemented is consistent with the established framework in the Death Valley National Park Wilderness and Backcountry Stewardship Plan. The National Park Service does not intend to collect fees for camping at the Saline Valley Warm Springs Area at this time, but if fees were to be implemented for developed backcountry campgrounds, this change would be applied to the Saline Valley Warm Springs Area as well. If fees were to be implemented, the change would not require a separate NEPA process, but the public would be invited to comment.

## SITE STEWARDSHIP

**Concern Statement 25:** Commenters suggested that the National Park Service should negotiate another MOU with SPA for care of the Saline Valley Warm Springs Area. This would take much of the effort and financial strain off the National Park Service and include maintenance of the infrastructure and road, vegetation maintenance, trash collection when necessary, education of new visitors, and restoration after flood or other weather events.

**Response:** As stated in the plan/EIS (“Alternatives” chapter), the National Park Service intends to work with the user groups to develop agreements for stewardship of the Saline Valley Warm Springs Area to include activities such as minimal maintenance of the tubs, invasive plant removal, campsite management, monitoring of conditions at Upper Spring, protection of archeological resources, maintenance of the Chicken Strip airstrip, and protection of wilderness boundaries.

## SOILS

**Concern Statement 26:** One commenter expressed that the soil impacts caused by moving rocks to create art are overstated.

**Response:** The National Park Service does not agree with this statement. The plan/EIS states that moving rocks to create rock art and form road alignments “exposes soils to wind and water erosion.” This is an accurate statement. The “Types of Impacts on Soils and Vegetation” in the “Environmental Consequences” chapter clearly explains the types of impacts that can occur from activities at the Saline Valley Warm Springs Area, including moving rocks to create art. Walking in undisturbed areas and moving rocks from their original location to a new location can cause trampling and compaction on the soil. Moving rocks is not the only or most important activity that impacts soils, but the analysis correctly notes that this activity does alter the soil

characteristics, which can alter air and water movement in soil and the suitability for plant growth.

In reviewing the draft plan/EIS, the National Park Service determined that the impacts to archeological resources were not adequately characterized, as moving rocks could negatively impact these resources. The final plan/EIS describes these impacts under the appropriate alternatives in the “Cultural Resources” section of the “Environmental Consequences” chapter.

## SUGGESTED REVISIONS

**Concern Statement 27:** Commenters identified certain sections of the draft plan/EIS that should be revised or elements that should be included in the final plan/EIS. These revisions included adding language regarding clothing optional recreation, including language on encouraging collaborative activities with SPA, adding the Inyo Mountains as a range surrounding Saline Valley, clarifying the springs as a “Developed Area,” adding the Bat Pool to the description of Lower Spring, clarifying what water is used for the dishwashing station, remove language referring to the Saline Valley as a campground, clarify that the palm trees were human-planted, analyze impacts to roads within the developed area of the campground, and include an example camping permit in the Record of Decision. Commenters also suggested several elements to be included in the alternatives, including adding trash cans and removing some of the trash from the site.

**Response:** Based on suggestions, the National Park Service made the following edit to the final plan/EIS:

- Developed Area – As stated in the responses to concern statements 6 and 23, the Saline Valley Warm Springs Area is considered a developed backcountry campground, and the final plan/EIS has been edited appropriately.

Some suggestions did not result in changes to the final plan/EIS and are explained below:

- Inyo Mountain Range – One commenter stated that the executive summary omitted the Inyo Mountains when describing the viewshed. The executive summary has been edited to remove the description of the location of the project site; however, this information is included in the “Purpose and Need” and “Affected Environment” chapters.
- Clothing Optional Recreation – Federal law and regulations do not prohibit nudity; however, they do prohibit actions that are threatening or obscene. The National Park Service encourages visitors to be respectful and use the Saline Valley Warm Springs Area as a shared public space. Public nudity can make other visitors uncomfortable and is inconsistent with tribal values. No changes to the clothing optional recreation were made in the final plan/EIS.
- Palm Trees – The draft plan/EIS states the following on page 45: “Users of the warm springs area planted palm trees to create shade for the tubs.” No changes were made in the final plan/EIS regarding the origin of the palm trees.
- Bat Pool – Several features at the Saline Valley Warm Springs Area have multiple names to describe them. The Bat Pool is called “the bathtub” in the plan/EIS. A photograph of the bathtub is depicted on the divider page for the “Purpose of and Need for Action” chapter, as well as page B-11 of appendix B of the draft plan/EIS. Although the Lower Spring shower has an actual bathtub, the soaking tub called “the bathtub” by some users



is recognized as a separate feature of Lower Spring. No changes were made in the final plan/EIS; refer to appendix C of the final plan/EIS.

- Dishwashing Station Water Sources – Schematic drawings from the NPS camp host show an irrigation pipe from the cold source spring to the main Lower Spring area where it appears that it connects to a junction box; therefore, the text was not changed in the final plan/EIS.
- Campground – The National Park Service disagrees with the statement that the Saline Valley Warm Springs Area should not be referred to as a campground. As stated above, the final plan/EIS was edited to define the Saline Valley Warm Springs Area as a developed backcountry campground.
- Impacts to Roads – The preferred alternative does not propose changes to designated roads. Visitors should use only Warm Springs Road when driving through the Saline Valley Warm Springs Area; this road connects to Saline Valley Road and gives visitors access to Lower, Palm, and Upper Springs. If the National Park Service creates the designated dispersed camping area, new access roads may be created, but driving anywhere except designated road and access roads would be illegal. For these reasons, the National Park Service did not analyze impacts to roads in the final plan/EIS.
- Permits – As discussed in the response to concern statement 23, the preferred alternative in the final plan/EIS was revised to remove permits for overnight use at the Saline Valley Warm Springs Area; therefore, a sample permit will not be included in the Record of Decision.
- Trash Cans and Junk Removal – As discussed in the response to concern statement 25, the National Park Service is working with the user groups to develop MOUs for site stewardship. The tasks that would be covered by the volunteers could include trash and extraneous items collection and removal at the Saline Valley Warm Springs Area.

## TOILET MANGEMENT

**Concern Statement 28:** Commenters stated that the National Park Service should pump the vault toilets as needed and another vault toilet should be added at Palm Spring. Commenters stated that requiring visitors to pack out waste is not reasonable and there is concern that some visitors would dump wag bags into the vault toilets causing issues. Suggestions include installing an additional toilet near the Wizard Pool at Palm Springs, determining ways to minimize risk from contaminating surrounding areas during flood events, decreasing odors from the toilet, blending the vault toilet buildings into the surrounding desert, and using composting toilets.

**Response:** Camping in the backcountry requires visitors to be self-reliant. As the Saline Valley Warm Springs Area is a developed backcountry campground, visitors should be prepared to be independent and not rely on the NPS facilities. Although the National Park Service does not require visitors to pack out human waste, visitors are encouraged to practice Leave No Trace® camping principles. The actions for toilet management were not changed in the final plan/EIS, as the preferred alternative encourages visitors to be self-reliant and allows for additional vault toilets if deemed necessary by the National Park Service.

The response to concern statement 15 explains the need for a form of subterranean system for treating wastewater, as suggested by the Lahontan Regional Water Quality Control Board. Once the type of treatment system is decided, the National Park Service would determine whether the vault toilets should be tied into the septic system at that time.

The current vault toilets were selected to blend into the environment, and no changes to the toilets are planned at this time. As stated in the “Alternatives” chapter of the plan/EIS, vault toilets could be added to Lower or Palm Springs, if necessary. If the National Park Service decides to make changes to the toilet facilities, items such as minimizing risk from contaminating surrounding areas during flood events, decreasing air pollutants from the toilet, and using composting toilets would be considered.

## VEGETATION

**Concern Statement 29:** Commenters stated the lawn and palm trees are misrepresented in the draft plan/EIS as invasive. They stated the palm trees and the grass species are nonnative, but they are not invasive, as they are not outcompeting native species, they are not spreading, and they are not having a negative effect on the environment. Some commenters minimized concerns about the invasiveness of palm trees, stating that they are easily controlled and contained. Commenters objected to the comparison in the draft plan/EIS of palm trees to tamarisk, which are harder to control and more damaging to the natural habitat. Commenters suggested tamarisk removal should continue to occur at the park and site. Commenters stated the plan/EIS should be revised to adequately describe the difference in controlling palm trees and tamarisk; palm tree control is successful at the Saline Valley Warm Springs Area, whereas tamarisk spread is nearly impossible to control. Various suggestions were made to study and evaluate the invasiveness of these species and their impacts on the habitat.

**Response:** Death Valley National Park has five species of introduced palm trees that are generally recognized as two different groups: date palm trees from Africa and fan palm trees from Southern California and Mexico. Although the introduction of these species occurred relatively recently and was well documented, there is a common misconception that fan palm trees are native to Death Valley National Park, but they are not. Historically, the closest palm trees to Death Valley were found and restricted to remote springs and seeps in the Colorado Desert in springs along the San Andreas Fault near the Salton Sea and east into southern Arizona; however, the California fan palm (*Washingtonia filifera*) has been widely distributed as an ornamental species, especially to the various missions throughout California. Readily grown from seed, the California fan palm has been transported well beyond its native range with great success. Consultation with the Tribe in Death Valley confirms that these trees were introduced, and that there are no traditional uses for palms or palm fruits by the Tribe. Finally, there are receipts and photographs in the Death Valley National Park archives that document the introduction of palm trees.

Within Death Valley National Park, palm trees have spread from their original planting locations, and each year the National Park Service spends money to control population numbers. Through the public comment period, the National Park Service has heard the value of the palm trees and the shade they produce for visitors of the Saline Valley Warm Springs Area. Based on this feedback, the National Park Service would like to clarify the actions of the preferred alternative. Palm tree seedlings would be removed and replaced by native species. The existing mature palm trees would be allowed to remain at the Saline Valley Warm Springs Area until they die naturally, and only then would they be removed. By this time, the native species should have matured sufficiently to provide shade to visitors. Retaining palm trees at the Saline Valley Warm Springs Area increases the operational maintenance required to prevent the spread of these species to other springs and riparian sites. In addition to humans spreading palm trees, birds and coyotes have been shown to be long distance dispersers of the seeds. Due to the remote nature of the Saline Valley Warm Springs Area and limited staffing of the National Park Service, the National Park Service would enter into an MOU with the Saline Valley Warm Springs Area user groups for the control and removal of palm tree seedlings. Implementation details would be defined in

the MOU. If the National Park Service and user groups are unable to prevent the spread of palm trees to new sites, the National Park Service would reserve the management responsibility to remove mature palm trees and replace them with native species. In all cases, the National Park Service would plan the plantings of native species so that they would provide shade as the palm trees die naturally and are removed. Under this scenario, native species would be selected for maintenance and potential to produce shade for visitors.

Additionally, and in response to public comments, the National Park Service would retain the lawn. The National Park Service understands the value of the lawn to users of the springs and believes that removal of nonnative Bermuda grass would be more destructive to the environment than leaving it in place at this time. The footprint of the lawn at the time the decision document is signed would define the footprint moving forward. Maintenance of the lawn to prevent its spread would also be included in the MOU with the Saline Valley Warm Springs Area user groups.

Upper Spring would be restored to a natural state and remove the palm trees and Bermuda grass. The fence would be increased in size to protect both the warm and cold springs at this location.

The final plan/EIS reflects these changes and clarifications in the alternative narrative in the executive summary and the “Alternatives” chapter. The analysis in the “Environmental Consequences” chapter was also edited to reflect this change.

**Concern Statement 30:** Commenters stated that the palm trees should be retained at Lower Spring and Palm Spring, as well as the lawn at Lower Spring. Rationale for retaining the palm trees and lawn include the importance of these features to the experience, the shade offered by the trees, and the expense of removal of these features. Various suggestions were offered for maintaining the palm trees. Some commenters suggested planting cottonwood trees for shade in place of the palm trees, while others stated that cottonwood trees would require ongoing, regular maintenance and are not recommended. Commenters suggested planting “mule palm trees” and planting native grass in place of the current Bermuda grass. Other commenters stated the National Park Service should consider the habitat the palm trees provide for bats.

**Response:** NPS Management Policies 2006 defines nonnative species as those “that occupy or could occupy park lands directly or indirectly as the result of deliberate or accidental human activities.” Unless a nonnative species is maintained to meet an identified park purpose, NPS policy is to manage the species, up to and including eradication. An invasive species is defined as, “a non-native organism whose introduction causes or is likely to cause economic or environmental harm, or harm to human, animal, or plant health,” according to Executive Order 13751, “Safeguarding the Nation from the Impacts of Invasive Species.” Executive Order 13751 requires federal agencies to take steps to prevent the introduction and spread of invasive species and to support efforts to eradicate and control invasive species that are established. Death Valley National Park recognizes all palm tree species and five of the six grass species at the Saline Valley Warm Springs Area as invasive species.

The National Park Service appreciates the public comments regarding vegetation at the Saline Valley Warm Springs Area. Based on these comments, the National Park Service decided to revise the preferred alternative to allow the lawn to remain; the current mature palm trees would remain, as stated in the draft plan/EIS. The National Park Service would work with the user groups to create an MOU (see response to concern statement 25) for management of the lawn and palm trees. The MOU would place most of the responsibility of maintaining the palm trees and the lawn on the user groups. This would require trimming the existing palm trees, removing young palm trees, and maintaining the lawn to prevent spread into areas beyond what exists

currently. The National Park Service would continue to monitor the resources at the Saline Valley Warm Springs Area and would take steps to remove these nonnative invasive species if management goals are not met.

Although the current mature palm trees would be allowed to remain, the National Park Service would remove palm tree seedlings and plant native species that would provide shade when mature. These trees would be planted while the existing mature palm trees are still alive to allow the native trees time to mature and provide shade. The National Park Service would determine the best species to plant during implementation of the plan; the species would be chosen based on the amount of shade they would provide and the amount of maintenance they would require. The current palm trees likely provide habitat for bats and birds in the Saline Valley Warm Springs Area. This would also be factored into the decision when choosing native tree species.

The final plan/EIS reflects these changes in the alternative narrative in the executive summary and the “Alternatives” chapter. The analysis in the “Environmental Consequences” chapter was also edited to reflect this change.

**Concern Statement 31:** Commenters suggested the siphon hose from Burro Spring to the adjacent riparian area should remain, as removing the water source would kill the mesquite trees. Commenters stated this line of native mesquite and associated understory vegetation provides habitat for various wildlife (e.g., migratory birds, coyotes, bobcats), provides a large area of shaded camping locations, and acts as a windbreak. Commenters suggested replacing the hose with a permanent pipe, installing a screen over the trough to deter burros and other habituated wildlife, and installing a valve to control water use.

**Response:** Based on suggestions from the Lahontan Regional Water Quality Control Board that hydromodification should be avoided, the National Park Service would retain this element of the preferred alternative and remove the hose from Burro Spring upon implementation. The hose from Burro Spring to the wildlife trough modifies the natural flow of water. The line of mesquite trees associated with Burro Spring has been established for approximately 20 years. The mesquite trees are likely to persist at the site because they are already established, and the trees grow a very long taproot and an extensive lateral root system for obtaining water. For these reasons, no changes have been made to the final plan/EIS regarding this issue.

## REFERENCES

Harpers Ferry Center Accessibility Committee

- 2017 Programmatic Accessibility Guidelines for National Park Service Interpretive Media, Version 2.3. May.

National Park Service

- 2000 *Legislative Environmental Impact Statement: Timbisha Shoshone Homeland*. November.

- 2006 *Management Policies 2006*. National Park Service, Washington, D.C.

New South Associates (New South)

- 2015 Saline Valley Warm Springs Assessment of Eligibility, Death Valley National Park. October.

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**ATTACHMENT A**

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Public Comment Content Summary Tables

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**TABLE 1: GEOGRAPHIC DISTRIBUTION OF PUBLIC COMMENTS BY COUNTRY**

Country	Number of Correspondences	Percentage of Correspondences
United States	380	99.5%
Italy	1	0.3%
Thailand	1	0.3%

**TABLE 2: GEOGRAPHIC DISTRIBUTION OF PUBLIC COMMENTS BY STATE**

State	Number of Correspondences	Percentage of Correspondences
California	274	71.7%
Nevada	29	7.6%
Arizona	8	2.1%
Colorado	7	1.8%
Washington	7	1.8%
Oregon	6	1.6%
Utah	6	1.6%
Idaho	4	1.0%
Maine	3	0.8%
New Mexico	3	0.8%
Alaska	2	0.5%
Illinois	2	0.5%
Indiana	2	0.5%
Montana	2	0.5%
Ohio	2	0.5%
Pennsylvania	2	0.5%
Texas	2	0.5%
Florida	1	0.3%
Georgia	1	0.3%
Massachusetts	1	0.3%
Michigan	1	0.3%
New Jersey	1	0.3%
New York	1	0.3%
North Carolina	1	0.3%
South Carolina	1	0.3%
Virginia	1	0.3%
Washington, DC	1	0.3%
West Virginia	1	0.3%
Unknown	8	2.1%
<b>Total</b>	<b>380</b>	<b>99.5%</b>

**TABLE 3: CORRESPONDENCE COUNT BY CORRESPONDENCE TYPE**

Type of Correspondence	Number of Correspondences
Web Form	319
Letter	48
E-mail	9
Park Form	5
Other (Newspaper Article)	1
<b>Total</b>	<b>382</b>

**TABLE 4: CORRESPONDENCE COUNT BY ORGANIZATION TYPE**

Organization Type	Number of Correspondences	Percentage of Correspondences
Conservation/Preservation	4	1.0%
Federal Governmental	1	0.3%
Recreational Group	25	6.5%
Town or City Government	3	0.8%
Tribal Member	2	0.5%
State Government	1	0.3%
Unaffiliated Individual	345	90.3%
University	1	0.3%

**TABLE 5: CORRESPONDENCE DISTRIBUTION BY CODE**

Code	Description	Number of Correspondences
NS1110	Alternative 1 - No-Action Alternative: Supports	80
NS1210	Alternative 2 - Regulatory Compliance Alternative: Supports	6
NS1310	Alternative 3 - Community Engagement Alternative: Supports	2
NS1420	Alternative 4 - Restoration Alternative: Opposes	4
NS1410	Alternative 4 - Restoration Alternative: Supports	2
NS1520	Alternative 5 - Preferred Alternative: Opposes	6
NS1510	Alternative 5 - Preferred Alternative: Supports	16
NS1610	Alternative Developed by Saline Preservation Association: Supports	55
AL4000	Alternatives: New Alternatives or Elements	14
AL2000	Alternatives: Range of Alternatives	5
LE1000	Comments Pertaining to Law Enforcement and NPS Staffing	6

**TABLE 5: CORRESPONDENCE DISTRIBUTION BY CODE**

<b>Code</b>	<b>Description</b>	<b>Number of Correspondences</b>
AS1100	Comments Pertaining to Accessibility	7
AU1000	Comments Pertaining to Auto Repair Support Services	62
CA2000	Comments Pertaining to Campfires	26
CA1000	Comments Pertaining to Camping Areas	54
RC1200	Comments Pertaining to Clothing Optional Recreation	5
NE2000	Comments Pertaining to Consultation and Coordination	5
CM1000	Comments Pertaining to Cooperative Management with the Tribe	20
CR1400	Comments Pertaining to Cultural Resources	25
DW1000	Comments Pertaining to Dishwashing Stations/Wastewater Management	32
ES1000	Comments Pertaining to Education and Signage	15
FE1100	Comments Pertaining to Fencing and Burro Management	124
LM1400	Comments Pertaining to Hazardous Materials	3
HS2000	Comments Pertaining to Human Health and Safety	5
NP4000	Comments Pertaining to National Park Service/Park Mission	1
PS1100	Comments Pertaining to Permit/Fee System	91
PN1000	Comments Pertaining to Purpose and Need	3
RW1000	Comments Pertaining to Recreational Water Usage	6
ST2000	Comments Pertaining to Resource Stewardship	21
AR1100	Comments Pertaining to the Bat Pole and Other Art	28
LM1300	Comments Pertaining to the Management of the Chicken Strip	23
MN1000	Comments Pertaining to the Management of the Warm Springs	15
CR1300	Comments Pertaining to the Timbisha Shoshone Tribe	35
TM1000	Comments Pertaining to Toilet Management	23
VE1000	Comments Pertaining to Vegetation	108
CH1000	Comments Pertaining to VIPs and Camp Hosts	22
CR1100	Cultural Resources: Affected Environment	6
CR1200	Cultural Resources: Impact of Alternatives	3
ED1000	Editorial	9
NS1000	Nonsubstantive	53
OS1000	Out of Scope	11
RF1000	References - General Comments	7



<b>TABLE 6: HOW COMMENTERS HEARD ABOUT THE DRAFT PLAN/EIS AND COMMENTERS PREFERRED METHOD OF NOTICE</b>		
<b>Source</b>	<b>How Commenters Heard about the Draft Plan/EIS</b>	<b>How Commenters Would Prefer to be Notified</b>
Blog	8	10
Email - NPS	33	130
Email - Other	45	61
Facebook	57	54
Newsletter	11	41
Newspaper	6	21
Other	43	12
Other Social Media (e.g. YouTube)	3	23
Other Website	34	13
Park Website	9	47
Public Meeting	31	33
Radio	0	11
Standard Mail	6	22
Twitter	0	10

**ATTACHMENT B**

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Summary of Public Involvement for the Plan/EIS

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## **SUMMARY OF PUBLIC INVOLVEMENT FOR THE PLAN/EIS**

Public involvement is a key component of the National Environmental Policy Act of 1969, as amended (NEPA) process. Public involvement is imperative in a project such as the plan/EIS. Traditionally, the Saline Valley Warm Springs Area was used by the Timbisha Shoshone Tribe (the Tribe), and the site is identified as a special use area for the Tribe. Development of the area by visitors began in the 1940s and continued through the 1990s, though the area was not incorporated into the national park until 1994. Tribal Elders have intimate first-hand knowledge of the natural state of the Saline Valley Warm Springs Area, as it was used for healing and medicinal purposes. The visitors to the Saline Valley Warm Springs Area have a thorough understanding of the features of the site because maintenance of the Saline Valley Warm Springs Area has been mostly volunteer-based and completed by the people who visit for recreational and cultural purposes.

Through the public input process, the National Park Service was able to communicate with the public to determine the factors of the Saline Valley Warm Springs Area that are most important to continued use that would also protect the resources of the park. It should be noted that the National Park Service invited comments from all sources during the public comment period, including the general public, the cooperating agencies (the Tribe, Inyo County Board of Supervisors, and Bureau of Land Management, Ridgecrest Field Office), state and federal agencies, and non-governmental agencies. A summary of the public involvement process from scoping through the preparation of the Saline Valley Warm Springs Final Management Plan and Environmental Impact Statement (plan/EIS) is provided in this appendix.

### **PUBLIC SCOPING**

On May 29, 2012, the National Park Service released the Public Scoping Newsletter for the plan/EIS to the public for review and comment. The newsletter included a description of the purpose and need, project description and background, project objectives, and a list of issues and impact topics. A Notice of Intent to Prepare an Environmental Impact Statement was published in the Federal Register on June 5, 2012. The public scoping period was open through August 6, 2012.

The National Park Service held three public meetings from Tuesday, June 12 to Thursday, June 14, 2012 in Bishop, California; Ridgecrest, California; and Victorville, California. Each scoping meeting began at 5:00 PM with an open house format. NPS staff was on hand to visit with meeting attendees and to answer questions. A total of 46 individuals attended the public scoping meetings in California. The public were able to submit their comments on the project by submitting a written comment at one of the meetings, by electronically submitting comments through the NPS Planning, Environment and Public Comment (PEPC) website, and by mailing or emailing comments to the park.

### **NATURE OF COMMENTS RECEIVED**

Over 540 pieces of correspondence were received during the public scoping period, resulting in 1,714 substantive comments. The substantive comments are in excess of the pieces of correspondence because some correspondence contained multiple comments. The PEPC website listed six topic questions to prompt responses from the public. The public comments received were in response to those questions, as well as from observations on other issues pertaining to the management at the Saline Valley Warm Springs Area. The topics that received the majority of the comments were in response to the questions presented and include expressions of opinion on appropriate recreation activities, feral burro population, management of the Chicken Strip airstrip, and management of camping at the springs.

Commenters strongly expressed the desire for most activities at the Saline Valley Warm Springs Area to continue, including soaking in the tubs, clothing optional recreation, camping, and use of the Chicken

Strip airstrip. Commenters advocated for continuation of the volunteer-based, self-maintained maintenance and recreation because they feel that this has been working since development of the first soaking tubs. Those that commented on clothing optional recreation support the opportunity, even if they did not practice it. Most who commented on camping at the Saline Valley Warm Springs Area were in favor of continued dispersed camping but did not want to see expansion into wilderness areas. Many commenters wrote in support of retaining the Chicken Strip airstrip as one of the few remaining backcountry airstrips.

## **PUBLIC ALTERNATIVES DEVELOPMENT**

Following the analysis of the public scoping comments, the NPS planning team and cooperating agencies worked together to create four action alternatives that were designed to address the issues identified during the public scoping process. The National Park Service considered options for all the elements of the alternatives to ensure that a full range of alternatives was available for analysis. Ultimately, the National Park Service developed four action alternatives—the minimum action alternative, the community engagement alternative, the recreation management alternative, and the restoration alternative; a no-action alternative was also included.

On January 23, 2014, the National Park Service released the Alternatives Development Newsletter containing descriptive narratives of the five alternatives, as well as a table that compared the elements of the alternatives. The public was originally given a 60-day period to submit comments on the preliminary alternatives through March 28, 2014, but the National Park Service issued a 30-day extension and accepted comments through April 27, 2014.

During the comment period, three public meetings were held at different locations to discuss the preliminary alternatives. The meetings were held on Tuesday, February 4 through Thursday, February 6, 2018 in Death Valley, California; Lone Pine, California; and Ridgecrest, California with a total of 78 attendees. The meetings were open house format, and each began at 4:00 PM. NPS staff were on hand to discuss participants' issues and concerns. The public were encouraged to submit comments using the same manner as described above.

## **NATURE OF COMMENTS RECEIVED**

During the public review period, 774 pieces of correspondence were received, resulting in 1,704 substantive comments. The comments were again supportive of continuation of the current activities at the Saline Valley Warm Springs Area, including use of the Chicken Strip airstrip and the soaking tubs, clothing optional recreation, and continued volunteer-based management and maintenance of the site. The correspondences provided input on many elements of the alternatives. The following were common thoughts on the elements presented in the preliminary alternatives:

- Dishwashing stations should not be removed.
- Dispersed camping with vehicle parking at the campsite should continue.
- The NPS automobile repair facility should remain.
- The NPS camp host positions should be rotating positions.
- Existing art should be allowed to remain, and new art should be allowed.
- Commenters sought more information on ethnographic and historic cultural landscapes.
- Permits and fees are not warranted.
- The palm trees should not be removed.



## PREPARATION OF THE DRAFT PLAN/EIS

The National Park Service carefully considered all comments when editing the preliminary alternatives and creating a preferred alternative. Due to similarities, the community engagement alternative and the recreation management alternative were combined to create one alternative, a refined community engagement alternative. The preferred alternative is very similar to the community engagement alternative but management of the Chicken Strip airstrip, the area proposed for fencing, and the use of food storage boxes differs slightly from the community engagement alternative.

In completing the alternatives used to analyze impacts in the draft plan/EIS, the National Park Service responded to public comments by making several changes to the action alternatives that retained the developed features at the Saline Valley Warm Springs Area. Based on public comments received during alternatives development, the following changes were incorporated into the preferred alternative for the draft plan/EIS:

- Dishwashing stations would remain with an added filtration system to catch food debris.
- The NPS camp host position would have a one-year term. The host could be reinstated beyond one year but would have to reapply for the position.
- The vault toilet at the camp host area would not be relocated. Additional vault toilets could be installed at Lower Spring or Palm Spring, if necessary.
- Native tree species that would provide shade for visitors would be planted. These trees would be mature by the time the existing palm trees die naturally.

Some elements of the alternatives were not changed in response to public comment due to the need of the National Park Service to comply with federal and state regulations. For example, the National Park Service must comply with federal and state regulations for human health and safety concerning the recreational use of water and wastewater. The automobile repair facility, the unfenced settling pond, and other resources present potential sources of risk to human health. Therefore, the automobile repair facility would be removed, the settling pond would be fenced, and fencing would be installed to protect resources from feral burros.

On May 4, 2018, a Notice of Availability for the draft plan/EIS was published in the Federal Register, beginning the comment period that would extend through July 2, 2018, resulting in a 60-day comment period, 15 days longer than the required 45-day comment period for EISs. The National Park Service received several requests for the comment period to be extended. However, because of the issuance of Secretarial Order 3355: *Streamlining National Environmental Policy Act Reviews and Implementation of Executive Order 13807*, “Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure Projects,” which requires all in-progress EISs be completed by April 27, 2019, the National Park Service chose not to extend the comment period.

The National Park Service held three open houses between Sunday, May 27 and Wednesday, May 30, 2018 in the following locations: the Saline Valley Warm Springs Area; Ridgecrest, California; and Bishop, California. Additionally, the National Park Service conducted an online webinar on May 31, 2018. The meetings and webinar were announced through a press release, Facebook post, email, and on the PEPC website on May 4, 2018, providing advance notice of these meetings and webinar. There were 140 attendees at the open house meetings and 34 people that attended the webinar.

The public was encouraged to submit their comments on the draft plan/EIS as stated for public scoping. The National Park Service received 382 pieces of correspondence, which resulted in 789 substantive

comments. Topics that rose to importance for many commenters included the management of the palm trees and lawn, the burro exclusion fencing, the permit and fee system, the removal of the NPS automobile repair facility, the cooperative agreement with the Tribe, art and other aspects of cultural resources, and the camping restrictions.

## PREPARATION OF THE FINAL PLAN/EIS

The National Park Service is required to respond to the substantive comments on the draft plan/EIS captured in concern statements. The National Park Service carefully considered the overarching public comments when determining where to make changes to the plan/EIS. Some points were clarified in the final plan/EIS to ensure that the public fully understands the elements (e.g., camping zones, management of the palm trees). However, other elements of the preferred alternative were changed solely based on the public comments. Instead of issuing overnight camping permits, the National Park Service would conduct visitor use surveys to gather information on visitor use trends and impacts. (It should be noted that as a developed backcountry campground, the Saline Valley Warm Springs Area is subject to management changes, such as implementation of overnight camping permits and fees, that would affect all developed backcountry campgrounds in the park.) The public commented with the need to retain the lawn at Lower Spring as a gathering place. Due to this and the inclusion of the lawn as a contributing element of the Saline Valley Warm Springs Historic Site, the National Park Service would retain the lawn, but it must be maintained in its current footprint. The public was concerned about the impacts from large scale fencing, as described in the draft plan/EIS. Due to this and the agreement with Peaceful Valley Donkey Rescue (in a process separate from this plan/EIS) to round up and remove 2,500 feral burros from Death Valley National Park, the National Park Service would only install fencing around the source springs to protect the water quality, as described for alternative 2. Commenters disagreed with the removal of all non-historic art and the prohibition of new art in non-wilderness, saying that some of the art is historic despite being less than 50 years old, and that creating art is part of the cultural the Saline Valley Warm Springs Area experience. Therefore, the National Park Service would allow all art (as of January 31, 2019) to remain in non-wilderness areas and new art in non-wilderness areas would be allowed, as long as natural and cultural resources are not manipulated, the art is not a permanent fixture, and the art is removed from the site when the visitor creating the art leaves.

As with the preparation of the draft plan/EIS, the National Park Service cannot make some changes requested by the commenters because of the need to comply with state and federal regulations. The National Park Service would close the automobile repair facility when the current NPS camp host leaves or in 3 years, whichever comes first. Young palm trees would be removed and replaced by native species to provide shade when the existing mature palm trees die naturally. Camping zones would be established to prevent further damage to resources from off-road driving.

Commenters requested that the National Park Service delay finalizing the plan/EIS until after the cooperative agreement with the Tribe was completed and requested to be involved in the development of the cooperative agreement. The National Park Service is authorized to enter into a cooperative agreement with the Tribe by the Timbisha Shoshone Homeland Act of 2000 (Public Law 106-423). Development of the cooperative agreement would not be a public process and would not be subject to public comment, but the agreement would be a public document once complete. The National Park Service has engaged in government-to-government consultation regarding a cooperative agreement with the Tribe. This process is ongoing and is not expected to be completed before a record of decision is signed for this plan/EIS.

One change to the preferred alternative would be made based on suggestions by the Lahontan Regional Water Quality Control Board. The National Park Service would install some type of subterranean system (e.g., leach field, septic system) for treating wastewater from the dishwashing stations. Additionally, the National Park Service has proposed a special regulation to allow the use of the Chicken Strip airstrip to

continue to be used. The proposed rule would authorize an exemption to 36 CFR 2.17(a)(1), which prohibits operation or use of an aircraft on lands or waters within national parks other than at locations designated pursuant to a special regulation. The modification would authorize the use of the Chicken Strip airstrip.

