

NON-IMPAIRMENT DETERMINATION

This non-impairment determination has been prepared for the selected alternative, as described in the Record of Decision for the final *Saline Valley Warm Springs Management Plan and Environmental Impact Statement* (plan/EIS) at Death Valley National Park (park).

By enacting the NPS Organic Act of 1916 (Organic Act), Congress directed the US Department of the Interior and the National Park Service to manage units “to conserve the scenery, natural and historic objects, and wild life in the System units and to provide for the enjoyment of the scenery, natural and historic objects, and wild life in such manner and by such means as will leave them unimpaired for the enjoyment of future generations” (54 USC 100101).

NPS *Management Policies 2006*, section 1.4.4, explains the prohibition on impairment of park resources and values:

While Congress has given the Service the management discretion to allow impacts within parks, that discretion is limited by the statutory requirement (generally enforceable by the federal courts) that the Park Service must leave park resources and values unimpaired unless a particular law directly and specifically provides otherwise. This, the cornerstone of the Organic Act, establishes the primary responsibility of the National Park Service. It ensures that park resources and values will continue to exist in a condition that will allow the American people to have present and future opportunities for enjoyment of them.

As stated in section 1.4.5 of the NPS *Management Policies 2006*, an action constitutes impairment when its impacts “harm the integrity of park resources or values, including the opportunities that otherwise will be present for the enjoyment of those resources or values.” To determine impairment, the NPS must evaluate the “particular resources and values that will be affected; the severity, duration, and timing of the impact; the direct and indirect effects of the impact; and the cumulative effects of the impact in question and other impacts.”

National park system units vary based on their enabling legislation, natural and cultural resources present, and mission. Likewise, the activities appropriate for each unit and for areas in each unit also vary. For example, an action appropriate in one unit could impair resources in another unit.

As stated in section 1.4.5 of the NPS *Management Policies 2006*, an impact on any park resource or value may constitute an impairment, but an impact would be more likely to constitute an impairment to the extent that it affects a resource or value whose conservation is

- necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park; or
- key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park; or
- identified in the park’s general management plan or other relevant NPS planning documents as being of significance.

The significance and importance of each resource analyzed, based on the Death Valley National Park enabling legislation, is discussed in the following sections.

For the selected alternative, a determination of non-impairment is made for each of the impact topics carried forward for detailed analysis in the plan/EIS. A non-impairment determination is not made for wilderness, visitor use and experience, or human health and safety because these impact topics are not generally considered to be a park resources or values subject to the non-impairment standard established by the Organic Act and clarified further in Section 1.4.6 of NPS *Management Policies 2006*. A description of the current state of each resource topic evaluated for impairment can be found in the "Affected Environment" chapter of the plan/EIS. Each resource or value for which non-impairment is assessed and the reasons why impairment will not occur is described below.

SOILS

Past and current visitor activities, including driving and camping throughout the Saline Valley Warm Springs Area, have altered the soil structure and function. Dispersed car camping and driving beyond the one designated road (Warm Springs Road) have led to large areas of compacted and disturbed soils. Other activities, such as regular dragging of Warm Springs Road with large tires or other devices, and moving rocks to create impromptu fire rings, artwork, and road alignments, have contributed to soil disturbance. The selected alternative will concentrate dispersed car camping in previously disturbed areas and designate walk-in overflow camping with a parking area. The selected alternative will also designate areas where no camping will be allowed. Driving will be limited to Warm Springs Road and select access roads only. A parking area will be designated for visitors using the walk-in camping area. The National Park Service will maintain Warm Springs Road for use by high clearance vehicles and visitors will be prohibited from moving rocks. By limiting areas where visitors camp and drive, the selected alternative will allow the surrounding soil area to recover. Although foot traffic throughout the site will likely continue to occur and soils in arid areas are slow to recover, the impacts on soils under the selected alternative will be reduced from current conditions. As a result, the selected alternative will not result in impairment of soils at the Saline Valley Warm Springs Area.

