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Intermountain
Region (R4)

RECORD OF DECISION

MIDDLE KYLE COMPLEX

Spring Mountains National Recreation Area | Humboldt Toiyabe National Forest
Clark County, Nevada

December 2009

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Acronyms and Abbreviations

BA/BE	Biological Assessment and Biological Evaluation
BLM	U.S. Bureau of Land Management
BMPs	best management practices
Business Plan	2008 Spring Mountains National Recreation Area Market, Financial and Operational Analysis
CA	Conservation Agreement
CCC	Civilian Conservation Corps
CCDAQEM	Clark County Department of Air Quality and Environmental Management
CCFD	Clark County Fire Department
CFR	Code of Federal Regulations
CWA	Clean Water Act
DEIS	Draft Environmental Impact Statement
doc	Microsoft Office® Word document
EIS	Environmental Impact Statement
FEIS	Final Environmental Impact Statement
Forest Plan	1986 Toiyabe National LRMP
Framework Plan	2005 Middle Kyle Canyon Framework Plan
GHG	greenhouse gas
GMP	1996 Spring Mountains National Recreation Area General Management Plan, an amendment to the LRMP
LRMP	Land and Resource Management Plan
Metro	Las Vegas Metropolitan Police Department
MVUM	Motorized Vehicle Use Map
NDF	Nevada Division of Forestry
NDOT	Nevada Department of Transportation
NEPA	National Environmental Policy Act
NFS	National Forest System
NHPA	National Historic Preservation Act
NNIS	non-native invasive species
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
OHVs	off-highway vehicles
PA	Programmatic Agreement
ROD	Record of Decision
rtf	rich text format
SHPO	State Historic Preservation Office
SMNRA	Spring Mountain National Recreation Area
SR	State Route
Travel Analysis	2009 SMNRA Middle Kyle Complex Project Travel Analysis
USFWS	U.S. Fish and Wildlife Service
Working Group	Nuwuvi Working Group

Record of Decision

Summary of the Decision

This Record of Decision (ROD) for the Middle Kyle Complex Project documents my decision to authorize construction of recreation and administrative facilities in the Kyle Canyon area of the Spring Mountain National Recreation Area (SMNRA). This ROD also provides direction to manage recreation use such as dispersed camping use in the Kyle Canyon, Lee Canyon, and Deer Creek areas of the SMNRA. As the Responsible Official for the Humboldt-Toiyabe National Forest, I have decided to implement the Market Supported Alternative with modifications. The Market Supported Alternative (Alternative 3) is described and analyzed in the Final Environmental Impact Statement (FEIS). My modifications to the Market Supported Alternative generally serve to reduce the environmental impacts of this alternative as compared with the Proposed Action (Alternative 2).

In summary, my decision authorizes:

- Construction of a visitor's center at an area previously occupied by a golf course. This area, referred to as the Village area in the FEIS, will serve as the hub for visitor information and education programs for the SMNRA. Also authorized for this site are a wide range of recreation-related opportunities including an amphitheater, plaza area with exterior interpretative displays, group picnic area, play space, education facility, reconstruction of ponds for wildlife/kids fishing activities, interpretive trails and associated day-use facilities. Some portions of the former golf course area will be restored to a more natural state with native vegetation.
- Construction of a commercial-style campground and a traditional Forest Service-style campground, a picnic area with single sites and small group-use sites, a registration/camp store, trails, roads, and associated infrastructure to support facilities.
- Reconstruction of the Kyle Canyon Campground.
- Renovation of the existing historic Kyle Civilian Conservation Corps (CCC) Camp for managed public use, including the removal of non-historic structures such as the interim visitor center, improvement of existing utilities and infrastructure, and construction of a public parking area with restroom and a small amphitheater.
- Replacement of the water main from Rainbow Subdivision to Kyle CCC Camp.

- Relocation of Fletcher Canyon Trailhead parking to the Kyle CCC Camp area.
- Construction of a paved trail along the Kyle wash connecting the existing Fletcher View Campground, Kyle CCC Camp, and Kyle Canyon Campground to the Village area. .
- Construction of a trailhead, multi-use trails, Forest Service administrative and housing facilities, and access roads north of State Route (SR) 157 in the Telephone Canyon area.
- Construction of two trailheads near the Harris Springs Road to access non-motorized trails.
- Construction of hiking/biking trails south of Kyle wash and west of Harris Springs Road.
- Construction of necessary infrastructure improvements to support new and reconstructed facilities.
- Conversion of some motorized roads to non-motorized use and closure of some motorized routes.
- Two project-specific, non-significant Forest Plan Amendments necessary to implement the decision.
- Design features and mitigation measures intended to provide additional protection for sensitive resources, including mitigation for cultural resources in accordance with the Programmatic Agreement (PA), entered into by and between the Forest Service and the Nevada State Historic Preservation Office.
- Prohibition of dispersed camping within 300 feet of all designated motorized routes in the Kyle Canyon, Lee Canyon, and Deer Creek areas within the SMNRA, except for designated areas in the Blue Tree area in Lee Canyon.
- Updates to the SMNRA Motorized Vehicle Use Map (MVUM) to include changes to motorized routes associated with this decision.

My decision eliminates several elements of the Market Supported Alternative. These modifications are described in more detail in the *Decision* section of this ROD. Some of the more significant components of the Market Supported Alternative not included in my decision include:

- A foot bridge over Slot Canyon.
- A sewage collection and central wastewater treatment facility.
- The Wildlife Rehabilitation Center.
- The interagency fire facility.
- The interagency law enforcement facility.
- Approximately 8.2 miles of multi-use trails in the Telephone Canyon area.

My decision will implement some components of the Proposed Action to replace two of the aforesaid features, including:

- Construction of a trail connection from the Slot Canyon Trailhead to the Rim Trail.
- Construction of on-site septic tank and drain field systems.

Introduction

Project Area

The Middle Kyle Complex is located in the Humboldt-Toiyabe National Forest within the SMNRA, located in Clark County approximately 35 miles northwest of Las Vegas, Nevada. The Middle Kyle Complex project is located in the lower elevations on the east side of the Spring Mountains range. The project area encompasses approximately 4,300 acres along Kyle Canyon Road (SR 157). There are three state highways on the eastern side of the SMNRA—SR 156, 157 and 158. Figure D-1 in Appendix D shows the regional location of the project area.

Existing Forest Service recreation and administrative facilities in Kyle Canyon include two campgrounds, the Kyle Canyon Interim Visitor Center, one picnic area, and four trailheads. In Deer Creek Canyon, recreation facilities include two campgrounds, one picnic area, an overlook, and two trailheads. Recreational facilities in Lee Canyon include two Forest Service picnic areas, two campgrounds, and several trailheads, two organizational camps under permit, and the Las Vegas Ski and Snowboard Resort. Figure D-2 shows the relationship of the project area to existing developed recreation sites on the SMNRA.

Background

Because SR 157 is the nearest point of access to the SMNRA from Las Vegas, Kyle Canyon is the most popular and frequently visited area in the Spring Mountains. Most SMNRA visitors are residents of the Las Vegas Valley. The majority of the existing SMNRA campgrounds, picnic areas, and administrative sites are concentrated in the upper Kyle and Lee Canyons. As a result, the upper canyons are congested and parking opportunities are limited. Local residents in upper Kyle Canyon have reported instances of visitors picnicking and camping on private property. There are misunderstandings between recreation users and the residents and there is little opportunity for construction of new recreation facilities due to the limitations of the steep topography and sensitive species habitat that exist in the upper canyons. Dispersed camping occurs throughout many areas of the SMNRA, typically within close proximity to existing roads. Repeated use of sites eventually results in resource impacts from litter, trash, human waste, compacted soils, trampling of plants, and damage to vegetation from firewood gathering, and unattended campfires.

Purpose and Need for Action

The Forest Service identified three need statements that served to define the standards for developing a proposal to provide new opportunities for recreation, environmental education, and conservation in the SMNRA. These identified needs resulted in development of the Proposed Action and alternatives described in the FEIS.

Provide New Recreation Facilities and Visitor Services

The existing recreation facilities on the SMNRA were designed with the emphasis on primitive camping and hiking experiences that were traditionally provided by the Forest Service in the 1960s and 1970s when visitation was far less. Based on the rapid and continuous population growth of Clark County, there is a demonstrated demand for new and expanded recreation facilities and visitor services. Changing demographics and current recreation trends tend toward more day-use activities and transitional experiences from the urban to the wilderness environment.

There is a need to reduce natural resource impacts to major concentrations of plant and wildlife species of concern that have evolved in the Spring Mountains range, the majority of which occur in upper Kyle and Lee Canyons and can be found nowhere else in the world. Visitor impacts are exerting pressure on natural ecosystems and it is evident that recreation use needs to be directed into developed recreation sites located out of the upper canyons.

The foregoing factors, along with consideration of other resources in the SMNRA, resulted in the development of a planning document titled *Middle Kyle Canyon Framework Plan* (Framework Plan), dated August 2005. In pre-National Environmental Policy Act (NEPA) public meetings, held as part of the Framework Plan development process, the public expressed its desire for easy access, better directional information, a safe environment, and family-oriented day-use activities. Demand figures reflect an increased need for camping facilities, picnicking and trailhead facilities, and short-looped hiking trails that are easy to moderate in the level of difficulty. The 2006 National Visitor Use Monitoring surveys for the SMNRA found that hiking and viewing natural features were the most popular activities for visitors to the SMNRA, followed by relaxing, viewing wildlife, and driving for pleasure. There is also a growing demand for mountain biking opportunities, which are currently limited and contribute to the development of unauthorized bike trails.

Relocate Forest Service Fire and Administrative Facilities

As described in the FEIS, there is a demonstrated need to relocate administrative facilities out of upper Kyle Canyon in a location less visible to the public and to preserve sensitive species habitat and the historic setting of the Kyle CCC Camp.

Current Forest Service administrative facilities include the Kyle Ranger Station and the Kyle administrative site, described in the FEIS as the Kyle CCC Camp, which was built in the 1930s and determined eligible for listing in the National Register of Historic Places (NRHP). Also located there are the Kyle Canyon Interim Visitor Center, Forest Service employee housing, public restrooms, public parking, and an outdoor storage area for Forest Service equipment. The entrance to the Kyle CCC Camp is congested on weekends and there is limited parking. Employee housing and administrative activities are highly visible to the public and Forest Service fire engines use the same ingress and egress lanes as visitors. The visitor recreation experience is not compatible with the administrative use of the area and there is a lack of security for employees and facilities.

Fire-service responsibilities in Kyle Canyon are shared among the Clark County Fire Department (CCFD), Nevada Division of Forestry (NDF) and Forest Service. As described in the FEIS, the existing NDF and CCFD facilities, located in the town of Mount Charleston, are inadequate with little room for expansion. Law enforcement responsibilities are shared among the Las Vegas Metropolitan Police Department (Metro), Nevada Highway Patrol and Forest Service, with each entity maintaining its own facility within or near the SMNRA. The Metro facility is a trailer located near the Nevada Department of Transportation (NDOT) facility in the SMNRA, authorized under a Forest Service special use permit.

Improve Visitor Information and Environmental Interpretation

The existing visitor center in Kyle Canyon is small and was established as an interim facility in 2004 until a larger more comprehensive visitor center could be built. The interim facility has limited parking and there are limited resources and opportunities to provide information to visitors to the SMNRA. Roads and trails are not well marked and visitors are not provided information about the importance of protecting and preserving the sensitive natural environment of the SMNRA.

The 1996 *Spring Mountains National Recreation Area General Management Plan* (GMP), an amendment to the LRMP, provides the guidance for developing a visitor center along the entrance to Kyle and/or Lee Canyons. The GMP conveys direction in several passages regarding public education and interpretation, including providing a point of contact for upper Kyle and Lee Canyons that allows distribution of educational and interpretive materials outside the visitor center and entrance stations. The Conservation Agreement (CA) for the SMNRA, entered into by and between the Forest Service and U.S. Fish and Wildlife Service (USFWS) and the State of Nevada Department of Conservation and Natural Resources, provides direction to promote environmental education to the public about biodiversity protection and ecosystem management. With inadequate opportunities for interpretation of biological, cultural and physical resources at the existing temporary facility, it was evident there is a need to improve distribution of visitor information and environmental interpretation in

order to promote understanding and appreciation of resources unique to the SMNRA.

Purpose for the Project

The foregoing need statements reveal there are resource conditions that must be addressed, inadequate recreation facilities in the SMNRA, and a need to locate new recreation and administrative facilities out of Upper Kyle Canyon. These current conditions, which are clearly disparate from the standards, guidelines, and desired conditions delineated in the Forest Plan, framed the purpose for the project. The project purpose is to:

- provide a diverse range of socially, financially and environmentally sustainable recreation opportunities that will reduce visitor impacts on major concentrations of plant and wildlife species of concern by providing visitor facility destinations out of upper Kyle Canyon;
- provide Forest Service administrative facilities in secure locations less visible to the public that will provide adequate work and employee housing facilities; and
- provide on-site environmental interpretation and information to the public.

Public Involvement

We conducted extensive pre-NEPA public involvement during 2004 and 2005 to identify options and new opportunities for conservation, recreation, and environmental education. Information gathered from public involvement was instrumental in developing the vision and goals for the area and to formulate three development options for analysis, as documented in the Framework Plan. Based on feedback from the public, the three options were narrowed to a preferred option (Option 1). This preferred option was presented in the Notice of Intent (NOI), as the Proposed Action for evaluation under the NEPA process in February 2006. Some of the pre-NEPA public involvement methods we employed were as follows:

- small group, information-gathering meetings;
- a 2-day workshop and field trip with American Indian tribes with a connection to the Spring Mountains;
- presentation of the master planning process and preferred option at the “Focus on the Forest: A Mt. Charleston Summit.” The summit included approximately 200 invited guests from various government agencies, organizations, and community groups including two Nevada senators; members of the Las Vegas Paiute Tribe; representatives from the NDF, the Regional Transportation Commission of Southern Nevada, the USFWS, and The Nature Conservancy; a Clark County Commissioner; residents of Mt. Charleston; representatives from the city of Pahrump and other entities;

- presentation to a planning review group consisting of more than 20 community and local government representatives;
- a public open house attended by more than 100 people. More than 35 questionnaires were received during the comment period. The comments were summarized and incorporated into the Framework Plan.
- distribution of newsletters at meetings;
- distribution of information to a mailing list of more than 500 people; and
- creation of a Web site to keep the public informed of the latest developments regarding the Framework Plan.