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**ATTACHMENT C**

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Agency and Organization Correspondence



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## AMARGOSA CONSERVANCY

July 2, 2018

Superintendent Mike Reynolds  
Death Valley National Park  
PO Box 579  
Death Valley, CA 92328

Via Electronic Transmission, Planning, Environmental and Public Planning Comment page

RE: Saline Warm Springs Environmental Impact Statement

Dear Superintendent Reynolds:

The Amargosa Conservancy, based in Shoshone, CA, is a small place-based conservation organization representing a few hundred members. Standing up for the wilds, waters and communities of the Amargosa Basin and Eastern Mojave is our mission. We understand that water is a precious thing in the desert and do what we can to be careful stewards of the approximately 1 million acres of the Amargosa River drainage basin and adjacent areas in CA and NV.

We thank you for the opportunity to participate in this process, as responsible management in one area of the desert encourages responsible management throughout the desert. The Organic Act of 1916 established the Park Service as an organization whose “purpose is to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.” We understand it is a delicate balance in a delicate landscape to provide access and preserve the resource so that future generations have the same access that we are privileged enough to have. We hope our comments can be of use in meeting all objectives responsibly.

The call for comments asked for input in three areas: natural and cultural resources management, administrative operations, and managing visitor use. We will address each area.

### Natural and Cultural Resource Management

There has to be a baseline to help inform management and consistent monitoring to know if there is an alteration in state. We recommend regular water quality sampling of the springs, especially looking for bacteria that could be harmful to visitors and/or wildlife. There should also be a monitoring procedure to determine if changes in human visitation are affecting the wildlife. Wildlife cameras could accomplish this objective if placed discreetly and in places that would not violate visitor privacy at the springs. We would also like to see biological and hydrological studies conducted to set a baseline of the resources that the hot spring area contains, and then a monitoring plan after the initial surveys have been completed.

We request that when altered conditions are found the park pursue restoration efforts. We would like to see restoration practices that are scientifically supported and informed by Traditional Ecological Knowledge from indigenous stewards of the land. Consultation with the Timbisha-Shoshone Tribe should be an integral part of any and all actions in Saline Valley. We cannot speak for the Tribe but encourage an agreement that facilitates tribal access to both the upper and lower springs for traditional uses. We understand that this might come in conflict with other users and suggest that compromise is sought, but recognize that tribal access may necessarily be exclusive access at certain times. It is important that the restoration of the natural and cultural (including living cultures with deep ancestral roots) be interpreted via signs and brochures to help all users understand actions informed by both the best science and

traditional values.

Invasive species should be a consideration and data point in all surveys. As far as the non-native vegetation, we again encourage multi-party meetings to determine actions that will benefit the land and the land users. However, we believe it is important, no matter what is decided for current areas, that areas that don't have exotic species remain pristine. The vegetation surveys will provide this information, and monitoring and maintenance can ensure it remains this way.

Burros in Death Valley National Park are an invasive species that require special attention. We commend the recent efforts of the Natural Resource staff in finding partners and management strategies to address this threat to other resources, especially fragile water resources and the isolated riparian oases they support. We heartily support the park's efforts to keep the burro population managed holistically throughout the park and not by fencing particular areas. Fencing areas to exclude burros is treating a symptom and not a cause. The Saline Valley and its resources are too broad an area to effectively micro-manage with fencing (and the constant maintenance that entails). Please keep up the work to keep this species out of the park and away from delicate resources.

The Saline Valley Warm Springs have a strong and unique modern cultural history. Visitors to the area experience a sub-culture that is unique to water holes of the western US deserts. People travel from all over the world to experience this bizarre and special little set of springs in a remote desert valley. This is a true expression of American culture, history, and values, and these cultural traditions and settings deserve acknowledgement and protection in their own right. While we understand that pristine areas ought to stay pristine, there is a well-developed footprint to the Saline Valley modern cultural area. Any management plan for the area should be considerate of the culture and historical uses of the springs - both modern and ancient. We request that the current footprint be honored and not whitewashed from the record. That the palm trees and "lawns" be allowed to stay. These areas are impacted, but also loved for what they have become. We fully support "freezing" the footprint and making sure it does not expand. We do not want to see these springs lose functionality - ecologically or traditionally, both ancient and modern.

#### Managing Visitor Use

As cities expand and people seek the quiet and peace of the desert, visitation to harsh, empty, beautiful areas increases. Park visitation sets a new record every year. Saline Valley visitation is no exception, except that there aren't survey data sets that reflect this. There need to be some basic systems in place to track visitor use - how many people actually visit the area? How many stay for a night? How many stay for longer? How much longer?

Disposing of waste in the desert is a difficult thing and we support efforts to manage food, trash, and human waste to avoid detrimental effects on wildlife. While wag bags are not usually thought of for front-country areas, they could be a very effective strategy in Saline Valley. We also recommend designated camping areas and fire pits, well-marked roads, and available maps for those who choose to explore Saline Valley. All of this would need to be accompanied by interpretive materials outlining the unique susceptibility of the desert to damage and the importance of Leave No Trace principles.

#### Administrative Operations

We acknowledge that no action takes place in a vacuum and all of the work to protect the natural and cultural resources and keep recreational uses sustainable has a cost to it. There would need to be resource staff to complete surveys and monitoring, interpretive staff to create materials and signage, and law enforcement staff (especially at first) to help explain and enforce changes. One strategy to help cover costs would be a self-serve pay station. Another might be Saline Valley specific merchandise at the gift shops.

Death Valley National Park also has a history of welcoming effective volunteer stewardship groups and working with the community in Saline Valley, these relationships and consultation with the Timbisha-Shoshone Tribe may provide the on-the-ground support needed to implement the actions necessary to keep Saline Valley “unimpaired for the use of future generations.”

Thank you again for providing the opportunity to include our voice in the future of such a valuable desert area. We appreciate the continued public outreach and ability to comment on the EIS. Please let us know if there is anything else we can provide to help achieve the objectives above.

Respectfully,

Tanya Henderson  
Executive Director  
Amargosa Conservancy

CC:  
Mike Reynolds  
Abigail Wines  
Michelle Hamilton (Saline Preservation Association)  
Chris Clarke & David Lamfrom (National Parks Conservation Association)

## CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

State of California - Natural Resources Agency  
DEPARTMENT OF FISH AND WILDLIFE  
Inland Deserts Region  
787 N. Main Street., Suite 220  
Bishop, CA 93514  
[www.wildlife.ca.gov](http://www.wildlife.ca.gov)

June 26, 2018

Mike Reynolds, Superintendent  
Death Valley National Park  
Attn: Saline Valley Management Plan Comments  
PO Box 579  
Death Valley, CA 92328

Subject: Draft Saline Valley Warm Springs Management Plan/ Environmental Impact Statement

Dear Mr. Reynolds:

The California Department of Fish and Wildlife (CDFW) appreciates the opportunity to comment on the Saline Valley Warm Springs Draft Management Plan and Environmental Impact Statement (Plan/EIS) prepared by Death Valley National Park (DVNP). The Plan/EIS assesses strategies for managing uses of the Saline Valley Warm Springs area by evaluating five potential alternatives ranging from no action, to restoration of the site to natural conditions with minimal recreational use.

CDFW owns the 520-acre Saline Valley Ecological Reserve located approximately seven miles southwest of the Plan/EIS area, and entirely within the boundaries of Death Valley National Park. This Ecological Reserve includes much of the seasonally dry salt lake, salt marsh, a spring, and upland habitats. The property is managed to provide optimal benefits for fish, wildlife, plants, and for the use and enjoyment of the public. Due to the adjacency of the Ecological Reserve to the National Park, and proximity to the Warm Springs project area, we share a number of management considerations that are discussed in the Plan/EIS and encourage continued coordination going forward.

CDFW appreciates the attention given to the need for control of nonnative vegetation and wildlife species. Of particular concern to CDFW are the impacts of feral burros, particularly within sensitive riparian and wetland habitats in Saline Valley and adjacent canyons, including habitat for the Inyo Mountains slender salamander. CDFW supports efforts by DVNP to achieve the stated “no burro or wild horse” goal. Until that goal is met, CDFW would like to encourage DVNP to repair the burro enclosure fence surrounding the spring and marsh located on federal lands which at the present time is in very poor repair and not serving its intended function. CDFW may be able to assist such work by providing staff time or materials towards the project.

The aggressive invasive woody plant species Tamarisk (*Tamarix ramosissima*) has been the focus of many years of cooperative management efforts with CDFW, Bureau of Land Management, National Parks Lake Meade Exotic Plant Management Team, and DVNP. Tamarisk provides lower wildlife habitat value and can displace native vegetation through a number of mechanisms including increased fire danger and increased soil salinity. Tamarisk infestations are particularly damaging to wetlands such as those present on the Ecological Reserve due to the plant's ability to quickly outcompete native vegetation, high

water consumption, and establish deep roots altering groundwater levels. CDFW would like to encourage continued management efforts to eradicate this species at known locations and surveys to detect new populations.

As public visitation to Death Valley National Park continues to increase, the impacts of recreational users have become more pronounced as well. Specifically, an increase in user created fire rings, off road vehicle travel, and trash have been noted at the Ecological Reserve. In 2013 a wildfire started when a vehicle overheated after becoming disabled, ultimately burning 11 acres on both DVNP and CDFW lands including much of the sensitive salt marsh area. CDFW encourages DVNP to increase efforts to provide visitor education designed to minimize these types of user impacts.

Thank you for the opportunity to provide comments on the draft Plan/EIS. Please contact Alisa Ellsworth, Acting Environmental Program Manager with questions regarding this letter at (760) 872-1173 or [Alisa.Ellsworth@wildlife.ca.gov](mailto:Alisa.Ellsworth@wildlife.ca.gov).

Sincerely,  
Alisa Ellsworth  
Environmental Program Manager (Acting)  
Inland Deserts Region

ec: CHRON



## CALIFORNIA FOUR WHEEL DRIVE ASSOCIATION

July 1, 2018

Mr. Mike Reynolds  
Superintendent, Death Valley National Park Service (NPS)  
P.O. Box 579  
Death Valley, CA 92328

Dear Superintendent Reynolds:

These comments are submitted on behalf of the California 4 Wheel Drive Association (Cal4Wheel) and its membership. Cal4Wheel represents clubs and individuals within the state of California that are part of the community of four-wheel drive enthusiasts. These comments are directed to the Saline Valley Warm Springs Draft Management Plan and EIS. This document shall not supplant the rights of other Cal4Wheel agents and organizational or individual members from submitting their own comments and the agency should consider and appropriately respond to all comments received to this Draft Management Plan and EIS.

While the main focus of Cal4Wheel is to protect, promote, and provide for motorized recreation opportunities on public and private lands, many of our members participate in multiple forms of recreation; including but not limited to hunting, fishing, camping, hiking, horseback riding, bicycle riding, and gem and mineral collection.

We recognize the positive health and social benefits that can be achieved through outdoor activities. We also recognize that motorized recreation provides the small business owners in the local communities a significant financial stimulus. And, our members are directly affected by management decisions concerning public land use.

Our members subscribe to the concepts of: 1) public access to public lands for their children and grandchildren; 2) condition and safety of the environment; and 3) sharing our natural heritage. The general public desires access to public lands now and for future generations. Limiting access today deprives our children the opportunity to view the many natural wonders of public lands. The general public is deeply concerned about the condition of the environment and personal safety. They desire wildlife available for viewing and scenic vistas to enjoy. They also want to feel safe while enjoying these natural wonders. Lastly, the public desires to share the natural heritage with friends and family today as well as in the future. How can our children learn and appreciate our natural heritage when native species are allowed to deteriorate and historic routes are routinely blocked or eradicated from existence?

Cal4Wheel supports the concept of managed recreation and believes it is prudent and appropriate management to identify areas where off-highway vehicle use is appropriate. Such use must be consistent with the public lands management plans, the Plan Standards, and all other requirements found in the Plans, as well as state and federal regulations. Recreation, especially recreation off of paved or gravel roads, is the leading growth in visitors to public lands. Improvements in the planning processes help minimize conflicts and potential resource damage while providing for recreation access to public lands.

Pursuant to the National Environmental Protection Act at 42 United States Code section 4371 et. seq. ("NEPA") and its implementing regulations, including 40 Code of Federal Regulations section 1501.7 and 1508.25, this letter is submitted for consideration to determine the range of actions, alternatives, and impacts that require in-depth analysis in the Environmental Impact Statement ("EIS"). The comments are extensive, but the complexity and importance of the Saline Valley Warm Springs Draft Management Plan

and EIS compel a thorough review of the potential environmental consequences associated with implementation of the project as proposed.

As you know, the Management Plan/EIS for the Saline Valley Warm Springs Draft Management Plan and EIS must comply with the provisions of the NEPA and its implementing regulations. Those regulations expressly provide that the Scoping must evaluate direct, indirect, and cumulative impacts, as well as alternatives to the proposed project that “...would avoid or minimize adverse impacts or enhance the quality of the human environment.” 40 C.F.R. Â§1502.1, 1508.25 (b)(2) and (c).

Cal4Wheel believes the proposed Plan should be in compliance with National Environmental Policy Act (NEPA).

The Management Plan/EIS has Alternatives in regard to the proposed NPS management of Saline Valley. Alternative 5 is considered by NPS to be the “preferred alternative”. The NPS stated in their Information Meeting that Alternative 5 was an option and that other Alternatives may be considered. Cal4Wheel believes, many of the proposed issues in Alternative 5 would have an adverse impact to the unique recreational, social, ethnic-historic and cultural experience of Saline Valley. Cal4Wheel seeks to preserve the unusual degree of magic, freedom and ownership people feel when visiting Saline Valley.

#### Listing for Historic Preservation

The Historical Section of the Draft Management Plan/EIS notes that: “As of September 2017, consultation with the State Historic Preservation Officer (SHPO), tribes, and the public are ongoing; however, the park is treating the Saline Valley Warm Springs Site as eligible for listing in the NRHP, as previously stated. The historic DOE also recommended that a Cultural Landscape Inventory and possibly a Cultural Landscape Report be prepared for the Saline Valley Warm Springs Historic Site (New South 2015),” (page 62).

Cal4Wheel strongly encourages the NPS to wait until a Cultural Landscape Inventory and Report are prepared, and determination is made about formal status under NRHP, before finalizing the Draft Management Plan/EIS. Many of the components of Alternative 5 specify plans to remove those very features that are core to the cultural experience of what exists today, and upon which such a determination rests.

#### Feral Burros and Proposed Fencing

Cal4Wheel shares the concerns stated in the Draft Management Plan/EIS about the feral burros. However, we believe that this problem can be successfully done WITHOUT the need for an expensive fence around the entire area. Cal4Wheel supports artistic fencing around the source pools and settling pond, Alternative 2. Rather than removing the Burro Spring and killing the native mesquite trees, Cal4Wheel would install a heavy screen over the Burro Spring trough, leaving the siphon hose in to water the mesquite. This would effectively keep most water sources away from the burros. Cal4Wheel does not want to put fencing around the tubs themselves as proposed in Alternative 3 as that would take away from the “Saline Experience”.

Additionally, Cal4Wheel feels that fencing the entire area as proposed in Alternative 5, would harm native non-burro wildlife. The fence would also be subject to possible vandalism, not to mention flash flooding, which would leave dangerous fence debris in the environment. This could create a long term hazard if NPS lacked funding to adequately remove and/or maintain the fence. NPS stated during informational meetings, the difficulty of acquiring maintenance funding. The addition of the fences as proposed in Alternative 5 will become a maintenance resource drain.

To keep people from feeding the burros, Cal4Wheel recommends an aggressive educational campaign, similar to other educational campaigns concerning feeding the bears in other NPS managed areas.

Cal4Wheel urges the NPS to give a priority to relocating/removing the habituated burros at the Warm Springs. Feral burros elsewhere in Saline Valley are not habituated and avoid humans.

### Non Native Vegetation

Cal4Wheel opposes the removal of the lawn and palm trees. Cal4Wheel agrees the palm trees and lawn are nonnative, but they are NOT invasive as they are confined to the “cared for” location. While the palms may not be native to this area, they are naturalized and are present in desert regions across California, (and in fact are an integral visual aspect of the NPS Furnace Creek Visitor's Center. The Draft Management Plan / IES (page 81) attempts to compare containing the spread of palm trees to containing the spread of salt cedar (tamarisk). Tamarisks are invasive, and should be removed. Palm trees are containable.

The lawn is a central gathering place for the users of the Warm Springs. It is the heart for socializing, potlucks, sharing road and other safety information, educating new visitors about the warm springs, and other important connections. The lawn provides major benefits and will not spread, because there is no water elsewhere. The lawn and palm trees are clearly part of the ethnic-historic experience of Saline Valley.

Cal4Wheel would propose a program monitoring palm tree development in Saline Valley and would eradicate those trees if they were to be discovered in other parts of Saline Valley. Cal4Wheel would also apply the same attention to the lawn. Cal4Wheel is not opposed to the removal of the palm trees at what NPS refers to as the upper fenced springs and strongly supports the removal of tamarisk.

### Camping Permits

Cal4Wheel is strongly opposed to the proposed requirement of a permit prior to arriving at the Saline Valley. During the NPS Informational meetings it was said there was not a specific permitting plan. There are too many unanswered questions, including: who will enforce this permitting system, who will administer the permits, how to obtain them and do they meet basic cost-benefit analysis.

If a permit system is implemented, Cal4Wheel requests permits be free, easily accessible online, and onsite for the visitors of the Saline Valley that come out and decide to stay or those that plan their vacation around visiting Saline Valley.

### Camping Areas

Cal4Wheel strongly supports Camping Areas in Alternative 2, unrestricted dispersed camping areas and strongly opposes designated camping. Currently campers chose sites when they arrive based on site-specific needs, the weather and wind conditions, their particular vehicle type, and accessibility to various amenities such as pools or lawn. Cal4Wheel supports defining camping boundaries, but assigning campsites is not workable.

Cal4Wheel is opposed to the increasing the distance from camping 100 feet to 200 feet from the source springs. Current NPS rule of, “no camping within 100 feet of a source springs” should remain the adopted policy.

## Campfires

Cal4Wheel supports the NPS Campfires section, as proposed in Alternative 3 NPS-provided fire enclosures, grates, grills or fire pans. Given a choice of the aforementioned, Cal4Wheel supports non-anchored, heavy NPS fire pits. Additionally, the presence or absence of a provided fire-pit should not be equated to de-facto “designated” camping spots.

## Toilet Management

Cal4Wheel supports the Toilet Management section as proposed in Alternative 3 requiring the pumping of vault toilets on an “as needed” basis. Cal4Wheel also highly recommends the addition of another vault toilet at the Palm Springs.

## Vehicle Assistance

Cal4Wheel would propose this alternative be changed to Emergency Vehicle Assistance and remain during the tenure of the current camp host. Cal4Wheel would encourage the NPS to clearly post signage at the end of pavement that there is no emergency vehicle assistance beyond this point and high-clearance/four wheel drive recommended beyond this point

## Dishwashing Stations

Cal4Wheel supports dishwashing stations. However, we feel the need for filters to be unnecessary as filters do not address any issues brought up in the management plan. Cal4Wheel supports signage warning visitors the dishwashing water is non-potable. Cal4Wheel will encourage the use of biodegradable dishwashing liquids. Additionally, the presence or absence of a provided dishwashing station should not be equated to de-facto “designated” camping spots.

## Co-Management with Timbisha Shoshone

Cal4Wheel understands the NPS and Timbisha Shoshone are working on a co-management plan. NPS stated at four Informational Meetings held over the last week of May that the co-management plan would not supersede the Draft Management Plan/EIS. Neither Cal4Wheel nor any Cal4Wheel member has been included in the co-management plan and its content, scope, and/or interaction within the Draft Management Plan/EIS. Therefore, it's difficult to comment on this issue. The Draft Management Plan/EIS states,

“The waters of the warm springs in Saline Valley are a source of *puha* for the Tribe, a life force energy.”

Within this context, Cal4Wheel supports Nonnative vegetation section of Alternative 3, only as it pertains to the upper springs. This would return the Upper Springs to its natural state. This might allow traditional use of the Upper Springs by the Tribe.

## In Summary

In closing, the proposed scoping must evaluate the initial intent based on current factors and not rest on the assumption that past factors and their impacts are current today. Careful consideration must be given to the cumulative impacts on public access and recreation opportunity in the region in addition to the cumulative impacts of the continued loss of recreation opportunity in the region.

Cal4Wheel encourages the NPS to embrace the public policy underlying NEPA which favors protecting

the balance between humans and the environment by establishing a national policy which will encourage productive and enjoyable harmony between man and his environment.

The agency has a responsibility to consider reasonable alternatives that would not only protect the species and their environment, but would also minimize the adverse impact on humans and the human environment.

The Management Plan/EIS has four Alternatives in regard to the proposed NPS management of Saline Valley. Alternative 5 is considered by NPS to be the “preferred alternative”. The NPS stated in their Information Meeting that Alternative 5 was an option and that other Alternatives may be considered. Cal4Wheel believes, many of the proposed issues in Alternative 5 would have an adverse impact to the unique recreational, social, ethnic-historic and cultural experience of Saline Valley. Cal4Wheel seeks to preserve the unusual degree of magic, freedom and ownership people feel when visiting Saline Valley.

Alternative 5, as modified by comments within this letter, provides for continued access in a manner that balances the needs of all desert users, local communities, and other public agencies, by focusing on implementation strategies that promote and support active partnerships. The alternative responds to concerns and provides guidance to minimize damage to resources, minimize harassment of wildlife, and minimize conflicts consistent with increased emphasis on current and historic use patterns, destinations, issues, and plans, where appropriate.

Cal4Wheel believes that cumulative effects of other planning efforts within and adjacent to the proposed planning area be determined and analyzed as part of the cumulative effects impacting the planning area.

The agency has a responsibility to disclose and analyze reasonable alternatives that would identify the impact of human actions on the environment. As part of that analysis, current literature review is an important tool. The study, Quiet, Nonconsumptive Recreation Reduces Protected Area Effectiveness, Sarah E. Reed<sup>1</sup> & Adina M. Merenlender from Department of Environmental Science, Policy & Management, University of California, Berkeley, CA, USA provides a review of protected areas around the world that were created with the goals of preserving biodiversity and providing nature-based recreation opportunities for millions of people. This dual mandate has guided the management of the majority of the world's protected areas, but there is growing evidence that quiet, non-consumptive recreation may not be compatible with biodiversity protection.

Cal4Wheel appreciates the opportunity to comment on this important plan. We are eager to assist land managers to formulate balanced and enforceable land use plans and we hope these comments have been helpful in beginning your journey. We understand comments such as these are not as clear or concise as they could be. Please do not hesitate to contact John Stewart, (619) 508-8840 if you have any questions or require clarification.

Respectfully Submitted,  
John Stewart  
Natural Resources Consultant  
California 4 Wheel Drive Association

## FRIENDS OF THE INYO

July 2, 2018

Mr. Mike Reynolds  
Superintendent, Death Valley National Park Service  
P.O. Box 579  
Death Valley, CA 92328

Re: Saline Warm Springs Environmental Impact Statement

Dear Superintendent Reynolds:

Friends of the Inyo is a Bishop, CA based grassroots conservation organization with over three decades of experience with public lands and wildlife in the Eastern Sierra and west Mojave within Inyo and Mono Counties. We represent over 800 members, many of who reside in the Eastern Sierra and recreate regularly in Saline Valley. An active stewardship partner with the Park, we recruit volunteers and carry out work such as the effacement of vehicle trespass at the Racetrack. We have a shared mission with the Park Service to advocate for natural resources management and sustainable recreation in remote areas of the park such as Saline Valley.

### Timbisha-Shoshone

The Saline Valley Warm Springs have become an important place for many different people. Friends of the Inyo recommends that any management plan include reasonable access to the springs for the native population of the region. This community's cultural, spiritual, and practical connections to this area span millennia rather than decades. Friends of the Inyo has a long-standing relationship with the Timbisha-Shoshone tribe. While we of course cannot speak for the tribe, we know from discussions with tribal staff and members that the springs are culturally important to the tribe. We also understand that it is a priority of the Park to address traditional usage at the springs. Unfortunately the current user group culture is sometimes at odds with traditional Timbisha Shoshone uses of the springs. To address this unfair situation, we recommend managers consult with the Timbisha-Shoshone Tribe when making decisions regarding restoration of the upper springs. We encourage an agreement that facilitates tribal access to both the upper and lower springs and advise that to achieve this it may be necessary to close the springs to general public use at certain times of the year. We request the tribe be an integral part of the planning process and their use and connection to this important site be recognized and incorporated. Education and outreach to the general public of this issue and the history of springs should also be incorporated in the management plan.

### Non-native Species Management

We understand the issue of non-native species such as planted grass and palm trees is a divisive one among the public and subject to interpretation of historical significance. The park must manage invasive species to be consistent with natural resource management prescriptions and objectives, however care should be taken to incorporate recreation and visitor experience. Particularly with respect to the existing palm trees, we do not recommend replacing them with cottonwood trees. Cottonwoods require ongoing and regular maintenance and are short-lived species, both of which will place financial burden on an already lean Park budget. There is also a liability issue with cottonwoods as they shed branches and limbs over time. A complete inventory of other invasive species in the area and an assessment of whether or not palms are negatively impacting the springs should be conducted. If consistent with tribal wishes, the palms at the upper springs should be removed to help restore those springs to their natural condition. Regardless of the park's course of action on non-native species, the EIS must clearly explain what actions will take place, with what methods, along with a timeline and follow up monitoring.



#### Burro Management

We commend the Park for their efforts on Burro management and the Park's acknowledgment that the population at the springs needs to be addressed. We support the timely implementation of gatherings and follow up monitoring. It does not seem financially feasible to fence the entire recreational area of the springs and park resources are likely better spent in other areas of management of the springs. The situation with the current host feeding burros must be remedied immediately to facilitate effective burro management.

#### Recreation Management

Due to the extreme popularity and increasing use of the springs, a visitor use study is needed to document how many people actually visit and camp, and how long they stay. We support efforts to manage human waste, food, and trash storage to avoid wildlife interactions. At Chicken Strip we suggest visitors pack out human waste or use wag bags. We remain concerned that visitor use is at a critical level now with many visitors staying past required time limits, creating overcrowding of campsites and overuse of associated facilities. A mandatory permit system would be ill advised given the site's remoteness, however a sign-in log should be maintained and hosts should check for a Park pass. It may be possible to implement a self-serve pay station in the future to help cover management costs. We recommend designated camping areas delineated by roads and signposts with maps and other user education targeted at regulatory, health & safety, compliance and Leave No Trace practices. These would include NPS sanctioned fire pits with host enforcement of no new individual fire rings or campsites.

Volunteer stewardship groups do an excellent job of caring for the springs and surrounding area but park managers must oversee, enforce and partner to limit growth, impact, and harm to wildlife, vegetation and other natural resources. Law enforcement presence may be necessary on busy holidays and weekends. We also recommend that no commercial activities take place within the valley.

We thank you for providing the opportunity to comment on the EIS and for your continued public outreach on this important management plan. Please reach out to us if we can be of any assistance in the planning process or with implementation of the plan.

Respectfully,

Jora Fogg  
Policy Director  
Friends of the Inyo

## INYO COUNTY BOARD OF SUPERVISORS

June 26, 2018

Saline Valley Management Plan  
Mike Reynolds, Superintendent Death Valley National Park  
PO Box 579  
Death Valley, CA 923282

Dear Superintendent Reynolds,

The Inyo County Board of Supervisors would like to thank you for the opportunity to comment on the Draft Saline Valley Management Plan and accompanying Draft Environmental Impact Statement. We believe that Saline Valley Warm Springs is a unique and special place with cultural importance to Inyo County. We have encouraged Death Valley National Park (DVNP) to keep it as such throughout this planning process by requesting as little change to it as possible.

We have reviewed the draft documents and respectfully submit the following comments.

¶ We are in support of the Preferred Alternative and appreciate DVNPs attention to concerns we submitted on the previous Saline Valley Management Alternatives Newsletter including:

- o Retaining the dishwashing stations, with the addition of filtration systems to capture food debris.
- o Consulting with the Office of Public Health regarding an approach to water quality monitoring.
- o Clarifying what constitutes historic/non-historic artwork and adding that artwork will be reconsidered for historic and/or culturally important designations as it hits the 50-year age requirement.
- o Allowing for the continued use and maintenance of the Chicken Strip.

¶ We encourage you to consult with the County Environmental Health Department on waste water management practices and water quality monitoring approaches.

¶ A more in depth analysis of the cultural significance of the artwork at the warm spring's site and the area surrounding it should be conducted, with regard to its importance as examples of "hippie" art, and in defining the warm springs as a special place with connections to the 'hippie' and 'beat' movements.

¶ The Preferred Alternative should be changed to include, at the least, a pared down version of the auto repair shop that can offer simple services such as tire repair and replacement and emergency fuel provision. Although we agree that people should understand the environment they are entering when they chose to go to the Saline Valley and be prepared for it, we also know that mishaps and accidents can still happen. Since the area is utterly remote, a small mishap or accident can have severe consequences, therefore, at least some services are appropriate.

## APPENDICES

Any proposed fencing should be constructed to blend into the surrounding landscape and not cause visual impacts to the visitor experience at the warm springs.

We encourage you to keep the lawn at the lower springs' area as it is unlikely it will spread into other areas due to the lack of water; or, to find a native grass species with similar traits to replace it.

As the palm trees at the lower spring die off, instead of waiting for natural revegetation, plant a native tree species to replace them for the shade that they provide in the area.

Again, we would like to extend our thanks to Death Valley National Park for providing the County the opportunity to comment on the Draft Saline Valley Management Plan and DEIS.

Sincerely,

Dan Totheroh, Chairperson,  
Inyo County Board of Supervisors

## LAHONTAN REGIONAL WATER QUALITY CONTROL BOARD

Comments on the Draft Environmental Impact Statement for the Saline Valley Warm Springs Draft Management Plan, Death Valley National Park, Inyo County

The California Regional Water Quality Control Board, Lahontan Region (Water Board) staff received a Notice for a Public Scoping Meeting for developing an Environmental Impact Statement for the Saline Valley Warm Springs Draft Management Plan (EIS) for the above-referenced plan (Plan) on May 7, 2018. The Death Valley National Park Service is lead agency under the National Environmental Protection Act (NEPA). Pursuant to the California Environmental Quality Act (CEQA) guidelines, California Code of Regulations (CCR), title 14, section 15096, responsible agencies must specify the scope and content of the environmental information germane to their statutory responsibilities. Water Board staff, acting as a responsible agency, has prepared these comments to help guide the environmental review process in an effort to protect water quality and hydrological resources, and ultimately, the beneficial uses of waters of the State. We encourage Death Valley National Park to take this opportunity to integrate elements into the Plan that: (1) support “Low Impact Development” (LID); and (2) reduce the effects of hydromodification. Our comments are outlined below.

### PURPOSE OF THE PLAN

The Saline Valley Warm Springs Draft Management Plan is an overarching policy document that will guide decisions of future growth and development, infrastructure, and conservation of natural resources in the Saline Valley at Death Valley National Park. Given the conceptual, long-term nature of the plan, the EIS provides a general overview of the potential impacts of proposed alternatives; subsequent and focused environmental review will occur as individual projects are proposed to implement elements of the Plan.

### WATER BOARD'S AUTHORITY

All groundwater and surface waters are considered waters of the State. Surface waters include streams, lakes, ponds, and wetlands, and may be ephemeral, intermittent, or perennial. All waters of the State are protected under California law. State law assigns responsibility for protection of water quality in the Lahontan Region to the Lahontan Water Board. Some waters of the State are also waters of the U.S. The Federal Clean Water Act (CWA) provides additional protection for those waters of the State that are also waters of the U.S.

The Water Quality Control Plan for the Lahontan Region (Basin Plan) contains policies that the Water Board uses with other laws and regulations to protect the quality of waters of the State within the Lahontan Region. The Basin Plan sets forth water quality standards for surface water and groundwater of the Region, which include designated beneficial uses as well as narrative and numerical objectives which must be maintained or attained to protect those uses. The Basin Plan can be accessed via the Water Board's web site at

[http://www.waterboards.ca.gov/lahontan/water\\_issues/programs/basin\\_plan/references.shtml](http://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/references.shtml).

### RECOMMENDED ELEMENTS TO INCLUDE IN THE PLAN

We recognize the effort put forth by Death Valley National Park to incorporate policies and objectives of watershed management into one comprehensive programmatic Plan for the Saline Valley Warm Springs. We encourage Death Valley National Park to take this opportunity and incorporate into the Plan elements and strategies that support LID and reduce the effects of hydromodification.

