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Forest Service

Intermountain
Region

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Scoping Notice and Notice of Proposed Action

Clark Canyon Restoration Project

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

COMMENTS WELCOME

The Spring Mountains National Recreation Area (SMNRA) of the Humboldt-Toiyabe National Forest is proposing to treat vegetation in the Clark Canyon area to improve sensitive species habitat and restore a healthy forest mosaic. These treatments would also protect private property and provide for public safety in the area.

It is expected that this project can be categorically excluded from documentation in an environmental impact statement or environmental assessment and that no extraordinary circumstances exist that would preclude use of this category (36 CFR 220.6)(e)(6). The category is described as: *Timber stand and/or wildlife habitat improvement activities that do not include the use of herbicides or do not require more than one mile of low standard road construction*. The SMNRA Area Manager is the responsible official for this project.

This document initiates both the scoping process pursuant to Council on Environmental Quality regulations at 40 CFR 1501.7 and provides notice of the 30-day comment period pursuant to Forest Service regulations at 36 CFR 215. The purpose of the scoping process is to solicit public comment early in the analysis. The purpose of the 30-day comment period is to provide an opportunity for the public to provide meaningful input on the proposed action prior to a decision by the Responsible Official. For this project, the Forest Service has decided to run the two periods simultaneously.

Written, facsimile, hand delivered, oral, and electronic comments concerning this action will be accepted for 30 calendar days following the publication of the 36 CFR 215 Notice of Proposed Action in the Las Vegas Review Journal. For detailed information on how to provide comments, please refer to the "Comment Process" section of this document on page 10.

LOCATION

Clark Canyon is located in the Spring Mountains National Recreation Area (SMNRA), Clark County, NV, on Forest Road (FR) 45071. The area is approximately 15 miles east of State Route 160 (Pahrump Highway) and Pahrump, NV, with an elevation range of 6,800 to 8,100 feet (Township 18 South, Range 55 East, Sections 26, 27, 34, and 35; and Township 19 South, Range 55 East, Sections 1, 2, and 3 of the Mt. Diablo Meridian). The proposed project area covers approximately 1,606 acres. The project boundaries are limited by the Mt. Charleston Wilderness on the east and south ends, private land on the east end, the limits of the mixed conifer stands dominated by ponderosa pine on the north end, and topography on the west end. Within the project area, a wildland-urban interface (WUI) exists along FR 45071, 45071A, 45566, 45566A, 45566B, and 45566D and along the private property boundary on the east end (Figure 1).

