

Appendix B

Detailed Comparison of Alternatives

Table B-1 below presents a one-to-one comparison of the design and operational features considered under the alternatives. The estimated quantities presented in the table are approximate and actual quantities may vary slightly after the final design has been completed. For additional information refer to the alternative figures and descriptions in Chapters 1 and 2.

Table B-1. Detailed Comparison of Alternatives

No Action Alternative	Proposed Action	Market Supported Alternative
WESTERN AREA		
Fletcher View Campground		
The culvert and drainage crossing over Kyle wash would be maintained.	Replace culvert in Kyle wash and upgrade drainage crossing to meet Forest Service standards.	Same as the Proposed Action.
Kyle CCC Camp and Fletcher Canyon Trailhead		
The existing Forest Service administrative site including employee housing, and outdoor storage area for Forest Service equipment and supplies would be maintained in the current location. Forest Service fire crews and engine would continue to operate out of this location.	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 would be relocated to new facilities in the Northern Area.	Same as the Proposed Action.
The Kyle Canyon Interim Visitor Center with public restrooms and parking for approximately 10 vehicles would remain in the existing location and function.	The Kyle Canyon Interim Visitor Center building would be relocated outside the project area. The existing restrooms and existing parking spaces would be removed and the area restored to a natural vegetative condition.	Same as the Proposed Action.
The existing roads would be maintained as either paved or unpaved roads. Drainage crossings in Kyle wash would remain in their current condition.	Infrastructure of retained roads in this area would be improved, including upgrading culverts in Kyle wash to meet Forest Service standards. Abandoned roads, parking area, and the outdoor storage area would be rehabilitated and restored to a natural vegetative state.	Same as the Proposed Action.
The existing Kyle CCC Camp storage yard, parking area and access road would remain in their current condition and uses.	Improve existing access road 275 feet in length west of the existing Fletcher Canyon Trailhead parking on SR 157. Construct Kyle CCC Camp public parking facilities with 12 spaces, a restroom, hydrant, and four single picnic units. This area would also serve as parking for Fletcher Canyon Trail. The surrounding area would be restored to a natural condition and existing trees would remain. A three-panel bulletin board would be constructed in this area.	Same as the Proposed Action with the addition of a small grass-covered play area centrally located between Fletcher View Campground and Kyle Canyon Campground and north of the proposed amphitheater.

No Action Alternative	Proposed Action	Market Supported Alternative
No similar action.	A paved 8-foot-wide Forest Service Trail Accessibility Guidelines (FSTAG) -accessible hiking and biking trail would be constructed through Kyle CCC Camp from existing trail to Fletcher View Campground (paved) on the west to Kyle Canyon Campground to the east.	Same as the Proposed Action.
Historic buildings and non-historic buildings would remain in the same location and setting.	Historic buildings would 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 (walks, utility connections, etc.) would be improved to address deferred maintenance backlog and to support proposed intended uses.	Same as the Proposed Action.
Interpretive information is currently not offered regarding the historic significance of the Kyle CCC buildings. Under this alternative, the Forest Service would not provide interpretive information for visitors.	Offer interpretive programs covering the historic site at the proposed 20- to 30-person amphitheater located west of historic CCC buildings. Self-guided tours may also be provided.	Same as the Proposed Action.
The Fletcher Canyon Trailhead adjacent to SR 157 with approximately 6 parking spaces would remain in the existing location. Pedestrian crossing on SR 157 may not be marked and signed.	A 6-foot-wide unpaved trail would be constructed to connect the existing trailhead parking on the south side of SR 157 to the public parking area at Kyle CCC Camp. A new pedestrian crossing on SR 157 would be marked and signed to identify it to both pedestrians and motorists.	Same as Proposed Action with the exception of closing and rehabilitating the existing Fletcher Canyon Trailhead parking and restoring the area to a native condition. Construct 7 additional off-highway parking spaces east of new access road.
Fletcher Canyon Trail (1.6 miles) would be maintained in the current configuration for hiking and equestrian use. User-created trails would remain undesignated and would be closed as necessary to reduce or prevent resource damage.	Build new section of Fletcher Canyon Trail utilizing user-created trails and new trail construction creating a loop, east of existing Fletcher Canyon Trail. Include connection to Northern Area trails via pedestrian/equestrian crossing on SR 158. This will provide 2.1 miles of new trail for hiking and equestrian use.	Same as Proposed Action with the exception of not constructing a connection to the trails in the Northern Area and pedestrian/equestrian crossing on SR 158. This will provide 1.8 miles of new trail for hiking and equestrian use.