The Proposed Action was modified after the NOI was published. Changes to the Proposed Action included replacement of the existing water main from the Rainbow Subdivision water meter to Kyle CCC Camp and reconstruction of the Kyle Canyon Campground. A summary of these modifications was provided to a list of interested parties and posted on the Forest Service internet site with a request to submit written comments on the modifications from April 30, 2008, to May 31, 2008.

We facilitated interagency participation in preparing the Environmental Impact Statement (EIS) by involving the Nevada Department of Wildlife, the Clark County Department of Air Quality and Environmental Management (CCDAQEM), and the U.S. Bureau of Land Management (BLM) as cooperating agencies for the EIS process. The USFWS was involved in the EIS process as a participating agency under the CA.

The NOI of the Draft Environmental Impact Statement (DEIS) was published in the *Federal Register* on October 2, 2009, and the legal notice of the opportunity to comment on the DEIS was published in the newspaper of record on October 7, 2009, for a 45-day period within which the Forest Service received comments from the public. The Forest Service's response to comments received on the DEIS is included in the FEIS.

Scoping comments helped to shape the Market Supported Alternative; however, both scoping and comments received on the DEIS were considered in arriving at my decision. Comments received on the DEIS were instrumental in defining the Selected Alternative, the alternative described herein which represents my decision.

Government-to-Government Tribal Consultation

We first informed the American Indian Tribes who have a connection to the Spring Mountains about the Middle Kyle Complex project during the pre-NEPA public involvement process conducted for the Framework Plan. We also involved the Tribes during preparation of the EIS, by way of workshops, site visits, meetings, and letters. In accordance with Executive Order 13175, we have engaged in regular and meaningful consultation with tribal officials to foster government-to-government collaboration in the development of this project. The

seven tribal governments identified as having ancestral relationships with the Spring Mountains designated the Nuwuvi Working Group (Working Group) to represent their interests during consultation. The Forest Service and the Working Group collaborated on the Selected Alternative. The results of this collaboration were integral in formulating my decision.

Formal consultation on a government-to-government basis began on August 7, 2006, when a presentation on the proposed project was given to the Tribes. The Tribes expressed the need to be informed as alternatives were developed and expressed their desire to be included in the decision making process. An update on the project was provided at a meeting on March 18 and 19, 2008. Prior to a meeting on June 23 and 24, 2009, the Working Group received a copy of the administrative DEIS. During that meeting, a field visit was conducted and the Working Group provided initial feedback on the alternatives. The Working Group met on October 18-20, 2009, to prepare written comments on the DEIS. They provided formal written comments in November 2009, including an essay that we incorporated in Chapter 3 of the FEIS. We met with the Working Group on November 30, 2009, to discuss the draft decision, the cultural resource survey report, respond to questions from the Working Group, and arrive at an agreement on how to incorporate DEIS Working Group comments and commentary into the FEIS. The Working Group comments and Forest Service responses are included in Appendix A of the FEIS.

Comments received on the DEIS include the Working Group's support of a blending of both the Proposed and Market Supported Alternatives to maintain the appropriate aesthetics and degree of isolation. Working Group representatives are concerned that ground disturbance may "unearth human remains and precious material culture, alter songscapes, storyscapes, and sacred sites". They do not support the removal of native plant communities or tree and shrub canopies. They are concerned about water quality, erosion and subsequent sedimentation. They requested that tribal monitors from the culturally affiliated nations be on site during construction of the project. Tribal representatives are concerned about maintaining the serenity of the area relative to the impacts resulting from off-highway vehicles (OHVs), mountain bikes, equestrian use, and increased trail use.

The Working Group does not support the development of a commercial-style campground because they believe it would significantly impact the natural and cultural resources in the landscape. We have agreed to collaborate with the Working Group during the design phase to identify appropriate measures that can be included in the design to reduce the impacts on the landscape important to the culturally affiliated American Indian nations.

The Working Group does not support construction of a bridge over Slot Canyon. I will not authorize construction of the Slot Canyon bridge as part of the Selected Alternative. By adopting the proposed rerouting of the trail around Slot Canyon, we will protect the cultural resources important to tribal values.

We will continue to collaborate with the Working Group into final design and implementation of the project to identify measures to reduce the impacts on the landscape. I acknowledge that construction will have a degree of impact on the

American Indian experience of viewsapes and isolationism and that we will consult with the Working Group to ensure impacts are mitigated where feasible. I agree to have traditional prayers offered during ground breaking ceremonies. I am very pleased that the Working Group is willing to collaborate with the Forest Service on environmental education aspects and vegetation management considerations. I agree to the presence of tribal monitors during implementation, as appropriate.

Significant Issue Driving Analysis and Alternative Development

Comments received from scoping resulted in the identification of one significant issue. The USFWS raised the issue that construction and operation of the Kyle wash trail from the Village to Kyle Canyon Campground will adversely impact the Spring Mountains *acastus* checkerspot butterfly (*Chlosyne acastus robusta*) habitat. The USFWS recently received a petition to list the *acastus* checkerspot butterfly as an endangered or threatened species. The butterfly is designated as a Forest Service sensitive species and a covered species under the Clark County Multiple Species Habitat Conservation Plan. It is also listed as a species of concern in the CA and a Tier 1 Special Status Species in the SMNRA Landscape Analysis.

Some temporary and permanent impacts will occur to the Kyle wash colony foraging habitat and the butterfly mate selection areas from construction and operations of the project, such as equipment noise and vibration disturbance, increased public use and recreational activities on and off-trails, and hiking and trampling of host plants.

The Selected Alternative will have less impact on foraging and mate selection habitats than the Proposed Action because of the lower scale of development. Some beneficial effects to the species will be realized through restoration in the Valley area and at the Kyle CCC camp. The Wildlife Biological Assessment and Biological Evaluation (BA/BE) for the project concluded that the Selected Alternative may impact individuals of the species, but is not likely to result in a trend toward federal listing or loss of viability to the Spring Mountains *acastus* checkerspot butterfly.

We consulted with USFWS on the trail alignment through the species' foraging habitat and on proposed mitigations to minimize effects to the species. As a result of consultation meetings with USFWS in December 2009, we agreed that the Kyle wash trail through the mate selection area will be shifted farther to the south to the extent practicable. This is in addition to wildlife design criteria W5 and W7 and wildlife mitigation measure MM-Wildlife 1, included in Appendix C, *Selected Alternative Design Criteria and Mitigation Measures*, which are expected to reduce construction and operation-related direct and indirect impacts to the species. Also, mitigation measures include installing a permanent fence at Kyle Canyon Campground and along the first 100 feet of the Kyle wash trail to funnel users onto the trail, as well as installing additional fencing, if monitoring

of recreation use in the mate selection habitat area indicates the need to preclude the proliferation of user-created trails. With the implementation of these measures, the USFWS concurred with the Forest Service species determination for the *acastus* checkerspot butterfly in their formal concurrence letter, dated December 23, 2009.

Alternatives

Alternatives Considered in Detail in the FEIS

Three alternatives were considered in detail in the FEIS: the No Action Alternative, the Proposed Action, and the Market Supported Alternative. A brief summary of each alternative is presented below. Refer to the FEIS for detailed descriptions of each alternative.

Alternative 1 – No Action

The No Action Alternative represents the existing conditions in the project area and is the baseline for comparing impacts and opportunities associated with the Proposed Action and the Market Supported Alternative.

Under the No Action Alternative, current management decisions would continue to guide recreation activities such as camping and picnicking (dispersed and developed), hiking, mountain biking, snow play, and equestrian and OHV use. Existing conditions in this area would persist. Facilities operated by the Forest Service, such as the shop and warehouse, maintenance yard, fire station, above-ground fuel tanks, living quarters for permanent and seasonal staff, Kyle Canyon Interim Visitor Center, public restrooms and parking, roads, and the helipad (used for fire response) would remain in their existing locations. Permitted occupancies including utility corridors, highway easements, a solid waste transfer facility, the Metro office, and permitted outfitter guide activities would continue.

A 128-acre privately-owned parcel the Forest Service purchased in 2004 (the site of a former golf course located south of SR 157) would undergo limited restoration to a more natural state including removal of non-native vegetation, debris, and some asphalt. The asphalt parking area on the property may be used as a fire command post in the event of fire activity in Kyle Canyon. The human-made ponds and upper storage reservoirs would serve as the source of water for fire suppression activities. The Forest Service would continue to maintain management presence in the area; however, unauthorized activities, such as illegal dumping of trash, vandalism of cultural sites, and creation of unauthorized trails and roads would continue.

The Kyle Canyon Interim Visitor Center would continue as the main source of information for visitors. Opportunities to reduce resource impacts in the upper canyon area and to improve environmental information, interpretative facilities, and the visitor experience in the SMNRA would remain the same. The demand

for recreational facilities, environmental interpretation, and information is anticipated to continue to increase as SMNRA visitation increases, as described in the Summary Comparison of Alternatives in the FEIS Table 2-1, *Summary Comparison of Alternatives*.

Alternative 2 – The Proposed Action

Background on the development of the Proposed Action, as analyzed in the DEIS and FEIS, is summarized in the *Public Involvement* section of this ROD. The Proposed Action would construct and operate new recreational facilities on approximately 4,300 acres, including a visitor center, large amphitheater, parking garage, multi-use trails, picnic areas, and traditional Forest Service-style campgrounds, in addition to relocating Forest Service administrative facilities from the upper canyon area. This alternative includes reconstruction of the Kyle Canyon Campground. An administrative action to close areas to dispersed camping was proposed under this alternative, to include an additional area of approximately 4,900 acres located outside the project area. This alternative represented the highest level of development of the three alternatives considered.

Alternative 3 – Market Supported Alternative

We engaged PricewaterhouseCoopers in 2006 to study the market demand and financial concerns related to the development of recreation and visitor facilities proposed in the Framework Plan. This study was titled the *Spring Mountains National Recreation Area Market, Financial and Operational Analysis* (Business Plan). The Business Plan was initiated to evaluate the scope, scale, and location of the proposed development in a manner that would be consistent with market demand, and to prepare a financial plan for the operation and maintenance of the new visitor center and recreation facilities. In addition to the Business Plan analysis, conceptual site planning, engineering, and mapping studies were completed. Those studies included a *SMNRA Built Environment Image Guide*, utility feasibility studies, geotechnical, materials and related studies, a traffic study, a travel analysis, and a transportation options report for the project. These studies are further described in the FEIS. Information and findings in these studies, along with scoping comments, were used to refine the infrastructure components of the Proposed Action and to develop the Market Supported Alternative.

The Market Supported Alternative is identified in the FEIS as the Forest Service Preferred Alternative. The Market Supported Alternative would construct and operate a similar range of developed recreation facilities as planned in the Proposed Action, but the facilities would have a smaller capacity. Recreation facilities supported by market demand, such as a commercial-style campground, were included. This alternative reduced the number of camping and picnic sites, reduced the size of the amphitheater eliminating the need for an underground parking garage, and reduced the scale of development at the Village area. An administrative action to close areas to dispersed camping was also proposed

under this alternative, to include an additional area of approximately 4,900 acres located outside the project area.

Alternatives Eliminated from Detailed Study

We considered twelve alternatives that we eliminated from detailed study. Many of these alternatives were eliminated because they did not meet the purpose and need for the project. These alternatives and the reasons for dismissing them from further consideration are disclosed in the FEIS.

Environmentally Preferred Alternative

The No Action Alternative is identified as the Environmentally Preferred Alternative because it does not include the short- and long-term site disturbance associated with the construction of new facilities. Under this alternative, however, we would forego the opportunity to reduce the impacts on environmentally sensitive areas in upper Kyle Canyon and elsewhere that occur with current use patterns. In crafting my decision, I carefully weighed this trade-off, as well as the need to serve the public demand for recreation and environmentally interactive opportunities in the Spring Mountains.

Concerns Raised during Public Comment on the DEIS

The 45-day public review period for the DEIS began on October 2, 2009, and ended on November 16, 2009. During the public review period, we received comments on the DEIS from federal, state, regional, and local agencies; special interest groups; and individual members of the public and American Indian tribes. All comments were carefully considered in arriving at my decision.

A total of 20 individual comment letters were received during the DEIS public review period. I reviewed all comments and my responses are provided in Appendix A of the FEIS. I am highlighting our responses to two selected concerns because they affected my decision. American Indian Tribe comments on the DEIS are summarized in the *Government-to-Government Tribal Consultation* section.

Trails and Trail Designations

There was a variety of comments on trails and trail designations. Many of the comments focused on trail designation, and caused me to consider whether or not all trails should be designated multi-use, and whether there should be any single-use designations. Concerns were raised regarding resource impacts from

mountain biking and equestrian use, and safety concerns to other trail users from mountain bikers traveling at high rates of speed on multi-use trails. A commenter expressed support for an equestrian highway crossing on SR 158 connecting the Telephone Canyon trails to the Fletcher Canyon trails, and an equestrian highway crossing on SR 157 connecting the Telephone Canyon trails to trails on the south side of the highway.

My decision designates multi-use trails to the greatest extent possible. When designating trails we must consider the appropriate mix of uses that enhance safety and minimize resource damage. Proper trail design and management are also key to providing for safety and resource protection. However, there are areas where some uses will be restricted or prohibited because of land use designations (such as Wilderness designation), safety factors, and/or resource impacts. A designation indicates the most appropriate use and does not necessarily imply restrictions. All restrictions will be clearly marked. Trailhead design will accommodate the designated trail uses.