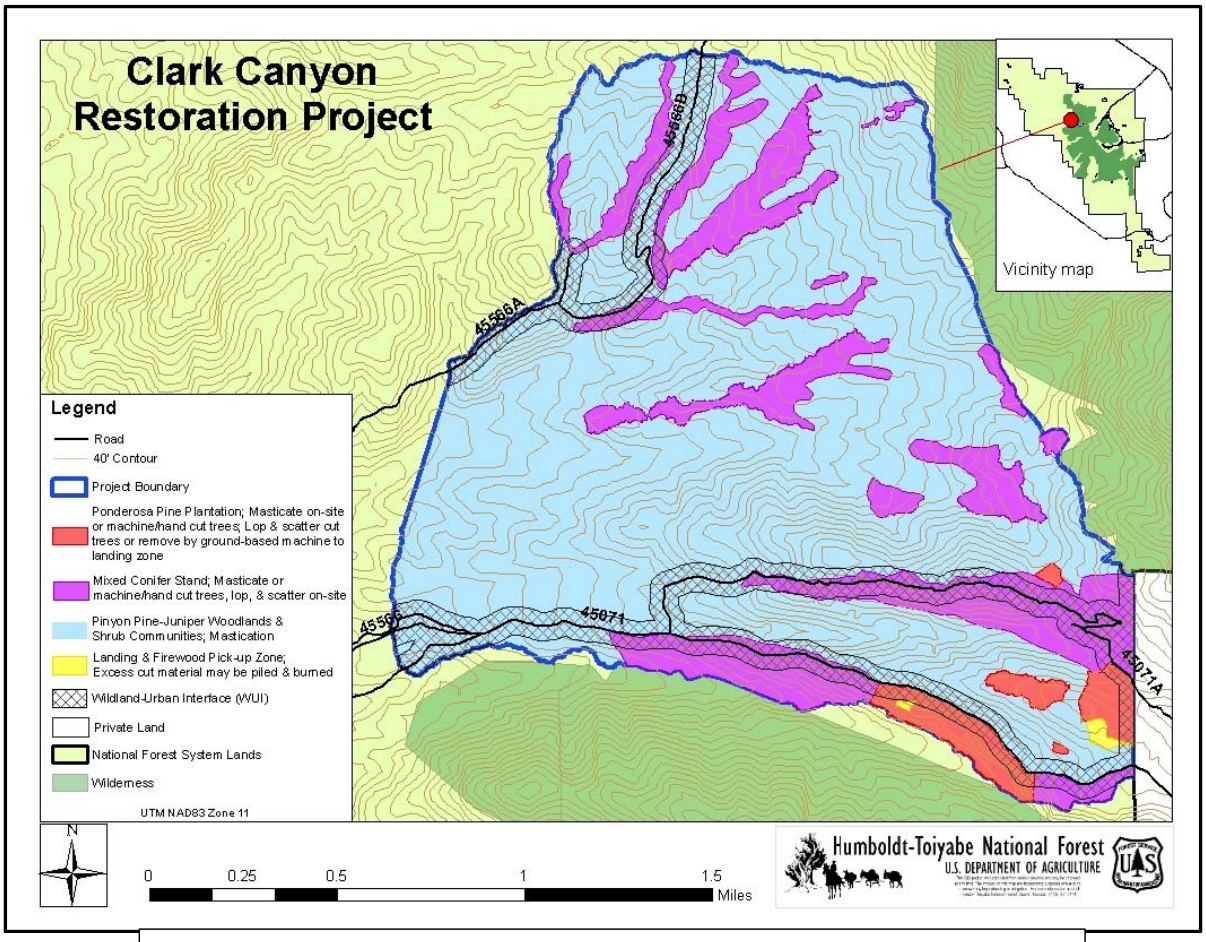

Figure 1: Clark Canyon Restoration Project Location and Proposed Treatment Areas

EXISTING CONDITION

The project area provides habitat for several U. S. Forest Service regional sensitive (R4 sensitive) plant and wildlife species. The vegetation communities in Clark Canyon include steep slopes and clifflands, mixed conifer forests dominated by ponderosa pine and white fir, pinyon pine-juniper woodlands, and montane shrublands, including mountain big sagebrush and chaparral dominated by pointleaf manzanita. Two springs exist in the project area, Buck Springs and Rosebud Springs.

Mixed Conifer Stands

Approximately 305 acres of mixed conifer stands dominated by ponderosa pine and white fir occur within the project area and are comprised of many large (greater than 20 inches in diameter at breast height (DBH)) trees in declining health due to overcrowding. In the matrix around these larger trees, there are pockets of overstocked smaller trees (Figure 2).

Figure 2: Overstocked ponderosa pine trees in a mixed conifer stand.

Ponderosa Pine Plantations

Approximately 53 acres of ponderosa pine plantations also exist in the project area. The ponderosa pine plantations in the southeastern part of the project area are stunted due to overcrowding and competition for sunlight, water, and nutrients (Figure 3).

Figure 3: Stunted and overcrowded ponderosa pine trees in a plantation.

High forest stand densities and stocking levels are compromising the health of these stands by increasing the risk and spread of insect and disease outbreaks. In one drainage and plantation, there is extensive infection of western dwarf mistletoe (*Arceuthobium campylopodum*) with many pockets of heavily infected trees. Many of these pockets contain infected overstory trees near new regeneration or smaller intermediate size trees; an ideal stand structure for western dwarf mistletoe spread (Figure 4). Additionally, a 2011 aerial detection survey indicated tree mortality in the project area due to the mountain pine beetle (*Dendroctonus ponderosae)*.