No Action Alternative	Proposed Action	Market Supported Alternative
Kyle Canyon Campground		
The existing Kyle Canyon Campground would be maintained with 26 campsites/32 units ¹ (20 single units, 6 double units).	Reconstruct and improve Kyle Canyon Campground including the following: <ul style="list-style-type: none"> ▪ 29 campsites/38 units (21 single units, 7 double units, 1 triple unit). ▪ Includes 3 new walk-in campsites on south bank of Kyle wash with trail bridge crossing wash. 	Reconstruct and improve Kyle Canyon Campground including the following: <ul style="list-style-type: none"> ▪ 24 campsites/33 units (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 would be walk-ins located on the south bank of Kyle wash with trail bridge crossing wash.
The existing tent pads (5 single, 5 double) would be maintained.	The number of tent pads (21 single, 7 double, 1 triple) would be increased.	The number of tent pads (16 single, 7 double, 1 triple) would be increased.
The existing restrooms with vault toilets would remain in use.	Construct 2 new restrooms (2 units each) with showers and flush toilets. One 2-unit vault toilet would be constructed in the western loop. Existing vault toilets would be removed.	Construct 2 new restrooms (2 units each) with showers and flush toilets. One 2-unit restroom with flush toilet and no showers would be constructed in western loop. Existing vault toilets would be removed.
Electrical, water and sewer hook-ups are not provided at Kyle Canyon Campground.	Install electrical hook-ups at select sites within Kyle Canyon Campground.	Install electrical, water, and sewer hook-ups at select sites within Kyle Canyon Campground.
Existing turning radius of roads, turnouts, and drainage crossings would be maintained. Recreational vehicle (RV) use would be maintained to the current size of vehicle.	Widen roadway segments with two-way traffic to double-lane standard and rehabilitate selected roads and parking stalls to accommodate larger RVs as appropriate. Upgrade existing drainage crossing in Kyle wash to meet Forest Service standards.	Retain two-way traffic road segments 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 could be avoided. Upgrade existing drainage crossing in Kyle wash to meet Forest Service standards.
The existing single unit vault toilets would be maintained.	Install sewer lines including a septic tank and drain field that will establish an on-site treatment system.	Install a sewer collection system connected to sewer trunk line and waste treatment facility that would be located in the Eastern Area. Remove existing vault toilets.

No Action Alternative	Proposed Action	Market Supported Alternative
Vegetation management and treatment would be implemented on a limited scale within the campground (e.g., hazard tree removal).	Implement vegetation management and treatment plan within the campground (reference <i>Vegetation Management for the Kyle Campground, Kyle CCC Camp, and Proposed Middle Kyle Complex (2009)</i>).	Same as the Proposed Action.
Six existing campsites would be maintained as - accessible. Remaining sites would be maintained in the current condition and some would not meet applicable accessible standards set forth by the Forest Service Outdoor Recreation Accessibility Guidelines (FSORAG) or FSTAG.	Upgrade campground facilities to the extent practicable within topographic and resource constraints to meet accessibility standards set forth by the FSORAG and FSTAG. All new restroom/shower facilities would be fully accessible.	Same as the Proposed Action.
Existing user-created trails around Kyle Canyon Campground would remain undesignated and would be closed as necessary to minimize or prevent resource damage. The external boundaries of the campground would not be fenced.	Construct a paved 8-foot-wide FSTAG -accessible trail in Kyle wash from the eastern end of campground leading to Village.	Same as Proposed Action. Construct additional 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.
VILLAGE		
Existing disturbed areas within the 128-acre former golf course property would undergo limited restoration ³ to a more natural state, including removal of non-native vegetation, debris, and some asphalt. In the event of a fire in the Kyle Canyon area, the asphalt parking area on the property may be used as a fire command post. Existing turn lanes on SR 157 would be maintained.	Construct the Village area south of SR 157 on previously disturbed 128-acre site. Construct left-turn and acceleration/deceleration lanes on SR 157 to improve safety and facilitate traffic movement. Coordinate SR 157 improvements with NDOT.	Construct the Village on both sides of SR 157, making the highway the “main street” of the Village. Install traffic calming devices and/or a roundabout on SR 157 to reduce traffic speed through this area and facilitate traffic movement. Construction of a roundabout would require granting additional easement width to NDOT. Provide for safe pedestrian crossing of SR 157. Coordinate with NDOT for improvements to SR 157.
No similar action at this location.	Construct visitor center (12,000 square feet) with 1 indoor classroom.	Construct visitor center (10,000 square feet) with retail/sundry/gift shop and café. No indoor classroom.
No similar action.	Construct a separate building (4,200 square feet) for meeting space, rental space for 4 to 6 retail shops, and 3 food vendors.	Limited retail (books and sundries), formal meeting space not included, and 1 food vendor/café included in Kyle Canyon Interim Visitor Center space.

No Action Alternative	Proposed Action	Market Supported Alternative
No similar action.	Provide a separate building (2,400 square feet.) for artist-in-residence and security facilities.	Provide security staff space in administrative facilities in Northern Area. Separate artist-in-residence building would not be provided.
No similar action at this location.	<p>Construct the following amenities:</p> <ul style="list-style-type: none"> ▪ Plaza area (60,000 square feet) ▪ Landscape and play space (40,000 square feet) ▪ Amphitheater (1,500-person capacity) ▪ Outdoor classroom (1) ▪ Commons area (4.25 acres) ▪ Interpretive exhibits (2,000 square feet) ▪ Three 50-person group picnic sites with covered pavilions and restrooms 	<p>Construct the following smaller scale amenities:</p> <ul style="list-style-type: none"> ▪ 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 <p>Construction of a separate education facility will be considered.</p>
The existing interpretive exhibits and selection of information would continue to be available at the Kyle Canyon Interim Visitor Center. A way-finding system would not be implemented.	Install support facilities including an improved way-finding system.	Same as the Proposed Action.
No similar action at this location.	Construct an underground parking structure and surface parking (1,300 spaces).	Construct surface parking lot (250 spaces).
No similar action.	Construct a transit center (2,000 square feet).	Allocate space for future transit center and bus stop but no facilities would be constructed.
No similar action.	Construct a biomass facility near the visitor center to provide heating and cooling for new facilities.	Biomass facility would not be constructed.
Existing ornamental trees and non-native vegetation planted as landscaping for golf course would be removed to restore site to a more natural state.	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.	Same as the Proposed Action.

