McFarland Canyon Fence Project
Purpose, Need, & Proposed Action

Spring Mountains National Recreation Area
Humboldt-Toiyabe National Forest

Existing Conditions

The Wild Free-Roaming Horses and Burros Act (PL 92-195) was signed into law on December 15, 1971, providing a federal management protection and control program for wild horses and burros. The law protects these animals within designated territories on lands administered by the Secretary of the Interior through the Bureau of Land Management or by the Secretary of Agriculture through the Forest Service and mandates that wild horses and burros be managed in ecological balance with the land and as part of the natural landscape. There are three such territories in and around the Spring Mountains National Recreation Area (SMNRA), all of which are outside of designated Wilderness. Keeping wild horses and burros out of wilderness is stated in Objective 12.8 of Management Area 12 in the SMNRA General Management Plan (GMP). Wild horses and burros cause impacts to the natural character of Wilderness by trampling vegetation and wallowing in springs.

Wild horses on the SMNRA, an introduced and acceptable non-native species, leave their territories and travel through McFarland Canyon into the Mt. Charleston Wilderness Area and Upper Lee Canyon Area. The Mt. Charleston Wilderness is part of the SMNRA. These locations are outside of Spring Mountain Wild Horse and Burro Territory (WHBT) as defined by SMNRA General Management Plan, a 1996 amendment to the Toiyabe National Forest Land and Resource Management Plan. Functioning wild horse exclusion fences were installed in Lee Canyon and Macks Canyon to keep the horses within the WHBT and outside of the developed canyons and designated Wilderness, pursuant to guidance in the SMNRA GMP. The FS will consider the following Guidelines for management of wild horses and burros:

- Construct fences in strategic locations to keep wild horses out of Kyle and Lee Canyons (SMNRA GMP, 10/1/1996, Management Area 11 Guideline 11.20, p. 32).
- Control wild horse and burro access into the Wilderness; favor control measures outside of Wilderness where prudent and feasible.
- In cases where impacts to springs and riparian systems result from wild horses or burros, mitigation measures may be employed to prevent further degradation or to restore Wilderness character.
  (SMNRA GMP Forest Plan Amendment replacing district-wide Wilderness management direction—La Madre Mountain and Rainbow Mountain Wilderness Management Plan, pp. 50-51, 12/17/2013).

Outside of their territories, wild horses can cause resource damage by trampling and grazing sensitive habitats. In Upper Lee Canyon, horses congregate at the Las Vegas Ski and Snowboard Resort (LVSSR) and Lee Meadows, two areas that contain habitat for the Mt. Charleston Blue Butterfly (MCBB). Both LVSSR and Lee Meadows are outside the Spring Mountain WHBT. On September 18, 2013, the U. S. Fish and Wildlife Service (USFWS) listed MCBB as endangered under the Endangered Species Act. On

July 15, 2014, USFWS published the Proposed Rule for designation of critical habitat for MCBB. The proposed critical habitat includes areas in Upper Lee Canyon where the wild horses congregate. In the Proposed Rule for designation of critical habitat for MCBB, USFWS listed trampling or grazing by wild horses of the MCBB larval host or nectar plants, loss and degradation of MCBB habitat resulting from said trampling or grazing, and direct mortality of MCBB as potential threats to the continued viability of the butterfly. USFWS listed removal or exclusion of wild horses in MCBB habitat as a management activity that could reduce these threats.

Desired Conditions

Manage wild horses and burros in a thriving ecological balance with long-term ecosystem health. Areas with high biodiversity and/or a number of species of concern are protected from development of facilities and trails, and impacts from wild horses and burros. Wild horse and burro populations are at appropriate management levels that are sustainable and in balance with the long-term ecosystem health of the Spring Mountains. Wild horses and burros are excluded from areas outside their territory, from riparian areas, highways, and other sensitive areas or areas where their presence poses a threat to public safety or themselves. Wild horses are not found within the Wilderness. Exclusion of wild horses from Upper Lee Canyon allows the restoration of degraded habitat and removes the threat of direct mortality to individual MCBB larvae and pupae and degradation of habitat.

Purpose and Need for the Project

Purpose for Action

The purpose of this project is to prevent wild horse entry into Mt. Charleston Wilderness and Lee Canyon through McFarland Canyon. This project would effectively contribute to the viability of the MCBB by preventing wild horses from impacting sensitive butterfly habitat in Upper Lee Canyon. Excluding wild horses from entering the Wilderness through McFarland Canyon would also contribute to the protection of cultural resources, sensitive resources associated with springs, and the natural character and ecological integrity of the Mt. Charleston Wilderness.