Based on public comment and reconnaissance work by my staff, in cooperation with user groups, I have decided that all trails in the Telephone Canyon area north of SR 157 be designated as non-motorized multi-use trails and located on sustainable alignments to reduce resource impacts. This area has a considerable number of existing unauthorized routes created by mountain bike and equestrian users, with many trails contributing to resource damage. We may not be able to meet the needs of the more extreme downhill bikers in order to address safety and resource concerns. My decision results in fewer miles of trails in the Telephone Canyon area than are described in either Alternative 2 or 3 in the FEIS. However, in a separate NEPA analysis, we will be considering additional trails to the north and east in the Telephone Canyon area, along with the closure of many user-created routes. I could not include these trails in this decision because they had not undergone appropriate environmental analysis.

My decision does not include a trail connection from the Telephone Canyon trails to the Fletcher Canyon trails across SR 158. I believe that it is not safe to have a designated equestrian crossing on this stretch of highway. Also, my decision does not include a highway equestrian crossing on SR 157 connecting the Telephone Canyon trails to trails on the south side of the highway, because there are no designated equestrian trails on the south side of SR 157.

My decision includes parking for large horse trailers at the Telephone Canyon Trailhead where suitable terrain can easily accommodate such a facility, along with space for corrals and a rental facility. I agree with the commenter who expressed concerns about resource damage from unmanaged commercial equestrian trail rides. Therefore, commercial equestrian use will be restricted to designated routes. Proper trail location, improved wayfinding/trail marking, enforcement, and monitoring will also help to minimize resource damage.

The decision does not include an equestrian campground in the Telephone Canyon area because the trail mileage in the project area is not sufficient to support the need for an overnight equestrian campground. However, as discussed in the next section, we do recognize the need for equestrian camping opportunities on the SMNRA and we are exploring options.

Design of trail facilities will take into consideration a wide range of user skill and ability levels to provide for a variety of opportunities. Our intent for the Middle Kyle Complex is to increase trail opportunities in general and, specifically, for people with disabilities, the elderly, and children. Trails and trailheads will be signed and designated uses clearly identified. Information kiosks with trail maps and mileages will be posted at trailheads.

Dispersed Camping Closures

Based on comments received from equestrian enthusiasts opposing dispersed camping closures, I have decided to allow designated dispersed camping to occur at Blue Tree. The dispersed camping closures identified in Alternatives 2 and 3 would close areas that are currently used by equestrian riders for multi-day trail rides in the Macks Canyon and Blue Tree areas in Lee Canyon. I acknowledge that since there are currently no designated equestrian camping facilities on the east side, that closing Macks Canyon and Blue Tree to dispersed camping would basically eliminate equestrian camping on the east side of the SMNRA. My staff investigated both the Macks Canyon area and Blue Tree areas for suitability as a designated dispersed camping area. I determined the Macks Canyon area presented too many administrative and resource concerns to designate for dispersed camping. Additional discussion on this topic is included in the *Rationale for Decision* section.

Decision

I am the Forest Service official responsible for the decision. Based on the analysis presented in the FEIS, I am authorizing the Market Supported Alternative, with modifications, as the Selected Alternative. The Selected Alternative, including design criteria and mitigation measures necessary to minimize impacts to sensitive resources, is fully described in Appendices A, B, C and D of this ROD.

To implement the Selected Alternative, I am authorizing two project-specific non-significant Forest Plan amendments in response to the areas where the project is inconsistent with the GMP:

- **Amendment to Forest Plan GMP Standard 0.31.** GMP Standard 0.31 states development of recreation sites must occur outside of Clokey's eggvetch (*Astragalus oophorus*) and rough angelica (*Angelica scabrida*) potential habitat. A project-specific non-significant Forest Plan amendment is required because construction will occur within the 100-yard buffer zone of potential habitat for rough angelica. Clokey's eggvetch does not occur in the project area.
- **Amendment to Forest Plan GMP Guideline 11.71.** GMP Guideline 11.71 states that the Harris Springs site will be maintained for permitted designated group uses, including black-powder shooting. A project-specific, non-significant Forest Plan amendment is required because direction at 36 CFR

261.10(d)(1-2) states that discharge of firearms, including black-powder shooting, is prohibited within 150 yards of the developed trailhead and trails, where persons or property may be exposed to injury or damage.

Construction of recreation facilities at the Harris Springs site will preclude this area from such activities.

These amendments to the Forest Plan are discussed in the *Rationale for the Decision* section. In addition, the SMNRA MVUM will be revised to reflect the specific motorized route closures included in my decision. The affected motorized routes are identified in Appendix B.

I am also authorizing an administrative action on approximately 4,900 acres that extends outside of the Middle Kyle Complex project area. Within this extended area, my decision prohibits dispersed camping on National Forest System (NFS) lands within 300 feet on either side of Forest Service roads and trails open to motorized vehicles, trailheads, county roads, and state highways within the Lee Canyon, Kyle Canyon, and Deer Creek areas of the SMNRA. The only exception to this administrative prohibition is that dispersed camping will be allowed by permit at designated dispersed camp sites in the Blue Tree area of Lee Canyon.

After weighing all of the information provided in public and tribal comments, I have selected a course of action (the Selected Alternative) that is based on the Market Supported Alternative, with several modifications. The modifications to the Market Supported Alternative were included within the range of alternatives analyzed in the FEIS and are listed below, along with an explanation for the changes.

Elements of the Market Supported Alternative that were modified in my decision:

- Eliminate the sewage collection system and central wastewater treatment facility and instead implement on-site septic tank and drain field systems as identified in the Proposed Action. My reason for not authorizing the sewage collection and central wastewater treatment facility is based on the very high construction costs compared to the on-site septic tank and drain field systems. As a result of this decision, further refinements to the Market Supported Alternative are necessary, including:
 - Constructing a vault toilet instead of the flush toilet in the west loop of Kyle Canyon Campground.
 - Constructing a drain field in disturbed areas of Kyle CCC Camp that are identified for restoration in the Market Supported Alternative. This will replace an existing drain field where the relocated Fletcher Canyon Trailhead will be constructed. After installation of the new underground drain field, the area will be restored to a natural condition as originally proposed.
 - Eliminating plans for water and sewer hook-ups at camp units in Kyle Canyon Campground.
- Eliminate the Slot Canyon Trail Bridge. My reasons for not authorizing the Slot Canyon bridge is due to the adverse impacts that the bridge would have

on American Indian cultural values. In addition, the trail bridge would be costly to construct and maintain. As a consequence of deleting the Slot Canyon Bridge, which provided a trail connection to non-motorized trails south of Kyle wash in the Harris Springs area, I am adding the following elements from the Proposed Action:

- I am authorizing the trail connection from the Slot Canyon trailhead to Forest Road 45531 along Kyle wash. The trail will be unsurfaced instead of paved.
- I am authorizing unsurfaced trail connections to the locations where the Slot Canyon trail bridge abutments were proposed. The trails will terminate with overlooks at the north and south canyon rims.
- Eliminate four picnic sites and the grass play area at the Kyle CCC Camp because of potential administrative issues associated with unmanaged free picnic use in an area with limited public parking that is primarily intended for trailhead parking and Kyle CCC interpretive program use.
- Authorize gravel shoulder parking at the Kyle CCC Camp/Fletcher Canyon Trailhead parking area to provide limited space for horse trailer parking. This decision is based on public comments to allow equestrian access on the Fletcher Canyon trails. I believe with a safe crossing on SR 157 that limited equestrian use can be safely accommodated. This takes into account the improved highway pedestrian crossing at this location and slower highway speeds in this area. We will work with the NDOT to develop the crossing area.
- Authorize construction of two group-use sites in the Main Camping and Picnic Area, as included in the Proposed Action to provide for more group and multifamily day-use facilities that are in near proximity to recreation amenities associated with the Village development. These group sites are located further east of the Village area and may help address some of the noise concerns raised by a resident living adjacent to the Village area.
- Authorize the Rim Trail and utility corridor through the private parcel, just east of the Village area, subject to acquisition of necessary rights-of-way. I believe this trail location is much more desirable than locating the trail in the highway right-of-way; however, both options are left in the decision in the event that rights-of-way across private land cannot be acquired.
- Authorize the entrance for the trailhead/corrals north of SR 157 to be shifted farther to the west to align with the main intersection into the Village area. This is based on communications with NDOT and will provide for safer and more efficient pedestrian movement between the Village area and the trailhead. In addition, infrastructure and space will be provided at this location for a future equestrian or bicycle rental facility, as was considered under the Proposed Action.
- Authorize elements of the Forest Service-operated water system, which were included in the Proposed Action, in the event that connection to the Mt. Charleston Water Company cannot be negotiated. This includes the water storage tank and access road in Telephone Canyon.

- Eliminate the Wildlife Rehabilitation Center because we were unable to identify a suitable entity to construct and operate the facility.
- Eliminate the interagency fire facility. NDF made a decision that it is in their best interest to remain at their current locations in Mount Charleston, Nevada, where their response time to the homes in upper Kyle Canyon would be less. Instead, the Forest Service fire crews and equipment will be located at the new Forest Service administrative site.
- Eliminate the interagency law enforcement facility. My reason for not constructing a separate interagency law enforcement facility is because of a lack of commitment for lease fee payments associated with occupancy at the new facility. The Forest Service law enforcement administrative office will be provided in the new Forest Service administrative site facility. The Metro facility will be relocated to a permitted site adjacent to the new Forest Service administrative facilities following construction of the Forest Service administrative facilities.
- Eliminate approximately 8.2 miles of non-motorized trails in the Telephone Canyon area, north of SR 157. However, I do support the need for an expanded trail network in this area and will evaluate a non-motorized trail system in a separate NEPA analysis. As a result of public comment, all trails that are constructed in the Telephone Canyon area will be designated for non-motorized multi-use (equestrian, hiking, and biking).
- Eliminate the Village development on the north side of SR 157. This concept was included in the Market Supported Alternative based on the idea of providing a “main street” feel for the area to give a sense of arrival and contribute to the economic viability of the development. The NDOT is considering a roundabout for the main entrance of the Village; therefore, I have determined that these objectives could be met without the Village development extending to both sides of the highway.
- As a result of consultation with USFWS, shift the Kyle wash trail through the Spring Mountains *acastus* checkerspot butterfly mate selection area as far south as practicable to minimize potential adverse effects on this species. We will consult with USFWS on the revised trail location.
- Based on public comment, allow designated dispersed camping to occur in the Blue Tree area in Lee Canyon. I determined that the Blue Tree area, which is currently used as a dispersed camping area, can be effectively managed by instituting a permit system, which will result in meeting resource protection objectives while still providing a suitable site for dispersed campers to enjoy the existing and proposed trail networks that connect from that location.

Rationale for the Decision

Our approach to the Middle Kyle project has evolved considerably over time from our original Proposed Action, to a Market Supported Alternative that was identified as our Preferred Alternative in the FEIS, to this final Selected Alternative that is based on a modified Market Supported Alternative that also

includes some features of the original Proposed Action. Many of these changes are based on public comment, Tribal consultation, and input from other agencies.

My decision to authorize the Selected Alternative, with modifications, provides a balance of management activities that respond to the purpose and need for the project, and considers the potential incompatibility between the demand for recreational opportunities and our desire to protect natural resources.

Construction of the Middle Kyle Complex project, and all the appurtenant facilities, trails, campgrounds, picnic areas and administrative actions associated with the project, will provide a means to address the inadequacy of recreation facilities in the SMNRA and provide focused recreation opportunities to protect the ecosystem.

I determined the most important criteria for my decision are:

- the ways and means that the project will achieve the purpose and need,
- the relationship of the project to environmental and social needs, and
- concerns raised by the public.

The purpose and need drove the development of the alternatives, which were informed by input from Forest Service personnel and the public. The purpose of the project is to provide a focused destination for visitors that is socially, financially and environmentally sustainable, with multiple opportunities for on-site environmental interpretation and information, and to relocate Forest Service administrative facilities out of upper Kyle Canyon. Social sustainability will be met by providing dynamic and entertaining activities so that visitors will return again and again over the long period. Such a site will remain viable and connected to the social fabric of the community in a rapidly changing cultural and demographic setting. Financial sustainability will be met by utilizing, to the extent possible, non-appropriated funding such as fees, partnerships, and other innovative funding mechanism to cover operations and maintenance costs. Environmental sustainability will be met by providing facilities built, or services offered, to be environmentally appropriate for the unique conditions present in the surrounding ecosystem, while sustaining the health, diversity, and productivity of the area.

In making my decision, I reviewed the project record to ensure there was a thorough analysis of effects using best available science. I based my decision on such review and, more specifically, on information contained in specialist reports and the resource analyses, methodologies and scientific sources disclosed the FEIS. I have included all of the project design features and mitigation measures that I believe are necessary to avoid or minimize impacts on biological resources, including wildlife and plant habitat, and cultural and visual resources. I have taken into consideration the degree to which the proposed mitigation measures reasonably reduce potential impacts to the environment, and the predicted effects of the Selected Alternative on biological resources, including wildlife and plant habitat, and on cultural and visual resources. I have ensured the analysis was accomplished through coordination with other state and federal agencies and collaboration with tribal governments. I determined that my decision complies with all applicable laws and regulations.

My decision is consistent with the Land and Resource Management Plan (LRMP) for the Toiyabe National Forest (1986). There are two exceptions to my decision's consistency with the GMP for the Spring Mountains National Recreation Area. The GMP is an Amendment to the LRMP, Toiyabe National Forest (1996). The two exceptions relate to GMP Standard 0.31, which addresses development of recreation sites outside of Clokey's eggvetch and rough angelica potential habitat, and, GMP Guideline 11.71, which provides for management of the Harris Springs site as a designated group-use site, available for black-powder shooting and other uses. The reasons for these two project-specific, non-significant Forest Plan Amendments are discussed in the *Justification for Non-Significant Forest Plan Amendments* section of this decision.

In the following sections, I will discuss the principal reasons supporting my decision to authorize the Market Supported Alternative, with modifications, as the Selected Alternative.

Meeting the Purpose and Need

Three needs were identified that led to development of the purpose for the project: 1) provide a range of recreation opportunities that respond to anticipated increased recreation demands based on population growth and encourage recreational use in developed recreation sites outside of the upper canyons to protect natural resources; 2) relocate Forest Service fire and administrative facilities out of upper Kyle Canyon; and 3) provide improved visitor information and environmental interpretation. I will address how my decision responds to each of these needs and fulfills the purpose of the project.