1. The foremost method of reducing impacts to watersheds from development is LID, the goals of which are maintaining a landscape functionally equivalent to predevelopment hydrologic conditions and minimal generation of non-point source pollutants. LID results in less surface runoff and potentially less impacts to receiving waters, the principles of which include:

• Maintaining natural drainage paths and landscape features to slow and filter runoff and maximize groundwater recharge;

• Reducing compacted and impervious cover created by development and the associated road network; and

• Managing runoff as close to the source as possible.

LID development practices that maintain aquatic values also reduce maintenance costs and benefit air quality, open space, and habitat. Vegetated areas for storm water management and infiltration onsite are valuable in LID. We encourage Death Valley National Park to incorporate these strategies into the Plan.

2. Hydromodification is the alteration of the natural flow of water through a landscape (i.e. lining channels, flow diversions, culvert installations, armoring, etc.). Disturbing and compacting soils, changing or removing the vegetation cover, increasing impervious surfaces, and altering drainage patterns limit the natural hydrologic cycle processes of absorption, infiltration, and evapotranspiration, and increases the volume and frequency of runoff and sediment transport. Hydromodification results in stream channel instability, degraded water quality, changes in groundwater recharge processes, and aquatic habitat impacts. Hydromodification also can result in disconnecting a stream channel from its floodplain. Floodplain areas provide natural recharge, attenuate flood flows, provide habitat, and filter pollutants from urban runoff. Floodplain areas also store and release sediment, one of the essential processes to maintain the health of the watershed. Information regarding hydromodification can be accessed online at [http://www.swrcb.ca.gov/water\\_issues/programs/stormwater/hydromodification.shtml](http://www.swrcb.ca.gov/water_issues/programs/stormwater/hydromodification.shtml).

We encourage Death Valley National Park to establish guidelines and develop mitigation measures that will help to avoid hydromodification. The guidelines should include maintaining natural drainage paths of streams and creeks and establishing buffers and setback requirements to protect channels, wetlands, and floodplain areas from encroaching development.

3. In addition to utilizing LID methods and preventing hydromodification, we encourage Death Valley National Park to separate municipal wastewater (shower, bathtub, dish washing sink, and camp host shower) from other waters and to discharge the municipal wastewater into a separate septic system.

## PERMITTING REQUIREMENTS FOR INDIVIDUAL PROJECTS

A number of activities that will be implemented by individual projects under the Plan have the potential to impact waters of the State and, therefore, may require permits issued by either the State Water Resources Control Board (State Water Board) or Lahontan Water Board. The required permits may include the following.

1. Streambed alteration and/or discharge of dredge and/or fill material to a surface water, including water diversions, may require a CWA, section 401 water quality certification for impacts to federal waters (waters of the U.S.), or dredge and fill WDRs for impacts to non-federal waters, both issued by the Lahontan Water Board.

2. Land disturbance of more than 1 acre may require a CWA, section 402(p) storm water permit, including a National Pollutant Discharge Elimination System (NPDES) General Construction Storm

Water Permit, Water Quality Order (WQO) 2009-0009-DWQ, obtained from the State Water Board, or an individual storm water permit obtained from the Lahontan Water Board.

3. Water diversion and/or dewatering activities may be subject to discharge and monitoring requirements under either NPDES General Permit, Limited Threat Discharges to Surface Waters, Board Order R6T-2014-0049, or General Waste Discharge Requirements for Discharges to Land with a Low Threat to Water Quality, WQO-2003-0003, both issued by the Lahontan Water Board.

Project proponents should consult with Water Board staff early on should implementation of individual projects result in activities that trigger these permitting actions. Information regarding these permits, including application forms, can be downloaded from our web site at <http://www.waterboards.ca.gov/lahontan/>.

Thank you for the opportunity to comment on the draft EIS. If you have any questions regarding this letter, please contact me at (760) 241-7305 [tiffany.steinert@waterboards.ca.gov](mailto:tiffany.steinert@waterboards.ca.gov) or Jan Zimmerman, Senior Engineering Geologist, at (760) 241-7376 [Jan.zimmerman@waterboards.ca.gov](mailto:Jan.zimmerman@waterboards.ca.gov). Please send all future correspondence regarding this Project to the Water Board's email address at [Lahontan@waterboards.ca.gov](mailto:Lahontan@waterboards.ca.gov) and be sure to include the Project name in the subject line.

Tiffany Steinert  
Engineering Geologist



## NATIONAL PARKS CONSERVATION ASSOCIATION

Monday, July 2, 2018

Superintendent Mike Reynolds  
Death Valley National Park  
P.O. Box 579,  
Death Valley, CA 92328

Superintendent Reynolds;

Thank you for the opportunity to submit these comments on behalf of the National Parks Conservation Association (NPCA) on the Saline Valley Warm Springs Management Plan EIS for Death Valley National Park.

NPCA is America's only private, non-profit advocacy organization solely dedicated to protecting and enhancing America's national parks. NPCA was founded in 1919 and today has over 1,000,000 members and active supporters, including more than 100,000 in California and Nevada. We have two field offices in the California desert that work to protect the natural and cultural resources of Death Valley National Park, Joshua Tree National Park, Sand to Snow and Mojave Trails national monuments, and the Mojave National Preserve.

We resubmit our original comments from August 7, 2012 for consideration, as they are still applicable to this process. Death Valley National Park is required through the Organic Act, its enabling legislation, and its management documents to preserve unimpaired this unparalleled landscape and the life and resources found here for future generations. All management decisions made in the unique and beautiful Saline Valley must be primarily viewed through the lens of how to best protect this timeless landscape into the future.

We ask that park managers consider our previous comments as NPCA's substantial contribution to this process, but we are writing this letter to highlight some key points we want to reinforce.

- We request that park managers move forward on the restoration of the upper springs, and to consult with the Timbisha-Shoshone Tribe on their participation in restoration, and potentially for limiting access to the upper spring to allow for tribal uses. If the tribe determines they want access to the lower hot springs, a conversation about how that can happen should move forward. NPCA does not speak for the tribe, nor do we here presume to represent their thoughts on this issue. However, we understand that Saline Valley, including the spring system, holds importance to the Tribe and we request that they be brought in fully to develop a plan for their use and connection to this important site. The Saline Valley Warm Springs have become an important place for various communities who have a long and meaningful connection to this place. That connection must not exclude the original inhabitants of this region, whose cultural, spiritual, and practical connections to the Warm Springs span millennia rather than decades.

- We request that park managers significantly increase their efforts to manage invasive species throughout the valley. Burros, palm trees, and other invasive plants must be effectively managed. We recognize that the palm trees are perceived to be a part of the historic landscape and, on a very practical level, are important for shade. We encourage park managers to look at practical solutions like replacing palms with cottonwood trees, or at minimum, starting a volunteer program to monitor springs in the region to ensure invasive species are not spreading from the site. Burros are becoming an increasingly serious issue across the California desert, and park managers should introduce a park-wide strategy to deal with feral burros,

including those that frequent the area of the springs. We believe palms at the upper springs should be removed to help restore those springs to their natural condition.

- The National Park Service should implement studies and analysis to understand visitation at Saline Valley overall. No one really knows how many people visit, camp, or use the various facilities at the springs. There is thus an insufficient understanding of the true impacts of status quo practices. A food and waste management plan should be implemented to avoid training coyotes and other species to depend on human food and trash. The disturbance footprint of the site will continue to grow if the true scope of visitation is not understood. We recommend that park managers develop a plan to address future site disturbance and future visitation. This has the potential to become unmanageable in the future if left unchecked. There are advantages to having a self-regulating community that effectively cares for the site. Park managers can work in partnership with this community to limit growth, impact, and harm to wildlife, and the site.

- We also recommend that no commercial activities take place within the valley.

Thank you for your consideration. We are happy to further discuss any of the issues raised in this letter or our previous letter.

Sincerely,

David Lamfrom  
California Desert and Wildlife Programs Director  
National Parks Conservation Association  
dlamfrom@npca.org

August 4, 2012

Superintendent Sarah Craighead  
Death Valley National Park  
PO Box 579  
Death Valley, CA 92328

This letter is intended to provide stakeholder input on the Death Valley National Park Saline Valley Warm Springs Management Plan EIS. National Parks Conservation Association's (NPCA) comments are public and intended to ensure that this process implements mission-driven and stakeholder-inclusive action, while carefully considering, minimizing or eliminating impacts to natural and cultural resources that may result from actions taken. Comments are being submitted to comply with the review period ending August 7, 2012.

NPCA is dedicated to the protection and enhancement of National Parks for current and future generations. NPCA currently has membership and support of over 700,000 individuals including 100,000 individuals in California. NPCA strives to uphold the protections provided to the resources and recreational opportunities within and directly affecting Death Valley National Park by law through the California Desert Protection Act of 1994, National Parks Organic Act of 1916, and the Endangered Species Act. NPCA currently manages three field offices in the Mojave Desert, including the Mojave Field Office in Barstow, CA and the Joshua Tree Field Office in Joshua Tree, CA.

Decisions made by Death Valley National Park must be consistent with its stated mission to protect resources unimpaired for future generations. Within that framework, Death Valley must provide

recreational access and promote safety, within reason and to the extent that those decisions do not impair natural and cultural resources. Saline Valley Warm Springs were added to Death Valley in the 1994 California Desert Protection Act. Due to their remote and beautiful location, these springs have gained a following of dedicated bathers and adventure travelers who negotiate difficult dirt roads to enjoy the deep quiet, brilliant night skies, and landscape-level views uniquely afforded by these manipulated warm to hot springs. The popularity of these springs is well-known, and groups have arisen to protect access to them and to connect new users to this resource.

NPCA understands and respects the value of this location to those who use it. This unique resource is also valuable to the Timbisha Shoshone tribe, who has a cultural connection to lands now protected within Death Valley National Park, and to the springs specifically. Also, these water sources could be important to local species and could harbor harmful bacteria known from other hot and warm springs in the Mojave desert. Death Valley is presented with the difficult job of balancing recreation, access, cultural use, and natural resource protection in a location that includes manipulated water sources, buildings, roads, parking, and an air strip. Within that context, NPCA recommends the following:

- Death Valley works in partnership with local groups to understand the usage of this remote resource. Questions arise such as: how many people use these springs? Are they purchasing park passes to visit? Does the park or groups on site assume any liability for visitors? Is there a carrying capacity for visitation to this site? And what uses are appropriate (i.e. RV vs. tent camping?)
- Death Valley regularly samples the springs for harmful bacteria. If a safety issue is present, it is incumbent upon the park to ensure that notification is posted.
- Death Valley strategically place wildlife cameras in areas surrounding the springs. This is not intended to violate privacy, and these could be placed away from the springs to determine if springs are being used by both people and wildlife. A survey of springs and seeps in the vicinity of this site should be part of any analysis, as the proximity of alternate water sources directly correlates with its importance to species that reside in or travel through this area.
- Death Valley provides access for Timbisha Shoshone tribal members to the springs for cultural uses-if requested by the tribe. Ideally dates could be planned in advance to provide notification to other users. Alternately, dates could be chosen in partnership with the tribe and could correspond to dates of cultural significance.
- Death Valley conducts biological and hydrological surveys in the areas to identify sensitive species, important corridors, and baseline flow data. Identification can protect these resources from unintended damage. After these surveys are completed, alternatives developed should indicate to the public how the park intends to protect resources and water flow while allowing continued access.
- Death Valley examines the current footprint of this recreational site and determines if it is being utilized in the best possible way. Should parking be restricted? Should camping take place only in designated areas? Is the air strip safe, of reasonable size, and does it impact visitor experience?

NPCA appreciates the opportunity to provide comments on this process. We encourage the park to develop and present to the public an EIS that examines existing infrastructure and its condition, an understanding of natural resources on site and adjacent, an examination of liability, an understanding of current visitation and proposed future visitation, consultation with the Timbisha Shoshone, and any safety issues that may be present. NPCA does not seek to inhibit access to this site, but we do ask Death Valley to carefully consider and present alternatives that do not expand existing infrastructure and that protect important resources consistent with the park's creation.

Feel free to reach out with any questions,

Respectfully,

David Lamfrom  
California Desert Program Manager  
National Parks Conservation Association

## **SALINE PRESERVATION ASSOCIATION**

Saline Preservation Association (SPA)  
P.O. Box 1941  
Lancaster, CA. 93539-1941  
[www.safineyreservation.org](http://www.safineyreservation.org)

June 15, 2018

Mr. Mike Reynolds  
Superintendent, Death Valley National Park Service (NPS)  
P.O. Box 579  
Death Valley, CA 92328

Dear Superintendent Reynolds:

The Saline Preservation Association (SPA) is a 503(c)(3) non-profit organization providing an informational conduit as well as advocacy between and among governing agencies and the widely diverse community who visit the Saline Valley and its Warm Springs. SPA is deeply committed to the preservation of the area as well as good relationship with concerned stakeholders. SPA has approximately 1,400 members, who visit Saline Valley from almost every state in the United States as well as international locations. Our organization is diverse with respect to race, color, religion, creed, sex, sexual orientation, national origin, ancestry age, veteran status, disability and military service.

The SPA Board (7 elected members) has read the Draft Management Plan I Environment Impact Statement (EIS), attended all NPS Informational meetings, and vetted the following comments through the SPA membership. SPA commends the NPS recognizing Saline Valley Warm Springs Site as eligible for listing in the National Register of Historic Places (NRHP), however the NPS should continue the current planning process until a Cultural Landscape Inventory and Report are prepared as recommended by the Determination of Eligibility (DOE).

The Draft Management Plan / EIS have 1 through 4 Alternatives in regard to the proposed NPS management of Saline Valley. Alternative 5 is considered by NPS to be the “preferred alternative”. The NPS stated in their Information Meeting that Alternative 5 was an option and that similar to the Draft Management Plan / EIS other Alternatives may be considered. SPA believes, many of the proposed issues in Alternative 5 would have an adverse impact to the unique recreational, social, ethno-historic and cultural experience of Saline Valley. SPA has created its own SPA Alternative (attached) that incorporates components of Alternatives 1, 2 and 3. SPA seeks to preserve the unusual degree of magic, freedom and ownership people feel when visiting Saline Valley. This directly correlates to contribution, self-sufficiency, and the desire to help out when things need to get done.

### **Listing for Historic Preservation**

The Historical Section of the Draft Management Plan / EIS notes that: “As of September 2017, consultation with the State Historic Preservation Officer (SHPO), tribes, and the public are ongoing; however, the park is treating the Saline Valley Warm Springs Site as eligible for listing in the NRHP, as previously stated. The historic DOE also recommended that a Cultural Landscape Inventory and possibly a Cultural Landscape Report be prepared for the Saline Valley Warm Springs Historic Site (New South 2015),” (page 62).

SPA strongly encourages the NPS to wait until a Cultural Landscape Inventory and Report are prepared, and determination is made about formal status under NRHP, -before finalizing the Draft Management Plan / EIS. Many of the components of Alternative 5 specify plans to remove those very features that are core to the cultural experience of what exists today, and upon which such a determination rests.

#### Feral Burros and Proposed Fencing

SPA shares the concerns stated in the Draft Management Plan / EIS about the feral burros. However, we believe that this problem can be successfully done WITHOUT the need for an expensive fence around the entire area. SPA supports artistic fencing around the source pools and settling pond, Alternative 2. Rather than removing the Burro Spring and killing the native mesquite trees, SPA would install a heavy screen over the Burro Spring trough, leaving the siphon hose in to water the mesquite. This would effectively keep most water sources away from the burros. This is outlined in the SPA Alternative, Feral Burro Access. SPA does not want to put fencing around the tubs themselves as proposed in Alternative 3 as that would take away from the “Saline Experience” and “wild feral burros” would not venture to a water source with people in them.

Additionally, SPA feels that fencing the entire area as proposed in Alternative 5, would harm native non-burro wildlife. The fence would also be subject to possible vandalism, not to mention flash flooding, which would leave dangerous fence debris in the environment. This could create a long term hazard if NPS lacked funding to adequately remove and/or maintain the fence. NPS stated during informational meetings, the difficulty of acquiring maintenance funding. The addition of the fences as proposed in Alternative 5 will become a maintenance resource drain.

To keep people from feeding the burros, SPA will initiate an aggressive educational campaign, similar to the successful campaign that stopped people from feeding the bears in the Mammoth area. SPA proposes to absorb the costs of pamphlets, bumper stickers and posting “don't be an ass, don't feed our burros,” on the forum and email that message out to the SPA members.

SPA urges the NPS to give a priority to relocating the habituated burros at the Warm Springs. There are only about 10 of them. They would be easy to capture and easy to find homes for since they are so domesticated and accustomed to people. Our experience is that feral burros elsewhere in Saline Valley are not habituated and avoid humans. We think that it is unlikely that they will invade the Warm Springs area.

#### Non Native Vegetation

SPA strongly opposes the removal of the lawn and palm trees. This includes the living state as well as after they die. SPA agrees the palm trees and lawn are nonnative, but they are NOT invasive. Both palm trees and lawn cannot survive without regular water. To date there is no evidence of palms or lawn anywhere else in Saline Valley. Planting other types of trees would negatively change the look, feel, and ecosystem at the Warm Springs. There are no native tree species which could be substituted for the palm trees that will provide equivalent benefits. The palms may not be native to this area, but are naturalized and are present in desert regions across California, (and in fact are an integral visual aspect of the NPS Furnace Creek Visitor's Center. The Draft Management Plan / IES (page 81) attempts to compare containing the spread of palm trees to containing the spread of saltcedar (tamarisk). Tamarisks are invasive, and should be removed. Palm trees are containable.

The lawn is a central gathering place for the users of the Warm Springs. It is the heart for socializing, potlucks, sharing road and other safety information, educating new visitors about the warm springs, and other important connections. The lawn provides major benefits and will not spread, because there is no



water elsewhere. The lawn and palm trees are clearly part of the ethno-historic experience of Saline Valley.

SPA would propose a program monitoring palm tree development in Saline Valley and would eradicate those trees if they were to be discovered in other parts of Saline Valley. SPA would also apply the same attention to the lawn. SPA is not opposed to the removal of the palm trees at what NPS refers to as the upper fenced springs and strongly supports the removal of tamarisk.

### Camping Permits

SPA is strongly opposed to the proposed requirement of a permit prior to arriving at the Saline Valley. During the NPS Informational meetings it was said there was not a specific permitting plan. There are too many unanswered questions, including: who will enforce this permitting system, who will administer the permits, how to obtain them and do they meet basic cost-benefit analysis. If the goal of the permit is to “keep track” of visitors and “impart park regulations” SPA would work with NPS on visit censuses and informational signs about regulations.

If a permit system is implemented, SPA wants to ensure permits stay free, easily accessible online, and onsite for the visitors of the Saline Valley that come out and decide to stay or those that plan their vacation around visiting Saline Valley. Online permitting is challenging as much of the Park does not have cell service. SPA has kept visitor counts for 10 years and would argue that even during high use times there was always enough camping space available.

SPA is strongly opposed to any future permit fee. This would undermine the very stewardship visitors have in Saline Valley. By imposing a fee, visitors are now “renting” their space in Saline Valley. The expectation would be that the NPS is now the landlord and responsible for the care and maintenance of Saline Valley. Does NPS expect the users to pay a fee and donate items, time and effort for its upkeep? SPA believes this would create a problem where one currently does not exist. Saline Valley has existed for decades at no cost, by the volunteers that visit it. Further, a fee could discriminate against many of the long time users that lack the recourses to pay such a fee, but are willing to donate time and effort for its maintenance. SPA would also bring attention that an NPS permit fee could violate 36 CFR 71.9 (attached), which specifically forbids the collection of a fee unless the NPS provides potable water, refuse containers, and someone onsite to collect the fees.

Bottom line, don't make Saline Valley a developed campground, don't impose a fee.

### Stewardship of Recreation Elements by NPS Partners

SPA supports the component of Alternative 3 “Stewardship of Recreation Elements by NPS partners”. From 2001 to 2006 SPA had a memorandum of understanding (MOU) with Death Valley National Park. SPA would like to negotiate another MOU concerning the Saline Valley Warm Springs area. This would focus on keeping the Saline Valley Warm Springs as close as possible to the current experience, minimal maintenance of tubs and campsite maintenance.

### Camping Areas

SPA strongly supports Camping Areas in Alternative 2, unrestricted dispersed camping areas and strongly opposes designated camping. Currently campers chose sites when they arrive based on site-specific needs, the weather and wind conditions, their particular vehicle type, and accessibility to various amenities such as pools or lawn. SPA supports defining camping boundaries, but assigning campsites is not workable. Please keep the camping as it is - it works.

SPA is opposed to the increasing the distance from camping 100 feet to 200 feet from the source springs. During all of the NPS Informational meetings the issue of camping no closer than 200 feet from the source springs was brought up. At all of the NPS Information meetings, the NPS stated this was a “misprint” and the NPS meant to stay with its current rule of, “no camping within 100 feet of a source springs”. SPA would like something in writing to assure them that the no camping within 100 feet of a source springs (NPS current policy) will continue.

#### Campfires

SPA supports the NPS Campfires section, as proposed in Alternative 3 NPS-provided fire enclosures, grates, grills or fire pans. Given a choice of the aforementioned, SPA supports non anchored, heavy NPS fire pits. SPA will work with NPS for the removal of fire pits that are not NPS-provided, as well as to educate the user community.

#### Toilet Management

SPA supports the Toilet Management section as proposed in Alternative 3 requiring the pumping of vault toilets on an “as needed” basis. SPA also highly recommends the addition of another vault toilet at the Palm Springs. This could be accomplished for the price of the proposed fence around the entire area. The fence as stated above is unnecessary, but another vault toilet for the Palm Springs should be an NPS priority.

#### Vehicle Assistance

SPA would propose this alternative be changed to Emergency Vehicle Assistance and remain during the tenure of the current camp host. SPA would encourage the NPS to clearly post signage at the end of pavement that there is no emergency vehicle assistance beyond this point. This may encourage visitors to be self-sufficient. That said, having Emergency Vehicle Assistance is a health and safety issue and its removal should be considered in that context.

#### Dishwashing Stations

SPA supports dishwashing stations. However we feel the need for filters to be unnecessary. Filters do not address any issues brought up in the management plan. However, if that is what is required to continue having dish washing stations, filters would be acceptable. SPA supports signage warning visitors the dishwashing water is non-potable. SPA will encourage the use of biodegradable dishwashing liquids.

#### Co-Management with Timbisha Shoshone

SPA understands the NPS and Timbisha Shoshone are working on a co-management plan. NPS stated at four Informational Meetings held over the last week of May that the co-management plan would not supersede the Draft Management Plan / EIS. Neither SPA nor any SPA member has been included in the co-management plan and its content, scope, and / or interaction within the Draft Management Plan / EIS. Therefore it's difficult to comment on this issue. The Draft Management Plan / EIS states,

“The waters of the warm springs in Saline Valley are a source of *puha* for the Tribe, a life force energy.”

In this context, SPA supports Nonnative vegetation section of Alternative 3, only as it pertains to the upper springs. This would return the Upper Springs to its natural state. This might allow traditional use of the Upper Springs by the Tribe.

### In Summary

The maintenance of the Saline Valley has been done successfully by volunteers, in cooperation with a volunteer Camp Host, for decades. Each visitor to the Saline Valley has understand that he/she is a volunteer, with the responsibility of policing the area, observing guidelines for proper food storage and disposal of trash, and helping with the cleaning of the pools and outhouses. The more the NPS relies on explicit rules and regulations, the less likely visitors will feel that the Warm Springs are their responsibility to be maintained on a voluntary basis. If visitation increases owing to expanded publicity and recognition of the Saline Valley as a National Park destination, newly arrived visitors, uninformed about the tradition of volunteerism, may take the attitude of “let the government take care of it, “rather than taking responsibility for minimizing their individual impact. Signage and rules and permits cannot accomplish as much as the traditional culture of cooperation and mutual responsibility that has characterized the Saline Valley throughout its history.

Any Management Plan must seek to encourage a continuing spirit of volunteerism and individual responsibility.

Sincerely,

John Runkle  
President, Saline Preservation Association

Attached 36 CFR 71.9  
Attached SPA Alternatives

Cc: Mike Ramsey, SPA Treasurer  
Michelle Hamilton, SPA Secretary  
Tim Hynes, SPA Director  
Fred Dickson, SPA Director  
Gary Kremen, SPA Director  
Bonneau Dickson, SPA Director

**TABLE ES-1. ELEMENTS OF THE ALTERNATIVES**

**Notes:**

The highlighted cells in this table show the elements that were used to create the SPA preferred alternative.

There are two elements without a shaded cell (Chicken Strip airstrip and feral burro access); for these elements, the preferred alternative incorporates actions that are not entirely captured in any of the other alternatives.

Items identified in this table as NPS-provided, such as fire enclosures, would be distributed as funding allows.

Items in italics in this table are mitigation and/or restoration efforts required under each alternative. Users, volunteers, and park staff could engage in further restoration efforts under NPS management; however, the actions identified in this table are the minimum actions required under each alternative.

Management Elements	Alternative 1: No-Action Alternative	Alternative 2: Regulatory Compliance Alternative	Alternative 3: Community Engagement Alternative	Alternative 4: Restoration Alternative	SPA Preferred Alternative to Recommend
<b>Recreation</b>					
Fees	<ul style="list-style-type: none"> <li>Park entrance fee applies</li> </ul>	<ul style="list-style-type: none"> <li>Park entrance fee applies</li> <li>Overnight camping fee could be implemented in the future and would include an independent public process</li> </ul>	<ul style="list-style-type: none"> <li>Park entrance fee applies; campground host(s) check compliance</li> <li>Overnight camping fee could be implemented in the future and would include an independent public process</li> </ul>	<ul style="list-style-type: none"> <li>Park entrance fee applies</li> </ul>	<ul style="list-style-type: none"> <li>Park entrance fee applies</li> </ul>
Camping Permits	<ul style="list-style-type: none"> <li>Permit not required</li> </ul>	<ul style="list-style-type: none"> <li>Mandatory no-cost permit system modeled after the Visitor Use Permit system proposed in the <i>Death Valley National Park Wilderness and Backcountry Stewardship Plan</i> (appendix E)</li> </ul>	<ul style="list-style-type: none"> <li>Mandatory no-cost permit system modeled after the Visitor Use Permit system proposed in the <i>Death Valley National Park Wilderness and Backcountry Stewardship Plan</i> (appendix E)</li> <li>A sign-in log would be maintained for campers</li> </ul>	<ul style="list-style-type: none"> <li>Mandatory no-cost permit system modeled after the Visitor Use Permit system proposed in the <i>Death Valley National Park Wilderness and Backcountry Stewardship Plan</i> (appendix E)</li> </ul>	<ul style="list-style-type: none"> <li>Permit not required</li> <li>A sign-in log would be maintained for campers</li> </ul>



Management Elements	Alternative 1: No-Action Alternative	Alternative 2: Regulatory Compliance Alternative	Alternative 3: Community Engagement Alternative	Alternative 4: Restoration Alternative	SPA Preferred Alternative to Recommend
Camping Areas	<ul style="list-style-type: none"> <li>No designated camp areas</li> <li>Unrestricted dispersed camping, including car camping in backcountry area</li> </ul>	<ul style="list-style-type: none"> <li>No designated camp areas</li> <li>Unrestricted dispersed camping, including car camping in backcountry area</li> </ul>	<ul style="list-style-type: none"> <li>Dispersed camping within designated camp areas defined by appropriate elements, such as delineation of roadways or signposts, with area use maps posted at the campground and online</li> <li>No camping within 200 feet of source springs</li> <li>Designated overflow walk-in camping areas with defined parking</li> </ul>	<ul style="list-style-type: none"> <li>Dispersed camping</li> <li>No camping within 200 feet of water</li> </ul>	<ul style="list-style-type: none"> <li>No designated camp areas</li> <li>Unrestricted dispersed camping, including car camping in backcountry</li> <li>No camping within 100 feet of source springs</li> </ul>
Campfires	<ul style="list-style-type: none"> <li>User-created fire rings</li> <li>NPS-provided fire enclosures, grates, or grills</li> </ul>	<ul style="list-style-type: none"> <li>Remove user-created fire rings at campsites</li> <li>Retain communal fire ring at Lower Spring</li> <li>Encourage the use of NPS-provided fire enclosures, grates, grills, or firepans</li> <li>Visitors to haul out ash and charcoal</li> </ul>	<ul style="list-style-type: none"> <li>Remove user-created fire rings at campsites</li> <li>Retain communal fire ring at Lower Spring</li> <li>Encourage the use of NPS-provided fire enclosures, grates, grills, or firepans</li> <li>Visitors to haul out ash and charcoal</li> </ul>	<ul style="list-style-type: none"> <li>Removal of all fire enclosures and fire rings</li> <li>No campfires</li> </ul>	<ul style="list-style-type: none"> <li>Remove user-created fire rings at campsites</li> <li>Retain communal fire ring at Lower Spring</li> <li>Encourage the use of NPS-provided fire enclosures, grates, grills, or firepans</li> <li>Visitors to haul out ash and charcoal</li> </ul>
"Chicken Strip" Airstrip	<ul style="list-style-type: none"> <li>Airstrip open for use</li> <li>Camping allowed at airstrip</li> </ul>	<ul style="list-style-type: none"> <li>Airstrip open for use; special regulation pending</li> <li>Camping allowed at airstrip</li> <li>Visitors required to pack out waste</li> </ul>	<ul style="list-style-type: none"> <li>Airstrip open for use; special regulation pending</li> <li>No camping allowed at airstrip</li> <li>Allow for additional airplane tiedowns with NPS approval</li> </ul>	<ul style="list-style-type: none"> <li>Removal of the airstrip</li> </ul>	<ul style="list-style-type: none"> <li>Airstrip open for use; special regulation pending</li> <li>Camping allowed at airstrip</li> <li>Visitors required to pack out waste</li> <li>Allow for additional airplane tiedowns with NPS approval</li> </ul>

Management Elements	Alternative 1: No-Action Alternative	Alternative 2: Regulatory Compliance Alternative	Alternative 3: Community Engagement Alternative	Alternative 4: Restoration Alternative	SPA Preferred Alternative to Recommend
Stewardship of Recreation Elements by NPS Partners	<ul style="list-style-type: none"> <li>Continuation of MOU with RAF for maintenance of the Chicken Strip airstrip</li> </ul>	<ul style="list-style-type: none"> <li>Continuation of MOU with RAF for maintenance of the Chicken Strip airstrip</li> <li>MOU with user group for minimal maintenance of tubs</li> </ul>	<ul style="list-style-type: none"> <li>Continuation of MOU with RAF for maintenance of the Chicken Strip airstrip</li> <li>MOU with user group for minimal maintenance of tubs</li> <li>Agreement with user groups that may include activities such as invasive plant removal; monitoring of Upper Spring; campsite management; and protection of archeological resources and wilderness boundaries</li> </ul>	<ul style="list-style-type: none"> <li>Contract with organizations for specified services related to protection of natural and cultural resources</li> <li>Chicken Strip airstrip removed from MOU with RAF</li> </ul>	<ul style="list-style-type: none"> <li>Continuation of MOU with RAF for maintenance of the Chicken Strip airstrip</li> <li>MOU with SPA for minimal maintenance of tubs</li> <li>Agreement with user groups that may include SPA for activities such as invasive plant removal; monitoring of Upper Spring; campsite management; and protection of archeological resources and wilderness boundaries</li> </ul>
<b>Natural Resources</b>					
Resource Stewardship	<ul style="list-style-type: none"> <li>Consistent with resource stewardship throughout the park</li> </ul>	<ul style="list-style-type: none"> <li>Consistent with resource stewardship throughout the park</li> </ul>	<ul style="list-style-type: none"> <li>Establish thresholds on use and overuse of the area</li> <li>Monitoring and response whereby actions would be taken by park management to restrict use of the springs if damage to natural and cultural resources is observed</li> <li>Implementation of restoration measures, such as removing the water diversion piping at Burro Spring</li> </ul>	<ul style="list-style-type: none"> <li>Establish thresholds on use and overuse of the area</li> <li>Monitoring and response whereby actions would be taken by park management to restrict access to the springs if damage to natural and cultural resources is observed</li> </ul>	<ul style="list-style-type: none"> <li>Consistent with resource stewardship throughout the park</li> </ul>



