

National Park Service
US Department of the Interior



Death Valley National Park
California

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 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 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.

CONTENTS

Purpose of and Need for Action.....	1
Purpose of Action.....	1
Need for Action.....	2
Cooperating Agencies	2
Background of the Saline Valley Warm Springs Area	2
Relevant Planning Documents	3
Death Valley National Park General Management Plan.....	3
Wilderness and Backcountry Stewardship Plan and Environmental Assessment.....	3
Special Regulation for Designation of the Chicken Strip Airstrip.....	3
Issues and Impact Topics Retained for Detailed Analysis.....	3
Soils.....	3
Vegetation	4
Wetlands.....	4
Wildlife	4
Cultural Resources	4
Wilderness Character	6
Visitor Use and Experience.....	6
Human Health and Safety	6
Alternatives.....	7
Description of the Alternatives	7
Elements Common to All Alternatives	7
Alternative 1: No-Action Alternative.....	8
Alternative 2: Regulatory Compliance Alternative.....	9
Alternative 3: Community Engagement Alternative.....	10
Alternative 4: Restoration Alternative	10
Alternative 5: Preferred Alternative.....	11
Alternative Elements Eliminated from Further Study.....	24
Mitigation Measures	24
Affected Environment.....	27
Introduction.....	27
General Project Setting	27
Soils.....	28
Vegetation.....	29
Native Species.....	29
Nonnative Species.....	30
Wetlands	30
Wildlife	34
Native Species.....	34
Nonnative Species.....	34
Cultural Resources	35
Archeological Resources.....	37

Historical Resources.....	38
Ethnographic Resources.....	42
Wilderness Character	43
Visitor Use and Experience.....	44
Saline Valley Warm Springs Area	44
Chicken Strip.....	46
Human Health and Safety	47
Risks from Flood Events.....	48
Risks of Recreational Water Use	48
Risks from Habituated Wildlife	48
Hazardous Material Handling	49
Environmental Consequences.....	51
Geographic Area Evaluated for Impacts	51
Additional Context for Assessing the Impacts.....	51
Cumulative Effects.....	51
Methods for Assessing Cumulative Effects	52
Soils and Vegetation	53
Methodologies.....	53
Types of Impacts on Soils and Vegetation.....	53
Alternative 1: No-Action Alternative.....	54
Alternative 2: Regulatory Compliance Alternative.....	57
Alternative 3: Community Engagement Alternative.....	58
Alternative 4: Restoration Alternative	60
Alternative 5: Preferred Alternative.....	62
Conclusion	63
Wetlands	64
Methodologies.....	64
Types of Impacts on Wetlands	64
Alternative 1: No-Action Alternative.....	64
Alternative 2: Regulatory Compliance Alternative.....	66
Alternative 3: Community Engagement Alternative.....	67
Alternative 4: Restoration Alternative	67
Alternative 5: Preferred Alternative.....	68
Conclusion	69
Wildlife	70
Methodologies.....	70
Types of Impacts on Wildlife.....	70
Alternative 1: No-Action Alternative.....	71
Alternative 2: Regulatory Compliance Alternative.....	73
Alternative 3: Community Engagement Alternative.....	74
Alternative 4: Restoration Alternative	76
Alternative 5: Preferred Alternative.....	77
Conclusion	78
Cultural Resources	78
Methodologies.....	78
Types of Impacts on Cultural Resources.....	79

Section 106 of the National Historic Preservation Act of 1966	79
Alternative 1: No-Action Alternative.....	79
Alternative 2: Regulatory Compliance Alternative.....	81
Alternative 3: Community Engagement Alternative.....	83
Alternative 4: Restoration Alternative	85
Alternative 5: Preferred Alternative.....	86
Conclusion	87
Wilderness Character	88
Methodologies.....	88
Types of Impacts on Wilderness Character.....	88
Alternative 1: No-Action Alternative.....	89
Alternative 2: Regulatory Compliance Alternative.....	91
Alternative 3: Community Engagement Alternative.....	91
Alternative 4: Restoration Alternative	92
Alternative 5: Preferred Alternative.....	93
Conclusion	93
Visitor Use and Experience.....	94
Methodologies.....	94
Alternative 1: No-Action Alternative.....	95
Alternative 2: Regulatory Compliance Alternative.....	97
Alternative 3: Community Engagement Alternative.....	98
Alternative 4: Restoration Alternative	101
Alternative 5: Preferred Alternative.....	102
Conclusion	103
Human Health and Safety	104
Methodologies.....	104
Types of Impacts on Health and Safety	104
Alternative 1: No-Action Alternative.....	105
Alternative 2: Regulatory Compliance Alternative.....	107
Alternative 3: Community Engagement Alternative.....	108
Alternative 4: Restoration Alternative	109
Alternative 5: Preferred Alternative.....	110
Conclusion	110
Sustainability and Long-term Management	111
Relationship of Local Short-term Uses versus Long-term Productivity	111
Irreversible and Irrecoverable Commitment of Resources	111
Adverse Environmental Effects that Cannot be Avoided	111
Consultation and Coordination	113
Introduction.....	113
The Scoping Process	113
Internal Scoping	113
Public Scoping	114
Public Alternative Development Workshops.....	115
Public Comments on the Draft Plan/EIS.....	115
Agency and Tribal Government Scoping.....	115
Cooperating Agencies	115
Agency Meetings	116

Endangered Species Act Section 7 Consultation	116
Section 106 of the National Historic Preservation Act Consultation.....	116
List of Recipients	117
Agencies.....	118
Indian Tribes	118
Organizations and Partners	118
Libraries	118
List of Preparers and Consultants	119
US Department of the Interior, National Park Service.....	119
EA Engineering, Science, and Technology, Inc.....	119
New South Associates.....	120
The Final Word	120
References.....	121
Glossary	131
Index	135

TABLES

Table 1. Elements of the Alternatives.....	12
Table 2. Functions and Values of Wetlands Found at Lower and Upper Springs	32
Table 3. Cultural Chronology for the Saline Valley Warm Springs Area	35
Table 4. Archeological Surveys Conducted in the Saline Valley Warm Springs Area	37
Table 5. Prehistoric Archeological Sites Recorded in the Saline Valley Warm Springs Area	38
Table 6. Features of the Area of Historic Significance for the Recreational Users	41
Table 7. Monthly Visitation at Lower Spring and Palm Spring Based on Visitor and Vehicle Counts Taken by Camp Hosts in 2012 and 2013	46

APPENDICES

Appendix A: Figures.....	A-1
Appendix B: Cooperating Agency Correspondence.....	B-1
Appendix C: Saline Valley Warm Springs Area Activity Areas and Features.....	C-1
Appendix D: Issues and Impact Topics Eliminated from Further Consideration.....	D-1
Appendix E: Visitor Use Permit System and Formal Visitor Use Studies	E-1
Appendix F: Vegetation and Wildlife in the Saline Valley Warm Springs Area	F-1
Appendix G: Floodplains Statement of Findings.....	G-1
Appendix H: Comment Summary Report.....	H-1
Appendix I: Agency Consultation.....	I-1

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