VEGETATION

Impacts on vegetation at the Saline Valley Warm Springs Area are directly related to the conditions of the soil and the introduction and spread of nonnative species. Recreation activities have caused displacement, compaction, contamination, and erosion of soils, which affect plant growth and survival. Impacts to plants also occur from trampling and the introduction and spread of nonnative species. The long history of visitor activities at the Saline Valley Warm Springs Area have led to a large portion of the Saline Valley Warm Springs Area becoming devoid of vegetation. Trampling from foot traffic and vehicles damages or destroys plants and compacts the soils, hindering water infiltration and root penetration by plants. Disturbance and erosion from activities such as dragging Warm Springs Road and contamination from human and animal waste, cleaning products, and vehicle supplies have changed the soil properties, creating habitats that encourage the spread of nonnative plants. Nonnative plants currently comprise approximately 40% of the species present at the Saline Valley Warm Springs Area. Most prevalent are the palm trees and the Lower Spring lawn, which were planted by the users of the site. The selected alternative will provide an opportunity for a large portion of the Saline Valley Warm Springs Area to recover from past impacts by limiting where visitors can camp and drive, as described above for soils. Although recovery rates of desert environments are generally slow, eliminating some visitor activities in portions of the Saline Valley Warm Springs Area (e.g., driving beyond Warm Spring Road and designated dispersed camping areas), will allow the habitat to return to a more natural condition over time. The selected alternative will also increase control of palm trees by pulling young palm trees and planting native trees with the help of the user groups. The palm trees at Upper Spring will be removed.

When the existing mature palm trees at Lower Spring and Palm Spring die naturally, they will be removed, by which time the native species should have matured sufficiently to provide shade to visitors. The lawn at Lower Spring will be retained and maintained by the user groups in the current footprint to avoid spread into adjacent areas. Additionally, the National Park Service will engage the user groups in nonnative plant control and onsite monitoring. The selected alternative will reduce impacts to native vegetation compared to the current condition and work to control and reduce the amount of nonnative plants at the site. For these reasons, the selected alternative will not result in impairment of vegetation at the Saline Valley Warm Springs Area.

WETLANDS

The Saline Valley Warm Springs Area contains wetlands that are both naturally occurring and artificially fed through water diversions. Three of the four wetlands are natural and are currently affected by trampling by visitors; feral burros also trample and graze these wetlands. The fourth wetland (the settling pond at Lower Spring) is artificial and is fed by runoff from the soaking tubs, shower, and lawn, and drainage from the dishwashing station. The settling pond overflow also feeds into one of the natural wetlands. The wetlands persist at the Saline Valley Warm Springs Area under current conditions and provide functions and values, such as floodflow alteration and wildlife habitat. The selected alternative will not change the hydrology of the wetlands at the Saline Valley Warm Springs Area. By diverting wastewater from the dishwashing stations, slightly less water will reach the settling pond and the wetland adjacent to the settling pond; however, these wetlands are expected to persist without any measurable change. Diverting wastewater to a subterranean system will, however, eliminate a possible contaminant from these wetlands, increasing the quality of the habitat. The selected alternative will also extend the fencing around the springs at Upper Spring, protecting the wetland from feral burro grazing and trampling. Nonnative plant removal by the National Park Service and the user groups will benefit the wetlands by retaining or restoring natural conditions to the extent possible. The selected alternative will reduce ongoing impacts to wetlands. As a result, the selection alternative will not result in impairment of wetlands at the Saline Valley Warm Springs Area.

WILDLIFE

The wildlife at the Saline Valley Warm Springs Area includes both native and nonnative species. Native species are typical of a desert habitat, and nonnative species include feral burros and European starlings. Due to the long history of human activity at the Saline Valley Warm Springs Area, habitat has become modified, wildlife has been displaced, and wildlife behavior has been modified. Driving, camping, and other recreation activities have compacted soils, prevented vegetation growth, and changed the habitat at the Saline Valley Warm Springs Area. Many wildlife species have become accustomed to the presence of humans and their food and have become habituated to humans. Other species have likely learned to avoid the Saline Valley Warm Springs Area to avoid interactions with humans. To reduce the amount of habituation, the selected alternative will remove an artificial water source (currently provided for feral burros to drink), divert wastewater that includes food scraps to a subterranean water treatment system, increase visitor education on proper food storage and interaction with wildlife, and allow the option to install food storage boxes, if the need arises. By restricting areas where visitors can drive and camp and by efforts to remove nonnative plant species, the selected alternative will improve the habitat available at the Saline Valley Warm Springs Area for wildlife. Therefore, the selected alternative will not result in impairment of wildlife at the Saline Valley Warm Springs Area.