The Proposed Action and Market Supported Alternative meet the purpose and need for action. The rationale behind my decision to authorize the Selected Alternative is based on the key findings in the Business Plan, which contributed significantly to the development of the Market Supported Alternative. The Business Plan scaled the facilities according to the following primary factors:

- determined the market demand for specific activities,
- considered that SMNRA users were locals and not the 38 million annual tourists to the Las Vegas area, and
- refined the estimated SMNRA visitation projections.

While both the Proposed Action and the Selected Alternative meet the purpose and need for action, the Selected Alternative is more market supported than the Proposed Action, and is more likely to be financially sustainable than the Proposed Action. The Selected Alternative has a reduced footprint and resultant ground disturbances, thereby reducing impacts on plant and wildlife and reducing the need for restoration and vegetation treatments.

My decision meets the need to locate Forest Service administrative facilities outside of upper Kyle Canyon. While both the Proposed Action and the Market

Supported Alternative proposed to relocate Forest Service fire and administrative facilities out of the upper canyon, the Selected Alternative will equally meet the need to reduce resource impacts in the upper canyons by relocating the Forest Service administrative facilities to less environmentally sensitive areas. Removing the non-historic structures will enhance the historic nature of the Kyle CCC Camp, and provide an enhanced visitor experience at this location.

My decision meets the need to provide improved visitor information and environmental interpretation with installation of a visitor center and education facility in the Village and Valley outdoor facilities, and the provision of basic visitor information services throughout the Middle Kyle Complex. This decision will achieve the forest planning objective of providing a focused destination for visitors, where there will be multiple opportunities to disseminate environmental interpretation and other information important to a low-impact, yet quality recreation experience.

The authorization of the Selected Alternative will focus and regulate recreation use on the SMNRA. Currently, recreation activities are sometimes unregulated, resulting in impacts on resources and even a diminished recreation experience. While there will be some impacts from the construction and the focused use at Middle Kyle Complex, I believe that overall, resources will be protected on a larger scale, and the recreation experience greatly enhanced.

I compared the environmental impacts of the three alternatives. The No Action alternative would maintain facilities operated by the Forest Service in their existing locations and unauthorized activities, such as illegal dumping of trash, vandalism of cultural sites, and creation of unauthorized trails and roads would continue. Visitors would continue to be frustrated with poor dissemination of visitor information that is not well coordinated between the Forest Service, its concessionaires, and local businesses. The Proposed Action is representative of more buildings, larger infrastructure facilities and parking areas, more recreation facilities, more paved roads and helipads, and an OHV trailhead. While both action alternatives represent the irreversible and irretrievable commitment of resources by way of land permanently committed to development of recreation facilities and visitor services, the Selected Alternative and the Market Supported Alternative, upon which it is based, represent a reduction in facility sizing and, consequently, a reduction in environmental impacts from construction activities.

The irreversible and irretrievable commitment of a range of natural, physical, human, and fiscal resources, including potential habitat for the Spring Mountains *acastus* checkerspot butterfly, is a trade-off that I have fully considered in selecting an alternative that provides focused destinations for recreation opportunities out of the upper canyons and provides better opportunities for the public to appropriately interact with the natural resources and environmental setting of the SMNRA.

I am authorizing changes to motorized activities in order to meet the purpose and need to minimize impacts to the habitat of rare and sensitive plant species on the SMNRA and to provide for a range of multi-use recreation opportunities. The majority of motorized use changes will occur from road closures associated with the relocation and construction of new roads to access the new facilities and

conversion of some motorized routes to non-motorized routes. Motorized routes in the Harris Springs area will be changed to non-motorized hiking/biking trails. Telephone Canyon Road at the mouth of the canyon will be converted to non-motorized access to accommodate multi-use hiking/biking/equestrian opportunities. Public comments, management direction and the 2009 *SMNRA Middle Kyle Complex Project Travel Analysis* (Travel Analysis) prepared for the project led to my decision to make these changes. The SMNRA MVUM will be updated to be consistent with the transportation designations, which are further described in the Selected Alternative in Appendix B of this ROD. A summary of proposed changes to existing NFS routes that will be implemented by the Selected Alternative is disclosed in the FEIS and the Travel Analysis.

determined that while implementation of the project would increase project area GHG emissions over the existing condition, the increase would only result in short-term emissions and would not be a continuous new source of GHGs. Implementing the Selected Alternative will not impede the state of Nevada's ability to meet its 2020 GHG emission reduction goal.

While the Forest Service places a high priority on climate change considerations and has issued guidance to include climate change considerations in project planning, given the scope of this project, it is not possible to quantify or qualify the direct or indirect effects from heavy equipment emissions, nor establish a cause-and-effect relationship between this single project and global climate change. A baseline comparison cannot be made using the No Action Alternative because it is not possible to predict actual effects of a project on climate change, nor is it possible to determine the cumulative impact on global climate from emissions.

Given that there will be little impact on tree harvesting or planting, the project will have a negligible impact on the forest's carbon sequestration capacity. Based on the analysis for GHG emissions and the short-term nature of emissions from project activities, this project will have a negligible impact on climate change from a local, regional, national or global perspective.

Justification for Non-Significant Forest Plan Amendments

My decision includes a project-specific amendment to the GMP, which is required to address the permanent and temporary loss of potential habitat for rough angelica, a species that is listed on the Regional Forester's (Intermountain Region) sensitive species list. The GMP mandates that no construction occur within a 100-yard buffer zone around known Clokey's eggvetch and rough angelica populations or potential habitat (GMP Standard 0.31). A Forest Plan standard is a constraint that must be followed when planning for projects, or amended through the NEPA process to allow for implementation of the project. This site-specific amendment applies only to this project, and does not amend the GMP for other projects. My decision will allow construction of a parking area and trails within a 100-yard buffer of potential habitat for rough angelica. The project area is not located within areas of potential habitat for Clokey's eggvetch.

There will be no other impacts on rough angelica consequential to implementing the Selected Alternative. The project area is located within the elevation range of the species and its potential habitat; however, no individuals or populations of this species were observed in the project area, other than those discussed herein. While I support protecting the habitat for rough angelica, our botanists believe that the rough angelica is not likely to occur in this area. During trail design and layout, proposed trail alignments will be adjusted, if necessary and to the extent feasible, to avoid populations of rough angelica if encountered.

I determined that the aforesaid Forest Plan Amendment is non-significant because it is a minor change to a standard that does not significantly alter the multi-use goals and objectives for the long-term management of the resources. This amendment is project specific and will not apply to other projects.

The GMP Guideline 11.71 relating to management activities at the Harris Springs site conflicts with the Selected Alternative's action to construct a trailhead and non-motorized trails at the Harris Springs site. Forest Plan GMP Guideline 11.71 states the Harris Springs site will be maintained for permitted designated group uses, including black-powder shooting. Construction of recreation facilities at the Harris Springs site will eliminate the potential for black-powder shooting to continue at the site; therefore, a project-specific, non-significant amendment to the GMP is required to remove this guideline from the GMP.

I determined the Forest Plan Amendment to remove GMP Guideline 11.71 to be non-significant because the action does not significantly alter the multi-use goals and objectives for long-term land and resource management. There are other suitable locations for black-powder shooting and designated group uses within the SMNRA.

Legally Required Findings

National Forest Management Act and SMNRA General Management Plan

My decision complies with the mandates of National Forest Management Act to develop a land and resource management plan and provide diverse plant and animal communities. My decision to authorize the Selected Alternative takes into account all applicable standards and guidelines, management area prescriptions, and goals and objectives of the GMP for the Spring Mountains National Recreation Area (1996), an Amendment to the 1986 Toiyabe National Forest LRMP. The Selected Alternative is consistent with direction in the LRMP for the Toiyabe National Forest and with the GMP, with the exception of GMP Standard 0.31 and GMP Guideline 11.71, for which I am authorizing project-specific, non-significant Forest Plan Amendments.

Endangered Species Act of 1973

My decision meets the requirement of the Endangered Species Act. The Forest Service prepared a Wildlife BA/BE and a Botany BA/BE to identify endangered, threatened, and sensitive species likely to be affected by this decision. No species listed as threatened, endangered, or proposed for listing occur in the project area. By letter dated December 23, 2009, the USFWS concurred with the Forest Service determinations for other sensitive species as listed in the Wildlife and Botany BA/BEs.

National Historic Preservation Act

Appropriate surveys and a cultural resources report were prepared to determine the nature and distribution of cultural resources in the project area, making this decision consistent with the National Historic Preservation Act (NHPA). There was also ongoing coordination with culturally affiliated tribes regarding the findings in the project area. The cultural report documented survey results and provided NRHP eligibility recommendations and management recommendations for Forest Service consideration.

The project will adversely affect archaeological sites and those effects will be mitigated through a PA signed between the Forest Service and the Nevada State Historic Preservation Office (SHPO). The PA will guide cultural resource mitigation through Section 106 of the NHPA, and with culturally affiliated tribes throughout project design and construction.

Executive Order 13112 (Invasive Species)

My decision is consistent with Executive Order 13112 because the risks for invasive weed introduction during and following construction of the project were analyzed in a specialist report that includes a risk assessment. Project design criteria include preventative measures against the spread of Non-Native Invasive Species (NNIS) plants to meet Forest Service Standards and Guidelines, as well as Executive Order 13112 and Forest Service Manual 2081.03. Control of new infestations will occur in accordance with the Humboldt-Toiyabe National Forest Decision Notice for the Noxious Weed Control Program (2001). After construction, the project area will be monitored for the occurrence and spread of NNIS for a period of time consistent with Forest Service policy.

Executive Order 13186 (Migratory Birds) and the Migratory Bird Treaty Act

My decision will comply with Executive Order 13186, the 2008 Memorandum of Understanding between the Forest Service and USFWS to promote the conservation of migratory birds, and the Migratory Bird Treaty Act. Specialist reports prepared for the project include the analysis of direct, indirect, and cumulative effects of the project on migratory birds. The needs of migratory birds have been incorporated into the forest planning process and mitigation measures necessary to address the needs of migratory birds are included in the design criteria.

Clean Water Act

My decision is predicted to meet Nevada Water Quality Standards, protect in-stream beneficial uses, and comply with the requirements of the Clean Water

Act (CWA). Construction of the project will require obtaining a National Pollutant Discharge Elimination System (NPDES) permit to comply with Section 402 of the CWA. A Stormwater Pollution Prevention Plan would be prepared as part of the NPDES permit. Permits will also be obtained to comply with Section 401 and Section 404 of the CWA.

Clean Air Act

My decision complies with the Clean Air Act because no significant air quality impacts were forecasted as a result of construction or operation of the project. This decision was based on an assessment of air quality, including emissions calculations and regional air quality impacts, as described in the specialist report for the project. The projected increase in emissions of criteria pollutants is forecast to be well below the General Conformity applicability thresholds. In addition, SMNRA emissions will be very low compared to existing emissions within Clark County. Implementation of design criteria and best management practices (BMPs) will prevent significant air quality impacts.

Executive Order 12898 (Environmental Justice) and Equal Employment Opportunity, and Effects on Minorities and Women

My decision will not result in adverse environmental or human health effects that would fall disproportionately on low-income, minority populations; American Indians Tribes; and women, nor will my decision affect the civil rights of any United States citizen, based on analysis in a technical memorandum prepared for the project. The physical effects from the ground disturbance itself, hence the physical surface resources affected by the disturbance, would be localized to the disturbance footprint; therefore, there will be no disproportionately high or adverse human health or environmental effects to the American Indian Tribes as a result of the Selected Alternative.

Executive Order 13007 (Native American Sacred Sites)

My decision complies with the mandates of Executive Order 13007 because American Indian Tribes that have a connection to the Spring Mountains have been fully informed about the project through the pre-NEPA public involvement process and through ongoing public involvement during preparation of the EIS. Components of the Selected Alternative provide for continued tribal access to and use of the area. In November 2009, members of my staff met with representatives of the seven tribal governments with ancestral ties to the Spring Mountains and invited them to participate in a blessing to be performed at the ground-breaking ceremony and to be involved with construction monitoring.

Executive Order 11988 (Floodplain Management)

My decision complies with Executive Order 11988 because there are no Federal Emergency Management Agency delineated floodplains within the project area and there will be no impacts on floodplains. However, a hydrologic analysis was conducted to quantify potential peak flows that could occur within the Kyle Canyon watershed. Design guidance for culverts, parking areas, and storm drain systems was provided in the report. Specifically, facility locations and measures to maintain the integrity of the floodplains were incorporated in the design of the project alternatives.

Executive Order 11990 (Protection of Wetlands)

My decision complies with Executive Order 11990 because there are no wetlands within the project area under the jurisdiction of the U.S. Army Corps of Engineers and there are no non-jurisdictional wetlands that would be adversely affected from implementation of the Selected Alternative.

Administrative Review, Implementation, and Contact Information

Copies of the FEIS and this ROD are available for review at the SMNRA District Office in Las Vegas, Nevada, at the Forest Supervisor's office in Sparks, Nevada, and online at <http://www.fs.fed.us/r4/htnf/>. The supporting project file is available for review at the SMNRA District Office at 4701 N. Torrey Pines Drive, Las Vegas, Nevada 89130.

Administrative Review or Appeal Opportunity

This decision is subject to appeal pursuant to Forest Service regulations at 36 CFR 215. Appeals must meet the content requirements of 36 CFR 215.14. Only individuals or organizations who submitted comments or otherwise expressed interest in the project during the comment period may appeal. Appeals must be postmarked or received by the Appeal Deciding Officer within 45 days of the publication of this notice in the newspaper of record, the *Reno Gazette-Journal*, Reno, Nevada. An additional notice will be published in the *Las Vegas Review Journal*; however, the date of publication in the *Reno Gazette-Journal* is the exclusive means for calculating the time to file an appeal. If you want to file an appeal, do not rely on timeframe information from other sources.