Management Elements	Alternative 1: No-Action Alternative	Alternative 2: Regulatory Compliance Alternative	Alternative 3: Community Engagement Alternative	Alternative 4: Restoration Alternative	SPA Preferred Alternative to Recommendations
Nonnative Vegetation	<ul style="list-style-type: none"> <li>Minimal control of nonnative plants (e.g., trimming and hand pulling of young nonnative invasive palms is accomplished by volunteer camp host)</li> </ul>	<ul style="list-style-type: none"> <li>Remove nonnative invasive palms from Upper Spring</li> <li>As nonnative invasive palm trees age and die at Lower Spring and Palm Spring, allow the area to naturally revegetate</li> <li>Nonnative plant control by National Park Service</li> </ul>	<ul style="list-style-type: none"> <li>Removal of nonnative invasive palms from Upper Spring</li> <li>As nonnative invasive palm trees age and die at Lower Spring and Palm Spring, allow the area to naturally revegetate</li> <li>Nonnative plant control by National Park Service</li> <li>Remove the lawn and allow the area to naturally revegetate or replant with native vegetation</li> <li>Engage tribes to incorporate traditional ecological knowledge</li> </ul>	<ul style="list-style-type: none"> <li>Removal of all nonnative species, including the lawn at Lower Spring</li> <li>Restoration with native species in natural distribution patterns</li> <li>Engage tribes to incorporate traditional ecological knowledge</li> </ul>	<ul style="list-style-type: none"> <li>Removal of nonnative invasive palms from Upper Spring</li> <li>Minimal control of nonnative plants (e.g., trimming and hand pulling of young nonnative palms by volunteers and camp host)</li> </ul>
Feral Burro Access	<ul style="list-style-type: none"> <li>Minimal control (e.g., fencing to exclude feral burros from lawn at Lower Spring)</li> </ul>	<ul style="list-style-type: none"> <li>Artistic fencing to surround the source springs at Lower and Palm Springs to prevent access to the water sources by feral burros</li> </ul>	<ul style="list-style-type: none"> <li>Extension of the artistic wooden fencing around the tubs, source springs and riparian areas at Lower and Palm Springs to prevent access to water sources and vegetation by feral burros</li> </ul>	<ul style="list-style-type: none"> <li>Installation of fencing around the warm springs area at the wilderness boundary to prevent access by feral burros</li> </ul>	<ul style="list-style-type: none"> <li>Minimal control (e.g., fencing to exclude feral burros from lawn at lower Spring)</li> <li>Artistic fencing to surround the source springs at Lower and Palm Springs to prevent Access to the water sources by feral burros</li> </ul>

Management Elements	Alternative 1: No-Action Alternative	Alternative 2: Regulatory Compliance Alternative	Alternative 3: Community Engagement Alternative	Alternative 4: Restoration Alternative	SPA preferred Alternative to Recommend
Habituated Wildlife and Food Storage	<ul style="list-style-type: none"> <li>Education to prevent deliberate or inadvertent feeding of wildlife</li> </ul>	<ul style="list-style-type: none"> <li>Appropriate food storage would be encouraged through on-site and online outreach to users</li> <li>Camp host(s) would encourage users to keep all food safely and securely stored in vehicles</li> <li>Education (including signage) to prevent deliberate or inadvertent feeding of wildlife</li> </ul>	<ul style="list-style-type: none"> <li>Appropriate food storage would be encouraged through on-site and online outreach to users</li> <li>Camp host(s) would encourage users to keep all food safely and securely stored in vehicles or food storage boxes</li> <li>Education (including signage) to prevent deliberate or inadvertent feeding of wildlife</li> <li>Installation of food storage box(es), if necessary</li> </ul>	<ul style="list-style-type: none"> <li>Education to prevent deliberate or inadvertent feeding of wildlife</li> </ul>	<ul style="list-style-type: none"> <li>Appropriate food storage would be encouraged through on-site and online outreach to users</li> <li>Camp host(s) would encourage users to keep all food safely and securely stored in vehicles</li> <li>Education (including signage) to prevent deliberate or inadvertent feeding of wildlife</li> <li>Implement "don't feed our burros" campaign</li> </ul>
<b>Cultural Resources</b>					
Archeological Resources	<ul style="list-style-type: none"> <li>NPS monitoring</li> </ul>	<ul style="list-style-type: none"> <li>NPS monitoring</li> </ul>	<ul style="list-style-type: none"> <li>NPS monitoring</li> <li>Monitoring by NPS-trained site stewards</li> <li>Increased education</li> </ul>	<ul style="list-style-type: none"> <li>NPS monitoring</li> <li>Monitoring by NPS-trained site stewards</li> </ul>	<ul style="list-style-type: none"> <li>NPS monitoring</li> <li>Monitoring by NPS-trained site stewards</li> <li>Increased education</li> </ul>
Historical Resources	<ul style="list-style-type: none"> <li>Management of the warm springs area as an area of historical significance for recreational users</li> </ul>	<ul style="list-style-type: none"> <li>Management of the warm springs area as an area of historical significance for recreational users</li> </ul>	<ul style="list-style-type: none"> <li>Management of the warm springs area as an area of historical significance for recreational users</li> </ul>	<ul style="list-style-type: none"> <li><i>Documentation of and mitigation for the effects on elements of the proposed Saline Valley Warm Springs Historic Site</i></li> </ul>	<ul style="list-style-type: none"> <li>Management of the warm springs area as an area of historical significance for recreational users</li> <li>If necessary, preparation of MOU with SHPO for any adverse effects to cultural resources</li> </ul>



Management Elements	Alternative 1: No-Action Alternative	Alternative 2: Regulatory Compliance Alternative	Alternative 3: Community Engagement Alternative	Alternative 4: Restoration Alternative	SPA Preferred Alternative to Recommend
<b>Ethnographic Resources</b>	<ul style="list-style-type: none"> <li>Management of the warm springs area as an area of ethnographic significance for the Tribe</li> </ul>	<ul style="list-style-type: none"> <li>Management of the warm springs area as an area of ethnographic significance for the Tribe</li> <li>Consultation with tribes to identify and maintain ethnographic resources (e.g., native vegetation)</li> </ul>	<ul style="list-style-type: none"> <li>Management of the warm springs area as an area of ethnographic significance for the Tribe</li> <li>Consultation with tribes to identify and maintain ethnographic resources (e.g., native vegetation)</li> </ul>	<ul style="list-style-type: none"> <li>Management of the warm springs area as an area of ethnographic significance for the Tribe</li> <li>Consultation with tribes to identify and maintain ethnographic resources (e.g., native vegetation)</li> <li>Removal of all development and restoration to natural and ethnographic landscape</li> </ul>	<ul style="list-style-type: none"> <li>Management of the warm springs area as an area of ethnographic significance for the Tribe</li> <li>Consultation with tribes to identify and maintain ethnographic resources (e.g., native vegetation)</li> </ul>
<b>Bat Pole and Other Art</b>	<ul style="list-style-type: none"> <li>Identify and manage National Register of Historic Places (NRHP)-eligible art</li> <li>Restrictions on artwork not actively enforced</li> </ul>	<ul style="list-style-type: none"> <li>Identify and manage NRHP-eligible art</li> <li>Non-historic artwork removed from wilderness</li> <li>No manipulation of natural or cultural resources (to include disturbance and collection) for the purposes of art</li> </ul>	<ul style="list-style-type: none"> <li>Identify and manage NRHP-eligible art</li> <li>Non-historic artwork removed from wilderness and backcountry area</li> <li>No manipulation of natural or cultural resources (to include disturbance and collection) for the purposes of art</li> </ul>	<ul style="list-style-type: none"> <li>Remove all artwork, including the bat pole</li> <li>Ongoing monitoring to prevent installations of new artwork</li> </ul>	<ul style="list-style-type: none"> <li>Identify and manage NRHP-eligible art</li> <li>Non-historic artwork removed from wilderness and backcountry area</li> <li>No manipulation of natural or cultural resources (to include disturbance and collection) for the purposes of art</li> </ul>
<b>Infrastructure</b>					
<b>Vehicle Assistance</b>	<ul style="list-style-type: none"> <li>Continued vehicle repair by camp host</li> </ul>	<ul style="list-style-type: none"> <li>Remove vehicle support facility</li> <li>Emergency vehicle assistance should not be expected by the visiting public</li> </ul>	<ul style="list-style-type: none"> <li>Remove vehicle support facility</li> <li>Emergency vehicle assistance should not be expected by the visiting public</li> </ul>	<ul style="list-style-type: none"> <li>Removal of vehicle repair support facility</li> <li>Emergency vehicle assistance should not be expected by the visiting public</li> </ul>	<ul style="list-style-type: none"> <li>Continued vehicle repair by current camp host</li> <li>Sign-age that emergency vehicle assistance should not be expected by the visiting public</li> </ul>

Management Elements	Alternative 1: No-Action Alternative	Alternative 2: Regulatory Compliance Alternative	Alternative 3: Community Engagement Alternative	Alternative 4: Restoration Alternative	SPA Preferred Alternative to Recommend
Lower Spring Camp Host Site	<ul style="list-style-type: none"> <li>Retain permanent housing, water feature, drainage ditch, plumbing, solar array, government vehicles and personal items</li> </ul>	<ul style="list-style-type: none"> <li>Retain permanent housing, water feature, drainage ditch, plumbing, and personal items with housekeeping policy<sup>1</sup></li> <li>Allow for power system that complies with applicable regulations and cultural landscape</li> <li>Retain government vehicle</li> </ul>	<ul style="list-style-type: none"> <li>Remove permanent housing; host would provide temporary housing</li> <li>Retain water feature, drainage ditch, plumbing, and personal items with housekeeping policy<sup>1</sup></li> <li>Allow for power system that complies with applicable regulations and cultural landscape</li> <li>Retain government vehicle</li> </ul>	<ul style="list-style-type: none"> <li>Remove all elements of the camp host site</li> </ul>	<ul style="list-style-type: none"> <li>Retain permanent housing, water feature, drainage ditch, plumbing, and personal items with housekeeping policy<sup>1</sup></li> <li>Allow for power system that complies with applicable regulations and cultural landscape</li> <li>Retain government vehicle</li> </ul>
Toilet Management	<ul style="list-style-type: none"> <li>NPS maintenance staff pumps vault toilets once or twice a year</li> </ul>	<ul style="list-style-type: none"> <li>NPS maintenance staff or contractors pump vault toilets once or twice a year</li> <li>Encourage visitors to pack out waste</li> <li>Education on the benefits of packing out waste</li> </ul>	<ul style="list-style-type: none"> <li>Vault toilets pumped as needed by NPS maintenance staff, by contractor, or by cooperative agreement with user group</li> <li>Encourage visitors to pack out waste</li> <li>Education on the benefits of packing out waste</li> <li>Additional toilets could be added to Lower Spring or Palm Spring, if necessary.</li> </ul>	<ul style="list-style-type: none"> <li>Removal of vault toilets</li> <li>Visitors required to carry out human waste</li> </ul>	<ul style="list-style-type: none"> <li>Vault toilets pumped as needed by NPS maintenance staff, by contractors, or by cooperative agreement with user group</li> <li>Encourage visitors to pack out waste</li> <li>Education on the benefits of packing out waste</li> <li>Additional toilets <b>must</b> be added to Palm Spring.</li> </ul>

<sup>1</sup> Housekeeping policy: The grounds of the camp host site would be kept clutter free. The camp host would not make improvements to the camp host site and would not have more than two vehicles at the camp host site. As this is not a permanent residence, all items at the camp host site should be removable within a two-day notice. There should be no evidence of the host once he or she completes the camp host assignment.



Management Elements	Alternative 1: No-Action Alternative	Alternative 2: Regulatory Compliance Alternative	Alternative 3: Community Engagement Alternative	Alternative 4: Restoration Alternative	SPA Preferred Alternative to Recommendation
Dishwashing Stations	<ul style="list-style-type: none"> <li>Dishwashing stations would be retained</li> <li>Signage at sinks to indicate water is non-potable</li> </ul>	<ul style="list-style-type: none"> <li>Retain dishwashing stations and add filtration systems to catch food debris</li> <li>Signage at sinks to indicate water is non-potable</li> </ul>	<ul style="list-style-type: none"> <li>Retain dishwashing stations and add filtration systems to catch food debris</li> <li>Signage at sinks to indicate water is non-potable</li> </ul>	<ul style="list-style-type: none"> <li>Removal of dishwashing stations</li> </ul>	<ul style="list-style-type: none"> <li>Retain dishwashing stations and add filtration systems to catch food debris</li> <li>Signage at sinks to indicate water is non-potable</li> </ul>
Settling pond	<ul style="list-style-type: none"> <li>Unfenced</li> </ul>	<ul style="list-style-type: none"> <li>Fence settling pond</li> </ul>	<ul style="list-style-type: none"> <li>Fence settling pond</li> </ul>	<ul style="list-style-type: none"> <li>Removal of settling pond</li> </ul>	<ul style="list-style-type: none"> <li>Fence settling pond</li> </ul>
Maintenance of Tubs, Roads, and Infrastructure	<ul style="list-style-type: none"> <li>No expansion related to tubs<sup>2</sup></li> <li>Upper Spring would remain undeveloped<sup>2</sup></li> <li>Water diverted from source springs to soaking tubs, showers/bathtubs, and dishwashing sinks; all uses have dedicated piping directly from the source springs</li> <li>Users/camp host(s) maintain plumbing infrastructure and tubs under NPS oversight</li> <li>Maintenance of Warm Springs Road by users / camp host using large tires or other road drag</li> </ul>	<ul style="list-style-type: none"> <li>No expansion related to tubs<sup>2</sup></li> <li>Upper Spring would remain undeveloped<sup>2</sup></li> <li>Water diverted from source springs to soaking tubs, showers/bathtubs, and dishwashing sinks; all uses have dedicated piping directly from the source springs</li> <li>Users/camp host(s) maintain plumbing infrastructure and tubs under NPS oversight</li> <li>Maintenance of Warm Springs Road by National Park Service in accordance with guidelines for four-wheel drive high clearance roads<sup>3</sup></li> </ul>	<ul style="list-style-type: none"> <li>No expansion related to tubs<sup>2</sup></li> <li>Upper Spring would remain undeveloped<sup>2</sup></li> <li>Water diverted from source springs to soaking tubs, showers/bathtubs, and dishwashing sinks; all uses have dedicated piping directly from the source springs</li> <li>Users/camp host(s) maintain plumbing infrastructure and tubs under NPS oversight</li> <li>Maintenance of Warm Springs Road by National Park Service in accordance with guidelines for four-wheel drive high clearance roads<sup>3</sup></li> </ul>	<ul style="list-style-type: none"> <li>All development and modifications would be removed and the site restored</li> <li>No water diversion</li> <li>Maintenance of Warm Springs Road by National Park Service in accordance with guidelines for four-wheel drive high clearance roads<sup>3</sup></li> </ul>	<ul style="list-style-type: none"> <li>No expansion related to tubs<sup>2</sup></li> <li>Upper Spring would remain undeveloped<sup>2</sup></li> <li>Water diverted from source springs to soaking tubs, showers/bathtubs, and dishwashing sinks; all uses have dedicated piping directly from the source springs</li> <li>Users/camp host(s) maintain plumbing infrastructure and tubs under NPS oversight</li> <li>Maintenance of Warm Spring Road by National Park Service in accordance with guidelines for four-wheel drive high clearance roads<sup>3</sup></li> </ul>

<sup>2</sup> As per the 2002 GMP

<sup>3</sup> As described in the Death Valley National Park Wilderness and Backcountry Stewardship Plan

Management Elements	Alternative 1: No-Action Alternative	Alternative 2: Regulatory Compliance Alternative	Alternative 3: Community Engagement Alternative	Alternative 4: Restoration Alternative	EPA Alternative Preferred Alternative to Recommendations
Accessibility	<ul style="list-style-type: none"> <li>Tubs would not be altered to increase accessibility</li> </ul>	<ul style="list-style-type: none"> <li>To the extent possible, facilities would be made accessible.</li> </ul>	<ul style="list-style-type: none"> <li>To the extent possible, facilities would be made accessible.</li> </ul>	<ul style="list-style-type: none"> <li>All facilities would be removed and the site restored. The site would be accessed in the same manner as all backcountry sites in the park.</li> </ul>	<ul style="list-style-type: none"> <li>To the extent possible, facilities would be made accessible.</li> </ul>
<b>Management</b>					
Camp Host	<ul style="list-style-type: none"> <li>Full-time camp host at Lower Spring</li> <li>Seasonal camp hosts at Palm Spring</li> <li>Continue with current camp host term</li> </ul>	<ul style="list-style-type: none"> <li>Camp host(s) will be present</li> <li>Continue with current camp host term</li> </ul>	<ul style="list-style-type: none"> <li>Camp host(s) will be present</li> <li>Camp host term would be one year/season with possible reinstatement; host must re-apply annually</li> </ul>	<ul style="list-style-type: none"> <li>No camp host</li> </ul>	<ul style="list-style-type: none"> <li>Camp host(s) will be present</li> <li>Continue with current camp host term</li> </ul>
Education	<ul style="list-style-type: none"> <li>Some signs on campground boards</li> <li>Camp host disperses information</li> </ul>	<ul style="list-style-type: none"> <li>Education through various media focused on regulatory, health and safety, and compliance information</li> </ul>	<ul style="list-style-type: none"> <li>Education through various media focused on regulatory, health and safety, and compliance information</li> <li>Interpretive program to include signs on campground boards and engagement by camp host on topics such as potential for flooding, Leave No Trace® camping practices, resource protection, visitor safety, relationship with the Tribe, and history of Saline Valley</li> </ul>	<ul style="list-style-type: none"> <li>Minimal outreach and education as appropriate for undeveloped backcountry area</li> </ul>	<ul style="list-style-type: none"> <li>Education through various media focused on regulatory, health and safety, and compliance information</li> <li>Interpretive program to include signs on campground boards and engagement by camp host and SPA on topics such as potential for flooding, Leave No Trace® camping practices, resource protection, visitor safety, relationship with the Tribe, and history of Saline Valley</li> </ul>



Management Elements	Alternative 1: No-Action Alternative	Alternative 2: Regulatory Compliance Alternative	Alternative 3: Community Engagement Alternative	Alternative 4: Restoration Alternative	SPA Preferred Alternative to Recommend
<b>State and Federal Regulations</b>					
Recreational Water Usage	<ul style="list-style-type: none"> <li>No water quality testing</li> </ul>	<ul style="list-style-type: none"> <li>Consult with the Office of Public Health to develop an approach for water quality monitoring</li> </ul>	<ul style="list-style-type: none"> <li>Consult with the Office of Public Health to develop an approach for water quality monitoring</li> </ul>	<ul style="list-style-type: none"> <li>Tubs would be removed and water from source springs would not be used for recreation purposes</li> </ul>	<ul style="list-style-type: none"> <li>Consult with the Office of Public Health to develop an approach for water quality monitoring</li> </ul>
Hazardous Materials Storage	<ul style="list-style-type: none"> <li>Use and storage on-site not compliant with regulations</li> </ul>	<ul style="list-style-type: none"> <li>Use and storage would meet Occupational Safety and Health Administration regulations</li> </ul>	<ul style="list-style-type: none"> <li>Use and storage would meet Occupational Safety and Health Administration regulations</li> </ul>	<ul style="list-style-type: none"> <li>Removal of all hazardous materials</li> </ul>	<ul style="list-style-type: none"> <li>Use and storage would meet Occupational Safety and Health Administration regulations</li> </ul>

Cornell Law School

CFR › Title 36 › Chapter I › Part 71 › Section 71.9

## 36 CFR 71.9 - Establishment of recreation use fees.

### § 71.9 Establishment of recreation use fees.

(a) Recreation use fees shall be established by all outdoor recreation administering agencies of the Department of the Interior in accordance with the following criteria:

- (1) The direct and indirect cost to the government,
- (2) The benefit to the recipient,
- (3) The public policy or interest served,
- (4) The comparable recreation fees charged by other Federal agencies, non-Federal public agencies and the private sector located within the service area of the management unit at which the fee is charged,
- (5) The economic and administrative feasibility of fee collection, and
- (6) Other pertinent factors.

(b) With the approval of the Secretary of the Interior recreation use fees may be established for other types of facilities in addition to those which are listed below.

(c) Types of recreation facilities for which use fees may be charged:

Tent, trailer and recreation vehicle sites <sup>1</sup>

<sup>1</sup> Provided, That in no event shall there be a charge for the use of any campsite and adjacent related facilities unless the campground in which the site is located has all of the following: Tent or trailer spaces, drinking water, access road, refuse containers, toilet facilities, personal collection of the fee by an employee or agent of the bureau operating the facility, reasonable visitor protection, and simple devices for containing a campfire (where campfires are permitted).

Group camping sites <sup>1 2</sup>

<sup>2</sup> The administering agency may establish a group use rate in lieu of the above "Group Camping Sites" recreation use fee in accordance with the criteria set out in this section provided such rate is not less than \$3.00 per day per group. Such a group use rate may constitute either a special recreation permit fee or a recreation use fee as determined by the administering agency.

Specialized boat launching facilities and services <sup>3</sup>

## US ENVIRONMENTAL PROTECTION AGENCY

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION IX

75 Hawthorne Street  
San Francisco, CA 94105-3901

June 28, 2018

Mike Reynolds, Superintendent  
Death Valley National Park  
Attn: Saline Valley Management Plan Comments  
PO Box 579  
Death Valley, CA 92328

Subject: Draft Environmental Impact Statement for the Saline Valley Warm Springs Management Plan Project, Death Valley National Park. (CEQ# 20180074)

Dear Mr. Reynolds:

The U.S. Environmental Protection Agency (EPA) has reviewed the Draft Environmental Impact Statement (DEIS) for the Saline Valley Warm Springs Management Plan Project, Death Valley National Park Project. Our review is provided pursuant to the National Environmental Policy Act, Council on Environmental Quality regulations (40 CFR Parts 1500-1508), and Section 309 of the Clean Air Act.

Based on our review of the DEIS, we have rated Preferred Alternative 5 as Lack of Objections (LO) (see enclosed "Summary of Rating Definitions"). EPA supports the National Park Service's proposal to restore natural resources in the project area and protect public health through actions such as water quality monitoring, management of nonnative species, and promotion of Leave No Trace practices at the springs.

EPA appreciates the opportunity to review this DEIS, and looks forward to reviewing the Final EIS when it is released. If you have any questions, please contact me at (415) 972-3521, or have your staff contact James Munson, the lead reviewer for this project. Mr. Munson can be reached at (415) 972-3852 or Munson.James @epa.gov.

Sincerely,

Kathleen Martyn Goforth, Manager  
Environmental Review Section  
Enforcement Division

Enclosure: Summary of the EPA Rating System  
cc via email: Kelly Daigle, National Park Service



## **SUMMARY OF EPA RATING DEFINITIONS\***

This rating system was developed as a means to summarize the U.S. Environmental Protection Agency's (EPA) level of concern with a proposed action. The ratings are a combination of alphabetical categories for evaluation of the environmental impacts of the proposal and numerical categories for evaluation of the adequacy of the Environmental Impact Statement (EIS).

### **ENVIRONMENTAL IMPACT OF THE ACTION**

#### ***“LO” (Lack of Objections)***

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

#### ***“EC” (Environmental Concerns)***

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

#### ***“EO” (Environmental Objections)***

The EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

#### ***“EU” (Environmentally Unsatisfactory)***

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potentially unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

### **ADEQUACY OF THE IMPACT STATEMENT**

#### ***Category “1” (Adequate)***

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

#### ***Category “2” (Insufficient Information)***

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

#### ***Category “3” (Inadequate)***

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

\*From EPA Manual 1640, Policy and Procedures for the Review of Federal Actions Impacting the Environment.

## **XLADV**

I run an online adventure motorcycle community and we have an event in DV each Nov staying at Panamint Springs but frequently will ride out for the day to the springs. I've been there maybe 15 times and camped three times overnight.

Since they graded the road a few years ago it's obvious the springs have seen a dramatic increase in use and problems have cropped up. The beauty of the springs is in part to what volunteers have made it but I do see a need for some improvements.

I think the fencing for the burros is a good idea. I'm not crazy about the permitting process for camping but understand. Consider then adding fire rings and picnic tables for each site. The park should be collecting more in park pass fees but I know they don't now. Camp hosts could be “enforcing” that.

What I really don't like hearing is the removal of the palm trees and grass lawn. Sure they're non-native but it's not clear to me what harm they inflict and consideration should be given to the purpose they serve.



# AGENCY CONSULTATION



COMMUNITY CAMPFIRE RING AT LOWER SPRING





## **APPENDIX I**

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### **AGENCY CONSULTATION**



## **SECTION 7 CONSULTATION: US FISH AND WILDLIFE SERVICE**







## United States Department of the Interior

NATIONAL PARK SERVICE

Death Valley National Park

PO Box 579

Death Valley, California 92328



IN REPLY REFER TO:  
RM.A.2

October 1, 2012

Carl Benz, Section 7 Program Coordinator  
U.S. Fish and Wildlife Service  
2493 Portola Road, Suite B  
Ventura, CA 93003

**RE: Saline Valley Warm Springs Management Plan and Environmental Impact Statement**

Dear Mr. Benz:

The National Park Service is seeking comments and a species list regarding a proposed management plan and Environmental Impact Statement (EIS) for the Saline Valley Warm Springs area of Death Valley National Park. The proposed plan will provide a basis for guiding management actions and making decisions in this remote yet popular area, which was added to Death Valley National Park in 1994 with the passage of the California Desert Protection Act. Two project maps are enclosed in order to clarify and define the geographic area of the proposed management plan.

The purpose of the Saline Valley Warm Springs Management Plan/EIS is to:

- Provide a framework for natural and cultural resources management at the Warm Springs area;
- Provide a framework for administration and operations at the Warm Springs area;
- Provide a framework for managing visitor use at the Warm Springs area;
- Provide guidance for Death Valley National Park managers as they work with various stakeholders of the Warm Springs area; and
- Balance management of natural resources, ethnographic resources, and visitor use.

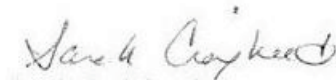
To help identify environmental issues connected with the proposed management plan, please provide us with written comments concerning interests within your agency's responsibility. Specifically, we are interested in federally listed endangered, threatened, candidate, special concern species and habitat designations, and sensitive communities known to occur on or in proximity to the Saline Valley Warm Springs location within Death Valley National Park. Your agency's expertise is greatly appreciated as we conduct this planning process. The park's own natural resource specialists are simultaneously conducting a review of the California Department of Fish and Game's Natural Diversity Database, in order to ensure protection of species of state concern as well as those species which are federally listed and candidates for listing.

APPENDICES

Carl Benz, Section 7 Program Coordinator  
U.S. Fish and Wildlife Service  
Saline Valley Warm Springs Management Plan and EIS  
October 1, 2012  
Page Two

We welcome your input on the proposed project and our intended efforts to avoid adverse effects on threatened and endangered species. If, through the course of project development, it is determined that the project may affect any listed species, we intend to fulfill our obligations to consult under Section 7 of the Endangered Species Act. Thank you for your assistance. Should you have any questions, please contact Mike Cipra, Environmental Protection Specialist, at 760.786.3227; or Linda Manning, Wildlife Biologist, at 760.786.3252.

Sincerely,



Sarah Craighead  
Superintendent

Enclosures:

1. Park Map with Saline Valley Warm Springs
2. Saline Valley Warm Springs Study Area Map

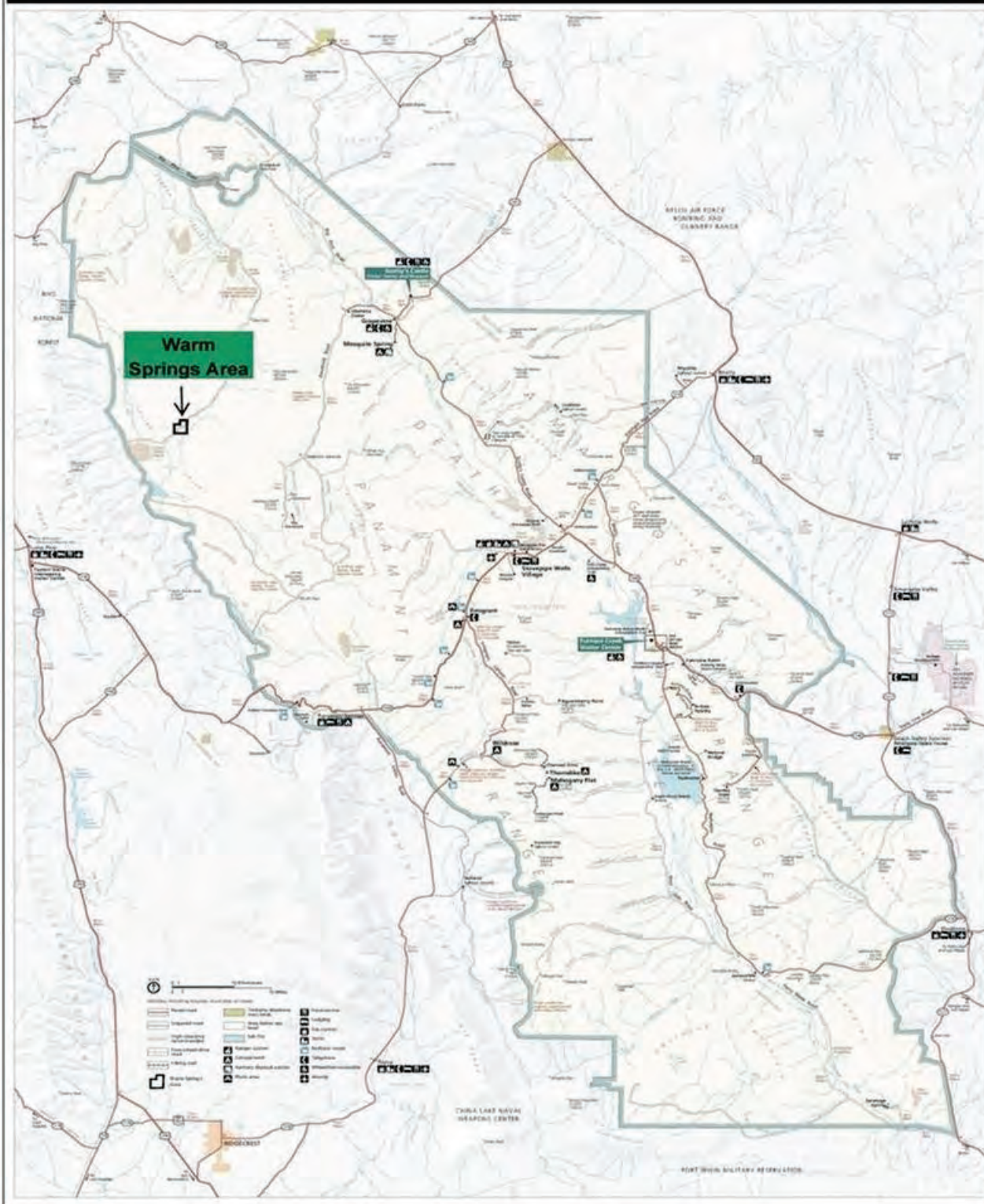
Cc w/o enclosures:

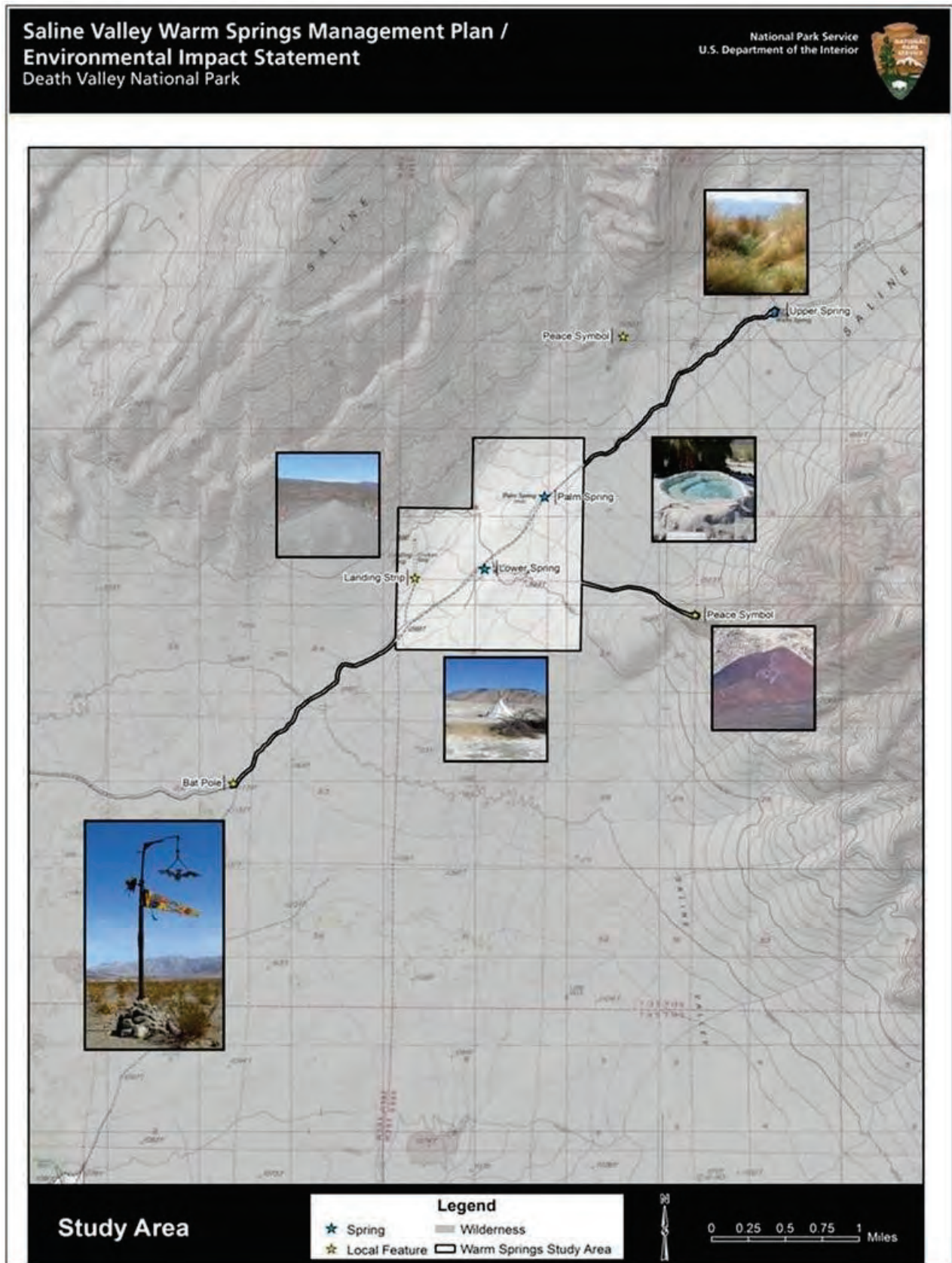
Linda Manning, Wildlife Biologist, Death Valley National Park  
Mike Cipra, Environmental Protection Specialist, Death Valley National Park  
Kelly Fuhrmann, Chief of Resources Management, Death Valley National Park



**Saline Valley Warm Springs Management Plan /  
Environmental Impact Statement**  
Death Valley National Park

National Park Service  
U.S. Department of the Interior









## United States Department of the Interior

FISH AND WILDLIFE SERVICE  
Ventura Fish and Wildlife Office  
2493 Portola Road, Suite B  
Ventura, California 93003

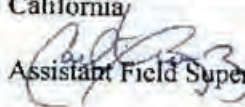


IN REPLY REFER TO:  
(8EVEN00-2013-SL-023)

May 23, 2013

### Memorandum

To: Superintendent, Death Valley National Park, National Park Service, Death Valley, California

From:  Assistant Field Supervisor, Ventura Fish and Wildlife Office, Ventura, California

Subject: Species List for the Saline Valley Warm Springs Management Plan, Death Valley National Park, Death Valley, California (RM.A.2)

This memorandum is in response to your request, dated October 1, 2012, and received in our office on October 4, 2012, for information on federally threatened and endangered species, candidate species, and proposed or designated critical habitat that occurs within Death Valley National Park. The National Park Service (NPS) proposes developing a combined Saline Valley Warm Springs Management Plan and Environmental Impact Statement to guide the NPS in making decisions regarding the future use and protection of the Warm Springs area.