No Action Alternative	Proposed Action	Market Supported Alternative
VALLEY		
Portions of the 128-acre site would be restored to a more natural state including removal of ornamental trees and non-native vegetation, removal of trash and debris and some asphalt.	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.	Same as the Proposed Action.
Existing artificial ponds would provide water for fire suppression.	Reconstruct existing ponds. Construct modest recreation amenities near ponds including restrooms, small natural amphitheater for educational programs, and picnic tables.	Same as the Proposed Action.
User-created trails would remain undesignated and would be closed as necessary to minimize or prevent resource damage.	Construct trail system including FSTAG-accessible paved interpretive trail, crossings over the Kyle wash, and trail/stairs connecting to the Resort on Mount Charleston.	Same as the Proposed Action.
User-created trails would remain undesignated and would be closed as necessary to prevent resource damage.	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 3 unpaved hiking trails.	Same as Proposed Action except construct trail with two connections to Rim Trail.
No similar action.	Provide two outdoor classrooms and a natural picnic area.	Same as the No Action Alternative.
Snow play would continue in designated area in Lee Canyon. Areas in Kyle Canyon would not be designated for winter activities.	Designate a winter snow play area including a sledding hill.	No designated snow-play area. Design and space considerations would be given to provide for limited snow play only when suitable winter conditions exist on site.
MAIN CAMPING & PICNIC AREA		
User-created trails would remain undesignated and would be closed as necessary to prevent resource damage.	Construct paved 8-foot-wide FSTAG-accessible Rim Trail from Village to overlook of slot canyon in Eastern Area. Align trail south of Main Camping and Picnic Area. Allow hiking and biking on trail. Construct hiking trails to three canyon overlook areas.	Construct Rim Trail as described under Proposed Action, except with hiking trail leading to only one canyon overlook. Construct trail bridge over slot canyon connecting to trails in Eastern Area.

No Action Alternative	Proposed Action	Market Supported Alternative
Existing width of SR 157 would be maintained.	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. Coordinate with NDOT for improvements to SR 157.	Same as Proposed Action. 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.
NFS roads 45531 and 45531A would be maintained as unpaved roads.	Realign and pave 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.	Same as the Proposed Action.
Existing erosion controls on SR 157 would be maintained.	Install riprap for energy dissipation of runoff east of main entrance on south side of SR 157 at highway drainage outlets to reduce erosion.	Same as the Proposed Action.
No similar action at this location.	Construct a camp store/registration area at main entrance to camping and picnic fee area.	Same as Proposed Action except parking in this area would be enlarged to accommodate Class A RVs.
No similar action.	<p>Construct traditional Forest Service campgrounds for individual RV and tents with 211 campsites/291 units (167 single, 35 double, 9 triple). Some sites may include shade shelters. In addition, the following may also be included:</p> <ul style="list-style-type: none"> ▪ 10 campsites in small group RV campground. ▪ 100 campsites in walk-in large group tent campground. ▪ 10 campsites in equestrian campground. ▪ A small amphitheater. ▪ Restrooms with flush toilets and showers. 	<p>Construct traditional Forest Service campground for individual RV and tents with 48 campsites/62 units (36 single, 10 double, 2 triple). May include the following:</p> <ul style="list-style-type: none"> ▪ A small amphitheater. ▪ Restrooms with flush toilets and showers.

No Action Alternative	Proposed Action	Market Supported Alternative
No similar action.	Same as the No Action Alternative.	<p>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.</p> <p>Construct an earthen landscaped berm to act as a sound barrier between campground and SR 157.</p> <p>Include a camp store with multi-purpose space and Laundromat. Provide a 15-site campground for workers.</p> <p>Provide additional recreation facilities that may include a disc golf course, splash pad, grassy playground, two multi-use playing fields, and a small amphitheater.</p>
No similar action.	<p>Construct two picnic loops with 85 picnic sites/132 units (38 single, 47 double) west of campgrounds.</p> <p>Include shade shelters at select sites.</p> <p>Construct 3 large group picnic sites (1, 50-person sites and 2, 25-person sites).</p>	<p>Construct one picnic loop with 42 picnic sites/65 units (19 single, 23 double) west of campgrounds.</p> <p>Include shade shelters at select sites.</p>
The existing helipad location would be maintained in its current location. Illegal dumping occurring adjacent to this site may continue.	Remove existing helipad and dump site material; restore area. Construct helipad in the Northern Area near interagency fire station and Forest Service administrative facility.	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.
No similar action.	Install on-site sewage treatment with septic tanks and leach fields.	Construct a central sewage treatment facility with lagoons east of new helipad location.
No similar action.	Construct an RV dump station east of main entrance to camping and picnic area within the fee area.	Same as Proposed Action, except locate RV dump station outside the fee area, west of main entrance near the registration/camp store.
No similar action.	Build a large walk-in group tent campground (100 campsites total) at far east end of the campground road.	Add trailhead at east end of campground road accessing Rim Trail and bridge over Kyle wash/slot canyon connecting to south rim trail system.