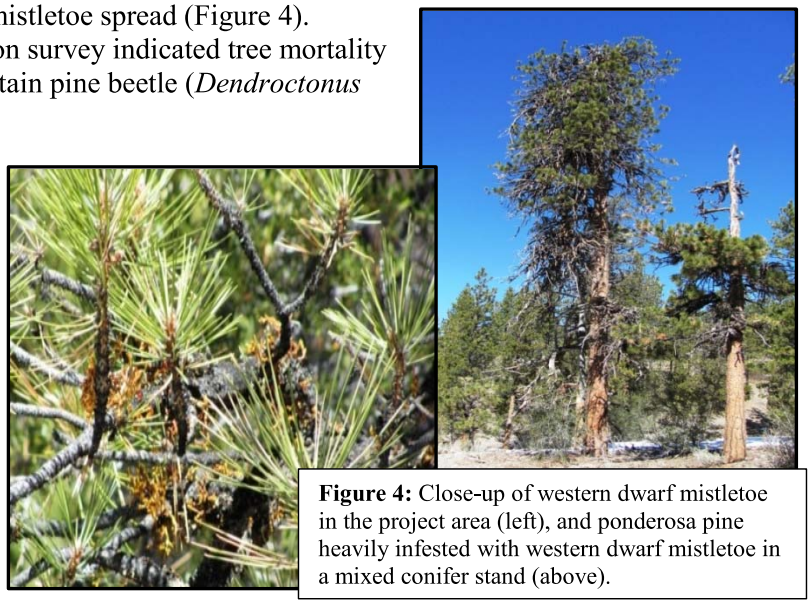

Figure 4: Close-up of western dwarf mistletoe in the project area (left), and ponderosa pine heavily infested with western dwarf mistletoe in a mixed conifer stand (above).

Pinyon Pine-Juniper Woodlands and Shrub Communities

Pinyon pine-juniper woodlands and shrub communities compose 1,248 acres of the project area. Most of the pinyon pine-juniper woodlands community is late seral (late-successional, tree-dominated) with areas in which the canopy is closing (average canopy cover is 54 percent). These closed canopies are suppressing understory plants and can increase soil erosion.

Mistletoe is also present in the pinyon pine-juniper woodlands. A 2008 aerial detection survey also indicated tree mortality in the project area due to pinyon ips (*Ips confusus)*. In the shrub communities, the number of pinyon pine and juniper trees is increasing and their canopy is closing, decreasing shrub and understory cover.

Small, isolated patches of Clokey's milkvetch (*Astragalus aequalis*), an R4 sensitive species, exist in the pinyon pine-juniper woodland and shrub communities throughout the project area. Based on preliminary survey results, larger patches of Clokey's milkvetch occur in younger stands of Gambel's oak and pinyon pine and juniper where the canopy cover is more open and understory vegetation is present. In sections of the project area, pinyon pine, juniper, and Gambel's oak have aged and outcompeted the understory, reducing habitat suitability for Clokey's milkvetch (Figure 5).

Figure 5: Enclosed canopy of pinyon pine and juniper trees that is suppressing the growth and establishment of understory plants including Clokey's milkvetch.

R4 sensitive bat and butterfly species' habitats and elk habitat also occur in the project area. The R4 sensitive wildlife species that may occur in the area include Townsend's big-eared bat (*Corynorhinus townsendii pallescens*), Spring Mountains acastus checkerspot butterfly (*Chlosyne acastus robusta*), and Spring Mountains dark blue butterfly (*Euphilotes ancilla cryptica*). Additional bat species that may use the area include Allen's big-eared bat (*Idionycteris phyllotis*), silver-haired bat (*Lasionycteris noctivagans*), fringed myotis (*Myotis thysanodes*), long-eared myotis (*Myotis evotis*), western small-footed myotis (*Myotis ciliolabrum*), and long-legged myotis (*Myotis volans*). Overstocked and homogeneous stands of mixed conifer forest and pinyon pine-juniper woodlands have reduced suitable habitat and species richness. Based on preliminary survey results, understory plants on which wildlife depend are becoming sparse as the woodlands and forest canopies close and outcompete the understory. In addition, elk avoid thick forests and bats prefer open mature stands that are maneuverable.