The Appeal Deciding Officer is Harv Forsgren, Regional Forester, Intermountain Region. Appeals must be sent to the following address: Appeal Deciding Officer Intermountain Region USFS, 324 25th Street, Ogden, Utah 84401; or by fax to

801-625-5277; or by email to: appeals-intermtn-regional-office@fs.fed.us. Emailed appeals must be submitted in rich text format (rtf) or as a Microsoft Office® Word document (doc) and must include the project name in the subject line. Appeals may also be hand delivered to the above address, during regular business hours of 8:00 a.m. to 4:30 p.m., Monday through Friday.

The appeal must meet the content requirements of 36 CFR 215.14. It is the appellant's responsibility to provide sufficient project- or activity-specific evidence and rationale, focusing on the decision, to show why the decision should be reversed. At a minimum, an appeal must include the following:

- Appellant's name and address, with a telephone number, if available;
- Signature, or other verification of authorship upon request (a scanned signature for electronic mail may be filed with the appeal);
- Identification of the lead appellant (when multiple names are listed on an appeal) and verification of the identity of the lead appellant upon request;
- The name of the project or activity for which the decision was made, the name and title of the Responsible Official, and the date of the decision;
- The regulation under which the appeal is being filed, which in this case is 36 CFR 215;
- Any specific change(s) in the decision that the appellant seeks and rationale for those changes;
- Any portion(s) of the decision with which the appellant disagrees, and explanation for the disagreement;
- Why the appellant believes the Responsible Official's decision failed to consider the comments; and
- How the appellant believes the decision specifically violates law, regulation, or policy.

Implementation

If no appeals are filed within the 45-day appeal period, implementation of the decision may occur on, but not before, 5 business days from the close of the appeal filing period. If appeals are filed, implementation may occur on, but not before, the 15th business day following the date of the last appeal disposition.

Construction of the first phases of the Selected Alternative is anticipated to begin within 6 months after publication and circulation of the FEIS and ROD.

Contact Information

For additional information concerning this decision, contact:

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Responsible Official's Signature

EDWARD C. MONNIG
Forest Supervisor
Humboldt-Toiyabe National Forest

Date

Appendix A

Selected Alternative Description

Appendix A
Selected Alternative Description

Selected Alternative

To spatially describe the location of facilities and activities identified in the Selected Alternative, six general geographic areas are used for the Middle Kyle Complex project area: the Western Area, the Village, the Valley, the Main Camping and Picnic Areas, the Northern Area, and the Eastern Area. These areas are depicted in the figure below:

The Selected Alternative includes an administrative action to close areas to dispersed camping which covers an additional area of approximately 4,900 acres outside of the Middle Kyle Complex project area. Figure D-6 in Appendix D shows the location of the dispersed camping closure areas.

Middle Kyle Complex

The area encompassed by the Middle Kyle Complex project is approximately 4,300 acres. This appendix summarizes facilities and land uses included in the Selected Alternative, organized by the geographic areas. Additional detail on elements of the Selected Alternative is provided in Table B-1, *Selected Alternative Detailed Summary* in Appendix B, and spatially shown on maps in Appendix D. Design criteria and mitigation measures that are to be implemented as part of the Selected Alternative are included in Appendix C.

Western Area: The Western Area comprises the existing developed sites, including Fletcher View Campground, the Kyle Civilian Conservation Corps (CCC) Camp, Kyle Canyon Interim Visitor Center, Fletcher Canyon Trailhead, and Kyle Canyon Campground.

The existing drainage culvert in Kyle wash at the entrance to the Fletcher View Campground will be replaced and upgraded to meet current Forest Service standards. The water main will be replaced from the Rainbow Subdivision to Kyle CCC Camp serving the entire western section of the project area including Fletcher View Campground, Kyle CCC Camp, and Kyle Canyon Campground.

Improvements at the Kyle CCC Camp include restoration of existing historic buildings for managed public use. Non-historic outbuildings present on the site will be removed, as will aboveground fuel tanks and the existing Kyle Canyon Interim Visitor Center building, restrooms, and parking area. Abandoned roads, parking areas, and the outdoor storage area will be restored and infrastructure improvements will be made to retained roads, trails, and utilities. Existing and new drainage crossings of Kyle wash will be sized to meet Forest Service standards. A small amphitheater is included as part of these improvements for interpretative programs of the historic site. An existing low-standard access road will be reconstructed east of the existing paved entrance to the Kyle CCC Camp, and new public parking facilities, a new public restroom, and information kiosk will be constructed.

The existing Fletcher Canyon Trailhead parking south of State Route (SR) 157 will be relocated to a site east of and adjacent to the Kyle CCC Camp public parking area and the existing highway shoulder parking areas closed and restored to natural condition. An unpaved trail will connect the trailhead to the new parking area. The pedestrian crossing on SR 157 accessing the Fletcher Canyon Trail will be marked and signed, subject to approval and permitting by Nevada Department of Transportation (NDOT). A new trail loop north of SR 157 will be added to the Fletcher Canyon Trail. A paved accessible trail meeting Forest Service Trail Accessibility Guidelines (FSTAG) will extend through Kyle CCC Camp providing a connection from Fletcher View Campground to Kyle Canyon Campground and to the Village area via the new Kyle Canyon Wash Trail (also FSTAG-accessible).

Kyle Canyon Campground will be rehabilitated to meet Forest Service accessibility standards for people with disabilities to the extent practicable within topographic and resource constraints. Reconstruction will include updated campsites (new picnic tables, fire rings, grills, utility tables, and wheel stops), and new restrooms (one vault toilet, and two flush toilets with power, heat, and showers). Five campsites will include camp cabins. Three new walk-in campsites will be added on the south bank of Kyle wash accessed by a foot bridge over the wash. A looped hiking trail south of Kyle Canyon Campground will be constructed. Portions of the south side of the campground will be fenced to prevent the creation of unauthorized trails and to direct people to designated trails. Selected roads and parking stalls will be widened and rehabilitated only at locations where removal of mature ponderosa pines could be avoided. A small play space in the east campground loop will be constructed. A sewer system will be constructed including installation of sewer lines, a septic tank, and drain fields (located within the easternmost loop of the campground) to serve the flush toilets. The electrical infrastructure will be upgraded and installed underground using road and trail corridors with provision for electrical hook-ups for select campground sites. Existing drainage crossings and culverts in Kyle wash will be replaced and upgraded to meet Forest Service standards. The *Vegetation Management Plan for the Kyle Campground, Kyle CCC Camp and the Proposed Middle Kyle Complex*, (Above and Beyond Ecosystems Enterprise Unit 2009) will be implemented. The Kyle Canyon Wash Trail will be paved providing an FSTAG-accessible connection from the campground to the Village area and the Kyle CCC Camp.

The Village: The Village will be the center of visitor information and recreation activities and will be located south of SR 157 on the previously disturbed 128-acre site acquired by the Forest Service. Facilities at the Village will include a new visitor center (space for one retail/gift/sundry shop and a small café will be included in the visitor center building), plaza area, and landscaped play areas, 150-person amphitheater, one 50-person group picnic site with shelters and restrooms, a commons area, a bus stop and space for a future transit center, a separate education facility, surface parking area, new hiking and biking trails, and access roads.

Traffic-calming devices and a roundabout will be constructed on SR 157 to reduce traffic speeds through the Village area, subject to NDOT approval and permitting. The construction of a roundabout on SR 157 at this location will require granting additional easement width to NDOT. A pedestrian crossing on SR 157 will be added in this area.

The Valley: The Valley will be located adjacent to the Village, near Kyle wash and southern uplands of the 128-acre parcel. Activities will include reconstructing and restoring the existing human-made ponds, including restoration of the uplands surrounding the ponds and Kyle wash. Log structures in Kyle wash will be removed as will remnants of the former golf course property such as the golf cart paths, tee boxes, and other associated infrastructure.

Facilities for this area include wildlife/fishing ponds for children, a small amphitheater, picnic tables, public restrooms, paved and unpaved trails including a new crossing over Kyle wash and connection to the Village and Kyle Canyon

Campground, a FSTAG-accessible interpretive trail, and a trail and/or stairs connecting to the Resort on Mount Charleston, formerly known as the Mount Charleston Hotel.

Main Camping and Picnic Area: The Main Camping and Picnic Area will be located on a large flat area immediately east of the Village, south of SR 157. An entry station and camp store will be located at the entrance and will include a recreational vehicle (RV) dump station and parking adequate to accommodate Class A RVs. The picnic area will be located on the west and include individual sites, group sites, restrooms, shelters, parking areas, and a paved access road. Hiking and biking trails will also be included in the camping and picnic areas connecting to the main multiuse trail system (Rim Trail). A disc golf course will be constructed east of the picnic area.

Two styles of campgrounds will be constructed: a commercial-style campground and traditional Forest Service-style campground. The campground located nearest the entrance and registration area will be a commercial-style campground with approximately 144 sites located in a concentrated area and will include a smaller campground for workers. A Laundromat will be constructed near the camp store. An earthen berm will be constructed and act as a sound barrier between the commercial-style campground and SR 157. An irrigated grassy play area, splash pad, playground, small amphitheater, and multiuse playing field will be included with the commercial-style campground. The easternmost campground will be constructed in the traditional Forest Service style with two camping loops including tent and RV sites with hook-ups and a small amphitheater. A new trailhead will be constructed east of the traditional-style campground and will connect to the Rim Trail and trails in the canyon bottom and Harris Springs Road area and an unpaved trail connection to an overlook on the canyon rim above slot canyon.

The helipad and firefighting support facilities will be located east of the campgrounds and south of SR 157. The sewage treatment area (septic tanks and leach fields) will also be located in this area.

Northern Area: Facilities located north of SR 157 will include multiuse hiking, biking, and equestrian trails. A trailhead with restrooms and corrals will be constructed in the Telephone Canyon Area with the entrance north of the main Village area entrance. Space will be allocated for a horse/bicycle rental concession facility.

Forest Service administrative facilities for this area will include fire and administrative offices and a warehouse, concessionaire/non-profit office, and seasonal employee housing. The existing Las Vegas Metropolitan Police Department (Metro) facility will be relocated to the permitted area adjacent to the Forest Service administrative facilities and the existing site restored. Relocation of the Metro station will not occur until after the new Forest Service administrative facilities are established in the area. The solid waste transfer station will remain in its existing location; however, a new access road will connect this site to the main administrative road. The existing transfer station access road connection to SR 157 will be removed and revegetated. Existing water storage reservoirs will be restored and revegetated, as will abandoned

roads. Telephone Canyon Road will be gated and closed to motor vehicle use north of the employee housing area. A pedestrian crossing on SR 157 will be signed and marked and access roads will be paved. An access road and water storage tank will be constructed in Telephone Canyon area if connection to the Mt. Charleston Water Company (MCWC) water utility is not possible.

Eastern Area: The Eastern Area will be located south of SR 157 adjacent to the Harris Springs Road. Two trailheads and access roads will be constructed west of Harris Springs Road. The first trailhead will have a vault toilet and trails will connect to hiking trails in the canyon bottom; an unsurfaced trail will connect to the Rim Trail. The second trailhead, further south on Harris Springs Road at approximately milepost 0.6, will include vault toilet restrooms and connections to non-motorized mountain bike/hiking trails. Many of the existing National Forest System (NFS) roads and trails in the project area extending westward from Harris Springs Road will be closed to motorized vehicle use and converted to use as hiking and biking trails. Signs and traffic management devices will be constructed to discourage vehicle use west of Harris Springs Road where the non-motorized trails are located.

Other Actions: Other facilities or actions under the Selected Alternative will include installation of infrastructure to support the planned facilities (e.g., roads, utilities, stormwater management, wastewater treatment); improvements to SR 157 to provide safe intersections for vehicles and pedestrians; restoration and revegetation of abandoned roads, trails, and utility sites; removal of illegally dumped materials; removal of portions of existing aerial utility lines and installation of the lines underground; removal of selected non-native trees and shrubs in the Village area; closure of selected Forest Service roads to motor vehicle use; and conversion of selected Forest Service roads to non-motorized trail use. Under the Selected Alternative the water system for all facilities east of the Western Area will be connected to an existing commercial water system (MCWC). These changes will include connecting the two existing Forest Service wells to the MCWC system. A water storage tank located on private land adjacent to an existing MCWC storage tank may be constructed. The sewer system will consist of several on-site septic tanks and drain field systems. Several of the high-use recreation and administrative areas may include select plantings of non-native, non-invasive tree and turf species.

A project-specific Forest Plan Amendment will be required. There are two exceptions to the Selected Alternative's consistency with the General Management Plan (GMP) for the Spring Mountains National Recreation Area, an Amendment to the Land and Resource Management Plan, Toiyabe National Forest (1996) (LRMP). The two exceptions relate to GMP Standard 0.31, which addresses development of recreation sites outside of Clokey's eggvetch (*Astragalus oophorus*) and rough angelica (*Angelica scabrida*) populations, and, GMP Guideline 11.71, which provides for management of the Harris Springs site as a designated group-use site, available for blackpowder shooting (target practice) and other uses.

Selected Alternative Detailed Summary Table

Selected Alternative Detailed Summary Table

Table B-1 below presents a detailed summary of the design and operational features included in the Selected Alternative. The estimated quantities presented in the table are approximate; actual quantities likely will vary after the final design for the project has been completed. For additional information refer to the Selected Alternative description in Appendix A, design criteria and mitigation measures in Appendix C, and Selected Alternative maps in Appendix D.

Table B-1. Selected Alternative Detailed Summary Table

WESTERN AREA

Fletcher View Campground

Replace culvert in Kyle wash and upgrade drainage crossing to meet Forest Service standards.

Kyle Civilian Conservation Corps (CCC) Camp and Fletcher Canyon Trailhead

Remove existing non-historic buildings, including storage sheds, aboveground fuel tanks, barracks, trailers, and outdoor storage. Forest Service administrative and fire functions and employee housing will be relocated to new facilities in the Northern Area.

Relocate the Kyle Canyon Interim Visitor Center building outside of the project area. Remove the existing restrooms and parking spaces and restore the area to a natural vegetative condition. Existing septic tank and leach field in this area will continue to be used.