No Action Alternative	Proposed Action	Market Supported Alternative
NORTHERN AREA		
No similar action.	Build trailhead in Telephone Canyon area west of NDOT maintenance station, including equestrian rental concession, corrals and parking area.	Build trailhead with parking area and corral only, no rental concession.
No similar action.	Construct trailhead and corrals east of main entrance to the Northern Area with parking available for equestrians, hikers, and bikers. Provide trail connection to Telephone Canyon trail system and trailhead west of main entrance. Construct equestrian campground (10 pull-thru sites) east of trailhead.	Same as the No Action Alternative.
User-created trails in this area would remain undesignated and would be closed as necessary to minimize or prevent resource damage.	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 19.5 miles. Designate approximately 2.7 miles for biking only. Designate other trails for hiking and equestrian use or hiking, biking, and equestrian use. Telephone Canyon Road would be closed to motorized vehicles north of gate. Trails would extend north to existing Robbers Roost trailhead. Provide trail connection to trailhead and equestrian campground east of main entrance road southeast of employee housing area. Provide additional connection to same area further south and parallel to SR 157.	Same as Proposed Action, except trail system would be a total of approximately 17 miles without trail connection along SR 157 or trails connecting to equestrian facilities included under Proposed Action.
Access to area would remain unchanged. User-created trails would remain undesignated and would be closed as necessary to minimize or prevent resource damage.	Connect Telephone Canyon trails to improved Fletcher Canyon Trails (approximately 0.9 mile), via pedestrian/equestrian crossing on SR 158.	Construct trails in Telephone Canyon without connection to Fletcher Canyon Trails or pedestrian/equestrian crossing on SR 158.
Existing entrance to NDOT maintenance station would be maintained.	Reroute access road from SR 157 to NDOT maintenance office from new entrance road. Leave office in existing location; restore and revegetate abandoned highway access road.	Same as the No Action Alternative.
Existing width of SR 157 would be maintained.	Improve SR 157 entrance to Northern Area as described under Main Camping and Picnic Area.	Improve SR 157 as described under Main Camping and Picnic Area.

No Action Alternative	Proposed Action	Market Supported Alternative
No similar action.	Sign and stripe pedestrian crossings on SR 157 for access to Village, fee areas, and trail system south of SR 157.	Same as the Proposed Action.
Existing solid waste transfer station would continue to be permitted in the existing location.	Relocate solid waste transfer station to another location outside the project area and off NFS lands. Existing permit would not be reauthorized. Restore and revegetate site.	Leave solid waste transfer station in existing location, eliminate access road off SR 157, and reroute access road from main entrance. Extend electrical and communication lines to facility as required. Restore and revegetate abandoned access road.
Forest Service administrative activities and facilities would continue in the existing locations at Kyle CCC Camp. Nevada Division of Forestry (NDF) and Clark County Fire Department (CCFD) would continue operating in their current locations and facilities in Mt. Charleston. Nevada Highway Patrol (NHP) and Las Vegas Metropolitan Police Department (Metro) would continue to operate out of their existing locations. Existing helipad location would be maintained.	<p>Construct administrative facility (10,000 square feet), including facilities or permitted adjacent NFS land for the following agencies:</p> <ul style="list-style-type: none"> ▪ Forest Service administration, warehouse, and maintenance. ▪ Interagency fire facilities (NDF and CCFD) station. ▪ Helipads. ▪ Law enforcement (Metro office at new permitted location near administrative facilities). ▪ Separate concessionaire office (2,000 square feet). ▪ Locate administrative facilities more than 1,000 feet north of SR 157 on main (Telephone Canyon) road. 	<p>Construct Forest Service and interagency administrative complex including the following facilities:</p> <ul style="list-style-type: none"> ▪ Construct interagency (Forest Service, NDF, CCFD) fire facilities (13,400 square feet) closer to SR 157. ▪ Interagency (Forest Service, NHP, Metro) law enforcement (5,000 square feet) with exterior fenced impound area. ▪ 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, and concession office 0.6 mile east of main road. ▪ Move helipad to more remote location south of SR 157.

No Action Alternative	Proposed Action	Market Supported Alternative
Existing employee housing would be maintained at Kyle CCC Camp.	Build employee and volunteer housing area consisting of 3 single family houses, 1 barrack, and 8 trailer pads north of administrative facilities.	Construct employee and volunteer housing area consisting of 4 duplex units, 2 barracks and 8 trailer pads. Include additional facilities such as outdoor play area and gathering area for trailer pads.
No similar action.	Construct a research center (3,000 square feet) located adjacent to employee housing area.	Include office space for research center in Forest Service administrative facility.
No similar action.	No similar action.	Build wildlife rehabilitation facility north of gate on main road. Extend utilities (water, sewer, electrical and communication) to proposed facility within road corridor.
No similar action.	Build biomass facility to heat and cool administrative facilities in this area.	Biomass facility would not be constructed.
NFS road 45530 (Telephone Canyon Road) would be maintained as unpaved road. Road would remain open to all motorized vehicles.	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.	Same as Proposed Action, except install gate approximately 300 feet further south than under Proposed Action. Extend pavement north of gate for access to wildlife rehabilitation facilities by authorized vehicles only.
NFS road 45530A would be maintained as unpaved road.	Realign, pave, and extend NFS road 45530A to the east by 0.6 miles to provide access to trailhead and equestrian campground.	Same as Proposed Action, except road would access the interagency fire, law enforcement, and Forest Service administrative facilities.
NFS road 45577 (Wooden Pole Power Line Road) would be maintained as unpaved road open to all motorized vehicles.	Build OHV trailhead with vault toilet east of NFS road 45577 on the north side of SR 157 for access to existing NFS roads and trails.	Same as the No Action Alternative.
Designated NFS trails shown on Motor Vehicle Use Map would remain open to all motorized vehicles.	Close NFS trails 25871 and 25872 to motorized vehicles.	Same as the Proposed Action.
Existing deteriorating fiberglass water storage tanks on 128-acre parcel would be removed. Existing reservoirs would be maintained for fire suppression purposes.	Remove existing water storage tanks and reservoirs including aboveground portions of distribution lines. Restore and revegetate surrounding areas, including abandoned and unauthorized routes ² north of SR 157 and east of SR 158.	Same as the Proposed Action.