Wildland-Urban Interface

The Spring Mountains Multi-Jurisdictional Fuel Reduction and Wildfire Prevention Strategy (10 Year Fuel Plan) identified the project area as a priority area for hazardous fuels reduction. In 2007, the Forest Service, Bureau of Land Management (BLM) and private land management contracted with the Nature Conservancy to map Fire Regime Condition Classes (FRCC) throughout the Spring Mountains. Fire Regime Condition Class is a measure of departure of vegetation structure-composition and fire regimes between current and reference condition. The FRCC for the plant communities within the project area were identified as mostly 2 and 3 (moderate to high departure from the natural regime). The modeled fire behavior and rate of fire spread for the existing plant communities predicts passive to active crown fires with flame lengths 4-8 feet and 10-20 chains per hour, respectively (Spring Mountains Multi-Jurisdictional Fuel Reduction and Wildfire Prevention Strategy 2008).

Private Lands

Private land exists near the project area and the only access road to the private land passes through the project area. Forest roads 45071, 45071A, 45566, and 45566D access this private land parcel and Buck Springs through the project area. The private landowner has constructed defensible space within his private property. There is no shaded fuel break on National Forest System land to provide for safe ingress or egress along these forest roads.

PURPOSE AND NEED

The purpose of the Clark Canyon Restoration Project is to restore a healthy forest mosaic (Figure 6) and sensitive species habitats, protect private property, and provide for public safety within the WUI.

Figure 6: Example of a desired mosaic landscape with an open, mature mixed conifer stand (left) and pinyon pine-juniper woodland (right).

The project is needed to:

1. Restore a healthy mixed conifer forest and pinyon pine-juniper woodland mosaic landscape throughout the project area;
2. Create forest and woodland conditions that are resistant and resilient to insect and pest infestations and to wildfire;
3. Improve sensitive botanical and wildlife species' habitats;
4. Reduce the rate of fire spread to 50 percent of existing modeled estimates;
5. Provide safe ingress and egress along the FS roads for the private property owner, public, and fire personnel.

The proposed project would align with direction in the 1986 Toiyabe National Forest Land and Resource Management Plan (Forest Plan) and in the 1996 General Management Plan (GMP) for the SMNRA, an amendment to the Forest Plan, to conserve the health, diversity, and integrity of the ecosystems.

PROPOSED ACTION

The SMNRA proposes implementing a variety of vegetation treatments for the Clark Canyon Restoration Project to restore forest health, increase forest heterogeneity, improve R4 sensitive species' habitats while minimizing impacts to species, protect private property, and provide safer ingress and egress along FS roads. The proposed actions for the Clark Canyon Restoration Project, based on different vegetation communities (Figure 1) are as follows. Treatments would occur only on slopes less than 35 percent. Access to the treatment areas would occur on existing forest roads; no new roads would be constructed. Implementation would begin in the fall of 2013.

1. ***Ponderosa Pine Plantations*** (53 acres):
   a) Thin (machine or hand cut or masticate) from below to attain an average tree spacing of 20 feet with a range of 15-25 feet.
   b) Mechanically fall and lop and scatter on-site or whole-tree yard material over 2 inches DBH to designated landing zones to achieve desired spacing.

c) Provide cut materials in ponderosa pine plantations as firewood available for the public at designated firewood pick-up locations in the landing zones.
d) Mechanically pile and burn excess cut materials in the landing zones.
e) Rip compacted landing zone areas to the depth of 6 inches after cut materials are removed by the public or burned.
f) Remove mistletoe infected overstory trees within 30-60 feet of a plantation, with 30 feet as the minimum spacing on the downhill side of the plantation and 60 feet on the uphill side.