Statement of Need for Action

The Mt. Charleston Wilderness is outside of the Spring Mountain WHBT. There is a need for excluding wild horses from entering the Wilderness where their presence impacts the natural character of the Mt. Charleston Wilderness. Wild horses are causing extensive damage to habitat by trampling and defecating on MCBB larval host and nectar plants resulting in loss and degradation of the habitat, as well as the direct mortality of MCBB where it is present. Wild horses are also wallowing in and denuding an area that contains one of the three remaining colonies of the MCBB. Wild horses are congregating at spring sources and are trampling sensitive spring habitat; water quality is degrading and erosion is occurring as horses move down banks to access the springs. Piles of manure left by horses leach phosphorus and nitrogen into the soil creating micro-habitats for noxious weeds. This, in turn, facilitates dispersal of noxious weed seeds. This proposal was analyzed in a Minimum Requirements Decision Guide (signed April 11, 2014). The Proposed Action meets the requirements for and aligns with the protection of wilderness character.

Proposed Action

The Interdisciplinary Team for the project developed the Proposed Action to meet the Purpose and Need for Action. Under the Proposed Action, the Forest Service would construct a permanent fence, built of primarily native materials, in the Mt. Charleston Wilderness at a pinch-point located in McFarland Canyon between two canyon walls. This fence would be wildlife-friendly for elk and mule deer passage. It would also include a gate to allow for recreation access through the canyon. The objective of the fence would be to exclude wild horses from the Wilderness and Upper Lee Canyon, but not exclude wild horses from other areas where access to water and forage are available. This alternative is consistent with Guideline 12.5 of the SMNRA GMP, which identifies the need for the construction of fences in Wilderness to keep wild horses and burros out of Wilderness and Kyle and Lee Canyons.

The fence would be a wood post-and-rail design with three rails per panel. More than three rails may be necessary in some areas. Each fence panel is approximately 10 to 12 feet in width having posts spaced approximately 10 to 12 feet apart. The fence height would be between 40-46 inches. The fence will be approximately 120 feet total length from end to end and will butt up against the rock cliff faces. This fence would be constructed using mostly native and natural materials. Metal posts may be necessary for strength.

Fence materials will be transported by motorized vehicles to the end of the authorized motorized route close to the Wilderness boundary. From the Wilderness boundary the materials will be moved by pack stock and trail workers to the fence construction location. Generally accepted wilderness construction methods would be used in the actual construction of the fence including use of hand tools.

In addition to the actions outlined above, the following mitigation measures will be implemented as directed by the Regional Forester:

- Fence inspections will be by non-motorized means at least once a year, preferably in the spring after snowmelt when horses might try to access McFarland Canyon.

- The fence will be repaired annually, or more frequently if needed, using hand tools and non-motorized access methods.

- Horse numbers, spring conditions, and other resources will be monitored to determine if wild horses are being kept out of the wilderness and if natural conditions are improving as a result.

- The fence could be removed in the future if monitoring determines it does not achieve its intended goal of excluding wild horses.

- Over the longer term, when management actions such as a Herd Management Plan result in an effective solution to wild horse populations and impacts, the fence will be removed.