No Action Alternative	Proposed Action	Market Supported Alternative
EASTERN AREA		
Existing width of SR 157 would be maintained.	Widen SR 157 for westbound deceleration preceding left turn lane at intersection with Harris Springs Road. Coordinate with NDOT for improving SR 157.	Revise traffic study based on reduced scale of development under this alternative to validate the need for highway widening. Coordinate with NDOT.
Harris Springs Road would continue to be maintained by Clark County as an unpaved improved road.	Widen and pave approximately 0.7 mile of Harris Springs Road to meet Clark County standards, including a paved bike lane. Upgrade drainage crossing to meet Clark County standards.	Same as the No Action Alternative.
NFS roads 45532H and 45532J would be maintained as unpaved and unimproved roads. Unimproved access to area would be maintained. User-created trails would remain undesignated and would be closed as necessary to minimize or prevent resource damage.	Construct trailhead and pave approximately 1,000 feet of NFS road 45532H and parking area west of Harris Springs Road. Include restroom with vault toilet. Close NFS road 45532J to motor vehicles.	Construct trailhead in same location as under Proposed Action, except NFS road 45532 H and parking area would 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.	Same as the Proposed Action.
	Build paved FSTAG-accessible trail from trailhead parallel to and south of SR 157 leading to paved road at eastern end of camping area.	Provide access to canyon bottom trail only at this trailhead.
Existing unimproved access to area would be maintained.	Construct and pave trailhead west of Harris Springs Road at approximately 0.6 milepost. Build bicycle rental/concession building and restroom with vault toilet. Install on-site sewage treatment system with septic tank and leachfield. Extend water, power, and communication utilities to this location.	Construct unpaved trailhead in same location including restroom with vault toilet. No utilities would be provided to this location.
NFS roads 45532A thru 45532C and NFS trails 25875 and 25876 would be maintained as unimproved dirt routes open to all motorized vehicles. User-created routes would remain undesignated and may be closed as necessary to minimize or prevent resource damage.	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 8.5 miles hiking and biking trails with an overlook on east rim of slot canyon.	Same as the Proposed Action. Connect trail at overlook to trail bridge (approximately 300-foot span) over Kyle wash/slot canyon and paved FSTAG-accessible Rim Trail on west.

No Action Alternative	Proposed Action	Market Supported Alternative
Designated routes west of Harris Springs Road would remain open to use by motorized vehicles. Some areas and unauthorized routes may be closed as necessary to minimize or prevent resource damage.	Install signs and traffic management devices (e.g., barrier rock, fence, signs) west of Harris Springs Road to discourage unauthorized vehicle access.	Same as Proposed Action.
OTHER ACTIONS		
Dispersed camping would be allowed to continue within the Lee Canyon, Kyle Canyon, and Deer Creek Canyon areas of the SMNRA. Some areas would be closed as necessary to prevent or restore resource damage.	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 within the Lee Canyon, Kyle Canyon, and Deer Creek areas of the SMNRA, including connecting and tributary Forest Service routes such as those in the Macks Canyon and Harris Springs areas. This closure would occur within the Middle Kyle Complex area and on an additional area of approximately 4,900 acres.	Same as the Proposed Action.
Existing landscaping at Kyle CCC Camp, Kyle Interim Visitor Center and other developed sites in canyon would be maintained.	Implement vegetation treatment and management recommendations included in <i>Vegetation Management for the Kyle Campground, Kyle CCC Camp and the Proposed Middle Kyle Complex (2009)</i> , which includes vegetative treatments at existing facilities, the proposed Middle Kyle Complex, and areas that would be restored and revegetated.	Same as the Proposed Action.
ELECTRICAL AND COMMUNICATION UTILITIES- SUMMARY BY ALTERNATIVE		
Existing overhead electrical transmission lines owned and operated by NV Energy would be maintained in current configuration.	<p>Install new or upgraded underground electrical distribution lines within road and trail corridors in developed areas.</p> <p>Consider installing portions of NV Energy's overhead transmission lines underground (see <i>Public Utility Companies</i> below).</p> <p>Extend underground line across SR 157 Main Camping and Picnic Area and locate within road and trail corridors to facility locations in this area.</p>	Same as the Proposed Action although location of underground electrical distribution lines would extend to location of facilities included in this alternative.
	Extend electrical service to bicycle rental facility on Harris Springs Road underground within road and trail corridors where possible.	Terminate underground electrical service at the waste treatment site and helipad area east of Main Camping and Picnic Area.

No Action Alternative	Proposed Action	Market Supported Alternative
	Move solid waste transfer station to another location, service not required.	Existing electrical service to solid waste transfer station would be maintained.
	Extend underground electrical service to employee housing area within road corridor.	Extend electrical service from employee housing area to wildlife rehabilitation facility and within road corridor to facility.
Existing Embarq communication trunk lines would be maintained in existing configuration. Lines are buried throughout project area, except areas where topography (e.g., slot canyon area and deep drainage crossings) prohibited burial.	<p>Install new or upgraded communication lines within road and trail corridors in developed areas.</p> <p>Consider installing portions of Embarq’s overhead communication lines underground. Leave overhead lines in areas restricted by topography, east of Main Camping and Picnic Area and over slot canyon.</p> <p>Relocate some segments of Embarq’s buried communication lines in the Main Camping and Picnic Area outside of development areas and along road corridors (see <i>Public Utility Companies</i> below).</p>	<p>Same as the Proposed Action.</p> <p>Include overhead lines crossing slot canyon in conduits added to trail bridge, also providing a utility corridor to serve Eastern Area if future needs warrant.</p>
WATER SYSTEM- SUMMARY BY ALTERNATIVE		
Las Vegas Valley Water District (LVVWD) would continue to supply water to facilities in western area (Fletcher View Campground, Kyle CCC Camp, and Kyle Canyon Campground) via 1 ½ -inch and 2-inch water main.	Upgrade water main distribution line to 4 to 8 inches and upgrade existing connection to the LVVWD system to serve western area. Replace water main in existing water line alignment within road and trail corridors.	Same as the Proposed Action.
<p>The existing water system improvements on the 128-acre parcel including 2 wells and 3 water reservoirs would be maintained in current condition. Existing fiberglass storage tanks adjacent to the reservoirs would be removed.</p> <p>The artificial ponds in the former golf course may be retained for fire suppression needs.</p>	<p>Existing storage tanks, reservoirs, and aboveground distribution lines would be removed and the area including access road restored.</p> <p>Forest Service would develop and operate a public water system, using existing wells and water rights permitted by the State of Nevada to supply water to all proposed facilities east of Western Area.</p> <p>Water supply and distribution lines would be extended to a new water storage tank (330,000 gallons) in the Northern Area. Water line corridors would utilize road and trail corridors to the greatest extent practicable.</p>	<p>Same as Proposed Action except connect water system for all proposed facilities east of Western Area to existing public water system, Mount Charleston Water Company (MCWC) connection.</p> <p>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 utilizing road and trail corridors to the greatest extent practicable.</p>