2. ***Mixed Conifer Stands*** (with pockets of larger (greater than 18 inch DBH) and mature ponderosa pine and white fir surrounded by a matrix of younger ponderosa pine and white fir) (305 acres).
   a) Radially thin (masticate or machine/hand cut trees) to 5 feet past the drip line of larger ponderosa pine trees (greater than 18 inches DBH) to facilitate their survival by reducing competition for water, sunlight, and nutrients. All trees greater than 18 inches DBH would be retained.
   b) Masticate or machine/hand cut trees, lop, and scatter on-site the residual younger trees in the matrix around pockets of larger trees or individual large trees in the stand from below to an average spacing of 25 feet with a range of 20-30 feet.
   c) Remove trees less than 18 inches DBH that are infected with western dwarf mistletoe. Infected trees greater than 18 inches DBH would be retained.

3. ***Pinyon Pine-Juniper Woodlands and Shrub Communities*** (1,248 acres)
   a) Masticate 1 to 10 acre patches over no more than 30 percent (approximately 375 acres within the project area) of pinyon pine-juniper and shrub communities. These patches would be located near rock outcrops used by bats and existing occurrences of Clokey's milkvetch (*Astragalus aequalis*) and R4 sensitive butterfly larval host plants (*Chrysothamnus viscidiflorus* ssp. *viscidiflorus* and *Eriogonum umbellatum* var. *subaridum*).
   b) Thin trees from below within these patches with a spacing of 25 feet with a range of 20-30 feet.
   c) Thin shrubs to 30 percent cover within these patches. Spacing would vary dependent upon the size of residual shrub clumps.

4. ***Wildland-Urban Interface***
   a) The proposed treatments described above encompass approximately 262 WUI acres along the private property boundary and roads within the project area.

5. ***Seeding*** (dependent upon future funding)
   a) Broadcast seeding of herbaceous species may occur in treated areas where the understory seed bank and organic layer are absent due to prolonged canopy closure and understory suppression.
   b) Broadcast seeding of Spring Mountains acastus checkerspot butterfly larval host and nectar plants may occur in areas where butterfly habitat has been identified as present and in need of restoration (i.e., the seed banks have disappeared due to prolonged canopy closure and understory suppression or densities of larval host and nectar plants are too low for Spring Mountains acastus checkerspot to utilize). Species to be seeded would be *Chrysothamnus viscidiflorus* ssp. *viscidiflorus* and *Eriodictyon angustifolium*.

6. ***Design Criteria***

SMNRA resource specialists have proposed the following design criteria to avoid potential impacts of the proposal.

Botany

- Prior to implementation, crews would meet with a qualified botanist or ecologist on the SMNRA staff to coordinate on sensitive species identification, techniques to minimize impacts to sensitive species and habitats, and notification procedures if threatened and endangered species (TES) are encountered.
- In locations where R4 sensitive plants are present, timing of mastication treatments would be late summer to early spring (August–March) when plants are not actively growing and have dispersed their seed.
- Burn piles would be located in areas determined to be free of sensitive plants and butterfly larval host plants.
- Seeding, including the possible seeding of butterfly larval host and nectar plants, may occur within treatment areas. Any such seeding would be limited to areas where the application of seed would not alter or degrade habitats of sensitive species.
- Contractors would follow Forest Service policy (FSM 2070) and use genetically appropriate native materials for rehabilitation and restoration when possible.

Cultural Resources

- Cultural sites found in areas proposed for mechanical treatments would be avoided. Brush piles would be placed a minimum of 100 feet from site boundaries should pile burning occur near sites. The District Archaeologist would provide archaeological site protection input and on-site monitoring as needed.

Insects and Disease

- Preferred timing to begin implementation within the ponderosa pine plantations would be after September 1.