The attached list of species fulfills the requirements of the U.S. Fish and Wildlife Service under section 7(c) of the Endangered Species Act of 1973, as amended (Act). There is no proposed or designated critical habitat located within Death Valley National Park. The NPS, as the lead Federal agency for the project, has the responsibility to review its proposed activities and determine whether any listed species may be affected. If the project is a construction project which may require an environmental impact statement<sup>1</sup>, the NPS has the responsibility to prepare a biological assessment to make a determination of the effects of the action on the listed species. If the NPS determines that a listed species is likely to be adversely affected, it should request, in writing through our office, formal consultation pursuant to section 7 of the Act. Informal consultation may be used to exchange information and resolve conflicts with respect to threatened or endangered species prior to a written request for formal consultation. During this review process, the NPS may engage in planning efforts but may not make any irreversible commitment of resources. Such a commitment could constitute a violation of section 7(d) of the Act.

<sup>1</sup> "Construction project" means any major Federal action which significantly affects the quality of the human environment designed primarily to result in the building of structures such as dams, buildings, roads, pipelines, and channels. This includes Federal actions such as permits, grants, licenses, or other forms of Federal authorizations or approval which may result in construction.

**Superintendent**

Only federally listed species receive protection under the Act; however, species listed by the State of California or otherwise considered to be sensitive should be considered in the planning process in the event that they become listed or proposed for listing prior to project completion. We recommend that you also review information in the California Department of Fish and Wildlife's Natural Diversity Database. You can contact the California Department of Fish and Wildlife at (916) 324-3812 for information on other sensitive species that may occur in this area.

In your letter, you also requested comments on the proposed management plan and environmental impact statement. At this time, we do not have any comments. When the NPS completes a draft of the Saline Valley Warm Springs Management Plan, we would appreciate the opportunity to review it and provide any comments we may have.

We apologize for the delay in responding to your request. Should you have any questions regarding this memorandum, I can be reached at (805) 644-1766, extension 311.

**Attachment**

cc: Linda Manning, Wildlife Biologist, Death Valley National Park  
Mike Cipra, Environmental Protection Specialist, Death Valley National Park



**LISTED SPECIES WHICH MAY OCCUR IN SALINE VALLEY WARM SPRINGS,  
DEATH VALLEY NATIONAL PARK, CALIFORNIA**

Birds

Southwestern willow flycatcher	<i>Empidonax traillii extimus</i>	E
Least Bell's vireo	<i>Vireo bellii pusillus</i>	E
Yellow-billed cuckoo	<i>Coccyzus americanus</i>	C

**Key:**

E - Endangered      T - Threatened

C - Candidate species for which the Service has on file sufficient information on the biological vulnerability and threats to support proposals to list as endangered or threatened.



## United States Department of the Interior

### NATIONAL PARK SERVICE

Death Valley National Park  
P.O. Box 579  
Death Valley, California 92328



IN REPLY REFER TO:

August 4, 2016

#### Memorandum

Documentation of telephone consultation with the US Fish and Wildlife Service regarding the Saline Valley Warm Springs EIS.

Date: July 7, 2016

Time: 08:00 a.m.

Jonathan Penman-Brotzman of Death Valley National Park and Brian Croft of the US Fish and Wildlife Service met via telephone to discuss potential endangered or other special status species, continued participation of the USFWS in cooperating agency meetings, and cooperating agency review of the Draft EIS.

#### Discussion points of the call:

1. USFWS does not consider Saline Valley to be suitable habitat for threatened or endangered species that they manage.
2. As the lead Federal Agency, the NPS has the authority to make a no adverse effect to endangered species determination (having fulfilled due diligence process).
3. The USFWS would like to participate in the cooperating agency meeting and review of the Draft EIS.

Thank you,  
Jonathan Penman-Brotzman

## **SECTION 106 CONSULTATION: ADVISORY COUNCIL ON HISTORIC PRESERVATION**





United States Department of the Interior  
NATIONAL PARK SERVICE  
Death Valley National Park  
P.O. Box 579  
Death Valley, CA 92328



IN REPLY REFER TO:  
N1632

January 10, 2013

MAILED USPS CERTIFIED MAIL-RETURN RECEIPT #70081830000326392026

Mr. Reid Nelson  
Director, Office of Federal Agency Programs  
Advisory Council on Historic Preservation  
1100 Pennsylvania Avenue, NW, Suite 803  
Old Post Office Building  
Washington, DC 20004

Subject: Initiation of Section 106 Consultation between the National Park Service and the California State Historic Preservation Officer for the Saline Valley Warm Springs Management Plan and Environmental Impact Statement, Death Valley National Park, Inyo County, California

Dear Mr. Nelson,

In accordance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 USC 470, et seq.) and its implementing regulation 36 CFR 800.3(a), please accept this letter as notification of a proposed project and as initiation of consultation. The U.S. Department of the Interior, National Park Service (NPS) is conducting an environmental review for the proposed Saline Valley Warm Springs Management Plan (Plan) in Death Valley National Park (Park). For this project, the NPS is the lead federal agency for compliance with the National Environmental Policy Act (NEPA) and with Section 106 of the NHPA. The NPS has determined that the proposed federal action is an undertaking as defined in 36 CFR Part 800.16(y) and it is the type of activity that has the potential to cause effects on historic properties.

On June 5, 2012, the NPS published a Notice of Intent (NOI) for an Environmental Impact Statement (EIS). The NOI states that through the EIS process, the NPS will evaluate different approaches for managing the Saline Valley Warm Springs area and assess the potential impacts on visitor access, asset management, water resources, biological and cultural resources, human health and safety, aesthetics, visitor experience, wilderness character, and other stewardship considerations. Alternatives to be considered include no-action and reasonable action alternatives, which could include establishing designated camping areas, limiting further development of the springs, restoration or partial restoration of the springs, and either closure or authorization of the nearby airstrip.

For the purposes of NEPA, the Timbisha Shoshone Tribe, Bureau of Land Management and Inyo County are identified as cooperating agencies through a draft Memorandum of Understanding



(MOU). The Park conducted a public scoping process June 5 through August 6, 2012, seeking public and agency input in order to help define issues and shape alternatives for this planning process. The NPS is currently preparing the public Draft EIS.

The Park recognizes that the Saline Valley Warm Springs are historically and culturally significant to Timbisha Shoshone Tribe. The Timbisha Shoshone Homeland Act of 2000 (P.L. 106-423) designated over 1.5 million acres of the Park as a special use area for the Tribe, called the "Timbisha Shoshone Natural and Cultural Preservation Area," which includes the Saline Valley Warm Springs.

The proposed Plan/EIS will provide a basis for guiding management actions and making decisions in this remote yet popular area, which was added to Death Valley National Park in 1994 with the passage of the California Desert Protection Act.

The purpose of the Plan/EIS is to:

- Provide a framework for natural and cultural resources management at the Warm Springs area;
- Provide a framework for administration and operations at the Warm Springs area;
- Provide a framework for managing visitor use at the Warm Springs area;
- Provide guidance for Park managers as they work with various stakeholders of the Warm Springs area; and
- Balance management of natural resources, ethnographic resources, and visitor use.

The NPS plans to coordinate compliance with the requirements of both NEPA and Section 106 of the NHPA pursuant to 36 CFR Part 800.8(c). If effects of an undertaking on historic properties are found to be adverse, the Plan/EIS will identify measures to avoid, minimize, or mitigate such effects in accordance with 36 CFR Part 800.8(c)(1)(v). The Record of Decision (ROD) for the Plan/EIS will identify implementation of such measures as a condition of approval of the action, will evidence the Park's compliance with Section 106, and shall govern the undertaking and all of its parts.

The NPS welcomes your input on the proposed project. Should you have any questions, please contact Blair Davenport, Cultural Resources Manager, at 760.786.3287 ([blair\\_davenport@nps.gov](mailto:blair_davenport@nps.gov)); or Mike Cipra, Environmental Protection Specialist, at 760.786.3227 ([mike\\_cipra@nps.gov](mailto:mike_cipra@nps.gov)).

Sincerely,



Kelly Fuhrmann  
Acting Superintendent

Enclosure:

Presentation, Saline Valley Warm Springs Management Plan / EIS, 13 pages

cc (w/ enclosures):

Carol Roland-Nawi, State Historic Preservation Officer, Department of Parks and Recreation,  
Post Office Box 942896, Sacramento, CA 94296-0001, Attn: Mark Beason, State Historian II

bcc (w/out enclosures):

B Davenport, CR Manager, DEVA (signed copy via email)  
W Raschkow, Archeologist, DEVA (signed copy via email)  
M Cipra, Environmental Specialist, DEVA (signed copy via email)  
Central Files, DEVA

RM:BDAVENPORT:mbd:01/10/2013:760-786-3287;  
Sent via US Certified Mail, January 11, 2013



September 2, 2014

Ms. Kathleen Billings  
Superintendent  
Death Valley National Park  
P.O. Box 579  
Death Valley, CA 92328

**Ref: *Saline Valley Warm Spring Management Plan and Environmental Impact Statement  
Inyo County, California***

Dear Ms. Billings:

The Advisory Council on Historic Preservation (ACHP) received the National Park Service (NPS) notification pursuant to Section 800.8(c) of the ACHP's regulations, "Protection of Historic Properties" (36 CFR Part 800). We appreciate receiving your notification, which establishes that NPS will use the process and documentation required for the preparation of an Environmental Impact Statement (EIS) to comply with Section 106 of the National Historic Preservation Act in lieu of the procedures set forth in 36 CFR §§ 800.3 through 800.6.

In addition to notifying the ACHP, the NPS must also notify the California State Historic Preservation Officer (SHPO) and/or the appropriate Tribal Historic Preservation Officer (THPO) if the undertaking is located on tribal lands. During the preparation of the Draft EIS, the NPS shall meet the standards in §§ 800.8(c)(1)(i) through (v) and describe its efforts in the resulting environmental document:

- identify consulting parties either pursuant to § 800.3(f) or through the NEPA scoping process with results consistent with § 800.3(f);
- identify historic properties and assess the effects of the undertaking on such properties in a manner consistent with the standards and criteria of §§ 800.4 through 800.5, provided that the scope and timing of these steps may be phased to reflect the agency official's consideration of project alternatives in the NEPA process and the effort is commensurate with the assessment of other environmental factors;
- consult regarding the effects of the undertaking on historic properties with the SHPO/THPO, Indian tribes and Native Hawaiian organizations that might attach religious and cultural significance to the affected historic properties, other consulting parties, and the ACHP, where appropriate, during the NEPA scoping, environmental analysis, and the preparation of NEPA documents;
- involve the public in accordance with the agency's published NEPA procedures; and

ADVISORY COUNCIL ON HISTORIC PRESERVATION  
401 F Street, Suite 306 • Washington, DC 20001-2637  
Phone: 202-517-0200 • Fax: 202-517-6381 • [achp@achp.gov](mailto:achp@achp.gov) • [www.achp.gov](http://www.achp.gov)



- develop in consultation with identified consulting parties alternatives and proposed measures that might avoid, minimize or mitigate any adverse effects of the undertaking on historic properties and describe them in the DEIS.

Section 800.8(c)(2)(i) requires that you submit to the ACHP any draft EIS or EIS you prepare. Inclusion of your adverse effect determination in both the draft EIS/EIS and in your transmittal letter will help ensure a timely response from the ACHP regarding its decision to participate in consultation. Please indicate in your cover letter the schedule for Section 106 consultation and a date by which you require a response from the ACHP.

We encourage the NPS to review and apply the guidance in the publication, *NEPA and NHPA: A Handbook for Integrating NEPA and Section 106*, published in March 2013, and available at [http://www.achp.gov/docs/NEPA\\_NHPA\\_Section106\\_Handbook\\_Mar2013.pdf](http://www.achp.gov/docs/NEPA_NHPA_Section106_Handbook_Mar2013.pdf). This handbook, prepared jointly by the Council on Environmental Quality [CEQ] and ACHP, provides a checklist for using the substitution process defined in Section 800.8(c) which may be helpful to you in your NEPA/Section 106 consultation.

Thank you for your notification pursuant to Section 800.8(c). If you have any questions or if we may be of assistance, please contact Katty Harris by telephone at (202) 517-0213 or by e-mail at [kharris@achp.gov](mailto:kharris@achp.gov).

Sincerely,



Caroline D. Hall  
Assistant Director  
Federal Property Management Section  
Office of Federal Agency Programs



## United States Department of the Interior

NATIONAL PARK SERVICE  
Death Valley National Park  
PO Box 579  
Death Valley, California 92328



IN REPLY REFER TO:  
DEVA CRP No. 11-036  
PEPC No. 39438  
SHPO No. NPS\_2013\_0114\_001

September 20, 2018

MAILED USPS CERTIFIED MAIL-RETURN RECEIPT

Christopher Wilson  
Program Analyst  
Advisory Council on Historic Preservation  
401 F Street NW  
Washington, DC 20001

Subject: SHPO# NPS\_2013\_0114\_001: Conclusion of Consultation with the California State Historic Preservation Office for the Saline Valley Warm Springs Management Plan/EIS, Death Valley National Park, Inyo County, California

Dear Mr. Wilson:

Death Valley National Park (Park) is conducting an Environmental Impact Statement (EIS) to assess the potential impacts to natural and cultural resources for five alternative management plans for the Saline Valley Warm Springs camping and hot springs soaking area. This project qualifies as a federal undertaking under the definitions found in 36 C.F.R. 800.16(y).

The Park initiated consultation with the California State Historic Preservation Office (SHPO) on May 23, 2017. The Park received SHPO concurrence on Step 1 of the Standard 4-Step Process and the identification of the Area of Potential Effect on July 20, 2017. The Park submitted a letter with archeological surveys, the ethnographic site eligibility determination, the historic site eligibility determination, and the assessment of effect form on February 15, 2018. Although the 60 day window for review of Steps 2 and 3 of the Standard 4-Step Process had passed, the Park submitted a letter on July 24, 2018, describing the new Department of the Interior EIS guidance and timelines for completion. The Park requested comments and/or concurrence on the Identification of Historic Properties and a finding of no adverse effect by August 31, 2018, to ensure we could respond to concerns, incorporate your input, and meet our deadlines. To date, the SHPO has not provided concurrence or a request for additional information.

Following these consultation efforts, the Park discussed options to resolve and conclude consultation with the SHPO. It was determined the Park provided more than a reasonable amount of time (over 6.5 months) for the SHPO to either concur with or request additional information regarding the agency's "no adverse effect" determination.

Therefore, in accordance with 36 CFR 800.5(c)(1), the NPS will proceed with the undertaking. The NPS will maintain a record of the finding and will provide information on the finding to the public on request, consistent with the confidentiality provisions of 36 CFR 800.11(c).

Should the SHPO or the ACHP have comments or recommendations on this project in the future, we will do our best to accommodate those concerns.

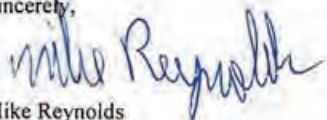


September 20, 2018  
Ms. Julianne Polanco

Page 2

Should you have any questions, please contact Josh Hoines, Chief of Resources, at [josh\\_hoines@nps.gov](mailto:josh_hoines@nps.gov) or at (760) 786-3253; or Amanda Landon, Park Archeologist, at [amanda\\_landon@nps.gov](mailto:amanda_landon@nps.gov) or at (760) 786-3217. All correspondence can be sent to the address on the above letterhead to the attention of Mike Reynolds.

Sincerely,

A handwritten signature in blue ink that reads "Mike Reynolds". The signature is fluid and cursive, with the first name "Mike" and last name "Reynolds" clearly legible.

Mike Reynolds  
Superintendent

CC: David Louter, Cultural Resources Program Chief, Pacific West Region, National Park Service



**SECTION 106 CONSULTATION: STATE HISTORIC PRESERVATION  
OFFICER**





United States Department of the Interior  
NATIONAL PARK SERVICE  
Death Valley National Park  
P.O. Box 579  
Death Valley, CA 92328



IN REPLY REFER TO:  
N1632

January 10, 2013

MAILED USPS CERTIFIED MAIL-RETURN RECEIPT #70081830000326392033

Carol Roland-Nawi  
State Historic Preservation Officer  
Department of Parks and Recreation  
Post Office Box 942896  
Sacramento, CA 94296-0001

Attn: Mark Beason, State Historian II

Subject: Initiation of Section 106 Consultation between the National Park Service and the State Historic Preservation Officer for the Saline Valley Warm Springs Management Plan and Environmental Impact Statement, Death Valley National Park, Inyo County, California

Dear Ms. Roland-Nawi,

In accordance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 USC 470, et seq.) and its implementing regulation 36 CFR 800.3(a), please accept this letter as notification of a proposed project and as initiation of consultation. The U.S. Department of the Interior, National Park Service (NPS) is conducting an environmental review for the proposed Saline Valley Warm Springs Management Plan (Plan) in Death Valley National Park (Park). For this project, the NPS is the lead federal agency for compliance with the National Environmental Policy Act (NEPA) and with Section 106 of the NHPA. The NPS has determined that the proposed federal action is an undertaking as defined in 36 CFR Part 800.16(y) and it is the type of activity that has the potential to cause effects on historic properties.

On June 5, 2012, the NPS published a Notice of Intent (NOI) for an Environmental Impact Statement (EIS). The NOI states that through the EIS process, the NPS will evaluate different approaches for managing the Saline Valley Warm Springs area and assess the potential impacts on visitor access, asset management, water resources, biological and cultural resources, human health and safety, aesthetics, visitor experience, wilderness character, and other stewardship considerations. Alternatives to be considered include no-action and reasonable action alternatives, which could include establishing designated camping areas, limiting further development of the springs, restoration or partial restoration of the springs, and either closure or authorization of the nearby airstrip.



For the purposes of NEPA, the Timbisha Shoshone Tribe, Bureau of Land Management and Inyo County are identified as cooperating agencies through a draft Memorandum of Understanding (MOU). The Park conducted a public scoping process June 5 through August 6, 2012, seeking public and agency input in order to help define issues and shape alternatives for this planning process. The NPS is currently preparing the public Draft EIS.

The Park recognizes that the Saline Valley Warm Springs are historically and culturally significant to Timbisha Shoshone Tribe. The Timbisha Shoshone Homeland Act of 2000 (P.L. 106-423) designated over 1.5 million acres of the Park as a special use area for the Tribe, called the "Timbisha Shoshone Natural and Cultural Preservation Area," which includes the Saline Valley Warm Springs.

The proposed Plan/EIS will provide a basis for guiding management actions and making decisions in this remote yet popular area, which was added to Death Valley National Park in 1994 with the passage of the California Desert Protection Act.

The purpose of the Plan/EIS is to:

- Provide a framework for natural and cultural resources management at the Warm Springs area;
- Provide a framework for administration and operations at the Warm Springs area;
- Provide a framework for managing visitor use at the Warm Springs area;
- Provide guidance for Park managers as they work with various stakeholders of the Warm Springs area; and
- Balance management of natural resources, ethnographic resources, and visitor use.

The NPS plans to coordinate compliance with the requirements of both NEPA and Section 106 of the NHPA pursuant to 36 CFR Part 800.8(c). If effects of an undertaking on historic properties are found to be adverse, the Plan/EIS will identify measures to avoid, minimize, or mitigate such effects in accordance with 36 CFR Part 800.8(c)(1)(v). The Record of Decision (ROD) for the Plan/EIS will identify implementation of such measures as a condition of approval of the action, will evidence the Park's compliance with Section 106, and shall govern the undertaking and all of its parts.

The NPS welcomes your input on the proposed project. Should you have any questions, please contact Blair Davenport, Cultural Resources Manager, at 760.786.3287 ([blair\\_davenport@nps.gov](mailto:blair_davenport@nps.gov)); or Mike Cipra, Environmental Protection Specialist, at 760.786.3227 ([mike\\_cipra@nps.gov](mailto:mike_cipra@nps.gov)).

Sincerely,



Kelly Fuhrmann  
Acting Superintendent

Enclosures:

Presentation, Saline Valley Warm Springs Management Plan / EIS, 13 pages

Cc: (w/enclosures):

Mr. Reid Nelson, Director, Office of Federal Agency Programs, Advisory Council on Historic Preservation, 1100 Pennsylvania Avenue, NW, Suite 803, Old Post Office Building, Washington, DC 20004

bcc (w/out enclosures):

B Davenport, CR Manager, DEVA (signed copy via email)

W Raschkow, Archeologist, DEVA (signed copy via email)

M Cipra, Environmental Specialist, DEVA (signed copy via email)

Central Files, DEVA

RM:BDAVENPORT:mbd:01/10/2012:760-786-3287;

Sent via US Certified Mail, January 11, 2012



## United States Department of the Interior

NATIONAL PARK SERVICE

Death Valley National Park  
PO Box 579  
Death Valley, California 92328



IN REPLY REFER TO:  
H4217

April 25, 2016

MAILED USPS CERTIFIED-RETURN RECEIPT

Ms. Julianne Polanco  
Office of Historic Preservation  
Department of Parks and Recreation  
1725 23rd Street, Suite 100  
Sacramento, CA 95816-7100

Attn: Mark Beason, State Historian II  
NPS\_2013\_0114\_001

Subject: Request to review draft report *Saline Valley Warm Springs Assessment of Eligibility*, and, Continuation of Section 106 Consultation between the National Park Service and the State Historic Preservation Officer for the Saline Valley Warm Springs Management Plan and Environmental Impact Statement, Death Valley National Park, Inyo County, California.

Dear Ms. Polanco:

On December 3, 2016, at the Nationwide Programmatic Agreement Biennial Meeting held at Santa Monica National Park, Cultural Resources Manager Blair Davenport (Death Valley National Park, park) transmitted a bound copy of the *Saline Valley Warm Springs Assessment of Eligibility* draft report to Mark Beason. Through this letter, the National Park Service (NPS) is formally requesting your review of the draft report.

The park is seeking California State Historic Preservation Office consensus with the National Park Service (NPS) finding that Saline Valley Warm Springs Historic Site is eligible for the National Register of Historic Properties (NRHP) at the local level under Criteria A for its association with *Recreation* as a campground established around a hot spring site, and, with *Social History* as a site that typifies the ideals and principles of a continuum of counterculture movements culminating the Beat and Hippie movements.

Saline Valley Warm Springs Historic Site is a developed campground located at the north end of Saline Valley in Death Valley National Park. The site is comprised of a combination of natural features and built features including rock alignments, soaking pools, camping areas, a road, trails and pathways, and an aircraft landing strip.

The period of significance for the Saline Valley Warm Springs Historic Site begins in 1955 and continues until 1978. The earliest anecdotal evidence for Euro-American use of the site is in the 1930s; however, as miners knew of the springs as early as 1904, it is possible that site began to be used much earlier. Anecdotal



H4217  
April 22, 2016  
Julianne Polanco  
Page 2 of 2

reports indicate that the first tub (the Bathtub) may have been constructed by either the Civilian Conservation Corps (CCC) in the early 1930s or miners/ranchers in the late 1930s. The first documented report of a constructed tub at the springs was in 1947.

Since the late 1940s, visitation to the springs has steadily increased and additional soaking pools and other features have been constructed. The springs were first managed by the U.S. Forest Service, then the U.S. Bureau of Land Management, and are currently under the jurisdiction of the U.S. National Park Service. Gradually, more and more people visited the site from the mid-1950s through mid-1960s which coincided with the rise of the Beat and Hippie movements in the U.S. The first conclusive date for the site being considered a destination is in 1955. While the springs were likely used for camping in earlier years, 1955 provides a start date for the period of significance with solid evidence for recreational use. The end date for the period of significance is defined as being 1978, to include all resources more than 50 years of age and the contributing resources constructed between 1965 and 1978, which although not individually eligible, contribute to the eligibility of the site as a whole.

It's important to note this *Assessment of Eligibility* ("historic" Determination of Eligibility or DOE) considers only the potential significance of the site from a perspective of the Euro-American use and development from the 1930s to the present. The site's extensive Native American history and its significance to culturally affiliated Tribes, in particular the Timbisha Shoshone Tribe, will be covered in a separate "ethnographic DOE" report which is currently being revised in cooperation with Native American informants and the NPS. Upon completion, the "ethnographic DOE" will be submitted to the Tribe and SHPO for formal review. The park is concurrently submitting this "historic DOE" to the Tribe for their review at this time.

This *Assessment of Eligibility* was prepared in support of several efforts currently in progress:

- As a proposed DOE for Saline Valley Warm Springs Historic Site;
- To meet NHPA Section 106 compliance requirements associated with the completion of a management plan and an environmental impact statement (EIS) for Saline Valley Warm Springs, being prepared by the NPS and their contractor EA Engineering, Science, and Technology, Inc.;
- To document cultural landscape resources and other historic resources for the above mentioned plan and EIS.

We greatly appreciate your office's assistance and want to thank you for the review of this finding. If you concur with the finding of eligibility for the Saline Valley Warm Springs Historic Site, please send us a letter stating your concurrence. If you need additional information, or have questions or concerns, please contact Blair Davenport, Cultural Resources Manager, at 760/786-3287, or, [blair\\_davenport@nps.gov](mailto:blair_davenport@nps.gov).

Sincerely yours,

Mike Reynolds  
Superintendent

Enclosure:

Cover and Title pages only, draft report *Saline Valley Warm Springs Assessment of Eligibility*.

## APPENDICES

Bcc (w/out attachments):

Jonathan Pennman-Brotzman, Environmental Protection Specialist

Wanda Raschkow, Park Archeologist

Central Files (hard copy)

RM:BDAVENPORT:mbd:04/25/2016:760-786-3287



# Saline Valley Warm Springs Assessment of Eligibility

Death Valley National Park  
Inyo County, California

GSA Contract No. GS-10F-0228J  
Task Order P11PD24428

NEW SOUTH ASSOCIATES, INC.

## Saline Valley Warm Springs Assessment of Eligibility

Death Valley National Park  
Inyo County, California

GSA Contract No. GS-10F-0228J  
Task Order P11PD24428

Report submitted to:

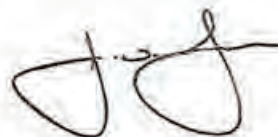
EA Engineering, Science, and Technology, Inc. PBC • 225 Schilling Circle •  
Hunt Valley, Maryland 21031

Report prepared for:

National Park Service • Death Valley National Park • P.O. Box 579 •  
Death Valley, California 92328

Report prepared by:

New South Associates • 6150 East Ponce de Leon Avenue • Stone Mountain, Georgia 30083



J.W. Joseph, Ph.D., RPA – Principal Investigator

Julie Coco-Author

September 11, 2015 • Revised Draft Report  
New South Associates Technical Report 2457





**United States Department of the Interior**  
NATIONAL PARK SERVICE  
Death Valley National Park  
PO Box 579  
Death Valley, California 92328



IN REPLY REFER TO:  
DEVA CRP No. 11-036  
PEPC No. 39438  
SHPO No. NPS\_2013\_0114\_001

May 23, 2017

MAILED USPS CERTIFIED MAIL-RETURN RECEIPT

Ms. Julianne Polanco  
Office of Historic Preservation  
Department of Parks and Recreation  
1725 23rd Street, Suite 100  
Sacramento, CA 95816-7100

Attn: Mark Beason, State Historian II

Subject: NPS\_2013\_0114\_001: Request for Initiation of Consultation per 36 CFR 800.3 for the Saline Valley  
Warm Springs Management Plan, Death Valley National Park, Inyo County, California

Dear Ms. Polanco:

The National Park Service (NPS), Death Valley National Park (Park) is seeking to initiate consultation with the California State Historic Preservation Officer (SHPO) in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended (54 USC 300101 et seq.) and its implementing regulation 36 CFR 800.3, for the following project. The Park is conducting an Environmental Impact Statement (EIS) to assess the potential impacts to natural and cultural resources for five alternative management plans for the Saline Valley Warm Springs camping and hot springs soaking area (Attachment 1: Figures 1 and 2, Attachment 2: Figures 1-5). The Park originally initiated consultation on this project on January 10, 2013, with the intent to combine National Environmental Policy Act (NEPA) and Section 106 compliance into one document. At the beginning of this year, the Park compliance staff decided to conduct a separate, concurrent Section 106 compliance action.

**Description of the Preferred Alternative**

The purpose of the project is to complete a management plan for the site as directed in the 2002 General Management Plan, which would bring the site into compliance with health and safety regulations, ensure cooperation and coordination with the Timbisha Shoshone Tribe in accordance with the Timbisha Homeland Act, and provide a plan for resource protection (Attachment 1: page 3).

The Preferred Alternative (Alternative 5) encourages cooperative management between the Park and user groups and protects the natural and cultural resources of the site while allowing for continued recreational visitor use. The Park would consult with the Office of Public Health to develop an approach for water quality monitoring, add signs at the sinks to inform visitors of non-potable water, add filtration systems for discharge water at the dishwashing stations, and make the tubs accessible, to the extent possible (Attachment 1: Figure 6 on page 43).

Further actions to protect public health would include installing fencing around the developed portion of the Warm Springs area to prevent feral burro access to water resources, vegetation, and campsites, and requiring proper storage of hazardous materials. The vehicle support facility would be removed.

The Park would limit visitor impacts by creating a permit system for all overnight guests, limiting the length of stay to 14 consecutive days, prohibiting the manipulation of natural or cultural resources for the purpose of art, and removing all non-historic art from wilderness. Camping would be restricted to designated camping areas with designated overflow walk-in camping areas and associated defined parking areas. Camping would be allowed at the Chicken Strip airstrip, and additional airplane tie-downs could be added. No camping would be allowed within 200 feet of the source springs. User groups could be involved in resource protection through agreements with the Park that could include invasive plant removal, monitoring of the conditions at Upper Spring, campsite management, and archeological resource and wilderness boundary monitoring. The Park would also encourage proper storage of food through on-site and online education.