No Action Alternative	Proposed Action	Market Supported Alternative
SEWER SYSTEM- SUMMARY BY ALTERNATIVE		
<p>The existing restroom facilities and sewer system at Kyle CCC Camp with septic tanks and leach field would be maintained.</p> <p>The existing vault toilets at Kyle Canyon Campground would be maintained.</p> <p>Existing sewer system installed for golf course operation would remain in its current state.</p> <p>Additional restrooms would not be provided in middle Kyle Canyon area.</p>	<p>Maintain sewer systems at Kyle CCC Camp with septic tanks and leach field.</p> <p>Install separate on-site sewage treatment systems consisting of septic tanks and leachfields at project locations in Kyle Canyon Campground, Village, Main Camping and Picnic Area, Northern Area, and Eastern Area. Unneeded existing vault toilets and septic tanks would be properly removed or abandoned.</p> <p>Install restrooms with vault toilets at OHV trailhead and canyon bottom trailhead on Harris Springs Road.</p> <p>Install restrooms with septic tank and leachfield at bicycle concession trailhead.</p>	<p>Install sewer collection system connecting all project areas to a central treatment facility with lagoons or package treatment facility south of SR 157 and east of Main Camping and Picnic Area. Maintain flexibility to add additional users to the system. Unneeded existing vault toilets and septic tanks would be properly removed or abandoned.</p> <p>Install vault toilets at trailhead restrooms on Harris Springs Road.</p>
ROADS - SUMMARY BY ALTERNATIVE		
NFS Roads, unsurfaced – 12.9 miles	NFS Roads, unsurfaced – 0.3 mile	NFS Roads, unsurfaced – 0.6 mile
NFS Roads, paved – 0.7 mile	NFS Roads, paved – 17.1 miles	NFS Roads, paved – 12.2 miles
NFS Roads, closed/restored – 0 miles	NFS Roads, closed/restored – 5.2 miles	NFS Roads, closed/restored – 5.2 miles
NFS Roads, converted to trail – 0 miles	NFS Roads, converted to trail – 6.0 miles	NFS Roads, converted to trail – 5.6 miles
Clark County Roads, improved/paved – 0 miles	Clark County Roads, improved/paved – 0.7 mile	Clark County Roads, improved/paved – 0 miles
Unauthorized Roads – 6.9 miles	Unauthorized Roads – 0 miles	Unauthorized Roads – 0 miles
TRAILS - SUMMARY BY ALTERNATIVE		
<p>Existing designated non-motorized trails that would be maintained in middle Kyle Canyon area:</p> <ul style="list-style-type: none"> ▪ Fletcher Canyon Trail – 1.6 miles, hiking and equestrian use authorized. 	<p>Provide trail mileage designated for specific use as follows (all mileages approximate and includes Fletcher Canyon Trail mileage):</p> <ul style="list-style-type: none"> ▪ Hiking only trails – 8.6 miles. ▪ Biking only trails – 2.8 miles. ▪ Hiking and biking trails – 17.4 miles. ▪ Hiking and equestrian trails – 6.0 miles. ▪ Hiking, biking and equestrian trails – 13.3 miles. 	<p>Provide trail mileage designated for specific use as follows (all mileages approximate and includes Fletcher Canyon Trail mileage):</p> <ul style="list-style-type: none"> ▪ Hiking only trails – 8.6 miles. ▪ Biking only trails – 2.8 miles. ▪ Hiking and biking trails – 16.4 miles. ▪ Hiking and equestrian trails – 4.2 miles. ▪ Hiking, biking and equestrian trails – 11.8 miles.