Noxious/Invasive Species

- USFS and Humboldt-Toiyabe NF Best Management Practices (Humboldt-Toiyabe Supplemental FSM 2080) would be employed during project implementation to prevent and control the introduction and spread of invasive species. Inspection of erosion control and road materials, equipment, and vehicles would occur prior to contracted work to ensure they are free of mud and visible plant debris. The materials, equipment, and vehicles would also be cleaned prior to moving from an infested treatment unit to a unit that is free of weeds.
- Any new infestations of noxious weeds discovered during implementation would be documented and locations marked on a map or GPS. Newly discovered noxious weeds would be treated prior to conducting additional vegetation treatment activities within the infested area.

Recreation

- Treatment would take into consideration the visual appeal of the project area to recreationists and/or community members. Feathering of project boundaries and the utilization of tree screens to reduce visual impacts of project should be considered.

- Informative signs would be placed in the area during project implementation. This should educate the public about work in the area and reduce the potential for accidents.

Soils and Hydrology

- Contractor would provide an erosion control plan prior to implementation. Erosion devices would be installed to prevent sediment and debris from clogging culverts.
- Place slope limitations in pinyon pine-juniper woodland or desert shrub community cover types with 30 percent maximum for mechanical equipment, 35 percent for mixed conifer. No entry into entrenched channels except to cross. Hand-treat and remove material in channels. Keep travel routes 60 feet apart. Trails must be located and flagged in advance. Locate burn piles in the landing zones.
- Project activities would comply with the State of Nevada Best Management Practices Handbook, BMP 8-2 Wildland Interface Management, 8-3, Fuels Management, USFS National Best Management Practices for Water Quality Management on National Forest Service Lands, Vol. 1 National Core BMP Technical Guide (FS-990a, 2012), Mechanical Vegetation Management Activities (Veg-1, Veg-2, Veg-3, Veg-8), Soil and Water Conservation Practices Handbook, and FSH 2509.22 Region 4 Amendment No. 1, Practices 13.02, 13.03, 13.04, 13.06, 14.06, 14.10, 14.11, 14.15 (if skidding would occur).
- Equipment would be appropriate for the site and type of mechanical vegetation treatment implemented. Use of equipment would be confined to areas intended for disturbance and unnecessary disturbance would be avoided.
- Designated areas would be established for firewood pick-up, equipment staging, and parking to minimize the area of ground disturbance.
- Equipment would be maintained in good operating condition; refueling areas would be properly developed, monitored, and equipped with a spill prevention and clean-up plan.
- Excess material would be machine piled and burned, landing zones would be ripped to the depth of 6 inches, and erosion control devices would be installed as per erosion control plan.
- Springs and riparian locations and boundaries would be delineated in the project area using suitable markings. These boundaries would be maintained or reestablished as necessary during project implementation or operation. Springs/riparian zones layout, maintenance, and operating requirements would be specified in contracts, design plans, and other necessary project documentation.
- No placement of burn piles or use of ground based equipment within 100 feet of springs and seeps.
- Avoid treating vegetation on banks of washes and riparian areas.

Wildlife

- Prior to implementation, crews would meet with qualified botanist, wildlife biologist, or ecologist on SMNRA staff to coordinate on identification and avoidance of sensitive species and habitats and notification procedures if TES species are encountered.
- Thinning activities would not occur between May 20-July 20 to avoid bird breeding season. If an exception is requested, it may be granted if a nest search is conducted and substrates (i.e., trees, bushes, or ground) on which nests are found are avoided until

nestlings fledge. A qualified biologist who is familiar with the birds of southern Nevada and can accurately identify nesting and breeding behaviors would conduct all nest searches. Appropriate buffers would be designated for any nests located based on the species habitat requirements. Currently there are no known sensitive raptor nests within the project area boundaries; however if any are found, a 30-acre no-disturbance buffer would be centered around the nest from March 1 to August 31.