ARCHEOLOGICAL RESOURCES

Archeological surveys at the Saline Valley Warm Springs Area have identified resources such as wickiups, projectile points, pottery sherds, and obsidian knives. Any archeological resources at Lower Spring and Palm Spring have likely been badly damaged from visitor activities or collected by visitors in the past and currently. The selected alternative will incorporate additional visitor education, as well as resource monitoring efforts by the National Park Service and NPS-trained site stewards. Additionally, visitors will not be allowed to move rocks for creating art or delineating areas at the site. These elements of the selected alternative will reduce adverse impacts on archeological resources from ongoing visitor activities; therefore, the selected alternative will not result in impairment of archeological resources at the Saline Valley Warm Springs Area.

HISTORICAL RESOURCES

The Saline Valley Warm Springs Area has a long history of recreational use with the first developed recreational soaking tub installed between 1933 and 1947. Modification and expansion of the developed features continued through the 1990s and these features have been continually maintained by the user groups. A Determination of Eligibility completed in 2014 identified that the Saline Valley Warm Springs Historic Site is eligible for nomination to the National Register of Historic Places. Some contributing features to the site include the bathtub, the Cool, Sunrise, and Crystal pools, and the lawn at Lower Spring, the Volcano and Wizard pools and the palm trees at Palm spring, the bat pole, the Chicken Strip airstrip, and the lower peace sign. The selected alternative contains elements that will minimize impacts on natural resources that will have small adverse effects on the area of historic significance for the recreational users. The selected alternative will remove existing mature palm trees after they die naturally and install artistic wooden fencing around the source springs to exclude burros from drinking the water. These actions will have an impact on Palm Spring because these palm trees are a contributing element of the Saline Valley Warm Springs Historic Site and the fencing will have a visual effect due to the more open setting of Palm Spring. The restrictions on camping under the selected alternative will have an impact on the historic site, as it will affect the feeling of unconfined recreational freedom. Although the selected alternative will have some impacts on the Saline Valley Warm Springs Historic Site, these impacts will be minor. Overall, the developed features will remain, most of the recreational opportunities will remain intact, and user groups will be able to remain engaged with the upkeep of the Saline Valley Warm Springs Area through a Memorandum of Understanding. For these reasons, the selected alternative will not result in impairment of historical resources at the Saline Valley Warm Springs Area because the site and most of its contributing features will continue to be present for the enjoyment of future generations.

ETHNOGRAPHIC RESOURCES

The homelands of the Timbisha Shoshone Tribe (the Tribe) encompass the entirety of Death Valley National Park. The Timbisha Shoshone Homeland Act of 2000 (Homeland Act; Public Law 106-423) identified Saline Valley as one of several designated special use areas of the Tribe. The warm springs of Saline Valley (the warm springs) are a source of *puha* for the Tribe, a life force energy. The development of the Saline Valley Warm Springs Area, the presence of nonnative species, and the clothing optional recreation have degraded *puha* and other ethnographic resources. The selected alternative will retain much of the development at the Saline Valley Warm Springs Area, but the vehicle support facility, the permanent camp host housing, and all non-historic art in designated wilderness will be removed. The selected alternative will remove all palm trees at Upper Springs, remove existing mature palm trees from

the Lower Spring and Palm Spring as they die naturally, and continue efforts to remove other nonnative species throughout the site. These actions, along with restricting driving and camping to designated areas, will reduce development and create more natural vegetation communities. This will result in a setting that is more sympathetic to the area of ethnographic significance for the Tribe, who feel an obligation to protect and restore the natural environment of the springs. For these reasons, the selected action will not result in impairment of ethnographic resources at the Saline Valley Warm Springs Area.

SUMMARY

It is the best professional judgement of the NPS decision-maker, based upon the impact analysis in the plan/EIS; relevant scientific studies; advice or insights offered by subject matter experts and others who have relevant knowledge or experience; and the results of civic engagement and public involvement activities, no impairment of Death Valley resources or values will result from implementation of the selected alternative.