No Action Alternative	Proposed Action	Market Supported Alternative
Existing designated motorized trails – 1.4 miles	Designated motorized trails – 0 miles	Designated motorized trails – 0 miles
Motorized trails closed/restored – 0 miles	Motorized trails closed/restored – 1.4 miles	Motorized trails closed/restored – 1.4 miles
Unauthorized trails – 16.0 miles	Unauthorized trails – 0 mile	Unauthorized trails – 0 miles
RESTORATION AND VEGETATION TREATMENTS		
Kyle CCC Camp restoration – 0 acres	1.4 acres	1.2 acres
Fletcher Canyon Trailhead parking restoration – 0 acres	0 acres	0.1 acre
Valley (former golf course restoration – 3.0 acres (includes 0.7 acre restoration in Village)	2.7 acres	2.7 acres
Northern Area restoration – 0 acre	8 acres	7.6 acres
Dump (near helipad) removal and restoration – 0 acres	0.9 acre	0.9 acre
Designated routes closed and restored – 0 acres	6.7 acres	6.7 acres
Unauthorized routes closed and restored – 0 acres	15.9 acres	15.9 acres
Vegetation Treatment - Maintain vegetation in existing developed sites with limited treatments, (e.g., removal of hazard trees)	Vegetation treatment and management plan would be implemented.	Same as the Proposed Action.
PERMITTED AND OTHER LAND OCCUPANCIES		
PUBLIC UTILITY COMPANIES		
NV Energy		
Existing utility easements and transmission lines would be maintained.	Approximately 8,900 linear feet of aerial electric transmission line north of SR 157 may be removed and installed underground within the existing utility easement. NFS trails 25871 and 25872, which follow the transmission line, would be closed to public motorized use. Approximately 3,900 linear feet of aerial electric transmission line south of SR 157 may be removed and	Same as the Proposed Action.

No Action Alternative	Proposed Action	Market Supported Alternative
	<p>installed underground in a new utility corridor within the Kyle Canyon Wash Trail corridor. The granting of new utility easements would be required.</p> <p>Underground primary power utilities would be installed from NV Energy transmission lines to new NV Energy pad mount transformers at locations throughout the proposed development.</p> <p>Proposed improvements and easement modifications would be coordinated with NV Energy.</p>	
Embarq		
<p>Existing utility easements and communication lines would be maintained.</p>	<p>Overhead communication trunk lines in the Main Camp and Picnic Area (approximately 2,140 linear feet) may be relocated underground within the existing utility easement where feasible.</p> <p>Approximately 2,200 linear feet of overhead communication line north of SR 157 located on NV Energy poles may be removed and installed underground within the existing utility easement.</p> <p>Approximately 3,900 linear feet of overhead communication line south of SR 157 may 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 would be required.</p> <p>Proposed improvements and easement modifications would be coordinated with Embarq.</p>	<p>Underground and aerial communication trunk lines in the Main Camping and Picnic Area may be relocated to new underground locations paralleling proposed road and trail corridors. This approach would require granting new utility easements. The length of the new easement would be approximately 16,900 linear feet. Approximately 15,830 linear feet of existing utility easement would be abandoned.</p> <p>The aerial span across slot canyon would be removed and installed on the proposed trail bridge over Kyle wash/slot canyon.</p> <p>Approximately 2,200 linear feet of overhead communication line north of SR 157 located on NV Energy poles may be removed and installed underground within the existing utility easement.</p> <p>Approximately 3,900 linear feet of overhead communication line south of SR 157 may 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 would be required.</p> <p>Proposed improvements and easement modifications would be coordinated with Embarq.</p>

No Action Alternative	Proposed Action	Market Supported Alternative
Mount Charleston Water Company		
Existing MCWC wastewater utility easements would be maintained. The Forest Service may permit the use of existing Forest Service wells for use in the MCWC public water system.	Same as the No Action Alternative except only the existing well in Kyle wash would be considered for permitting to MCWC for their water system. The other Forest Service well would be used exclusively by the Forest Service for the proposed water system that would serve the MKC development. The water system under this alternative would be operated and managed by the Forest Service.	<p>The Forest Service would connect to the MCWC water system. The two existing Forest Service wells would be connected to the MCWC. Use of the wells and supply lines to MCWC would be authorized under a special use permit. MCWC would expand its service area to include the Forest Service facilities. The Forest Service would allocate water rights sufficient for connection to MCWC. Additional water storage, if required, would be constructed on private land adjacent to existing MCWC storage tanks.</p> <p>The existing wastewater easement would not be affected; however, under this alternative, which includes a central sewage treatment facility, the MCWC would have an opportunity to abandon the easement and connect to the central sewage treatment facilities. The area identified in the EIS for the wastewater treatment plant was sized to include MCWC wastewater flows.</p> <p>Proposed improvements and permits/agreements would be coordinated with MCWC and the State of Nevada, as appropriate.</p>
Kyle Canyon Water District/Las Vegas Valley Water District		
Existing facilities in the Western Area are connected to the Kyle Canyon Water District, operated by LVVWD; there would be no change to existing service.	The existing Forest Service meter service connection in the Rainbow Subdivision in Mt. Charleston would be enlarged and upgraded to include backflow prevention. Proposed improvements would be coordinated and permitted through LVVWD.	Same as Proposed Action.

No Action Alternative	Proposed Action	Market Supported Alternative
Solid Waste Transfer Facility		
<p>Permitted to Clark County and operated by Republic Services, the solid waste transfer facility is a permitted use. Occupancy at the current location would continue.</p>	<p>The Special Use Permit would not be reauthorized. The facility would be moved to a location off NFS lands; improvements at the current site would be removed and the area restored.</p>	<p>The Special Use Permit would be reauthorized at the current location with expanded requirements for visual screening. The existing access off SR 157 would be removed and restored, and a new access road off the proposed main road to the Northern Area would be established. Proposed improvements and permit modifications would be coordinated with Clark County.</p>
PUBLIC ROAD AGENCIES		
Nevada Department of Transportation		
<p>There would be no change to the existing NDOT facilities.</p>	<p>The following activities would occur within the NDOT highway easements and would require consultation, coordination, and permitting from NDOT:</p> <ul style="list-style-type: none"> ▪ Pavement markings and signage for pedestrian crossings on SR 157 and SR 158. ▪ Highway widening for acceleration, deceleration, and turn lanes at major intersections. ▪ 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. ▪ Relocation of SR 157 access to the existing NDOT Maintenance Station. <p>This alternative does not require granting additional rights-of-way to NDOT.</p>	<p>Same as Proposed Action with the following exceptions:</p> <ul style="list-style-type: none"> ▪ The pedestrian crossings on SR 158 to the Fletcher Canyon Trail network would not be constructed. ▪ The highway shoulder parking for the Fletcher Canyon Trailhead would be eliminated; the area would be signed for No Parking and restored. ▪ The SR 157 access to the existing NDOT Maintenance Station would not be relocated. ▪ A highway roundabout and/or highway shoulder parking with traffic calming and speed reductions may be constructed at the Village area. Construction of a roundabout would require granting additional easement width to NDOT. The additional right-of-way easement area is estimated at 0.46 acre.