The alternative would also take steps to improve and restore the natural and cultural environments by controlling nonnative plant species, removing user-created fire rings, requiring visitors to haul out trash and charcoal, encouraging visitors at the campgrounds but requiring campers at the Chicken Strip to pack out their waste, encouraging the use of NPS-provided firepans at the campsites, and treating the Saline Valley Warm Springs as an area of ethnographic and historic significance for the Tribe and recreational users, respectively. Finally, visitor education would increase to include regulatory health, safety, and compliance information.

The preferred alternative aims to involve user groups in the cooperative management of the area to protect Park resources and ensure compliance with applicable NPS, state, and federal regulations, while providing visitors with the types of experiences they currently value. The user groups would be engaged through agreements to identify and carry out many of the actions needed to protect natural and cultural resources, protect human health and safety, and identify roles and responsibilities for protecting resources and maintaining visitor facilities. The user groups would be engaged in the accomplishment of many of the actions needed to protect human health and Park resources through agreements that could identify responsibilities for maintenance of facilities, maintenance of the airstrip, and protection of natural and cultural resources.

A complete description of the alternative with a table listing specific actions is available in the Draft EIS (Attachment 1: pages 22-34, including Table 1). The Park is completing a plan for cooperative management with the Tribe. When that plan is complete and implemented, actions will be taken at the Saline Valley Warm Springs consistent with that plan.

### **Area of Potential Effect**

The direct Area of Potential Effect (APE) includes the road to the campground, the developed area and camping areas, and the Chicken Strip airstrip. The indirect APE extends to the boundaries of the proposed historical district and the proposed ethnographic district (Attachment 2: Figures 1-2). Proposed actions that require Section 106 review are described below.

#### ***Maintenance of the Access Road***

The road from Saline Valley Road to the developed area (Lower Warm Springs Road) is currently maintained by Park visitors and volunteers by dragging a weighted tractor tire or other object behind a vehicle to smooth out the washboard and repair washouts (Attachment 1: page 81; Attachment 2: Figures 2-4). Under the Preferred Alternative, the Park would maintain the road in accordance with guidelines for four-wheel drive high clearance roads using proper equipment such as a road grader.



May 23, 2017  
Ms. Julianne Polanco

Page 3

#### ***Maintenance of the Chicken Strip Airstrip***

Under the Preferred Alternative, the Park would continue the Memorandum of Understanding (MOU) with the Recreational Aviation Foundation (RAF) for maintenance of the airstrip. Members of RAF would make necessary repairs to the Chicken Strip, including leveling the dirt strip after rain events, replacing the windsock, and painting the rocks that line the strip (Attachment 1: page 71; Attachment 2: Figures 4 and 6).

The Park would also allow pilots to camp with their planes at the plane parking area along the airstrip. Under the preferred alternative, the Park could install additional aircraft tie-downs within the existing disturbed parking area at the strip.

#### ***Camping at the Springs***

There are currently no designated campsites at Warm Springs. Under the preferred alternative, the Park would designate dispersed camping areas using posted maps, community agreements, and, if necessary, signage. Camping would be limited to existing disturbed areas, with no expansion outside of the existing footprint (Attachment 2: Figures 5, 7, and 8). Overflow camping would also be limited to the existing disturbed footprint, and overflow campers would park their vehicles in designated parking areas to walk out to their camp sites. Camping would not be allowed within 200' of source springs.

#### ***Camp Host Quarters***

The camp host currently lives in a makeshift fenced "fort" with a vehicle support facility under a wooden awning (Attachment 1: page 138; Attachment 2: Figure 7). The Preferred Alternative involves removing the housing and vehicle support facility. The camp host would provide their own temporary housing.

#### ***Fire Rings***

There are currently numerous, informal rock fire-rings at Warm Springs. Under the Preferred Alternative, the rock rings would be replaced with Park-furnished fire rings (Attachment 2: Figure 7). Constructing new fire rings or moving the Park fire rings would not be permitted. The Park would remove the above-ground portions of the informal fire rings, including cobbles and other debris used to delineate and protect campfires. The Park would then install standard 2'6" in diameter and 8" tall fire rings with 12" deep anchors in the same location as the informal visitor-constructed fire rings that were removed (Attachment 2: Figure 9). These rings would be installed by driving them into the ground by hand (soft soil) or pushing down using an excavator (hard soil) like the one described in the next section. Access routes off road will be identified to avoid cultural resources and will be based on the location of historical and archeological features identified during the inventories.

#### ***Vegetation Management***

Under the Preferred Alternative, the Park would remove the non-native palms from the upper springs and would develop a plan to prevent palms and other non-native plants from spreading at the lower springs (Attachment 2: Figures 7 and 8). Smaller palms would be removed by hand. Larger palms would be removed whole using a Caterpillar 320 CLU excavator or similar equipment equipped with a bucket and thumb attachment to pull them out of the ground. The excavator has a footprint of less than 5 PSI ground pressure, a shoe width of 23.6", and a total width of 9.8'. If any palms are beyond the reach of the excavator, they would be removed manually by felling them with a chainsaw, then cutting the boles into small sections to be carried off site. Tentatively, the staging area would be kept on the existing road. The off-road access route for the excavator will be identified based on the location of any archeological sites identified in the survey. Archeological sites would be avoided.

The Park would also remove the diversion piping and wildlife trough from Burro Spring (Attachment 1: upper right figure on page 42, Figure 11 on page 84).

#### ***Removal of Non-Historic Art from Wilderness and Backcountry Areas***

Under the Preferred Alternative, the Park would identify and manage NRHP-eligible art and remove non-historic art. New art would not be permitted (Attachment 1: Figure 10 on page 80).



May 23, 2017  
Ms. Julianne Polanco

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***Future Actions Needing Further Section 106 Consultation***

The Preferred Alternative calls for installing a fence around the developed area to prevent burros from accessing the springs, riparian vegetation, and campsites. The size and design of the fenced area will be determined later. The Park will consult on placement of the fence when the design for the project becomes available.

The Preferred Alternative also calls for additional toilets at the lower springs, should they become necessary. If visitation increases to the point that additional toilets need to be installed at the lower springs, the Park will consult on their number and locations.

**Identification of Historic Properties**

The Park is not ready to consult on the Identification of Historic Properties, yet, but would like to keep the California SHPO informed of our progress. We commissioned eligibility analyses for the Saline Valley Warm Springs Historical District and the Saline Valley Warm Springs ethnographic site (Ko' o Warm Springs Ethnographic District). The report for the historical site was submitted to the California SHPO on December 3, 2015, at the Nationwide Programmatic Agreement Biennial Meeting held at Santa Monica National Park, and a follow-up letter was sent on April 25, 2016. The report will be re-submitted as part of the Identification of Historic Properties for this Section 106 consultation effort. The draft report for the ethnographic site is currently being reviewed by National Park Service staff.

The Park also conducted two archeological surveys within the APE and one monitoring project of known archeological sites within about 2 miles of the project area. These data will help inform the assessment of effect for this project and the Saline Valley archeological site monitoring program.

**Tribal Consultation**


The Park is conducting formal consultation with the Timbisha Shoshone Tribe concurrently with the California SHPO. In addition to formal consultation, the Park commissioned an assessment of the eligibility of the Saline Valley Warm Springs area as an ethnographic site. The anthropologist doing the assessment conducted interviews and site visits with members of the Timbisha Shoshone Tribe. The Park and the Timbisha Shoshone Tribe are also developing a cooperative management plan for the area.

The Park seeks your concurrence with the following findings:

- Initiation of the Section 106 process including consultation with SHPO per 36 CFR 800.3.
- Determination of the Area of Potential (APE) per 36 CFR 800.4.

If you have any questions or concerns regarding this undertaking or the park's determination of effect, please contact the park Environmental Protection Specialist, Jonathan Penman-Brotzman (760/768-3227), Section 106 Archeologist Amanda J. Landon (760/786-3217), or Superintendent Mike Reynolds (760/786-3240).

Sincerely,



Mike Reynolds  
Superintendent

May 23, 2017  
Ms. Julianne Polanco

Page 5

Attachments:

1. *Saline Valley Warm Springs Draft Management Plan/Environmental Impact Statement*
2. *Maps and Photos Depicting the Area of Potential Effect*

CC (w/ attachments):  
Central Files (hard copy)

RM:ALANDON:mbd:05/23/2017:760-786-3217

**OFFICE OF HISTORIC PRESERVATION  
DEPARTMENT OF PARKS AND RECREATION**

1725 23<sup>rd</sup> Street, Suite 100  
SACRAMENTO, CA 95816-7100  
(916) 445-7000 Fax: (916) 445-7053  
calshpo@parks.ca.gov  
www.chp.parks.ca.gov



July 20, 2017

In reply, refer to: NPS\_2013\_0114\_001

Mike Reynolds, Superintendent  
National Park Service  
Death Valley National Park  
P.O. Box 579  
Death Valley, CA 92328

Subject: Saline Valley Warm Springs Management Plan, Death Valley National Park,  
Inyo County, California

Dear Mr. Reynolds:

Thank you for your May 23, 2017, letter re-initiating consultation regarding an undertaking at Death Valley National Park. The National Park Service (NPS) is consulting with the State Historic Preservation Officer (SHPO) in order to comply with Section 106 of the National Historic Preservation Act of 1966 (54 U.S.C. § 306108), as amended, and its implementing regulations at 36 CFR Part 800. In addition to the letter, NPS submitted maps, photographs, and a disc containing the Draft Environmental Impact Statement for this action.

NPS also initiated consultation with the Timbisha Shoshone Tribe regarding this undertaking and commissioned an assessment of the eligibility of the Saline Valley Warm Springs area as an ethnographic site. NPS will continue consulting during the identification and evaluation of historic properties and assessment of effects.

The proposed undertaking, as described, involves completing a management plan for the Saline Valley Warm Springs site. The preferred alternative seeks to protect the natural and cultural resources present while allowing for continued recreational visitor use by the following actions:

- Develop water quality monitoring plan;
- Add signage;
- Add filtration systems for discharge of water at dishwashing stations;
- Make tubs accessible to the extent possible;
- Install fencing to prevent access by feral burros;
- Install proper storage of hazardous materials;
- Remove the vehicle support facility and makeshift housing for camp host;



Mr. Mike Reynolds  
July 20, 2017  
Page 2

NPS\_2013\_0114\_001

- Create a permit system for overnight guests;
- Remove all non-historic art from wilderness;
- Restrict camping to designated areas and outside 200 feet of the source springs;
- Control non-native plant species;
- Remove user-created fire rings;
- Maintain the Access Road by NPS;
- Maintain the Chicken Strip Airstrip with Recreational Aviation Foundation (RAF);
- Install additional toilets at the lower springs if determined necessary by increased visitation.

NPS defined the Area of Potential Effect (APE) as the Access Road, the developed area, camping areas, Chicken Strip Airstrip, boundaries of a proposed historic district, and boundaries of a proposed ethnographic district. NPS intends to continue consultation following identification and evaluation of historic properties within the APE and with the assessment of effects.

After reviewing the information submitted, the SHPO agrees that the proposed action qualifies as a federal undertaking with the potential to affect historic properties as defined in 36 CFR 800 and looks forward to continuing consultation. The APE also appears to be sufficient to take direct and indirect effects into account. Thank you for seeking the SHPO's comments and considering historic properties as part of your planning. If you have any questions or concerns, please contact Mark Beason, State Historian, at (916) 445-7047 or [mark.beason@parks.ca.gov](mailto:mark.beason@parks.ca.gov).

Sincerely,



Julianne Polanco  
State Historic Preservation Officer



## United States Department of the Interior

NATIONAL PARK SERVICE

Death Valley National Park  
PO Box 579  
Death Valley, California 92328



IN REPLY REFER TO:  
DEVA CRP No. 11-036  
PEPC No. 39438  
SHPO No. NPS\_2013\_0114\_001

February 15, 2018

### MAILED USPS CERTIFIED MAIL-RETURN RECEIPT

Ms. Julianne Polanco  
Office of Historic Preservation  
Department of Parks and Recreation  
P.O. Box 942896  
Sacramento, CA 94296-0001

Attn: Mark Beason, State Historian II

Subject: SHPO# NPS\_2013\_0114\_001: Request Concurrence on the Identification of Historic Properties per 36 CFR 800.4 and the Finding of *No Adverse Effect* per 36 CFR 800.5 for the Saline Valley Warm Springs Management Plan/EIS, Death Valley National Park, Inyo County, California

Dear Ms. Polanco:

The National Park Service (NPS), Death Valley National Park (Park) re-initiated consultation with the California State Historic Preservation Officer (SHPO) and defined the Area of Potential Effect for the Stovepipe Wells Sewage Lagoon Project in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended (54 USC 300101 et seq.) and its implementing regulations 36 CFR 800.3 and 36 CFR 800.4, on May 23, 2017. The Park received concurrence from the SHPO on the identification of the Area of Potential Effect (APE) on July 20, 2017. The APE maps and description are included in this package, again, for your convenience in the attached Assessment of Effect document (Attachment 6). The Park now seeks concurrence under 36 CFR 800.4 on the identification of historic properties and under 36 CFR 800.5 on a finding of no adverse effect.

### Identification of Historic Properties

To meet the Section 106 requirements for the project, the Park conducted two archeological surveys (Attachments 1 and 2), conducted site condition assessments of nearby archeological sites (Attachment 3), and commissioned two eligibility recommendation documents (Attachments 4 and 5). Park Archeologist Leah Bonstead (Attachment 1) conducted an intensive pedestrian survey of the direct APE in 2011 to provide a baseline documentation of the area and inform future park planning efforts. She also enlisted the archeology crew (Attachment 3) to conduct site condition assessments within 2-4 miles of the Saline Valley Warm Springs area to provide a baseline for future site condition assessments and a possible site steward program (Attachment 6: Figures 10-14). After recording the Warm Springs area, Bonstead recommended that the Park conduct ethnographic and historic resource studies to determine the site's eligibility. The Park hired Penny Rucks (Attachment 4), an ethnographer, to conduct interviews and site visits with members of the Timbisha Shoshone Tribe to assess the site's eligibility as a Traditional Cultural Property. The Park also hired New South Associates (via EA Engineering) to assess the campground and soaking tubs as a possible historical site (Attachment 5).



February 15, 2018  
Ms. Julianne Polanco

Page 2

In 2015, Park Archeologist Wanda Raschkow conducted an intensive pedestrian survey of the road that leads to the springs (Attachment 2) because the road is currently maintained by Saline Valley visitors and volunteers, and would continue to be maintained by Park staff as part of the site plan.

#### **Assessment of Effect**

The Park prepared an Assessment of Effect document that summarizes our efforts to ensure that the project will not result in adverse impacts to the Saline Valley Warm Springs historic site, the *Ko o' Warm Springs* ethnographic site, or archeological sites in the vicinity of the springs (Attachment 6).

#### **Finding of No Adverse Effect**

The Park finds that the proposed actions are in line with criteria in the Secretary of Interior for the Treatment of Historic Properties (36 CFR 68). The proposed undertaking will have *No Adverse Effect* to historic properties provided the following stipulations are adhered to:

- (1) Mechanical palm removal at the upper springs is monitored by a qualified archeologist.
- (2) The communal fire ring, which is a contributing feature to the Historic District, is retained. The other rock fire rings can be removed and replaced with standard NPS metal fire rings.
- (3) The Park reduces the distance from springs visitors are allowed to camp from 200 feet to 100 feet. This would significantly reduce the impact of this policy on the historical district *and* bring the policy in line with the park wide camping rules in the Superintendent's Compendium.
- (4) The Park follows the Secretary of the Interior Standards on the treatment of vegetation in historic landscapes. The Park should consult with a qualified Historical Landscape Architect or Landscape Historian and the Timbisha Shoshone Tribe as the non-native contributing vegetation at Palm Springs and the Lower Warm Springs dies to identify appropriate native, non-invasive species to replace the palms with to avoid adverse impacts to the historical district while improving the integrity of the ethnographic site.
- (5) The park consults with a qualified Historical Landscape Architect or Landscape Historian on the future placement of the restrooms and fencing to ensure the Park is following the Secretary of the Interior Standards on the treatment of historic landscapes
- (6) In the unlikely event that previously undocumented archeological features are encountered during the project implementation, all necessary steps will be taken to protect them and work in that location will be immediately suspended until the park Compliance Archeologist or another archeologist meeting the Secretary of Interior Standards has evaluated the find.
- (7) In the unlikely event that human remains are encountered during project implementation, all work will be suspended immediately until measures stipulated in the *DEVA NAGPRA Inadvertent Discovery Plan* are completed and the Native American Graves Protection and Repatriation Act is followed.

For a full description of the Tribal consultation process, see pages 33-34 of the Assessment of Effect (Attachment 6). The Park initiated consultation on October 21, 2013, with five Tribes including the Timbisha Shoshone Tribe, the Big Pine Band of Owens Valley, the Bishop Paiute Tribe, the Fort Independence Community of Paiutes, and the Lone Pine Paiute Shoshone Reservation. The Park received a letter response from the Timbisha Shoshone Tribe, but not the other Tribes. The Park re-initiated consultation with the Timbisha Shoshone Tribe on this project as a separate but parallel Section 106 process concurrently with the California SHPO. The Timbisha Shoshone Tribe is a cooperating agency and signatory of the 2013 Memorandum of Understanding regarding the NEPA process for the Saline Valley Management Plan/EIS (Attachment 7).

February 15, 2018  
Ms. Julianne Polanco

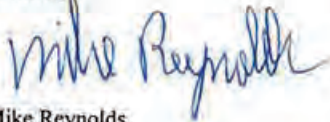
Page 3

The Park seeks your concurrence with the following findings:

- Identification of historic properties per 36 CFR 800.4 and acknowledgement of previous work.
- Determination that the project will have *No Adverse Effect* to historic properties per 36 CFR 800.5.

If you have any questions, please contact the park Environmental Protection Specialist, Jonathan Penman-Brotzman (760/768-3227) or Section 106 Archeologist Amanda J. Landon (760/786-3217).

Sincerely,



Mike Reynolds  
Superintendent

Attachments:

1. *Archeological Survey and Documentation, Saline Valley Warm Springs, CRP No. 11-036, Death Valley National Park, Inyo County, California* (2013, Leah Bonstead)
2. *Cultural Resources Inventory of Saline Valley Warm Springs Developed Area* (2014, Jennifer Durk)
3. *Saline Valley Condition Assessments, CRP No. 11-001, WACC Project No. DEVA 2011C, Death Valley National Park, Inyo County, California* (2011, Emily McCuistion)
4. *Saline Valley Warm Springs Assessment of Eligibility, Death Valley National Park, Inyo County, California* (2015, Julia Coco)
5. *National Register of Historic Places Form: Saline Valley Warm Springs/Ko o' Warm Springs* (2017, Penny Rucks)
6. *Assessment of Actions Having an Effect on Cultural Resources: Saline Valley Warm Springs Management Plan Environmental Impact Statement* (2017, Amanda J. Landon)
7. *Memorandum of Understanding Among the National Park Service, Death Valley National Park, and the Bureau of Land Management, Timbisha Shoshone Tribe, and Inyo County Regarding the NEPA Process for the Saline Valley Management Plan/EIS* (2013)





## United States Department of the Interior

NATIONAL PARK SERVICE

Death Valley National Park  
PO Box 579  
Death Valley, California 92328



IN REPLY REFER TO:  
DEVA CRP No. 11-036  
PEPC No. 39438  
SHPO No. NPS\_2013\_0114\_001

July 24, 2018

MAILED USPS CERTIFIED MAIL-RETURN RECEIPT

Ms. Julianne Polanco  
Office of Historic Preservation  
Department of Parks and Recreation  
1725 23rd Street, Suite 100  
Sacramento, CA 95816-7100

Attn: Mark Beason, State Historian II

Subject: SHPO# NPS\_2013\_0114\_001: Process Timeline and Further Opportunities for Involvement with the Saline Valley Warm Springs Management Plan/EIS, Death Valley National Park, Inyo County, California

Dear Ms. Polanco:

The Department of the Interior released new guidance under Secretarial Order No. 3355, Streamlining National Environmental Policy Act Reviews and Implementation of Executive Order 13807, which requires that Environmental Impact Statements (EIS) be completed within one year of issuance of a Notice of Intent (NOI) to prepare an EIS. Further direction under a memorandum released on April 27, 2018, requires that each EIS project team with an outstanding EIS with a NOI published on or before August 31, 2017, provide a project schedule with a Final EIS and Record of Decision (ROD) issuance date of no later than 365 calendar days from the effective date of the Memorandum.

Death Valley National Park (Park) and the Pacific West Regional Director must sign the ROD by April 27, 2019 to comply with the Order. The Park submitted a DEIS to ROD Schedule (Attached) with a target ROD date of April 26, 2019, to the Department to comply with this requirement.

The Park received SHPO concurrence on Step 1 of the Standard 4-Step Process and the identification of the Area of Potential Effect on July 20, 2018. The Park sent a letter with archeological surveys, the ethnographic site eligibility determination, the historic site eligibility determination, and the assessment of effect form on February 15, 2018. Although the 60 day window for review of Steps 2 and 3 of the Standard 4-Step Process has passed, the Park appreciates any input the California SHPO can provide in this process. The Park respectfully requests comments and/or concurrence on the Identification of Historic Properties and the Assessment of Effect by August 31, 2018, to ensure we can respond to concerns, incorporate your input, and meet our deadlines.

July 24, 2018  
Ms. Julianne Polanco

Page 2

If you have any questions or concerns regarding this undertaking please contact the park Chief of Resources, Josh Hoines (760/768-3253) or Section 106 Coordinator Amanda J. Landon (760/786-3217).

Sincerely,

A handwritten signature in black ink, appearing to read "Mike Reynolds". The signature is fluid and cursive, with the first name "Mike" and last name "Reynolds" clearly distinguishable.

Mike Reynolds  
Superintendent

Attachments:

1. *DEVA DEIS to ROD Schedule*



## United States Department of the Interior

NATIONAL PARK SERVICE

Death Valley National Park  
PO Box 579  
Death Valley, California 92328



IN REPLY REFER TO:  
DEVA CRP No. 11-036  
PEPC No. 39438  
SHPO No. NPS\_2013\_0114\_001

September 20, 2018

MAILED USPS CERTIFIED MAIL-RETURN RECEIPT

Ms. Julianne Polanco  
Office of Historic Preservation  
Department of Parks and Recreation  
P.O. Box 942896  
Sacramento, CA 94296

Attn: Mark Beason, State Historian II

Subject: SHPO# NPS\_2013\_0114\_001: Conclusion of Consultation for the Saline Valley Warm Springs  
Management Plan/EIS, Death Valley National Park, Inyo County, California

Dear Ms. Polanco:

Death Valley National Park (Park) is conducting an Environmental Impact Statement (EIS) to assess the potential impacts to natural and cultural resources for five alternative management plans for the Saline Valley Warm Springs camping and hot springs soaking area. This project qualifies as a federal undertaking under the definitions found in 36 C.F.R. 800.16(y).

The Park initiated consultation with the California State Historic Preservation Office (SHPO) on May 23, 2017. The Park received SHPO concurrence on Step 1 of the Standard 4-Step Process and the identification of the Area of Potential Effect on July 20, 2017. The Park submitted a letter with archeological surveys, the ethnographic site eligibility determination, the historic site eligibility determination, and the assessment of effect form on February 15, 2018. Although the 60 day window for review of Steps 2 and 3 of the Standard 4-Step Process had passed, the Park submitted a letter on July 24, 2018, describing the new Department of the Interior EIS guidance and timelines for completion. The Park requested comments and/or concurrence on the Identification of Historic Properties and a finding of no adverse effect by August 31, 2018, to ensure we could respond to concerns, incorporate your input, and meet our deadlines. To date, the SHPO has not provided concurrence or a request for additional information.

Following these consultation efforts, the Park discussed options to resolve and conclude consultation with the SHPO. It was determined the Park provided more than a reasonable amount of time (over 6.5 months) for the SHPO to either concur with or request additional information regarding the agency's "no adverse effect" determination.

Therefore, in accordance with 36 CFR 800.5(c)(1), the NPS will proceed with the undertaking. The NPS will maintain a record of the finding and will provide information on the finding to the public on request, consistent with the confidentiality provisions of 36 CFR 800.11(c).



September 20, 2018  
Ms. Julianne Polanco

Page 2

Should you have comments or recommendations on this project in the future, we will do our best to accommodate your concerns.

Should you have any questions, please contact Josh Hoines, Chief of Resources, at [josh\\_hoines@nps.gov](mailto:josh_hoines@nps.gov) or at (760) 786-3253; or Amanda Landon, Park Archeologist, at [amanda\\_landon@nps.gov](mailto:amanda_landon@nps.gov) or at (760) 786-3217. All correspondence can be sent to the address on the above letterhead to the attention of Mike Reynolds.

Sincerely,

  
Mike Reynolds  
Superintendent

CC: David Louter, Cultural Resources Program Chief, Pacific West Region, National Park Service  
Christopher Wilson, Program Analyst, Advisory Council on Historic Preservation

## **SECTION 106 CONSULTATION: TRIBES**





United States Department of the Interior  
NATIONAL PARK SERVICE  
Death Valley National Park  
P.O. Box 579  
Death Valley, CA 92328



IN REPLY REFER TO:  
N1632

October 21, 2013

MAILED USPS CERTIFIED MAIL-RETURN RECEIPT

George Gholson, Chairperson  
Timbisha Shoshone Tribe  
621 West Line Street, Suite 109  
Bishop, CA 93514

Subject: Initiation of NHPA Section 106 Consultation between the National Park Service and  
Culturally Affiliated Tribes for Saline Valley Warm Springs Management Plan and  
Environmental Impact Statement, Death Valley National Park, Inyo County, California

Dear Mr. Gholson:

Through this letter, the National Park Service (NPS), Death Valley National Park (Park) is seeking to initiate consultation with culturally affiliated tribes in accordance with Section 106 of the National Historic Preservation Act of 1966 (NHPA), as amended (16 USC 470, et seq.) and its implementing regulation 36 CFR 800.3(f)(2), for the following project.

The U.S. Department of the Interior, National Park Service (NPS) is conducting an environmental review for the proposed Saline Valley Warm Springs Management Plan (Plan) in Death Valley National Park (Park). For this project, the NPS is the lead federal agency for compliance with the National Environmental Policy Act (NEPA) and with Section 106 of the NHPA. The NPS has determined that the proposed federal action is an undertaking as defined in 36 CFR Part 800.16(y) and it is the type of activity that has the potential to cause effects on historic properties.

On June 5, 2012, the NPS published a Notice of Intent (NOI) for an Environmental Impact Statement (EIS). The NOI states that through the EIS process, the NPS will evaluate different approaches for managing the Saline Valley Warm Springs area and assess the potential impacts on visitor access, asset management, water resources, biological and cultural resources, human health and safety, aesthetics, visitor experience, wilderness character, and other stewardship considerations.

The NPS will apply the Advisory Council on Historic Preservation's criteria of adverse effects (36 CFR Part 800.5, Assessment of Adverse Effects), and, will continue to consult with the California State Historic Preservation Offices as the Plan progresses. The Plan will address and analyze potential effects on cultural resources – archeological sites, cultural landscapes, ethnographic resources, and historic and prehistoric structures.

For the purposes of NEPA, the Timbisha Shoshone Tribe, Bureau of Land Management and Inyo County are identified as cooperating agencies through a Memorandum of Understanding (MOU). The Park conducted a public scoping process June 5 through August 06, 2012, seeking public and agency input in order to help define issues and shape alternatives for this planning process. The NPS is currently preparing the public Draft EIS.

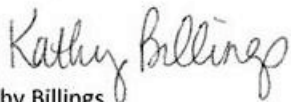
The Park recognizes that the Saline Valley Warm Springs are historically and culturally significant to the Timbisha Shoshone Tribe. The Timbisha Shoshone Homeland Act of 2000 (P.L. 106-423) designated over 1.5 million acres of the Park as a special use area for the Tribe, called the "Timbisha Shoshone Natural and Cultural Preservation Area," which includes the Saline Valley Warm Springs.

During project planning, the Park will consult with culturally affiliated Native American groups. Tribal interests will be an important factor in the planning process. There are numerous references that indicate how the Saline Valley area is of traditional importance to Native Americans. With tribal input, the Plan will consider potential impacts to traditional cultural resources (natural and manmade) such as:

- Plants (traditional use, palms)
- Animals (mammals, birds, reptiles)
- Water sources (springs, hydrological system)
- Geologic features (mountains, canyons)
- Places of traditional and cultural occupation, use, or ceremony (trails, villages, camps)

We look forward to your input on the proposed project and our intended efforts to avoid adverse effects. If, through the course of project development, it is determined that the project may adversely affect historic properties or culturally significant resources, we intend to fulfill our obligations to further consult with the appropriate culturally affiliated tribes. Should you wish to continue to participate in consultation on this project or have any questions please contact Blair Davenport, Cultural Resource Manager, at 760/786-3287 or [blair\\_davenport@nps.gov](mailto:blair_davenport@nps.gov).

Sincerely,



Kathy Billings  
Superintendent

Cc: (w/enclosures)

Presentation, Saline Valley Warm Springs Management Plan / EIS, 13 pages  
Native American Tribes Contact List, September 19, 2013, 1 page





United States Department of the Interior  
NATIONAL PARK SERVICE  
Death Valley National Park  
P.O. Box 579  
Death Valley, CA 92328



IN REPLY REFER TO  
N1632

October 21, 2013

MAILED USPS CERTIFIED MAIL-RETURN RECEIPT

Virgil Moose, Chairperson  
Big Pine Band of Owens Valley  
PO Box 700  
Big Pine, CA 93513

Subject: Initiation of NHPA Section 106 Consultation between the National Park Service and Culturally Affiliated Tribes for Saline Valley Warm Springs Management Plan and Environmental Impact Statement, Death Valley National Park, Inyo County, California

Dear Mr. Moose:

Through this letter, the National Park Service (NPS), Death Valley National Park (Park) is seeking to initiate consultation with culturally affiliated tribes in accordance with Section 106 of the National Historic Preservation Act of 1966 (NHPA), as amended (16 USC 470, et seq.) and its implementing regulation 36 CFR 800.3(f)(2), for the following project.

The U.S. Department of the Interior, National Park Service (NPS) is conducting an environmental review for the proposed Saline Valley Warm Springs Management Plan (Plan) in Death Valley National Park (Park). For this project, the NPS is the lead federal agency for compliance with the National Environmental Policy Act (NEPA) and with Section 106 of the NHPA. The NPS has determined that the proposed federal action is an undertaking as defined in 36 CFR Part 800.16(y) and it is the type of activity that has the potential to cause effects on historic properties.

On June 5, 2012, the NPS published a Notice of Intent (NOI) for an Environmental Impact Statement (EIS). The NOI states that through the EIS process, the NPS will evaluate different approaches for managing the Saline Valley Warm Springs area and assess the potential impacts on visitor access, asset management, water resources, biological and cultural resources, human health and safety, aesthetics, visitor experience, wilderness character, and other stewardship considerations.

The NPS will apply the Advisory Council on Historic Preservation's criteria of adverse effects (36 CFR Part 800.5, Assessment of Adverse Effects), and, will continue to consult with the California State Historic Preservation Offices as the Plan progresses. The Plan will address and analyze potential effects on cultural resources – archeological sites, cultural landscapes, ethnographic resources, and historic and prehistoric structures.

For the purposes of NEPA, the Timbisha Shoshone Tribe, Bureau of Land Management and Inyo County are identified as cooperating agencies through a Memorandum of Understanding (MOU). The Park conducted a public scoping process June 5 through August 06, 2012, seeking public and agency input in order to help define issues and shape alternatives for this planning process. The NPS is currently preparing the public Draft EIS.

The Park recognizes that the Saline Valley Warm Springs are historically and culturally significant to the Timbisha Shoshone Tribe. The Timbisha Shoshone Homeland Act of 2000 (P.L. 106-423) designated over 1.5 million acres of the Park as a special use area for the Tribe, called the "Timbisha Shoshone Natural and Cultural Preservation Area," which includes the Saline Valley Warm Springs.

During project planning, the Park will consult with culturally affiliated Native American groups. Tribal interests will be an important factor in the planning process. There are numerous references that indicate how the Saline Valley area is of traditional importance to Native Americans. With tribal input, the Plan will consider potential impacts to traditional cultural resources (natural and manmade) such as:

- Plants (traditional use, palms)
- Animals (mammals, birds, reptiles)
- Water sources (springs, hydrological system)
- Geologic features (mountains, canyons)
- Places of traditional and cultural occupation, use, or ceremony (trails, villages, camps)

We look forward to your input on the proposed project and our intended efforts to avoid adverse effects. If, through the course of project development, it is determined that the project may adversely affect historic properties or culturally significant resources, we intend to fulfill our obligations to further consult with the appropriate culturally affiliated tribes. Should you wish to continue to participate in consultation on this project or have any questions please contact Blair Davenport, Cultural Resource Manager, at 760/786-3287 or [blair\\_davenport@nps.gov](mailto:blair_davenport@nps.gov).