Improve the infrastructure of retained roads and trails in this area, including upgrading culverts in Kyle wash to meet Forest Service standards. Abandoned roads, parking area, and the outdoor storage area will be rehabilitated and restored to a natural vegetative state.

Improve existing access road, approximately 275 feet in length, west of the existing Fletcher Canyon Trailhead parking on State Route (SR) 157. Construct paved Kyle CCC Camp public parking facilities with 12 spaces, a restroom, a hydrant and gravel shoulder parking for horse trailers. This area will also serve as parking for Fletcher Canyon Trail. The surrounding area will be restored to a natural condition and existing trees will remain. A three-panel bulletin board will be constructed in this area.

A paved 8-foot-wide Forest Service Trail Accessibility Guidelines (FSTAG) accessible hiking and biking trail will be constructed through Kyle CCC Camp from existing trail to Fletcher View Campground (paved) on the west to Kyle Canyon Campground to the east. This trail will also serve as an underground utility corridor for the water line serving Kyle Canyon Campground.

Historic buildings will be restored and maintained for managed public use as a historic site. Limited Forest Service administrative functions may be continued in this location. Retained site infrastructure (buildings, walks, water/sewer/gas/electric/telecommunication utility connections, etc.) will be improved to address deferred maintenance backlog and to support intended uses.

A 6-foot-wide unpaved trail will be constructed to connect the Fletcher Canyon Trail north of SR 157 to the public parking area at Kyle CCC Camp. A new pedestrian crossing on SR 157 will be marked and signed to identify it to both pedestrians and motorists. The existing Fletcher Canyon Trailhead parking on the south side of SR 157 will be closed and the area restored to a native condition. Seven additional off-highway parking spaces east of new access road will be constructed. Existing septic drain field at the site of proposed parking will be relocated to a suitable area within the existing disturbed outdoor storage area.

Construct a new section of Fletcher Canyon Trail utilizing user-created trails and thus, creating a loop, east of existing Fletcher Canyon Trail. This will provide 1.8 miles of new trail for hiking and equestrian use.

Kyle Canyon Campground

Reconstruct and improve Kyle Canyon Campground including the following:

- 24 campsites/33 units¹ (16 single units, 7 double units, 1 triple unit).
- 5 camp cabins/7 units (3 single cabins, 2 double cabins with electricity). Of the 5 cabins, 3 will be walk-ins located on the south bank of Kyle wash with a trail bridge crossing the wash.
- The number of tent pads (16 single, 7 double, 1 triple) will be increased.

Construct two new restrooms (2 units each) with showers and flush toilets. One 2-unit vault toilet will be constructed in the western loop. Existing vault toilets will be removed.

Install electrical hook-ups at select sites within Kyle Canyon Campground.

Two-way traffic road segments will be retained at existing width and add intervisible turnouts where extra width can be accommodated with minimal resource impact. Widen and rehabilitate selected roads and stalls only where removal of existing mature ponderosa pines can be avoided. Upgrade existing drainage crossings in Kyle wash to meet Forest Service standards.

Install sewer lines including septic tanks and leach field that will establish an on-site treatment system.

Implement vegetation management and treatment plan within the campground (reference *Vegetation Management for the Kyle Campground, Kyle CCC Camp, and Proposed Middle Kyle Complex, 2009*).

Upgrade campground facilities to the extent practicable within topographic and resource constraints to meet accessibility standards set forth by the Forest Service Outdoor Recreation Accessibility Guidelines (FSORAG) and FSTAG. All new restroom/shower facilities will be fully accessible.

Construct a paved 8-foot-wide FSTAG-accessible trail in Kyle wash from the eastern end of campground leading to Village. Construct new 3-foot-wide unpaved hiking trail on southern perimeter of the campground leading west to Kyle CCC Camp. Create a small play space located in eastern loop and fence portions of the south side of campground to direct users to designated trails.

VILLAGE

Construct the Village area south of SR 157 on previously disturbed 128-acre site. Install traffic calming devices and a roundabout on SR 157 to reduce traffic speed through this area and facilitate traffic movement. Construction of a roundabout will require granting additional easement width to the Nevada Department of Transportation (NDOT). Provide for safe pedestrian crossing of SR 157. Coordinate with NDOT for improvements to SR 157.

Construct visitor center (10,000 square feet) with retail/sundry/gift shop and café. Visitor center will include limited retail (books and sundries), one food vendor/café and multi-purpose meeting space.

Construct the following amenities in the Village area:

- Plaza area (40,000 square feet)
- Landscape and play space (40,000 square feet)
- Amphitheater (150-person capacity)
- Utilize amphitheater for educational purposes
- Commons area (4.25 acres)
- Interpretive exhibits (2,000 square feet)
- One 50-person group picnic site with covered pavilion and restroom
- An education facility

Install support facilities for an improved way-finding system.

Construct surface parking lot (approximately 250 spaces).

Allocate space for future transit center and bus stop but no transit building will be constructed.

Remove selected non-native trees and shrubs. Landscape developed and restored areas with native plants and with non-native, non-invasive tree and turf species in some high use areas, such as recreation and administrative areas.

VALLEY

Remove remaining golf course infrastructure including in-stream log structures. Recontour tee boxes and portions of former golf course area to approximate natural contours. Relocate golf cart trails as required to improve grades and alignment. Restore select areas in the surrounding uplands and Kyle wash.

Reconstruct existing ponds within valley area. Construct modest recreation amenities near ponds including restrooms, small natural amphitheater for educational programs, and picnic tables.

Construct trail system including FSTAG-accessible paved interpretive trail, drainage crossings over the Kyle wash, connections to escarpment trail south of valley area and trail/stairs connecting to the Resort on Mount Charleston. Provide vehicular access route into valley area for administrative/maintenance use.

Construct unpaved canyon bottom trail for hiking only, extending from Valley to trailhead west of Harris Springs Road. Connect canyon bottom trail to Village with paved FSTAG trail and to Rim Trail with 2 unpaved hiking trails.

Design and space considerations will be given to provide for limited snow play only when suitable winter conditions exist on site. No designated snow-play area will be provided.

MAIN CAMPING AND PICNIC AREA

Construct a paved 8-foot-wide FSTAG-accessible Rim Trail from Village to parking area at far east end of main camp area road. Construct unpaved trail from east parking area/east end of Rim Trail to overlook of slot canyon in Eastern Area. Align Rim Trail south of Main Camping and Picnic Area along canyon rim. Allow hiking and biking on trail. Construct hiking trails to three canyon overlook areas (includes canyon overlook on south side of slot canyon).

Widen SR 157 to provide turn and acceleration/deceleration lanes to improve safety and facilitate traffic movement at four-way intersection where entrances to the Main Camping and Picnic Area and Northern Area. Consider installing roundabout at four-way intersection where entrances to the Main Camping and Picnic Area and Northern Area in lieu of acceleration/deceleration/turn lanes. Coordinate with NDOT for improvements to SR 157.

Realign and pave National Forest Service (NFS) road 45531 as the main access road to camping and picnic areas approximately 3 miles in length. Construct new road, or improve existing road, parallel to and connecting to SR 157 at each terminus. Revegetate abandoned road segments. Install gates near each terminus and at easternmost parking area to provide controlled access within the fee area. Upgrade the low-water crossing on the east. Realign and pave NFS 45531A for approximately 500 feet as the main entrance to this area.

Install riprap for energy dissipation of runoff east of main entrance on south side of SR 157 at highway drainage outlets to reduce erosion. Coordinate with NDOT as required.

Construct a camp store/registration area at main entrance to camping and picnic fee area with a recreational vehicle (RV) dump station and parking adequate to accommodate Class A RVs.

Construct traditional Forest Service campground for individual RV and tents with 48 campsites/62 units (36 single, 10 double, 2 triple) including:

- A small amphitheater
- Restrooms with flush toilets and showers

Construct commercial-style campground with 144 campsites (71 back-in sites, 48 pull-thru sites, 12 tent sites, and 13 camp cabins) in concentrated area. Construct an earthen landscaped berm to act as a sound barrier between campground and SR 157. Include a camp store with multipurpose space and a Laundromat. Provide a 15-site campground for workers. Provide additional recreation facilities including a disc golf course, splash pad, grassy playground, two multiuse playing fields, and a small amphitheater.

Construct two 25-person group picnic areas and one picnic loop with 42 picnic sites/ 65 units (19 single, 23 double) west of campgrounds. Include shade shelters at select sites.

Remove existing helipad and dump site material; restore area. Construct helipad, 15,000-gallon portable tank for aerial dipping, parking and heliport support facilities east of the campground areas.

Install on-site sewage treatment with septic tanks and leach fields.

Construct trailhead at east end of campground road accessing Rim Trail.

NORTHERN AREA

Build trailhead with parking area and corrals, including provisions/dedicated space for equestrian/bicycle rental concession.

Construct new unpaved trails, improve selected existing undesignated trails and existing NFS road 45530 (Telephone Canyon Road) to create trail system in Telephone Canyon area for a total of approximately 6.1 miles. Locate and design trails for non-motorized multi-use (hiking, biking, and equestrian). Telephone Canyon Road will be closed to motorized vehicles north of gate.

Construct trails in Telephone Canyon without connection to Fletcher Canyon Trails or pedestrian/equestrian crossing on SR 158.

Coordinate with NDOT to sign and stripe pedestrian crossings on SR 157 for access to Village, fee areas, and trail system south of SR 157.

Leave solid waste transfer station in existing location, eliminate access road off of SR 157, and reroute access road from main entrance. Extend electrical and communication lines to facility as required. Restore and revegetate abandoned access road.

Relocate the Las Vegas Metropolitan Police Department (Metro) office to new permitted location near Forest Service administrative facilities. Restore existing Metro site to a natural condition, including removal of asphalt and aboveground improvements. Relocation of Metro facilities will not occur until Forest Service administrative facilities are constructed.

Construct Forest Service and interagency administrative complex including the following facilities:

- Concessionaire/non-profit partner (2,000 square feet)
 - Forest Service administrative building (8,200 square feet)
 - Forest Service warehouse (5,000 square feet)
 - Exterior fenced storage yards (30,000 square feet)
 - Locate administrative facilities, law enforcement (Metro facilities), and concession office 0.6 mile east of main road
 - Move helipad to more remote location south of SR 157
-

Construct employee and volunteer housing area consisting of four duplex units, two barracks and eight trailer pads. Include additional facilities such as outdoor play area and gathering area for trailer pads.

Realign NFS road 45530 and pave as the main entrance to this area. Install gate approximately 0.6 mile north of SR 157. Close road to all motor vehicle use north of the gate, excluding authorized vehicles. Extend paved portion of road to gate and include a widened gravel shoulder to accommodate foot traffic. Install drainage crossing to meet Forest Service standards.

Realign, pave, and extend NFS road 45530A to the east by 0.6 mile to provide access to the Forest Service administrative facilities.

Close NFS trails 25871 and 25872 to motorized vehicles.

Remove existing water storage tanks and reservoirs on including aboveground portions of distribution lines and restore areas. Restore and revegetate surrounding areas, including abandoned and unauthorized routes² north of SR 157 and east of SR 158.

EASTERN AREA

Widen SR 157 for westbound deceleration preceding left-turn lane at intersection with Harris Springs Road. Revise traffic study based on reduced scale of development under the selected alternative to validate the need for highway widening. Coordinate with NDOT for improvements on SR 157.

Construct trailhead at end of NFS road 45532H; road and parking area will not be paved. Include restroom with vault toilet. Close NFS road 45532J to motor vehicles.

Access canyon bottom trail (hiking only) from trailhead to Village and Valley areas to west. See description of canyon bottom trail provided under Valley area.

Build unsurfaced trail from trailhead parallel to and south of SR 157 leading to paved road at eastern end of camping area and connecting to Rim Trail.

Construct trailhead west of Harris Springs Road at approximately 0.6 milepost. Provide restroom with vault toilet. No utilities will be provided to this location.

Close NFS routes 25875, 25876, and 45532A through 45532C to all motor vehicle use and convert to hiking and biking south rim trail system. Provide approximately 8.6 miles hiking and biking trails with an overlook on east rim of slot canyon.

Install signs and traffic management devices (e.g., barrier rock, fence, signs) west of Harris Springs Road to discourage unauthorized vehicle access.

OTHER ACTIONS

Prohibit dispersed camping within 300 feet on either side of Forest Service roads and trails open to motorized vehicles, trailheads, county roads, and state highways in the Lee Canyon, Kyle Canyon, and Deer Creek areas of the Spring Mountains National Recreation Area (SMNRA), including connecting and tributary Forest Service routes with the exception of designated areas in the Blue Tree area of Lee Canyon where dispersed camping will be allowed by permit only. This closure will occur within the Middle Kyle Complex area and on an additional area described above of approximately 4,900 acres.

Implement vegetation treatment and management recommendations included in the *Vegetation Management for the Kyle Campground, Kyle CCC Camp and the Proposed Middle Kyle Complex, 2009*, which includes vegetative treatments at existing facilities, the proposed Middle Kyle Complex, and areas that will be restored and revegetated.

ELECTRICAL AND COMMUNICATIONS UTILITIES

Electrical

Install new or upgraded underground electrical distribution lines within road and trail corridors in developed areas to the extent practicable. Coordinate with NDOT for underground utility crossings on SR 157.

Portions of NV Energy's overhead transmission lines will be installed underground. NV Energy's utility easement in the vicinity of the proposed Northern Area trailhead/corrals/concession will be relocated as required. (See *Public Utility Companies* below.)

Communications

Install new or upgraded underground communication lines within road and trail corridors in developed areas to the extent practicable. Coordinate with NDOT for underground utility crossings on SR 157.

Portions of Embarq's overhead communication lines underground will be installed underground. Overhead lines in areas restricted by topography, east of Main Camping and Picnic Area and over slot canyon will be left in place. Segments of Embarq's buried communication lines in the Main Camping and Picnic Area will be relocated outside of development areas and along road corridors. Embarq's utility easement in the vicinity of the proposed Northern Area trailhead/corrals/concession will be relocated as required. (See *Public Utility Companies* below.)