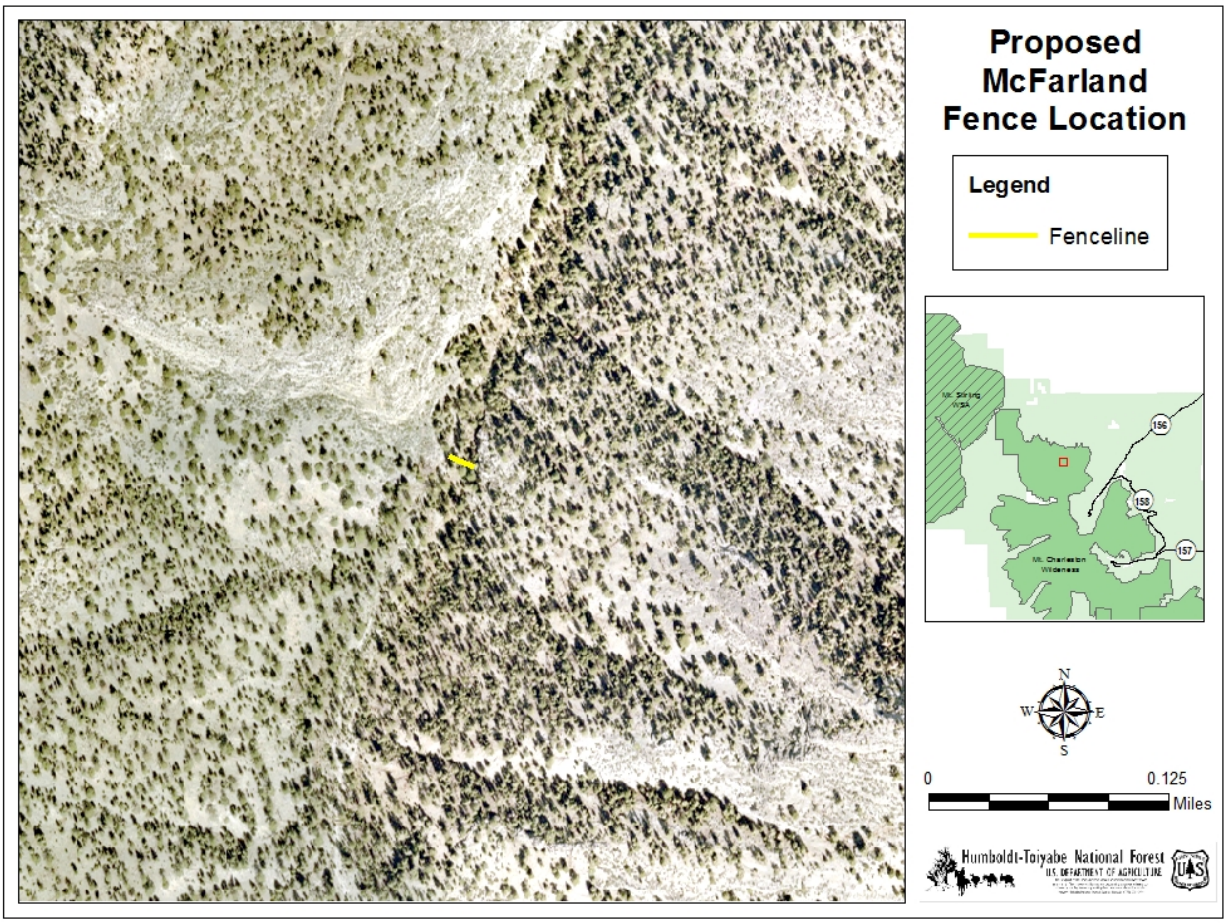
- Develop and implement appropriate interpretive messaging and outreach prior to, during, and after the project. This is an opportunity to explain to the broader public that wilderness is managed differently than other public lands, and that the Forest Service carefully considered impacts to wilderness character prior to authorizing the work and we need the public's help to ensure the fence is not vandalized and the gate is reliably closed.

Design Criteria

The Design Criteria are proactive measures incorporated into the Proposed Action to reduce or eliminate possible undesirable effects of the Proposed Action on forest resources. Design criteria for the proposed action include:

Botany	
Design Criteria	**Potential Impacts Addressed**
Education of Implementation Crews: 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 TES species are encountered.	Minimize accidental destruction of TES species and degradation of sensitive habitat
Wildlife	
Design Criteria	**Potential Impacts Addressed**
Fence Specifications: Post-and-rail design. The fence would be a wood post-and- rail design with three rails per panel. More than three rails may be necessary in some areas. Each fence panel is approximately 10 to 12 feet in width having posts spaced approximately 10 to 12 feet apart. The fence height would be between 40-46 inches. The fence will be approximately 120 feet total length from end to end and will butt up against the rock cliff faces. This fence would be constructed using mostly native and natural materials. Metal posts may be necessary for strength. The fence heights will vary with slope. The center rail is centered between the top and bottom rail as much as possible.	Minimize accidental injury to mammals and birds.
Invasive Species	
Design Criteria	**Potential Impacts Addressed**
Weed Prevention: 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. Any new infestations of noxious weeds discovered during implementation will be documented, locations marked on a map or GPS and avoided by crews. Prior to implementation, inspect potential	Minimize the introduction and spread of noxious and invasive species onto and throughout the project area and adjacent federal land.

camping and staging areas for noxious weed populations and take corrective actions should noxious weeds be present. Use only certified weed-free hay or cubes for pack stock; if a certified product is not available pelletized products can be used. Brush and clean the hooves of all pack and saddle animals before entering the National Forest. Encourage outfitters to feed the pack and saddle stock weed-free forage 64 hours before traveling in the National Forest. Avoid driving, walking, riding, and/or herding through noxious weed infestations. Clean vehicles and field equipment used in the weed-infested areas with special emphasis on the undercarriage, frame and front grill, prior to entering National Forest lands. When using native materials such as wood, rock, and gravel select source sites that are weed-free.	
Recreation	
Design Criteria	**Potential Impacts Addressed**
Fence design should provide access through the fence for recreational equestrians and their horses.	Address access to recreation horse riders into Mt. Charleston Wilderness.
Monitoring	
Design Criteria	**Potential Impacts Addressed**
Fence should be inspected at least annually to ensure that it is structurally sound and in good condition.	
Wild horse numbers, spring conditions, and other resources will be monitored.	Are wild horses are being kept out of the Wilderness and if natural conditions are improving as a result of the fence.


Proposed
McFarland
Fence Location
Legend
Fenceline
Mt. Charleston
Wilderness
156
158
157
N
W
E
S
0
0.125
Miles
Humboldt-Toiyabe National Forest
U.S. DEPARTMENT OF AGRICULTURE