No Action Alternative	Proposed Action	Market Supported Alternative
Clark County		
Existing Clark County road in the project area would continue to be maintained by the County.	The first 0.7 mile of the Harris Springs Road would be upgraded to a double-lane paved road with shoulder bike lanes meeting County road standards. The Kyle wash crossing would be improved to meet Clark County requirements. Required permits and agreements would be coordinated with Clark County.	Same as the No Action Alternative.
FIRE PROTECTION SERVICES		
Nevada Division of Forestry		
NDF would continue to operate out of its facilities located in the community of Mt. Charleston.	Space would be provided at the proposed interagency fire facilities in the Northern Area. An agreement with the Forest Service for facility occupancy, operation, and maintenance expenses would be executed.	Same as the Proposed Action except location would be closer to SR 157. A special use permit for NDF-owned facilities at the same or nearby location may also be considered.
Clark County and Mt. Charleston Volunteer Fire Department		
The Clark County and Mt. Charleston Volunteer Fire Department would continue to operate out of their facilities located in the community of Mt. Charleston.	Space would be provided at the proposed interagency fire facilities in the Northern Area for the fire engine. The Clark County and Mt. Charleston Volunteer Fire Department Emergency Services would continue to operate out of their current facility in Mt. Charleston. An agreement with the Forest Service for facility occupancy, operation, and maintenance expenses would be executed.	Same as the Proposed Action except location would be closer to SR 157.
LAW ENFORCEMENT SERVICES		
Las Vegas Metropolitan Police		
The existing Special Use Permit and occupancy at the current location north of SR 157 would continue.	The permitted occupancy would be relocated to an area adjacent to the proposed Forest Service administrative facilities in the Northern Area. The existing facilities and paved access would be removed and the site revegetated.	Space would be provided at the proposed interagency law enforcement building in the Northern Area. An agreement with the Forest Service for facility occupancy, operation, and maintenance expenses would be executed.

No Action Alternative	Proposed Action	Market Supported Alternative
Nevada Highway Patrol		
The existing periodic shared use of the Las Vegas Metro office would continue.	Same as the No Action Alternative.	Space would be provided at the proposed interagency law enforcement building in the Northern Area. An agreement with the Forest Service for facility occupancy, operation, and maintenance expenses would be executed.
WILDLIFE REHABILITATION FACILITIES		
This use does not currently exist in Kyle Canyon area.	Same as the No Action Alternative.	A permit would be issued to a local non-profit to operate a wildlife rehabilitation facility in the Telephone Canyon area for birds/raptors. The non-profit would also provide wildlife education programs at the Village. The non-profit would be responsible for the construction and maintenance costs of the proposed rehabilitation facilities.
OUTFITTER GUIDES		
Pink Jeep Tours		
The existing Special Use Permit to operate jeep tours on designated routes within the project area would continue.	The Special Use Permit would be amended to exclude those routes in the project area identified for closure to motorized vehicles.	Same as the Proposed Action.
Robert Humphries		
The existing Special Use Permit to operate guided horse and carriage rides north of SR 157 on designated routes in the Telephone Canyon area would continue.	The existing permit would not be reauthorized and a new concession contract to operate the proposed equestrian rental facilities and corrals would be competitively advertised in accordance with federal regulations.	An outfitter guide permit may be issued utilizing proposed equestrian trails identified under this alternative. Physical improvements necessary to implement this service would be provided at the permittee's expense and would be located north of SR 157 near the proposed corrals and trailhead parking, and would conform to requirements in this EIS.

No Action Alternative	Proposed Action	Market Supported Alternative
RIGHT-OF-WAY ACQUISITION NEEDS		
Clark County Assessor’s Parcel Number 128-28-602-001: Existing paved access road and access rights would remain unchanged.	Existing paved road would be improved as a secondary/emergency access to the Village area if right-of-way was acquired. Formal right-of-way would be acquired from the land owner, approximately 75 feet in length and 50 feet wide (0.09 acre).	Same as the Proposed Action.
Clark County Assessor’s Parcel Number 128-28-602-005: Existing occasional public use would continue on this undeveloped and unposted parcel.	The proposed Rim Trail and underground utilities would be constructed on the south portion of the private parcel if right-of-way was acquired. Formal public right-of-way would be acquired from the land owner, approximately 460 feet in length and 30 feet wide (0.32 acre).	The proposed Rim Trail and underground utilities would not be located within the private parcel. Instead, the trail and utilities would be located north of the parcel within the NDOT SR 157 right-of-way. Appropriate permits and easements would be coordinated through NDOT.

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 would have parking space for three vehicles, three picnic tables, and three tent pads at a single location, and would be counted as three units.

² The term “route” refers to both trails and roads, e.g., motorized Forest Service routes would include both Forest Service roads and motorized Forest Service trails (reference Forest Service Manual 7705).

³ The terms “restored” and/or “restoration” used throughout this 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 would be implemented will be determined in the design process and is not identified in the EIS.