WATER SYSTEMS

Western Area (Fletcher View Campground, Kyle CCC Camp, and Kyle Canyon Campground): Replace/enlarge water main distribution line from meter connection in Rainbow Subdivision to the Kyle CCC Camp and upgrade existing connection to the Las Vegas Valley Water District (LVVWD) system as required to serve western area facilities. Replace water main along existing water line alignment within road and trail corridors. LVVWD will continue to supply water to facilities in this area.

Middle Kyle Developed Areas (Village, Valley, Northern Area, Main Picnic and Camp Area): Existing storage tanks, reservoirs, and aboveground distribution lines in the Northern Area will be removed and the area, including access road, restored. Connect water distribution system to existing public water system, Mount Charleston Water Company (MCWC) connection. Connect existing wells to MCWC to provide water for proposed facilities in all project areas excluding the western area. Extend water distribution lines to project areas using road and trail corridors to the greatest extent practicable. If unable to connect to MCWC, implement those necessary elements of the Forest Service-operated water system described under the Proposed Action including the water storage tank and access road in Telephone Canyon.

SEWER SYSTEMS

Maintain sewer systems at Kyle CCC Camp with septic tanks and leach field. Install separate on-site sewage treatment systems consisting of septic tanks and leach fields at project locations in Kyle Canyon Campground, Village, Main Camping and Picnic Area, and Northern Area. Unneeded existing vault toilets and septic tanks will be properly removed or abandoned. Install vault toilet restrooms at the canyon bottom trailhead on Harris Springs Road and at trailhead near mile post 0.6 on Harris Springs Road.

ROADS

NFS Roads, unsurfaced – 3.2 miles

NFS Roads, paved – 12.2 miles

NFS Roads, closed/restored² – 7.8 miles (includes 2.6 miles of Forest Service Road 45530 north of gate, and 4.9 miles of existing roads in Main Camping and Picnic Area that will be relocated)

NFS Roads, converted to trail – 3.0 miles (Forest Service Road 45532A, 45532B, 45532C)

Clark County Roads, improved/paved – 0 miles

TRAILS

Provide trail mileage designated for specific use as follows (all mileages approximate and includes existing Fletcher Canyon Trail mileage):

- Hiking only trails – 8.6 miles
 - Hiking and biking trails – 17.5 miles
 - Hiking and equestrian trails – 3.4 miles
 - Hiking, biking and equestrian trails – 6.1 miles
-

Designated motorized trails – 0 miles

Motorized trails closed/restored – 1.4 miles (Forest Service Trails 25871, 25872, 25875, 25876)

RESTORATION³ AND VEGETATION TREATMENTS

Kyle CCC Camp restoration – 1.4 acres

Fletcher Canyon Trailhead parking restoration – 0.1 acre

Valley (former golf course restoration – 2.7 acres

Northern Area restoration – 7.6 acres

Dump (near helipad) removal and restoration – 0.9 acre

Designated routes⁴ closed and restored – 6.7 acres

Unauthorized routes closed and restored – 15.9 acres

The vegetation treatment and management plan will be implemented.

PERMITTED AND OTHER LAND OCCUPANCIES**PUBLIC UTILITY COMPANIES****NV Energy**

Approximately 8,900 linear feet of aerial electric transmission line north of SR 157 will be removed and installed underground within the existing utility easement. NFS trails 25871 and 25872, which follow the transmission line, will be closed to public motorized use. A portion of the transmission line in the vicinity of the proposed Northern Area trailhead/corrals/concession will require relocation of the utility easement to accommodate facility construction.

Approximately 3,900 linear feet of aerial electric transmission line south of SR 157 will be removed and installed underground in a new utility corridor within the Kyle Canyon Wash Trail corridor. The granting of new utility easements will be required.

Underground primary power utilities will be installed from NV Energy transmission lines to new NV Energy pad mount transformers at locations throughout the development. Improvements and easement modifications will be coordinated with NV Energy.

Embarq

Underground and aerial communication trunk lines in the Main Camping and Picnic Area will be relocated to new underground locations paralleling proposed road and trail corridors. This approach will require granting new utility easements. The length of the new easement will be approximately 16,900 linear feet. Approximately 15,830 linear feet of existing utility easement will be abandoned.

Approximately 2,200 linear feet of overhead communications line north of SR 157 located on NV Energy poles will be removed and installed underground within the existing utility easement. A portion of the communications line in the vicinity of the Northern Area trailhead/corrals/concession will require relocation of the utility easement to accommodate facility construction.

Approximately 3,900 linear feet of overhead communication line south of SR 157 will be removed and installed underground in a new utility corridor that is within the Kyle Canyon Wash Trail corridor. The granting of new utility easements will be required. Improvements and easement modifications will be coordinated with Embarq.

Mt. Charleston Water Company

The Forest Service will connect to the MCWC water system. The two existing Forest Service wells will be connected to MCWC. Use of the wells and supply lines to MCWC will be authorized under a special use permit. MCWC will expand its service area to include the Forest Service facilities. The Forest Service will allocate water rights sufficient for connection to MCWC. Additional water storage, if required, will be constructed on private land adjacent to existing MCWC storage tanks; the existing MCWC wastewater easement will not be affected. Proposed improvements and permits/agreements will be coordinated with MCWC and the State of Nevada, as appropriate. If unable to connect to MCWC, those necessary elements of the Forest Service operated water system described under the Proposed Action will be implemented.

Kyle Canyon Water District/Las Vegas Valley Water District

The existing Forest Service meter service connection in the Rainbow Subdivision in Mt. Charleston will be enlarged and upgraded to include backflow prevention. Proposed improvements will be coordinated and permitted through LVVWD.

Solid Waste Transfer Facility

The Special Use Permit will be reauthorized at the current location with expanded requirements for visual screening. The existing access off SR 157 will be removed and restored, and a new access road off the proposed main road to the Northern Area will be established. Proposed improvements and permit modifications will be coordinated with Clark County.

PUBLIC ROAD AGENCIES

Nevada Department of Transportation

The following activities will occur within the NDOT highway easements and will require consultation, coordination, and permitting from NDOT:

- Pavement markings and signage for pedestrian crossings on SR 157.
- Highway widening for acceleration, deceleration, and turn lanes at major intersections, with traffic calming devices and/or highway roundabouts as authorized by NDOT. Construction of a roundabout at the Village intersection will require granting additional easement width to NDOT. The additional right-of-way easement area is estimated at 0.46 acre. Other intersection improvement locations will not require additional right-of-way width.
- Permanent encroachments within the highway easement (frontage roads, new intersections, underground utilities).
- Highway information signage associated with new improvements.
- Improvements to some highway drainage outlets to reduce erosion and resource damage to adjacent NFS lands.
- Restoration of Kyle Canyon Interim Visitor Center, restroom building, and parking area.
- The highway shoulder parking for the Fletcher Canyon Trailhead will be eliminated; the area will be signed for “No Parking” and restored.

RIGHT-OF-WAY ACQUISITION NEEDS

Clark County Assessor’s Parcel Number 128-28-602-001: Existing paved road will be improved as a secondary/emergency access to the Village area if right-of-way was acquired. Formal right-of-way will be acquired from the land owner, approximately 75 feet in length and 50 feet wide (0.09 acre).

Clark County Assessor’s Parcel Number 128-28-602-005: The proposed Rim Trail and underground utilities will be constructed on the south portion of the private parcel if right-of-way is acquired. Formal public right-of-way will be acquired from the land owner, approximately 460 feet in length and 30 feet wide (0.32 acre). If right-of-way cannot be acquired across the private parcel, the trail and utilities will be routed north of the parcel within the NDOT SR 157 right-of-way. If this option is exercised, appropriate permits and easements will be coordinated through NDOT.

Table Notes:

- ¹ Reference in this document to a picnic or camp “site” is defined as an individual developed area that may be a single unit, double unit, or triple unit. The term “unit” refers to the number of family units at a site. For example a triple unit will have parking space for three vehicles, three picnic tables, and three tent pads at a single location, and will be counted as three units.
 - ² See Project Record for complete list of Forest Service roads that are closed by the Selected Alternative.
 - ³ The term “route” refers to both trails and roads, e.g., motorized Forest Service routes will include both Forest Service roads and motorized Forest Service trails (reference Forest Service Manual 7705).
 - ⁴ The terms “restored” and/or “restoration” used throughout the Record of Decision (ROD) or Environmental Impact Statement (EIS) refers to rehabilitation activities that may vary in intensity depending on the land use impacts and resources affected: it can range from a simple road or trail closure left to revegetate on its own through natural processes, to full recontouring and revegetation with erosion control measures. The intensity of restoration that will be implemented will be determined in the design process and is not identified in the ROD or EIS.
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Appendix C

Selected Alternative Design Criteria and Mitigation Measures

Appendix C

Selected Alternative Design Criteria and Mitigation Measures

Appendix C includes design criteria and mitigation measures incorporated in the Selected Alternative. Table C-1 identifies design criteria, best management practices and minimization measures to be incorporated during project implementation. Table C-2 identifies mitigation measures that have been included in the Selected Alternative. For additional detail refer to the Selected Alternative Description in Appendix A, the Selected Alternative Detailed Summary Table in Appendix B, and Selected Alternative Maps in Appendix D.

Table C-1. Design Criteria for the Selected Alternative

Resource	Objective	Location		Design Criteria
Air Quality	Minimize Criteria Pollutants (PM ₁₀ , PM _{2.5} , CO, VOC, NO _x , SO ₂ , CO ₂)	Project area	AQ1	<ul style="list-style-type: none"> ▪ Treatments for construction slash, stumps, and logs to use chipping, burial, and/or removal methods; pile and burn disallowed. ▪ Comply with applicable best management practice dust control measures in the 2003 <i>Dust Mitigation Plan for National Forest Lands Located within the Clark County PM10 Nonattainment Area in Hydrographic Basin</i> and the Clark County Department of Air Quality and Environmental Management (CCDAQEM) <i>Construction Activities Dust Control Handbook</i>. ▪ Design and construct new motorized public access roads in compliance with CCDAQEM Air Quality Regulations, Section 91.
		Number		
Botany	Ensure impacts on sensitive plants are minimized by clearly defining construction areas.	General project area other than trail construction.	B1	<ul style="list-style-type: none"> ▪ Construction areas, other than trails, will have temporary fencing erected along the construction limits of proposed improvements prior to any ground-disturbing activities. Construction limits will be established to minimize ground disturbance. Contractor will be required to contain all construction activities within the approved construction limits and maintain temporary fencing until notified by the Contracting Officer.
	Minimize impacts on succulents.	Project area	B2	<ul style="list-style-type: none"> ▪ Joshua tree (<i>Yucca brevifolia</i>), other yuccas, and cacti located within construction limits that could be affected by construction activities will be flagged and avoided to the extent practicable.
	Emphasize use of native species in the restoration and landscaping of the proposed project area.	Project area	B3	<ul style="list-style-type: none"> ▪ Implement recommendations included in <i>Vegetation Management Plan for the Kyle Campground, Kyle CCC Camp and the Proposed Middle Kyle Complex</i>. ▪ Areas near buildings and turf areas may use limited amounts of non-native, non-invasive plants to accomplish landscaping goals.
	Minimize impacts on sensitive species and their habitat, and enhance regulatory compliance.	Project area	B4	<ul style="list-style-type: none"> ▪ Upon award of construction contract(s), key construction personnel will receive a briefing regarding the sensitive species and habitats that occur within the project area. This will include providing informational materials to each member of the construction crew relative to sensitive species identification and impact avoidance; methods used in protection of resources, and management requirements.

Resource	Objective	Location	Number	Design Criteria
	Minimize impacts on sensitive plants from trail construction and trail users.	Proposed trail construction in project area	B5	<ul style="list-style-type: none"> During trail design and layout, proposed trail alignments will be adjusted to the extent feasible to avoid populations of rough angelica (<i>Angelica scabrida</i>), Clokey greasebush (<i>Glossopetalon clokeyi</i>), inch high fleabane (<i>Erigeron uncialis</i> var. <i>conjugans</i>) (in stable cliff habitat), Jaeger beardtongue (<i>Penstemon thompsoniae</i> ssp. <i>jaegeri</i>), Charleston pinewood lousewort (<i>Pedicularis semibarbata</i> var. <i>charlestonensis</i>), Jaeger's ivesia (<i>Ivesia jaegeri</i>), Clokey's milkvetch (<i>Astragalus aequalis</i>), New York Mountains catseye (<i>Cryptantha tumulsa</i>), and Charleston violet (<i>Viola purpurea</i> var. <i>charlestonensis</i>, syn. <i>Viola charlestonensis</i>).
	This will minimize impacts on sensitive plants, soils, and habitat.	Project area	B6	<ul style="list-style-type: none"> Vegetation removal around sensitive plants and their habitats will be conducted using appropriate methods and equipment (manual or mechanized).
	Utilization of native plants for restoration and use of seed from plants that will be lost from construction, will maintain the genetic variability of those species in the area.	Project area	B7	<ul style="list-style-type: none"> Where feasible, collect seed from sensitive plants and other target species from areas that will be directly impacted to use in revegetating restoration areas in suitable habitat. Areas suitable for revegetation will be defined prior to implementation of revegetation/restoration activities in consultation with the SMNRA or Forest Service botanist. The establishment of sensitive and rare plants and host and larval plants for sensitive and rare butterflies in areas of developed landscaping will be considered experimental and educational populations and will not be managed for species viability.
Facility Design	Ensure new and reconstructed facilities reflect the unique settings of the Spring Mountains National Recreation Area (SMNRA) and are attractive, functional, and sustainable.	Project area	FD1	<ul style="list-style-type: none"> Follow guidelines in 2007 <i>Spring Mountains National Recreation Area Built Environment Image Guide</i> for the design, construction, and rehabilitation of project facilities. Follow applicable Forest Service requirements for compliance with U.S. Green Building Council Leadership in Energy and Environmental Design (LEED).
	Ensure new facilities meet required standards.	Project area	FD2	<ul style="list-style-type: none"> Design new facilities to comply with appropriate Forest Service Manual and Handbook requirements, and applicable codes, regulations, accessibility standards and Executive Orders. Design primary facilities and infrastructure for year-round use.
	Minimize resource impacts from construction staging areas.	Project area	FD3	<ul style="list-style-type: none"> Locate/designate construction staging areas in areas where intensive development is planned or in previously disturbed areas designated for restoration.