Sincerely,



Kathy Billings  
Superintendent

Cc: (w/enclosures)

Presentation, Saline Valley Warm Springs Management Plan / EIS, 13 pages  
Native American Tribes Contact List, September 19, 2013, 1 page





United States Department of the Interior  
NATIONAL PARK SERVICE  
Death Valley National Park  
P.O. Box 579  
Death Valley, CA 92328



IN REPLY REFER TO  
N1632

October 21, 2013

MAILED USPS CERTIFIED MAIL-RETURN RECEIPT

Bill Helmer, THPO  
Big Pine Band of Owens Valley  
PO Box 700  
Big Pine, CA 93514

Subject: Initiation of NHPA Section 106 Consultation between the National Park Service and  
Culturally Affiliated Tribes for Saline Valley Warm Springs Management Plan and  
Environmental Impact Statement, Death Valley National Park, Inyo County, California

Dear Mr. Helmer:

Through this letter, the National Park Service (NPS), Death Valley National Park (Park) is seeking to initiate consultation with culturally affiliated tribes in accordance with Section 106 of the National Historic Preservation Act of 1966 (NHPA), as amended (16 USC 470, et seq.) and its implementing regulation 36 CFR 800.3(f)(2), for the following project.

The U.S. Department of the Interior, National Park Service (NPS) is conducting an environmental review for the proposed Saline Valley Warm Springs Management Plan (Plan) in Death Valley National Park (Park). For this project, the NPS is the lead federal agency for compliance with the National Environmental Policy Act (NEPA) and with Section 106 of the NHPA. The NPS has determined that the proposed federal action is an undertaking as defined in 36 CFR Part 800.16(y) and it is the type of activity that has the potential to cause effects on historic properties.

On June 5, 2012, the NPS published a Notice of Intent (NOI) for an Environmental Impact Statement (EIS). The NOI states that through the EIS process, the NPS will evaluate different approaches for managing the Saline Valley Warm Springs area and assess the potential impacts on visitor access, asset management, water resources, biological and cultural resources, human health and safety, aesthetics, visitor experience, wilderness character, and other stewardship considerations.

The NPS will apply the Advisory Council on Historic Preservation's criteria of adverse effects (36 CFR Part 800.5, Assessment of Adverse Effects), and, will continue to consult with the California State Historic Preservation Offices as the Plan progresses. The Plan will address and analyze potential effects on cultural resources – archeological sites, cultural landscapes, ethnographic resources, and historic and prehistoric structures.

For the purposes of NEPA, the Timbisha Shoshone Tribe, Bureau of Land Management and Inyo County are identified as cooperating agencies through a Memorandum of Understanding (MOU). The Park conducted a public scoping process June 5 through August 06, 2012, seeking public and agency input in order to help define issues and shape alternatives for this planning process. The NPS is currently preparing the public Draft EIS.

The Park recognizes that the Saline Valley Warm Springs are historically and culturally significant to the Timbisha Shoshone Tribe. The Timbisha Shoshone Homeland Act of 2000 (P.L. 106-423) designated over 1.5 million acres of the Park as a special use area for the Tribe, called the "Timbisha Shoshone Natural and Cultural Preservation Area," which includes the Saline Valley Warm Springs.

During project planning, the Park will consult with culturally affiliated Native American groups. Tribal interests will be an important factor in the planning process. There are numerous references that indicate how the Saline Valley area is of traditional importance to Native Americans. With tribal input, the Plan will consider potential impacts to traditional cultural resources (natural and manmade) such as:

- Plants (traditional use, palms)
- Animals (mammals, birds, reptiles)
- Water sources (springs, hydrological system)
- Geologic features (mountains, canyons)
- Places of traditional and cultural occupation, use, or ceremony (trails, villages, camps)

We look forward to your input on the proposed project and our intended efforts to avoid adverse effects. If, through the course of project development, it is determined that the project may adversely affect historic properties or culturally significant resources, we intend to fulfill our obligations to further consult with the appropriate culturally affiliated tribes. Should you wish to continue to participate in consultation on this project or have any questions please contact Blair Davenport, Cultural Resource Manager, at 760/786-3287 or [blair\\_davenport@nps.gov](mailto:blair_davenport@nps.gov).

Sincerely,



Kathy Billings  
Superintendent

Cc: (w/enclosures)

Presentation, Saline Valley Warm Springs Management Plan / EIS, 13 pages  
Native American Tribes Contact List, September 19, 2013, 1 page





United States Department of the Interior  
NATIONAL PARK SERVICE  
Death Valley National Park  
P.O. Box 579  
Death Valley, CA 92328



IN REPLY REFER TO  
N1632

October 21, 2013

MAILED USPS CERTIFIED MAIL-RETURN RECEIPT

Dale Chad Delgado, Chairperson  
Bishop Paiute Tribe  
50 Tu Su Lane  
Bishop, CA 93514

Subject: Initiation of NHPA Section 106 Consultation between the National Park Service and  
Culturally Affiliated Tribes for Saline Valley Warm Springs Management Plan and  
Environmental Impact Statement, Death Valley National Park, Inyo County, California

Dear Mr. Delgado:

Through this letter, the National Park Service (NPS), Death Valley National Park (Park) is seeking to initiate consultation with culturally affiliated tribes in accordance with Section 106 of the National Historic Preservation Act of 1966 (NHPA), as amended (16 USC 470, et seq.) and its implementing regulation 36 CFR 800.3(f)(2), for the following project.

The U.S. Department of the Interior, National Park Service (NPS) is conducting an environmental review for the proposed Saline Valley Warm Springs Management Plan (Plan) in Death Valley National Park (Park). For this project, the NPS is the lead federal agency for compliance with the National Environmental Policy Act (NEPA) and with Section 106 of the NHPA. The NPS has determined that the proposed federal action is an undertaking as defined in 36 CFR Part 800.16(y) and it is the type of activity that has the potential to cause effects on historic properties.

On June 5, 2012, the NPS published a Notice of Intent (NOI) for an Environmental Impact Statement (EIS). The NOI states that through the EIS process, the NPS will evaluate different approaches for managing the Saline Valley Warm Springs area and assess the potential impacts on visitor access, asset management, water resources, biological and cultural resources, human health and safety, aesthetics, visitor experience, wilderness character, and other stewardship considerations.

The NPS will apply the Advisory Council on Historic Preservation's criteria of adverse effects (36 CFR Part 800.5, Assessment of Adverse Effects), and, will continue to consult with the California State Historic Preservation Offices as the Plan progresses. The Plan will address and analyze potential effects on cultural resources – archeological sites, cultural landscapes, ethnographic resources, and historic and prehistoric structures.



For the purposes of NEPA, the Timbisha Shoshone Tribe, Bureau of Land Management and Inyo County are identified as cooperating agencies through a Memorandum of Understanding (MOU). The Park conducted a public scoping process June 5 through August 06, 2012, seeking public and agency input in order to help define issues and shape alternatives for this planning process. The NPS is currently preparing the public Draft EIS.

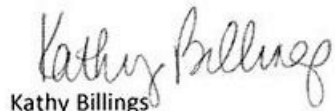
The Park recognizes that the Saline Valley Warm Springs are historically and culturally significant to the Timbisha Shoshone Tribe. The Timbisha Shoshone Homeland Act of 2000 (P.L. 106-423) designated over 1.5 million acres of the Park as a special use area for the Tribe, called the "Timbisha Shoshone Natural and Cultural Preservation Area," which includes the Saline Valley Warm Springs.

During project planning, the Park will consult with culturally affiliated Native American groups. Tribal interests will be an important factor in the planning process. There are numerous references that indicate how the Saline Valley area is of traditional importance to Native Americans. With tribal input, the Plan will consider potential impacts to traditional cultural resources (natural and manmade) such as:

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We look forward to your input on the proposed project and our intended efforts to avoid adverse effects. If, through the course of project development, it is determined that the project may adversely affect historic properties or culturally significant resources, we intend to fulfill our obligations to further consult with the appropriate culturally affiliated tribes. Should you wish to continue to participate in consultation on this project or have any questions please contact Blair Davenport, Cultural Resource Manager, at 760/786-3287 or [blair\\_davenport@nps.gov](mailto:blair_davenport@nps.gov).

Sincerely,



Kathy Billings  
Superintendent

Cc: (w/enclosures)

Presentation, Saline Valley Warm Springs Management Plan / EIS, 13 pages  
Native American Tribes Contact List, September 19, 2013, 1 page



United States Department of the Interior  
NATIONAL PARK SERVICE  
Death Valley National Park  
P.O. Box 579  
Death Valley, CA 92328



IN REPLY REFER TO  
N1632

October 21, 2013

MAILED USPS CERTIFIED MAIL-RETURN RECEIPT

Raymond Andrews, THPO  
Bishop Paiute Tribe  
50 Tu Su Lane  
Bishop, CA 93514

Subject: Initiation of NHPA Section 106 Consultation between the National Park Service and Culturally Affiliated Tribes for Saline Valley Warm Springs Management Plan and Environmental Impact Statement, Death Valley National Park, Inyo County, California

Dear Mr. Andrews:

Through this letter, the National Park Service (NPS), Death Valley National Park (Park) is seeking to initiate consultation with culturally affiliated tribes in accordance with Section 106 of the National Historic Preservation Act of 1966 (NHPA), as amended (16 USC 470, et seq.) and its implementing regulation 36 CFR 800.3(f)(2), for the following project.

The U.S. Department of the Interior, National Park Service (NPS) is conducting an environmental review for the proposed Saline Valley Warm Springs Management Plan (Plan) in Death Valley National Park (Park). For this project, the NPS is the lead federal agency for compliance with the National Environmental Policy Act (NEPA) and with Section 106 of the NHPA. The NPS has determined that the proposed federal action is an undertaking as defined in 36 CFR Part 800.16(y) and it is the type of activity that has the potential to cause effects on historic properties.

On June 5, 2012, the NPS published a Notice of Intent (NOI) for an Environmental Impact Statement (EIS). The NOI states that through the EIS process, the NPS will evaluate different approaches for managing the Saline Valley Warm Springs area and assess the potential impacts on visitor access, asset management, water resources, biological and cultural resources, human health and safety, aesthetics, visitor experience, wilderness character, and other stewardship considerations.

The NPS will apply the Advisory Council on Historic Preservation's criteria of adverse effects (36 CFR Part 800.5, Assessment of Adverse Effects), and, will continue to consult with the California State Historic Preservation Offices as the Plan progresses. The Plan will address and analyze potential effects on cultural resources – archeological sites, cultural landscapes, ethnographic resources, and historic and prehistoric structures.



For the purposes of NEPA, the Timbisha Shoshone Tribe, Bureau of Land Management and Inyo County are identified as cooperating agencies through a Memorandum of Understanding (MOU). The Park conducted a public scoping process June 5 through August 06, 2012, seeking public and agency input in order to help define issues and shape alternatives for this planning process. The NPS is currently preparing the public Draft EIS.

The Park recognizes that the Saline Valley Warm Springs are historically and culturally significant to the Timbisha Shoshone Tribe. The Timbisha Shoshone Homeland Act of 2000 (P.L. 106-423) designated over 1.5 million acres of the Park as a special use area for the Tribe, called the "Timbisha Shoshone Natural and Cultural Preservation Area," which includes the Saline Valley Warm Springs.

During project planning, the Park will consult with culturally affiliated Native American groups. Tribal interests will be an important factor in the planning process. There are numerous references that indicate how the Saline Valley area is of traditional importance to Native Americans. With tribal input, the Plan will consider potential impacts to traditional cultural resources (natural and manmade) such as:

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We look forward to your input on the proposed project and our intended efforts to avoid adverse effects. If, through the course of project development, it is determined that the project may adversely affect historic properties or culturally significant resources, we intend to fulfill our obligations to further consult with the appropriate culturally affiliated tribes. Should you wish to continue to participate in consultation on this project or have any questions please contact Blair Davenport, Cultural Resource Manager, at 760/786-3287 or [blair\\_davenport@nps.gov](mailto:blair_davenport@nps.gov).

Sincerely,



Kathy Billings  
Superintendent

Cc: (w/enclosures)

Presentation, Saline Valley Warm Springs Management Plan / EIS, 13 pages  
Native American Tribes Contact List, September 19, 2013, 1 page



United States Department of the Interior  
NATIONAL PARK SERVICE  
Death Valley National Park  
P.O. Box 579  
Death Valley, CA 92328



IN REPLY REFER TO  
N1632

October 21, 2013

MAILED USPS CERTIFIED MAIL-RETURN RECEIPT

Israel Naylor, Chairperson  
Fort Independence Community of Paiute  
PO Box 67  
Independence, CA 93526

Subject: Initiation of NHPA Section 106 Consultation between the National Park Service and  
Culturally Affiliated Tribes for Saline Valley Warm Springs Management Plan and  
Environmental Impact Statement, Death Valley National Park, Inyo County, California

Dear Mr. Naylor:

Through this letter, the National Park Service (NPS), Death Valley National Park (Park) is seeking to initiate consultation with culturally affiliated tribes in accordance with Section 106 of the National Historic Preservation Act of 1966 (NHPA), as amended (16 USC 470, et seq.) and its implementing regulation 36 CFR 800.3(f)(2), for the following project.

The U.S. Department of the Interior, National Park Service (NPS) is conducting an environmental review for the proposed Saline Valley Warm Springs Management Plan (Plan) in Death Valley National Park (Park). For this project, the NPS is the lead federal agency for compliance with the National Environmental Policy Act (NEPA) and with Section 106 of the NHPA. The NPS has determined that the proposed federal action is an undertaking as defined in 36 CFR Part 800.16(y) and it is the type of activity that has the potential to cause effects on historic properties.

On June 5, 2012, the NPS published a Notice of Intent (NOI) for an Environmental Impact Statement (EIS). The NOI states that through the EIS process, the NPS will evaluate different approaches for managing the Saline Valley Warm Springs area and assess the potential impacts on visitor access, asset management, water resources, biological and cultural resources, human health and safety, aesthetics, visitor experience, wilderness character, and other stewardship considerations.

The NPS will apply the Advisory Council on Historic Preservation's criteria of adverse effects (36 CFR Part 800.5, Assessment of Adverse Effects), and, will continue to consult with the California State Historic Preservation Offices as the Plan progresses. The Plan will address and analyze potential effects on cultural resources – archeological sites, cultural landscapes, ethnographic resources, and historic and prehistoric structures.



For the purposes of NEPA, the Timbisha Shoshone Tribe, Bureau of Land Management and Inyo County are identified as cooperating agencies through a Memorandum of Understanding (MOU). The Park conducted a public scoping process June 5 through August 06, 2012, seeking public and agency input in order to help define issues and shape alternatives for this planning process. The NPS is currently preparing the public Draft EIS.

The Park recognizes that the Saline Valley Warm Springs are historically and culturally significant to the Timbisha Shoshone Tribe. The Timbisha Shoshone Homeland Act of 2000 (P.L. 106-423) designated over 1.5 million acres of the Park as a special use area for the Tribe, called the "Timbisha Shoshone Natural and Cultural Preservation Area," which includes the Saline Valley Warm Springs.

During project planning, the Park will consult with culturally affiliated Native American groups. Tribal interests will be an important factor in the planning process. There are numerous references that indicate how the Saline Valley area is of traditional importance to Native Americans. With tribal input, the Plan will consider potential impacts to traditional cultural resources (natural and manmade) such as:

- Plants (traditional use, palms)
- Animals (mammals, birds, reptiles)
- Water sources (springs, hydrological system)
- Geologic features (mountains, canyons)
- Places of traditional and cultural occupation, use, or ceremony (trails, villages, camps)

We look forward to your input on the proposed project and our intended efforts to avoid adverse effects. If, through the course of project development, it is determined that the project may adversely affect historic properties or culturally significant resources, we intend to fulfill our obligations to further consult with the appropriate culturally affiliated tribes. Should you wish to continue to participate in consultation on this project or have any questions please contact Blair Davenport, Cultural Resource Manager, at 760/786-3287 or [blair\\_davenport@nps.gov](mailto:blair_davenport@nps.gov).

Sincerely,



Kathy Billings  
Superintendent

Cc: (w/enclosures)

Presentation, Saline Valley Warm Springs Management Plan / EIS, 13 pages  
Native American Tribes Contact List, September 19, 2013, 1 page





United States Department of the Interior  
NATIONAL PARK SERVICE  
Death Valley National Park  
P.O. Box 579  
Death Valley, CA 92328



IN REPLY REFER TO:  
N1632

October 21, 2013

MAILED USPS CERTIFIED MAIL-RETURN RECEIPT

Patricia Henry, Chairperson  
Kern River Paiute Council  
PO Box 3984  
Wofford Heights, CA 93285

Subject: Initiation of NHPA Section 106 Consultation between the National Park Service and Culturally Affiliated Tribes for Saline Valley Warm Springs Management Plan and Environmental Impact Statement, Death Valley National Park, Inyo County, California

Dear Ms. Henry:

Through this letter, the National Park Service (NPS), Death Valley National Park (Park) is seeking to initiate consultation with culturally affiliated tribes in accordance with Section 106 of the National Historic Preservation Act of 1966 (NHPA), as amended (16 USC 470, et seq.) and its implementing regulation 36 CFR 800.3(f)(2), for the following project.

The U.S. Department of the Interior, National Park Service (NPS) is conducting an environmental review for the proposed Saline Valley Warm Springs Management Plan (Plan) in Death Valley National Park (Park). For this project, the NPS is the lead federal agency for compliance with the National Environmental Policy Act (NEPA) and with Section 106 of the NHPA. The NPS has determined that the proposed federal action is an undertaking as defined in 36 CFR Part 800.16(y) and it is the type of activity that has the potential to cause effects on historic properties.

On June 5, 2012, the NPS published a Notice of Intent (NOI) for an Environmental Impact Statement (EIS). The NOI states that through the EIS process, the NPS will evaluate different approaches for managing the Saline Valley Warm Springs area and assess the potential impacts on visitor access, asset management, water resources, biological and cultural resources, human health and safety, aesthetics, visitor experience, wilderness character, and other stewardship considerations.

The NPS will apply the Advisory Council on Historic Preservation's criteria of adverse effects (36 CFR Part 800.5, Assessment of Adverse Effects), and, will continue to consult with the California State Historic Preservation Offices as the Plan progresses. The Plan will address and analyze potential effects on cultural resources – archeological sites, cultural landscapes, ethnographic resources, and historic and prehistoric structures.

For the purposes of NEPA, the Timbisha Shoshone Tribe, Bureau of Land Management and Inyo County are identified as cooperating agencies through a Memorandum of Understanding (MOU). The Park conducted a public scoping process June 5 through August 06, 2012, seeking public and agency input in order to help define issues and shape alternatives for this planning process. The NPS is currently preparing the public Draft EIS.

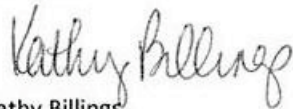
The Park recognizes that the Saline Valley Warm Springs are historically and culturally significant to the Timbisha Shoshone Tribe. The Timbisha Shoshone Homeland Act of 2000 (P.L. 106-423) designated over 1.5 million acres of the Park as a special use area for the Tribe, called the "Timbisha Shoshone Natural and Cultural Preservation Area," which includes the Saline Valley Warm Springs.

During project planning, the Park will consult with culturally affiliated Native American groups. Tribal interests will be an important factor in the planning process. There are numerous references that indicate how the Saline Valley area is of traditional importance to Native Americans. With tribal input, the Plan will consider potential impacts to traditional cultural resources (natural and manmade) such as:

- Plants (traditional use, palms)
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- Water sources (springs, hydrological system)
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- Places of traditional and cultural occupation, use, or ceremony (trails, villages, camps)

We look forward to your input on the proposed project and our intended efforts to avoid adverse effects. If, through the course of project development, it is determined that the project may adversely affect historic properties or culturally significant resources, we intend to fulfill our obligations to further consult with the appropriate culturally affiliated tribes. Should you wish to continue to participate in consultation on this project or have any questions please contact Blair Davenport, Cultural Resource Manager, at 760/786-3287 or [blair\\_davenport@nps.gov](mailto:blair_davenport@nps.gov).

Sincerely,



Kathy Billings  
Superintendent

Cc: (w/enclosures)

Presentation, Saline Valley Warm Springs Management Plan / EIS, 13 pages  
Native American Tribes Contact List, September 19, 2013, 1 page





United States Department of the Interior  
NATIONAL PARK SERVICE  
Death Valley National Park  
P.O. Box 579  
Death Valley, CA 92328



IN REPLY REFER TO  
N1632

October 21, 2013

MAILED USPS CERTIFIED MAIL-RETURN RECEIPT

Mary Wuester, Chairperson  
Lone Pine Paiute Shoshone Reservation  
PO Box 747  
Lone Pine, CA 93545

Subject: Initiation of NHPA Section 106 Consultation between the National Park Service and  
Culturally Affiliated Tribes for Saline Valley Warm Springs Management Plan and  
Environmental Impact Statement, Death Valley National Park, Inyo County, California

Dear Ms. Wuester:

Through this letter, the National Park Service (NPS), Death Valley National Park (Park) is seeking to initiate consultation with culturally affiliated tribes in accordance with Section 106 of the National Historic Preservation Act of 1966 (NHPA), as amended (16 USC 470, et seq.) and its implementing regulation 36 CFR 800.3(f)(2), for the following project.

The U.S. Department of the Interior, National Park Service (NPS) is conducting an environmental review for the proposed Saline Valley Warm Springs Management Plan (Plan) in Death Valley National Park (Park). For this project, the NPS is the lead federal agency for compliance with the National Environmental Policy Act (NEPA) and with Section 106 of the NHPA. The NPS has determined that the proposed federal action is an undertaking as defined in 36 CFR Part 800.16(y) and it is the type of activity that has the potential to cause effects on historic properties.

On June 5, 2012, the NPS published a Notice of Intent (NOI) for an Environmental Impact Statement (EIS). The NOI states that through the EIS process, the NPS will evaluate different approaches for managing the Saline Valley Warm Springs area and assess the potential impacts on visitor access, asset management, water resources, biological and cultural resources, human health and safety, aesthetics, visitor experience, wilderness character, and other stewardship considerations.

The NPS will apply the Advisory Council on Historic Preservation's criteria of adverse effects (36 CFR Part 800.5, Assessment of Adverse Effects), and, will continue to consult with the California State Historic Preservation Offices as the Plan progresses. The Plan will address and analyze potential effects on cultural resources – archeological sites, cultural landscapes, ethnographic resources, and historic and prehistoric structures.

For the purposes of NEPA, the Timbisha Shoshone Tribe, Bureau of Land Management and Inyo County are identified as cooperating agencies through a Memorandum of Understanding (MOU). The Park conducted a public scoping process June 5 through August 06, 2012, seeking public and agency input in order to help define issues and shape alternatives for this planning process. The NPS is currently preparing the public Draft EIS.

The Park recognizes that the Saline Valley Warm Springs are historically and culturally significant to the Timbisha Shoshone Tribe. The Timbisha Shoshone Homeland Act of 2000 (P.L. 106-423) designated over 1.5 million acres of the Park as a special use area for the Tribe, called the "Timbisha Shoshone Natural and Cultural Preservation Area," which includes the Saline Valley Warm Springs.

During project planning, the Park will consult with culturally affiliated Native American groups. Tribal interests will be an important factor in the planning process. There are numerous references that indicate how the Saline Valley area is of traditional importance to Native Americans. With tribal input, the Plan will consider potential impacts to traditional cultural resources (natural and manmade) such as:

- Plants (traditional use, palms)
- Animals (mammals, birds, reptiles)
- Water sources (springs, hydrological system)
- Geologic features (mountains, canyons)
- Places of traditional and cultural occupation, use, or ceremony (trails, villages, camps)

We look forward to your input on the proposed project and our intended efforts to avoid adverse effects. If, through the course of project development, it is determined that the project may adversely affect historic properties or culturally significant resources, we intend to fulfill our obligations to further consult with the appropriate culturally affiliated tribes. Should you wish to continue to participate in consultation on this project or have any questions please contact Blair Davenport, Cultural Resource Manager, at 760/786-3287 or [blair\\_davenport@nps.gov](mailto:blair_davenport@nps.gov).

Sincerely,



Kathy Billings  
Superintendent

Cc: (w/enclosures)

Presentation, Saline Valley Warm Springs Management Plan / EIS, 13 pages  
Native American Tribes Contact List, September 19, 2013, 1 page





United States Department of the Interior  
NATIONAL PARK SERVICE  
Death Valley National Park  
P.O. Box 579  
Death Valley, CA 92328



IN REPLY REFER TO:  
N1632

October 21, 2013

MAILED USPS CERTIFIED MAIL-RETURN RECEIPT

Kathy Bancroft, Cultural Resources Officer  
Lone Pine Paiute Shoshone Reservation  
PO Box 747  
Lone Pine, CA 93545

Subject: Initiation of NHPA Section 106 Consultation between the National Park Service and Culturally Affiliated Tribes for Saline Valley Warm Springs Management Plan and Environmental Impact Statement, Death Valley National Park, Inyo County, California

Dear Ms. Bancroft:

Through this letter, the National Park Service (NPS), Death Valley National Park (Park) is seeking to initiate consultation with culturally affiliated tribes in accordance with Section 106 of the National Historic Preservation Act of 1966 (NHPA), as amended (16 USC 470, et seq.) and its implementing regulation 36 CFR 800.3(f)(2), for the following project.

The U.S. Department of the Interior, National Park Service (NPS) is conducting an environmental review for the proposed Saline Valley Warm Springs Management Plan (Plan) in Death Valley National Park (Park). For this project, the NPS is the lead federal agency for compliance with the National Environmental Policy Act (NEPA) and with Section 106 of the NHPA. The NPS has determined that the proposed federal action is an undertaking as defined in 36 CFR Part 800.16(y) and it is the type of activity that has the potential to cause effects on historic properties.

On June 5, 2012, the NPS published a Notice of Intent (NOI) for an Environmental Impact Statement (EIS). The NOI states that through the EIS process, the NPS will evaluate different approaches for managing the Saline Valley Warm Springs area and assess the potential impacts on visitor access, asset management, water resources, biological and cultural resources, human health and safety, aesthetics, visitor experience, wilderness character, and other stewardship considerations.

The NPS will apply the Advisory Council on Historic Preservation's criteria of adverse effects (36 CFR Part 800.5, Assessment of Adverse Effects), and, will continue to consult with the California State Historic Preservation Offices as the Plan progresses. The Plan will address and analyze potential effects on cultural resources – archeological sites, cultural landscapes, ethnographic resources, and historic and prehistoric structures.



For the purposes of NEPA, the Timbisha Shoshone Tribe, Bureau of Land Management and Inyo County are identified as cooperating agencies through a Memorandum of Understanding (MOU). The Park conducted a public scoping process June 5 through August 06, 2012, seeking public and agency input in order to help define issues and shape alternatives for this planning process. The NPS is currently preparing the public Draft EIS.

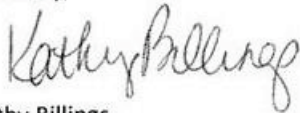
The Park recognizes that the Saline Valley Warm Springs are historically and culturally significant to the Timbisha Shoshone Tribe. The Timbisha Shoshone Homeland Act of 2000 (P.L. 106-423) designated over 1.5 million acres of the Park as a special use area for the Tribe, called the "Timbisha Shoshone Natural and Cultural Preservation Area," which includes the Saline Valley Warm Springs.

During project planning, the Park will consult with culturally affiliated Native American groups. Tribal interests will be an important factor in the planning process. There are numerous references that indicate how the Saline Valley area is of traditional importance to Native Americans. With tribal input, the Plan will consider potential impacts to traditional cultural resources (natural and manmade) such as:

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Sincerely,



Kathy Billings  
Superintendent

Cc: (w/enclosures)

Presentation, Saline Valley Warm Springs Management Plan / EIS, 13 pages  
Native American Tribes Contact List, September 19, 2013, 1 page



United States Department of the Interior  
NATIONAL PARK SERVICE  
Death Valley National Park  
P.O. Box 579  
Death Valley, CA 92328



IN REPLY REFER TO  
N1632

October 21, 2013

MAILED USPS CERTIFIED MAIL-RETURN RECEIPT

Barbara Durham, THPO  
Timbisha Shoshone Tribe  
621 West Line Street, Suite 109  
Bishop, CA 93514

Subject: Initiation of NHPA Section 106 Consultation between the National Park Service and Culturally Affiliated Tribes for Saline Valley Warm Springs Management Plan and Environmental Impact Statement, Death Valley National Park, Inyo County, California

Dear Ms. Durham:

Through this letter, the National Park Service (NPS), Death Valley National Park (Park) is seeking to initiate consultation with culturally affiliated tribes in accordance with Section 106 of the National Historic Preservation Act of 1966 (NHPA), as amended (16 USC 470, et seq.) and its implementing regulation 36 CFR 800.3(f)(2), for the following project.

The U.S. Department of the Interior, National Park Service (NPS) is conducting an environmental review for the proposed Saline Valley Warm Springs Management Plan (Plan) in Death Valley National Park (Park). For this project, the NPS is the lead federal agency for compliance with the National Environmental Policy Act (NEPA) and with Section 106 of the NHPA. The NPS has determined that the proposed federal action is an undertaking as defined in 36 CFR Part 800.16(y) and it is the type of activity that has the potential to cause effects on historic properties.

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The NPS will apply the Advisory Council on Historic Preservation's criteria of adverse effects (36 CFR Part 800.5, Assessment of Adverse Effects), and, will continue to consult with the California State Historic Preservation Offices as the Plan progresses. The Plan will address and analyze potential effects on cultural resources – archeological sites, cultural landscapes, ethnographic resources, and historic and prehistoric structures.



For the purposes of NEPA, the Timbisha Shoshone Tribe, Bureau of Land Management and Inyo County are identified as cooperating agencies through a Memorandum of Understanding (MOU). The Park conducted a public scoping process June 5 through August 06, 2012, seeking public and agency input in order to help define issues and shape alternatives for this planning process. The NPS is currently preparing the public Draft EIS.

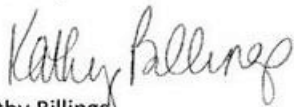
The Park recognizes that the Saline Valley Warm Springs are historically and culturally significant to the Timbisha Shoshone Tribe. The Timbisha Shoshone Homeland Act of 2000 (P.L. 106-423) designated over 1.5 million acres of the Park as a special use area for the Tribe, called the "Timbisha Shoshone Natural and Cultural Preservation Area," which includes the Saline Valley Warm Springs.

During project planning, the Park will consult with culturally affiliated Native American groups. Tribal interests will be an important factor in the planning process. There are numerous references that indicate how the Saline Valley area is of traditional importance to Native Americans. With tribal input, the Plan will consider potential impacts to traditional cultural resources (natural and manmade) such as:

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We look forward to your input on the proposed project and our intended efforts to avoid adverse effects. If, through the course of project development, it is determined that the project may adversely affect historic properties or culturally significant resources, we intend to fulfill our obligations to further consult with the appropriate culturally affiliated tribes. Should you wish to continue to participate in consultation on this project or have any questions please contact Blair Davenport, Cultural Resource Manager, at 760/786-3287 or [blair\\_davenport@nps.gov](mailto:blair_davenport@nps.gov).

Sincerely,



Kathy Billings  
Superintendent

Cc: (w/enclosures)

Presentation, Saline Valley Warm Springs Management Plan / EIS, 13 pages  
Native American Tribes Contact List, September 19, 2013, 1 page



## United States Department of the Interior

NATIONAL PARK SERVICE

Death Valley National Park  
PO Box 579  
Death Valley, California 92328



IN REPLY REFER TO:  
H4217

April 25, 2016

MAILED USPS CERTIFIED-RETURN RECEIPT

George Gholson, Chairman  
Timbisha Shoshone Tribe  
PO Box 1779  
621 W. Line St., Suite 109  
Bishop, CA 93515

Subject: Request to review draft report *Saline Valley Warm Springs Assessment of Eligibility*, and, Continuation of Section 106 Consultation between the National Park Service and the Timbisha Shoshone Tribe for the Saline Valley Warm Springs Management Plan and Environmental Impact Statement, Death Valley National Park, Inyo County, California.

Dear Mr. Gholson:

Enclosed for your review is the draft report *Saline Valley Warm Springs Assessment of Eligibility*. The park has also submitted the report to the California State Historic Preservation Office and is seeking their consensus with the National Park Service (NPS) finding that Saline Valley Warm Springs Historic Site is eligible for the National Register of Historic Properties (NRHP) at the local level under Criteria A for its association with *Recreation* as a campground established around a hot spring site, and, with *Social History* as a site that typifies the ideals and principles of a continuum of counterculture movements culminating the Beat and Hippie movements.