- Thinning activities would occur in daylight hours only (i.e. dawn to dusk) and depending on the species and type and status of habitat, seasonal operating limitations may be implemented to protect areas of maternity roosts and winter hibernacula.
- Retain all snags that do not pose a threat to public safety or increase fire danger.
- Retain existing down and dead woody debris in the plantations.
- Woody debris from mastication would be spread over an area no larger than 50 percent of the project or treatment area. Woody debris from mastication would be spread to a depth of no greater than five inches.

SUMMARY OF POTENTIAL PROPOSED ACTION IMPACTS

The following table summarizes the potential impacts of the proposed action by affected resources.

Affected Resource	Summary of Potential Impact
Botany	Potential impacts to Clokey's milkvetch individuals would be avoided throughout project activities. Vegetation treatments should improve habitat for Clokey's milkvetch. Openings created in the canopy by the treatments may also increase growth in larval host and nectar plants for butterflies.
Cultural Resources	It is expected there would be no adverse impacts to cultural resource sites as sites within the project area would be avoided during implementation.
Insect and Disease	The timing of project implementation within the ponderosa pine plantations (after September 1) would minimize the attraction of insect pests.
Noxious/Invasive Species	No noxious weeds are currently present in the project area. Some invasive species are present within the project area and may be spreading via natural dispersal and/or recreational use. The design features listed above would aid in avoiding the establishment or spread of noxious or invasive species in the project area.
Recreation/Visual Resources	Treatment activities may cause some inconvenience to forest recreationists. Information signing and news releases to inform the public of ongoing treatments would lessen these effects, which would be short-term in nature.
Soils and Hydrology	Use of mechanized equipment would be conducted following design features listed in the proposed action to reduce the possibility of erosion and prevent sedimentation.
Wildlife	Overstocking of trees and an overgrown understory are currently a barrier to movement of both sensitive bats and butterflies. Vegetation treatments would open the understory so that sensitive species can better utilize, move, and forage in the area. Treatment activities would occur outside of nighttime hours and should minimize impacts to foraging bats.

COMMENT PROCESS

The Forest Service encourages your comments on this proposed action, along with supporting reasons that the responsible official should consider in reaching a decision. Your comments will help us prepare an environmental analysis on the proposed action, and will be used to determine the level of analysis needed.

Written, facsimile, hand delivered, oral, and electronic comments concerning this action will be accepted for 30 calendar days following the publication of the 36 CFR 215 Notice of Proposed Acton in the Las Vegas Review Journal. Comments must be submitted to Spring Mountains National Recreation Area, 4701 N. Torrey Pines, Las Vegas, NV 89130, Attn: Marisa Anderson, or faxed to 702-515-5447. The office business hours for those submitting comments in person are: 8:00 am to 4:30 pm Monday through Friday, excluding holidays. Electronic comments may be submitted by selecting the "Comment on this Project" link on the Humboldt-Toiyabe National Forest website at http://www.fs.usda.gov/goto/htnf/ccr.

It is the responsibility of persons providing comments to submit them by the close of the comment period. Those who provide comments during this comment period are eligible to appeal the decision under the regulations. Individuals and organizations wishing to be eligible to appeal must provide the information identified in 36 CFR 215, including:

- Name and address
- Title of the proposed action
- Specific comments (36 CFR 215.2) on the proposed action, along with supporting reasons that the Responsible Official should consider in reaching a decision
- Signature or other verification of identity upon request; identification of the individual or organization who authored the comments(s) is necessary for appeal eligibility
- For multiple names or multiple organizations, a signature must be provided for the individual authorized to represent each organization, or for each individual that wishes to have appeal eligibility
- Individual members of organizations must submit their own comments to meet the requirements of appeal eligibility as an individual. Comments received on behalf of an organization are considered as those of the organization only.

Comments received in response to this solicitation, including names and addresses of those who comment, will be considered part of the public record for this project and will be available for public inspection and released if requested under the Freedom of Information Act.

For further information contact Marisa Anderson, Project Manager at (702) 515-5409 or via e-mail at marisaanderson@fs.fed.us.

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