Resource	Objective	Location	Number	Design Criteria
Cultural Resources	Protect known and undiscovered cultural resource sites.	Project area	HR1	<ul style="list-style-type: none"> ▪ If unanticipated resources are discovered during project implementation, all work will stop in the vicinity, the Contracting Officer will be notified, and work will not resume until cleared by a qualified cultural resources manager. ▪ Design requirements for proposed historic building renovations will be under the direction of an architectural historian and consultation with the Nevada State Historic Preservation Office (SHPO) will be initiated as required.
Noxious Weeds	Prevent weed introduction and control the spread of invasive and non-native species.	Project area	NW1	<ul style="list-style-type: none"> ▪ Employ Forest Service and Humboldt-Toiyabe National Forest best management practices for weed control.
	Prevent the spread of noxious weeds on disturbed soils.	Project area	NW2	<ul style="list-style-type: none"> ▪ Revegetate temporary disturbance areas at first appropriate opportunity following project work with specified seeding and plantings. ▪ Use weed-free rock sources for any imported soil and aggregate materials. The Forest Service will determine if a source is weed free or not. A list of approved local commercial sources will be included in contract construction documents. ▪ All vehicles and equipment must be pressure washed prior to entering and operating in the project area. Wash areas will be designated and monitored by the Forest Service for 3 years after use of the wash areas for infestation of invasive and noxious weeds. Wash locations will either be areas that will have later project development such as a parking lot, or an area where a small plastic-lined sump can be located to collect washed material if needed. ▪ Minimize soil disturbance within the project area by locating equipment staging and material storage areas within previously disturbed areas and/or areas designated for permanent improvements. ▪ Use native plant material and/or noxious weed-free seed material and mulches for rehabilitation, restoration, and landscaping, when possible and appropriate.
	Ensure successful mitigation after project construction is completed.	Project area	NW3	<ul style="list-style-type: none"> ▪ Monitor and treat infestations of noxious weeds following construction activities following mitigations in the Humboldt-Toiyabe National Forest Decision Notice for the Noxious Weed Control Program (1996).

Resource	Objective	Location	Number	Design Criteria
Soils	Minimize soil erosion, maintain soil productivity, prevent soil quality and productivity impacts, and maintain regional soil quality standards.	Project area	S1	<ul style="list-style-type: none"> ▪ Implement best management practices found in the Forest Service 1988 <i>Soil and Water Conservation Practices Handbook</i>. ▪ Where appropriate, revegetate closed roads, trails and restoration areas consistent with the <i>Vegetation Management Plan for the Kyle Campground, Kyle CCC Camp and the Proposed Middle Kyle Complex</i>.
Visual Quality	Reduce light pollution potential from developed sites.	Project area	VQ1	<ul style="list-style-type: none"> ▪ Use appropriate lighting to minimize light pollution and preserve dark skies, as specified under Section A.2, <i>Light</i>, in Appendix A of the 2007 <i>SMNRA Built Environment Image Guidelines</i>.
	Manage viewshed within project area to retain visual quality objectives.	Project area	VQ2	<ul style="list-style-type: none"> ▪ Take care in the design of facilities in areas of high visibility or high public use. In particular, such areas will include the Village and Valley, which will be major new primary use areas and are also within plain view of the scenic byway, especially from the overlook on SR 158. ▪ Install all new electrical and communication utilities underground where feasible. ▪ Ensure that design and construction of all new government-owned and permitted facilities comply with the 2007 <i>SMNRA Built Environment Image Guidelines</i>.
Water	Minimize sediment transport into stream channels during construction.	Project area	WA1	<ul style="list-style-type: none"> ▪ Implement site-appropriate best management practices found in the June 2008 <i>Nevada Contractors Field Guide for Construction Site Best Management Practices</i>. ▪ Implement appropriate principles in the January 2009 <i>Las Vegas Valley Construction Site Best Management Practices Guidance Manual</i>. ▪ Implement best management practices found in the Forest Service 1988 <i>Soil and Water Conservation Practices Handbook</i>.
	Prevent structural damage and minimize hazards to public safety from seasonal debris flows.	Project area	WA2	<ul style="list-style-type: none"> ▪ Locate permanent buildings outside the 50-year floodplain of Kyle wash and its tributaries to prevent structural damage and to avoid a hazard to public safety caused by debris and flood flows. ▪ Provide information at appropriate locations to warn visitors of seasonal debris and flood flow hazards.
	Water conservation.	Project area	WA3	<ul style="list-style-type: none"> ▪ Implement appropriate water and waste water conservation design and construction technologies and strategies consistent with LEED and agency Environmental Management System (EMS) goals.

Resource	Objective	Location		Design Criteria
	Minimize impacts on surface and ground water quality.	Project area	WA4	<ul style="list-style-type: none"> ▪ Design, construct, and maintain facilities in compliance with applicable sections of Chapter 24.40 of the Clark County Code, “Storm Sewer System Discharge.” Coordinate with Clark County Department of Air Quality and Environmental Management as appropriate. ▪ Comply with EPA Spill Prevention Control and Countermeasures Plan requirements for construction activities. ▪ Follow low-impact development (LID) design practices for storm water management that emphasize the use of naturally occurring and constructed features to reduce the impacts of increased flow rates and volumes associated with increases in impervious area. ▪ Implement grading, drainage, parking, and wastewater system design and construction consistent with 2007 <i>SMNRA Built Environment Image Guidelines</i> and appropriate LEED technologies and strategies.
	Compliance with Clark County 208 Area-wide Water Quality Management Plan (WQMP)	Project area	WA5	<ul style="list-style-type: none"> ▪ Coordinate with Clark County Department of Air Quality and Environmental Management for project compliance with Clark County 208 Area-Wide Water Quality Management Plan recommendations and provisions throughout project design and implementation phases as appropriate.
Wildlife	Minimize direct impacts on nesting migratory birds.	Project area and active nest sites	W1	<ul style="list-style-type: none"> ▪ Coordinate with the Forest Service District biologist to identify survey needs for active nesting sites prior to land clearing. If nests are located, or if other evidence of nesting (i.e., mated pairs, territorial defense, carrying nesting material, transporting food, etc.) is observed, a protective buffer as determined by the biologist (the size depending on the habitat requirements of the species and type of construction activities) should be delineated and the entire area avoided to prevent destruction or disturbance to nests until they are no longer active. ▪ Avoid impacts on western burrowing owl during nesting season by establishing an appropriate buffer area around active burrow sites and avoiding the area.
	Limit reduction of important cover/foraging habitat for wildlife (e.g., small mammals, amphibians, reptiles, invertebrates, and neotropical birds).	All known habitat areas within project area	W2	<ul style="list-style-type: none"> ▪ Provide a minimum of five wildlife cover sites per acre within developed or primitive recreation sites by maintaining or adding dead and down wood material or rocks at appropriate locations. ▪ Disturb brush piles prior to removing or burning to encourage wildlife to exit piles.

Resource	Objective	Location		Design Criteria
	Prevent wildlife from becoming trapped in open trenches or excavations during construction.	All known habitat areas within project area	W3	<ul style="list-style-type: none"> Wildlife escape ramps or ladders will be placed every 200 feet in open utility pipeline trench segments or other excavations during construction to avoid wildlife entrapment. Wildlife escape ramps and ladders may consist of tree branches, wood boards, rock piles, and sloped soil. The escape ramps and ladders should span from trench/excavation floor to top of trench wall, at an incline not exceeding 45 degrees, to facilitate effective wildlife escape. The perimeters of excavations that have side slopes exceeding 45 degrees will be fenced to exclude wildlife or will be covered with plywood or similar material to prevent wildlife falls/entrapment.
	Limit reduction of important nesting/foraging habitat for wildlife (e.g., bats; woodpeckers; chickadees; flamulated, western screech, and pygmy owls; and insects).	All known habitat areas within project area	W4	<ul style="list-style-type: none"> Retain all standing dead trees, or snags, that do not pose a threat to public safety or extreme fire danger. Snags are retained to provide habitat for cavity-nesting animals and animals that forage on insects living within snags. This criterion applies to pinyon/juniper, mixed conifer, and Bristlecone pine land cover associations. Important wildlife snags will be flagged for retention within all project areas unless they present a falling hazard that could affect private lands, travel corridors, and/or developed facilities.
	Minimize habitat impacts on Spring Mountains <i>acastus</i> checkerspot butterfly species.	Spring Mountains <i>acastus</i> checkerspot butterfly documented breeding/mate selection areas within project area	W5	<ul style="list-style-type: none"> Employ construction techniques to minimize temporary disturbance through known Spring Mountains <i>acastus</i> checkerspot butterfly breeding areas. Prohibit construction of Kyle Canyon Wash Trail and buried utilities from early May to mid July. Erect temporary construction fencing along the proposed construction limits of planned improvements prior to any ground-disturbing activities. Contractor will be required to contain all construction activities within the approved construction limits and maintain temporary fencing until notified by the Contracting Officer. Avoid where possible, occurrences of butterfly larval host plants including rubber rabbitbrush (<i>Chrysothamnus nauseosus</i>), yellow (sticky-leaf) rabbitbrush (<i>Chrysanthamus viscidiflorus</i>), viscid rabbitbrush (<i>Chrysothamnus viscidiflorus</i> var. <i>viscidiflorus</i>), downy rabbitbrush (<i>Chrysothamnus viscidiflorus</i> var. <i>puberulus</i>), white rubber rabbitbrush (<i>Ericameria nauseosa</i> var. <i>holoceuca</i>), smooth fruit rabbitbrush (<i>Chrysothamnus nauseosus</i> var. <i>leiospermus</i>), and Mojave rabbitbrush (<i>Chrysothamnus nauseosus</i> var. <i>mojavensis</i>). Based on recommendations from Forest Service botanist/biologist collect native seed from appropriate larval host and nectar plants and revegetate temporary construction disturbance areas following completion of construction. Implement construction dust control measures to minimize impacts on blooming nectar plant populations.

Resource	Objective	Location	Design Criteria
	Avoid impacts on bat species during construction.	Project area Number	W6 <ul style="list-style-type: none"> ▪ Restrict work to daylight hours. ▪ Maintain 500-foot distance between construction activities and potential bat roosts during winter months. ▪ Design underground parking structures in a manner that will minimize bat mortality and breeding/nesting activity within the parking structure.
	Minimize impacts on sensitive species and their habitat, and enhance regulatory compliance.	Project area	W7 <ul style="list-style-type: none"> ▪ Prior to entering the construction area, key construction personnel will receive a briefing regarding the sensitive species and habitats that occur within the project area. This will include providing informational materials to each member of the construction crew relative to sensitive species identification and impact avoidance; Contracting Officer notification procedures if a sensitive, threatened, or endangered species is encountered; and, permit retention and compliance procedures.
	Vector control	Artificial open water bodies	W8 <ul style="list-style-type: none"> ▪ Design open water bodies and/or employ appropriate environmentally friendly techniques to control mosquito populations.
	Minimize wildlife impacts at waste treatment plants	Lagoon treatment plants or other waste water treatment options with potential to adversely affect wildlife	W9 <ul style="list-style-type: none"> ▪ Coordinate with Nevada Department of Wildlife (NDOW) on appropriate wildlife protection measures at waste water treatment plants depending on technical issues, water quality, or other concerns to minimize adverse effects on wildlife.
	Comply with Nevada State fishing/stocking regulations	Project area	W10 <ul style="list-style-type: none"> ▪ Coordinate with NDOW on any proposed commercial or stocked fishing activities.

Table C-2. Mitigation Measures

Number	Resource	Location	Mitigation Description
MM- Wildlife 1	Spring Mountains <i>acastus</i> checkerspot butterfly habitat	Area in Kyle wash where Kyle Canyon Wash Trail construction will occur, from Kyle Canyon Campground to the Village	Install permanent fence at Kyle Canyon Campground to funnel trail users onto the Kyle Canyon Wash Trail, including fence along the first 100 feet of the trail. Monitor recreation use of the Kyle Canyon Wash Trail in the mate selection habitat area for impacts off the designated trail and install additional fence sections if necessary to prevent impacts from user-created trails.
MM- Botany 1	Clokey's milkvetch	Kyle Canyon Campground	A botanist will provide layout/location recommendations for the fence that will be constructed on the southern perimeter of the Kyle Canyon Campground to protect existing plant populations and habitat on the periphery of the campground and to direct users to designated trails.
MM- Botany 2	Clokey greasebush, inch high fleabane (in stable cliff habitat), Jaeger beardtongue, Jaeger's ivesia, Clokey's milkvetch, and Charleston violet	Trail on upland south of Village Area	Design and layout of trail alignments will be adjusted to provide a setback from the cliff edge as great as 25 feet, to avoid populations of sensitive cliff-dwelling plants and Clokey's milkvetch.

PM₁₀ = particulate matter smaller than 10 microns; PM_{2.5} = particulate matter smaller than 2.5 microns;
CO = carbon monoxide; VOC = volatile organic compounds; NO_x = oxides of nitrogen;
SO₂ = sulfur dioxide; CO₂ = carbon dioxide

Appendix D

Selected Alternative Maps

Appendix D

Selected Alternative Maps

Appendix D includes maps that represent facilities and land uses identified in the Selected Alternative. For additional detail refer to the Selected Alternative Description in Appendix A, the Selected Alternative Detailed Summary Table in Appendix B, and Design Criteria and Mitigation Measures in Appendix C.

The following maps are included in this appendix:

- Figure D-1 Regional Location
- Figure D-2 Project Vicinity
- Figure D-3 Selected Alternative
- Figure D-4 Selected Alternative – Kyle CCC Camp and Fletcher Canyon Trailhead
- Figure D-5 Selected Alternative – Reconstruction of Kyle Canyon Campground
- Figure D-6 Selected Alternative – Dispersed Camping Closure Areas