Saline Valley Warm Springs Historic Site is a developed campground located at the north end of Saline Valley in Death Valley National Park. The site is comprised of a combination of natural features and built features including rock alignments, soaking pools, camping areas, a road, trails and pathways, and an aircraft landing strip. The period of significance for the Saline Valley Warm Springs Historic Site begins in 1955 and continues until 1978. The earliest anecdotal evidence for Euro-American use of the site is in the 1930s; however, as miners knew of the springs as early as 1904, it is possible that site began to be used much earlier. Anecdotal reports indicate that the first tub (the Bathtub) may have been constructed by either the Civilian Conservation Corps (CCC) in the early 1930s or miners/ranchers in the late 1930s. The first documented report of a constructed tub at the springs was in 1947.

Since the late 1940s, visitation to the springs has steadily increased and additional soaking pools and other features have been constructed. The springs were first managed by the U.S. Forest Service, then the U.S. Bureau of Land Management, and are currently under the jurisdiction of the U.S. National Park Service. Gradually, more and more people visited the site from the mid-1950s through mid-1960s which coincided with the rise of the Beat and Hippie movements in the U.S. The first conclusive date for the site being considered a



destination is in 1955. While the springs were likely used for camping in earlier years, 1955 provides a start date for the period of significance with solid evidence for recreational use. The end date for the period of significance is defined as being 1978, to include all resources more than 50 years of age and the contributing resources constructed between 1965 and 1978, which although not individually eligible, contribute to the eligibility of the site as a whole.

It's important to note this *Assessment of Eligibility* ("historic" Determination of Eligibility or DOE) considers only the potential significance of the site from a perspective of the Euro-American use and development from the 1930s to the present. The site's extensive Native American history and its significance to culturally affiliated Tribes, in particular the Timbisha Shoshone Tribe, will be covered in a separate "ethnographic DOE" report which is currently being revised in cooperation with Native American informants and the NPS. Upon completion, the "ethnographic DOE" will be submitted to the Tribe and SHPO for formal review.

This *Assessment of Eligibility* was prepared in support of several efforts currently in progress:

- As a proposed DOE for Saline Valley Warm Springs Historic Site;
- To meet NHPA Section 106 compliance requirements associated with the completion of a management plan and an environmental impact statement (EIS) for Saline Valley Warm Springs, being prepared by the NPS and their contractor EA Engineering, Science, and Technology, Inc.;
- To document cultural landscape resources and other historic resources for the above mentioned plan and EIS.

The park has also submitted the report to the California State Historic Preservation Office and is seeking their consensus with the National Park Service (NPS) finding that Saline Valley Warm Springs Historic Site is eligible for the National Register of Historic Properties (NRHP) at the local level under Criteria A for its association with *Recreation* as a campground established around a hot spring site, and, with *Social History* as a site that typifies the ideals and principles of a continuum of counterculture movements culminating the Beat and Hippie movements.

We greatly appreciate your office's assistance and want to thank you for the review of this finding. If you concur with the finding of eligibility for the Saline Valley Warm Springs Historic Site, please send us a letter stating your concurrence. If you need additional information, or have questions or concerns, please contact Blair Davenport, Cultural Resources Manager, at 760/786-3287, or, [blair\\_davenport@nps.gov](mailto:blair_davenport@nps.gov).

Sincerely yours,

Mike Reynolds  
Superintendent

Enclosure:

Draft report *Saline Valley Warm Springs Assessment of Eligibility*.

Cc (w/out enclosure):

Barbara Durham, Tribal Historic Preservation Officer, P.O. Box 358, Death Valley, CA 92328



Bcc (w/out attachments):

Jonathan Pennman-Brotzman, Environmental Protection Specialist

Wanda Raschkow, Park Archeologist

Central Files (hard copy)

RM:BDAVENPORT:mbd:04/25/2016:760-786-3287



## United States Department of the Interior

### NATIONAL PARK SERVICE

Death Valley National Park  
PO Box 579  
Death Valley, California 92328



IN REPLY REFER TO  
**N1632**

December 15, 2014

MAILED USPS CERTIFIED MAIL-RETURN RECEIPT

George Gholson, Chairperson  
Timbisha Shoshone Tribe  
621 West Line Street, Suite 109  
Bishop, CA 93514

**Subject: Continuation of Consultation between the National Park Service and Culturally Affiliated Tribes for Saline Valley Warm Springs Management Plan and Environmental Impact Statement, Death Valley National Park, Inyo County, California**

Dear Mr. Gholson:

In accordance with Section 106 of the National Historic Preservation Act of 1966 (NHPA), as amended (16 USC 470, et seq.) and its implementing regulation 36 CFR 800.3(f)(2), the National Park Service (NPS), Death Valley National Park (Park) seeks to continue consultation with culturally affiliated tribes for the proposed Saline Valley Warm Springs Management Plan (Plan).

#### **Background Information on the Project**

The NPS is conducting an environmental review for the proposed Saline Valley Warm Springs Management Plan. For this project, the NPS is the lead federal agency for compliance with the National Environmental Policy Act (NEPA) and with Section 106 of the NHPA. The NPS has determined that the proposed federal action is an undertaking as defined in 36 CFR Part 800.16(y) and it is the type of activity that has the potential to cause effects on historic properties.

During the preparation of the Draft EIS (DEIS), the NPS shall meet the standards in 36 CFR 800.8(c)(1)(i) through (v) and describe the following efforts in the resulting environmental document:

- consult regarding the effects of the undertaking on historic properties with the SHPO/THPO, Indian tribes and Native Hawaiian organizations that might attach religious and cultural significance to the affected historic properties, other consulting parties, and the ACHP, where appropriate, during the NEPA scoping, environmental analysis, and the preparation of NEPA documents;
- involve the public in accordance with the agency's published NEPA procedures; and
- develop in consultation with identified consulting parties alternatives and proposed measures that might avoid, minimize or mitigate any adverse effects of the undertaking on historic properties and describe them in the DEIS.

December 15, 2014  
George Gholson, Chairperson

Page 2

On June 5, 2012, the NPS published a Notice of Intent (NOI) for an Environmental Impact Statement (EIS). In September 2013, the Park initiated consultation with potential culturally affiliated Tribes, the California State Historic Preservation Office (SHPO), and the Advisory Council on Historic Preservation (ACHP). For the purposes of NEPA, the Timbisha Shoshone Tribe, Bureau of Land Management and Inyo County are identified as cooperating agencies through a Memorandum of Understanding (MOU). The Park conducted a public scoping process June 5 through August 06, 2012, seeking public and agency input in order to help define issues and shape alternatives for this planning process. The NPS is currently preparing the public DEIS.


#### **Tribal Consultation**

Tribal interests are an important factor in the planning process. The NPS will continue to consult with culturally affiliated Native American groups including the Big Pine Band of Owens Valley, the Bishop Paiute Tribe, the Fort Independence Community of Paiute, the Lone Pine Paiute Shoshone Reservation, and the Timbisha Shoshone Tribe. The Park recognizes that the Timbisha have significant interest in the management of the Park: the Timbisha Shoshone Homeland Act of 2000 (P.L. 106-423) designated over 1.5 million acres of the Park as a special use area for the Tribe, including Saline Valley Warm Springs.

Numerous references indicate Saline Valley is of traditional importance to Native Americans. To assist with project planning and seek tribal input on Saline Valley Warm Springs, the Park has contracted with Ms. Penny Rucks, Cultural Anthropologist/Ethnographer with Western Cultural Resource Management in Sparks, NV. Ms. Rucks is experienced in tribal relations and historic preservation in the Great Basin region. Beginning January or February 2015, Ms. Rucks plans to contact tribal members who may have knowledge about Saline Valley Warm Springs, and seek tribal input on the traditional cultural resources (natural and manmade) at the Springs including plants (traditional use, palms); animals (mammals, birds, reptiles); water sources (springs, hydrological system); geologic features (mountains, canyons); and places of traditional and cultural occupation, use, or ceremony (trails, villages, camps).

We look forward to working with Ms. Rucks and tribal members on the proposed project and our intended efforts to avoid adverse effects to historic resources that may be culturally significant to Native Americans. Tribal members who wish to speak with Ms. Rucks about Saline Valley or have questions about the project, should contact Blair Davenport, Cultural Resource Manager, Death Valley National Park, at 760/786-3287, or, [blair\\_davenport@nps.gov](mailto:blair_davenport@nps.gov).

Sincerely,



Kathy Billings  
Superintendent

Cc: (w/enclosures)

Native American Tribes Contact List, December 11, 2014, 1 page



## United States Department of the Interior

### NATIONAL PARK SERVICE

Death Valley National Park  
PO Box 579  
Death Valley, California 92328



IN REPLY REFER TO  
N1632

December 15, 2014

MAILED USPS CERTIFIED MAIL-RETURN RECEIPT

Barbara Durham, THPO  
Timbisha Shoshone Tribe  
121 W Line Street  
Bishop, CA 93514

**Subject: Continuation of Consultation between the National Park Service and Culturally Affiliated Tribes for Saline Valley Warm Springs Management Plan and Environmental Impact Statement, Death Valley National Park, Inyo County, California**

Dear Ms. Durham:

In accordance with Section 106 of the National Historic Preservation Act of 1966 (NHPA), as amended (16 USC 470, et seq.) and its implementing regulation 36 CFR 800.3(f)(2), the National Park Service (NPS), Death Valley National Park (Park) seeks to continue consultation with culturally affiliated tribes for the proposed Saline Valley Warm Springs Management Plan (Plan).

#### **Background Information on the Project**

The NPS is conducting an environmental review for the proposed Saline Valley Warm Springs Management Plan. For this project, the NPS is the lead federal agency for compliance with the National Environmental Policy Act (NEPA) and with Section 106 of the NHPA. The NPS has determined that the proposed federal action is an undertaking as defined in 36 CFR Part 800.16(y) and it is the type of activity that has the potential to cause effects on historic properties.

During the preparation of the Draft EIS (DEIS), the NPS shall meet the standards in 36 CFR 800.8(c)(1)(i) through (v) and describe the following efforts in the resulting environmental document:

- consult regarding the effects of the undertaking on historic properties with the SHPO/THPO, Indian tribes and Native Hawaiian organizations that might attach religious and cultural significance to the affected historic properties, other consulting parties, and the ACHP, where appropriate, during the NEPA scoping, environmental analysis, and the preparation of NEPA documents;
- involve the public in accordance with the agency's published NEPA procedures; and
- develop in consultation with identified consulting parties alternatives and proposed measures that might avoid, minimize or mitigate any adverse effects of the undertaking on historic properties and describe them in the DEIS.



December 15, 2014  
Barbara Durham, THPO

Page 2

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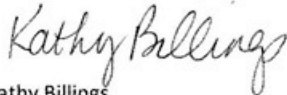
#### **Tribal Consultation**

Tribal interests are an important factor in the planning process. The NPS will continue to consult with culturally affiliated Native American groups including the Big Pine Band of Owens Valley, the Bishop Paiute Tribe, the Fort Independence Community of Paiute, the Lone Pine Paiute Shoshone Reservation, and the Timbisha Shoshone Tribe. The Park recognizes that the Timbisha have significant interest in the management of the Park: the Timbisha Shoshone Homeland Act of 2000 (P.L. 106-423) designated over 1.5 million acres of the Park as a special use area for the Tribe, including Saline Valley Warm Springs.

Numerous references indicate Saline Valley is of traditional importance to Native Americans. To assist with project planning and seek tribal input on Saline Valley Warm Springs, the Park has contracted with Ms. Penny Rucks, Cultural Anthropologist/Ethnographer with Western Cultural Resource Management in Sparks, NV. Ms. Rucks is experienced in tribal relations and historic preservation in the Great Basin region. Beginning January or February 2015, Ms. Rucks plans to contact tribal members who may have knowledge about Saline Valley Warm Springs, and seek tribal input on the traditional cultural resources (natural and manmade) at the Springs including plants (traditional use, palms); animals (mammals, birds, reptiles); water sources (springs, hydrological system); geologic features (mountains, canyons); and places of traditional and cultural occupation, use, or ceremony (trails, villages, camps).

We look forward to working with Ms. Rucks and tribal members on the proposed project and our intended efforts to avoid adverse effects to historic resources that may be culturally significant to Native Americans. Tribal members who wish to speak with Ms. Rucks about Saline Valley or have questions about the project, should contact Blair Davenport, Cultural Resource Manager, Death Valley National Park, at 760/786-3287, or, [blair\\_davenport@nps.gov](mailto:blair_davenport@nps.gov).

Sincerely,



Kathy Billings  
Superintendent

Cc: (w/enclosures)

Native American Tribes Contact List, December 11, 2014, 1 page





## United States Department of the Interior

NATIONAL PARK SERVICE

Death Valley National Park  
PO Box 579  
Death Valley, California 92328



IN REPLY REFER TO:  
N1632

December 15, 2014

MAILED USPS CERTIFIED MAIL-RETURN RECEIPT

Virgil Moose, Chairperson  
Big Pine Band of Owens Valley  
PO Box 700  
Big Pine, CA 93513

**Subject: Continuation of Consultation between the National Park Service and Culturally Affiliated Tribes for Saline Valley Warm Springs Management Plan and Environmental Impact Statement, Death Valley National Park, Inyo County, California**

Dear Mr. Moose:

In accordance with Section 106 of the National Historic Preservation Act of 1966 (NHPA), as amended (16 USC 470, et seq.) and its implementing regulation 36 CFR 800.3(f)(2), the National Park Service (NPS), Death Valley National Park (Park) seeks to continue consultation with culturally affiliated tribes for the proposed Saline Valley Warm Springs Management Plan (Plan).

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December 15, 2014  
Virgil Moose, Chairperson

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Sincerely,

  
Kathy Billings  
Superintendent

Cc: (w/enclosures)

Native American Tribes Contact List, December 11, 2014, 1 page



## United States Department of the Interior

NATIONAL PARK SERVICE

Death Valley National Park  
PO Box 579  
Death Valley, California 92328



IN REPLY REFER TO  
N1632

December 15, 2014

MAILED USPS CERTIFIED MAIL-RETURN RECEIPT

Bill Helmer, THPO  
Big Pine Band of Owens Valley  
PO Box 700  
Big Pine, CA 93514

**Subject: Continuation of Consultation between the National Park Service and Culturally Affiliated Tribes for Saline Valley Warm Springs Management Plan and Environmental Impact Statement, Death Valley National Park, Inyo County, California**

Dear Mr. Helmer:

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December 15, 2014

Bill Helmer, THPO

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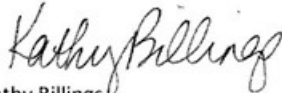
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Sincerely,



Kathy Billings  
Superintendent

Cc: (w/enclosures)

Native American Tribes Contact List, December 11, 2014, 1 page



## United States Department of the Interior

### NATIONAL PARK SERVICE

Death Valley National Park  
PO Box 579  
Death Valley, California 92328



IN REPLY REFER TO:  
N1632

December 15, 2014

MAILED USPS CERTIFIED MAIL-RETURN RECEIPT

Dale Chad Delgado, Chairperson  
Bishop Paiute Tribe  
50 Tu Su Lane  
Bishop, CA 93514

**Subject: Continuation of Consultation between the National Park Service and Culturally Affiliated Tribes for Saline Valley Warm Springs Management Plan and Environmental Impact Statement, Death Valley National Park, Inyo County, California**

Dear Mr. Delgado:

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December 15, 2014

Dale Chad Delgado

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Sincerely,



Kathy Billings  
Superintendent

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Native American Tribes Contact List, December 11, 2014, 1 page



## United States Department of the Interior

### NATIONAL PARK SERVICE

Death Valley National Park  
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Death Valley, California 92328



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December 15, 2014

MAILED USPS CERTIFIED MAIL-RETURN RECEIPT

Raymond Andrews, THPO  
Bishop Paiute Tribe  
50 Tu Su Lane  
Bishop, CA 93514

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December 15, 2014  
Raymond Andrews, THPO

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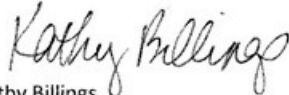
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Kathy Billings  
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Native American Tribes Contact List, December 11, 2014, 1 page





## United States Department of the Interior

### NATIONAL PARK SERVICE

Death Valley National Park  
PO Box 579  
Death Valley, California 92328



IN REPLY REFER TO  
N1632

December 15, 2014

MAILED USPS CERTIFIED MAIL-RETURN RECEIPT

Israel Naylor, Chairperson  
Fort Independence Community of Paiute  
PO Box 67  
Independence, CA 93526

**Subject: Continuation of Consultation between the National Park Service and Culturally Affiliated Tribes for Saline Valley Warm Springs Management Plan and Environmental Impact Statement, Death Valley National Park, Inyo County, California**

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Native American Tribes Contact List, December 11, 2014, 1 page





## United States Department of the Interior

### NATIONAL PARK SERVICE

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PO Box 579  
Death Valley, California 92328



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Tribal interests are an important factor in the planning process. The NPS will continue to consult with culturally affiliated Native American groups including the Big Pine Band of Owens Valley, the Bishop Paiute Tribe, the Fort Independence Community of Paiute, the Lone Pine Paiute Shoshone Reservation, and the Timbisha Shoshone Tribe. The Park recognizes that the Timbisha have significant interest in the management of the Park: the Timbisha Shoshone Homeland Act of 2000 (P.L. 106-423) designated over 1.5 million acres of the Park as a special use area for the Tribe, including Saline Valley Warm Springs.

Numerous references indicate Saline Valley is of traditional importance to Native Americans. To assist with project planning and seek tribal input on Saline Valley Warm Springs, the Park has contracted with Ms. Penny Rucks, Cultural Anthropologist/Ethnographer with Western Cultural Resource Management in Sparks, NV. Ms. Rucks is experienced in tribal relations and historic preservation in the Great Basin region. Beginning January or February 2015, Ms. Rucks plans to contact tribal members who may have knowledge about Saline Valley Warm Springs, and seek tribal input on the traditional cultural resources (natural and manmade) at the Springs including plants (traditional use, palms); animals (mammals, birds, reptiles); water sources (springs, hydrological system); geologic features (mountains, canyons); and places of traditional and cultural occupation, use, or ceremony (trails, villages, camps).

We look forward to working with Ms. Rucks and tribal members on the proposed project and our intended efforts to avoid adverse effects to historic resources that may be culturally significant to Native Americans. Tribal members who wish to speak with Ms. Rucks about Saline Valley or have questions about the project, should contact Blair Davenport, Cultural Resource Manager, Death Valley National Park, at 760/786-3287, or, [blair\\_davenport@nps.gov](mailto:blair_davenport@nps.gov).

Sincerely,

  
Kathy Billings  
Superintendent

Cc: (w/enclosures)

Native American Tribes Contact List, December 11, 2014, 1 page



## United States Department of the Interior

NATIONAL PARK SERVICE  
Death Valley National Park  
PO Box 579  
Death Valley, California 92328



IN REPLY REFER TO:  
N1632

December 15, 2014

MAILED USPS CERTIFIED MAIL-RETURN RECEIPT

Mary Wuester, Chairperson  
Lone Pine Paiute Shoshone Reservation  
PO Box 747  
Lone Pine, CA 93545

**Subject: Continuation of Consultation between the National Park Service and Culturally Affiliated Tribes for Saline Valley Warm Springs Management Plan and Environmental Impact Statement, Death Valley National Park, Inyo County, California**

Dear Ms. Wuester:

In accordance with Section 106 of the National Historic Preservation Act of 1966 (NHPA), as amended (16 USC 470, et seq.) and its implementing regulation 36 CFR 800.3(f)(2), the National Park Service (NPS), Death Valley National Park (Park) seeks to continue consultation with culturally affiliated tribes for the proposed Saline Valley Warm Springs Management Plan (Plan).

### Background Information on the Project

The NPS is conducting an environmental review for the proposed Saline Valley Warm Springs Management Plan. For this project, the NPS is the lead federal agency for compliance with the National Environmental Policy Act (NEPA) and with Section 106 of the NHPA. The NPS has determined that the proposed federal action is an undertaking as defined in 36 CFR Part 800.16(y) and it is the type of activity that has the potential to cause effects on historic properties.

During the preparation of the Draft EIS (DEIS), the NPS shall meet the standards in 36 CFR 800.8(c)(1)(i) through (v) and describe the following efforts in the resulting environmental document:

- consult regarding the effects of the undertaking on historic properties with the SHPO/THPO, Indian tribes and Native Hawaiian organizations that might attach religious and cultural significance to the affected historic properties, other consulting parties, and the ACHP, where appropriate, during the NEPA scoping, environmental analysis, and the preparation of NEPA documents;
- involve the public in accordance with the agency's published NEPA procedures; and
- develop in consultation with identified consulting parties alternatives and proposed measures that might avoid, minimize or mitigate any adverse effects of the undertaking on historic properties and describe them in the DEIS.



December 15, 2014  
 Mary Wuester, Chairperson

Page 2

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Sincerely,

  
 Kathy Billings  
 Superintendent

Cc: (w/enclosures)

Native American Tribes Contact List, December 11, 2014, 1 page



## United States Department of the Interior

NATIONAL PARK SERVICE  
Death Valley National Park  
PO Box 579  
Death Valley, California 92328



IN REPLY REFER TO:  
N1632

December 15, 2014

MAILED USPS CERTIFIED MAIL-RETURN RECEIPT

Kathy Bancroft, Cultural Resources Officer  
Lone Pine Paiute Shoshone Reservation  
PO Box 747  
Lone Pine, CA 93545

**Subject: Continuation of Consultation between the National Park Service and Culturally Affiliated Tribes for Saline Valley Warm Springs Management Plan and Environmental Impact Statement, Death Valley National Park, Inyo County, California**

Dear Ms. Bancroft:

In accordance with Section 106 of the National Historic Preservation Act of 1966 (NHPA), as amended (16 USC 470, et seq.) and its implementing regulation 36 CFR 800.3(f)(2), the National Park Service (NPS), Death Valley National Park (Park) seeks to continue consultation with culturally affiliated tribes for the proposed Saline Valley Warm Springs Management Plan (Plan).

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December 15, 2014  
Kathy Bancroft, Cultural Resources Officer

Page 2

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Sincerely,

  
Kathy Billings  
Superintendent

Cc: (w/enclosures)  
Native American Tribes Contact List, December 11, 2014, 1 page



## United States Department of the Interior

### NATIONAL PARK SERVICE

Death Valley National Park  
PO Box 579  
Death Valley, California 92328



IN REPLY REFER TO:  
DEVA CRP No. 11-036  
PEPC No. 39438  
SHPO No. NPS\_2013\_0114\_001

February 15, 2018

MAILED USPS CERTIFIED MAIL-RETURN RECEIPT

George Gholson, Chairman  
Timbisha Shoshone Tribe  
PO Box 1779  
621 W. Line St., Suite 109  
Bishop, CA 93515

Subject: Determination of *No Adverse Effect* for Proposed Saline Valley Warm Springs Management Plan/EIS,  
Death Valley National Park, Inyo County, California

Dear Mr. Gholson:

Death Valley National Park (Park) re-initiated consultation with the Timbisha Shoshone Tribe in a letter sent on May 23, 2017, for the Saline Valley Warm Springs Management Plan/EIS. The Area of Potential Effect maps and description are included in this package, again, for your convenience in the attached Assessment of Effect document (Attachment 6). In compliance with Section 106 of the National Historic Preservation Act of 1966 (16 U.S.C.470f) as amended, and its implementing regulations found at 36 CFR 800, the Park seeks your comments under 36 CFR 800.4 on the identification of historic properties and under 36 CFR 800.5 for a finding of no adverse effect for the following project.

#### Identification of Historic Properties

To meet the Section 106 requirements for the project, the Park conducted two archeological surveys (Attachments 1 and 2), conducted site condition assessments of nearby archeological sites (Attachment 3), and commissioned two eligibility recommendation documents (Attachments 4 and 5). Park Archeologist Leah Bonstead (Attachment 1) conducted an intensive pedestrian survey of the direct APE in 2011 to provide a baseline documentation of the area and inform future park planning efforts. She also enlisted the archeology crew (Attachment 3) to conduct site condition assessments within 2-4 miles of the Saline Valley Warm Springs area to provide a baseline for future site condition assessments and a possible site steward program (Attachment 6: Figures 10-14). After recording the Warm Springs area, Bonstead recommended that the Park conduct ethnographic and historic resource studies to determine the site's eligibility. The Park hired Penny Rucks (Attachment 4), an ethnographer, to conduct interviews and site visits with members of the Timbisha Shoshone Tribe to assess the site's eligibility as a Traditional Cultural Property. The Park also hired New South Associates (via EA Engineering) to assess the campground and soaking tubs as a possible historical site (Attachment 5). In 2015, Park Archeologist Wanda Raschkow conducted an intensive pedestrian survey of the road that leads to the springs (Attachment 2) because the road is currently maintained by Saline Valley visitors and volunteers, and would continue to be maintained by Park staff as part of the site plan.



February 15, 2018  
Mr. George Gholson

Page 2

#### Assessment of Effect

The Park prepared an Assessment of Effect document that summarizes our efforts to ensure that the project will not result in adverse impacts to the Saline Valley Warm Springs historic site, the *Ko o' Warm Springs* ethnographic site, or archeological sites in the vicinity of the springs (Attachment 6).

#### Finding of No Adverse Effect

The Park finds that the proposed actions are in line with criteria in the Secretary of Interior for the Treatment of Historic Properties (36 CFR 68). The proposed undertaking will have *No Adverse Effect* to historic properties provided the following stipulations are adhered to:

- (1) Mechanical palm removal at the upper springs is monitored by a qualified archeologist.
- (2) The communal fire ring, which is a contributing feature to the Historic District, is retained. The other rock fire rings can be removed and replaced with standard NPS metal fire rings.
- (3) The Park reduces the distance from springs visitors are allowed to camp from 200 feet to 100 feet. This would significantly reduce the impact of this policy on the historical district *and* bring the policy in line with the park wide camping rules in the Superintendent's Compendium.
- (4) The Park follows the Secretary of the Interior Standards on the treatment of vegetation in historic landscapes. The Park should consult with a qualified Historical Landscape Architect or Landscape Historian and the Timbisha Shoshone Tribe as the non-native contributing vegetation at Palm Springs and the Lower Warm Springs dies to identify appropriate native, non-invasive species to replace the palms with to avoid adverse impacts to the historical district while improving the integrity of the ethnographic site.
- (5) The park consults with a qualified Historical Landscape Architect or Landscape Historian on the future placement of the restrooms and fencing to ensure the Park is following the Secretary of the Interior Standards on the treatment of historic landscapes
- (6) In the unlikely event that previously undocumented archeological features are encountered during the project implementation, all necessary steps will be taken to protect them and work in that location will be immediately suspended until the park Compliance Archeologist or another archeologist meeting the Secretary of Interior Standards has evaluated the find.
- (7) In the unlikely event that human remains are encountered during project implementation, all work will be suspended immediately until measures stipulated in the *DEVA NAGPRA Inadvertent Discovery Plan* are completed and the Native American Graves Protection and Repatriation Act is followed.

The Park seeks your comments with the following findings:

- Identification of historic properties per 36 CFR 800.4 and acknowledgement of previous work.
- Determination that the project will have *No Adverse Effect* to historic properties per 36 CFR 800.5.

If you have any questions or concerns regarding this undertaking or the park's determination of effect, please contact the park Environmental Protection Specialist, Jonathan Penman-Brotzman (760/768-3227) or Section 106 Archeologist Amanda J. Landon (760/786-3217).

Sincerely,



Mike Reynolds  
Superintendent

February 15, 2018  
Mr. George Gholson

Page 3

Attachments:

1. *Archeological Survey and Documentation, Saline Valley Warm Springs, CRP No. 11-036, Death Valley National Park, Inyo County, California* (2013, Leah Bonstead)
2. *Cultural Resources Inventory of Saline Valley Warm Springs Developed Area* (2014, Jennifer Durk)
3. *Saline Valley Condition Assessments, CRP No. 11-001, WACC Project No. DEVA 2011C, Death Valley National Park, Inyo County, California* (2011, Emily McCuiston)
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6. *Assessment of Actions Having an Effect on Cultural Resources: Saline Valley Warm Springs Management Plan Environmental Impact Statement* (2017, Amanda J. Landon)

CC (w/ attachments)

Barbara Durham, Timbisha Shoshone THPO



## United States Department of the Interior

NATIONAL PARK SERVICE

Death Valley National Park  
PO Box 579  
Death Valley, California 92328



IN REPLY REFER TO:  
DEVA CRP No. 11-036  
PEPC No. 39438  
SHPO No. NPS\_2013\_0114\_001

February 15, 2018

MAILED USPS CERTIFIED MAIL-RETURN RECEIPT

Barbara Durham, THPO  
Timbisha Shoshone Tribe  
9314 So. Ash St., E10  
Tacoma, Washington 98444

Subject: Determination of *No Adverse Effect* for Proposed Saline Valley Warm Springs Management Plan/EIS,  
Death Valley National Park, Inyo County, California

Dear Ms. Durham:

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February 15, 2018  
Ms. Barbara Durham

Page 2

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Sincerely,



Mike Reynolds  
Superintendent

February 15, 2018  
Ms. Barbara Durham

Page 3

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## United States Department of the Interior

NATIONAL PARK SERVICE

Death Valley National Park  
PO Box 579  
Death Valley, California 92328



IN REPLY REFER TO:  
DEVA CRP No. 11-036  
PEPC No. 39438  
SHPO No. NPS\_2013\_0114\_001

July 24, 2018

MAILED USPS CERTIFIED MAIL-RETURN RECEIPT

George Gholson, Chairman  
Timbisha Shoshone Tribe  
PO Box 1779  
621 W. Line St., Suite 109  
Bishop, CA 93515

Subject: Process Timeline and Further Opportunities for Involvement with the Saline Valley Warm Springs Management Plan/EIS, Death Valley National Park, Inyo County, California

Dear Mr. Gholson:

We are writing to inform you of the close of the Saline Valley Warm Springs Management Plan and Draft Environmental Impact Statement (DEIS) public comment period and to invite you to participate in developing the Final EIS.

The Department of the Interior released new guidance under Secretarial Order No. 3355, Streamlining National Environmental Policy Act Reviews and Implementation of Executive Order 13807, which requires that Environmental Impact Statements (EIS) be completed within one year of issuance of a Notice of Intent (NOI) to prepare an EIS. Further direction under a memorandum released on April 27, 2018, requires that each EIS project team with an outstanding EIS with a NOI published on or before August 31, 2017, provide a project schedule with a Final EIS and Record of Decision (ROD) issuance date of no later than 365 calendar days from the effective date of the Memorandum.

Death Valley National Park (Park) and the Pacific West Regional Director must sign the ROD by April 27, 2019 to comply with the Order. The Park submitted a DEIS to ROD Schedule (Attached) with a target ROD date of April 26, 2019, to the Department to comply with this requirement.

There are still opportunities for cooperating and consulting agencies to participate in the development of the Final EIS. The public comment period for the Saline Valley Warm Springs Management Plan/EIS came to a close on July 2, 2018. The Park received 381 public comments, which are currently being analyzed and coded. The Park proposes the following engagement opportunities:

- Share the public comment analysis report, when compiled;
- Schedule a call to discuss the comment analysis report;
- Seek assistance in responding to public comments, where appropriate;
- Provide the opportunity to review and provide comments on the first internal Final EIS;
- Provide notification of the Final EIS publication;

July 24, 2018  
Mr. George Gholson

Page 2

- Provide notification of the ROD release.

If you have any questions or concerns regarding this undertaking please contact the park Chief of Resources, Josh Hoines (760/768-3253) or Section 106 Coordinator Amanda J. Landon (760/786-3217).

Sincerely,

A handwritten signature in black ink that reads "Mike Reynolds". The signature is fluid and cursive, with the first name "Mike" and last name "Reynolds" clearly legible.

Mike Reynolds  
Superintendent

Attachments:

1. *DEVA SVWS Schedule for PWR\_DEVA\_DOI*

CC (w/ attachments)

Barbara Durham, Timbisha Shoshone THPO





## United States Department of the Interior

NATIONAL PARK SERVICE

Death Valley National Park  
PO Box 579  
Death Valley, California 92328



IN REPLY REFER TO:  
DEVA CRP No. 11-036  
PEPC No. 39438  
SHPO No. NPS\_2013\_0114\_001

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Timbisha Shoshone Tribe  
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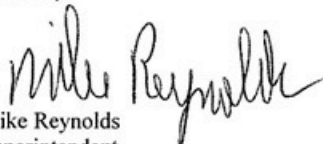


July 24, 2018  
Ms. Barbara Durham

Page 2

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Sincerely,



Mike Reynolds  
Superintendent

Attachments:

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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 a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

May 2019

United States Department of the Interior · National Park Service