

PURPOSE AND NEED
and
PROPOSED ACTION
for the

**Reauthorization and Management of Livestock Grazing
on the Cottonwood Sheep & Goat Allotment**

USDA Forest Service
Bridger-Teton National Forest
Greys River Ranger District
Lincoln County, Wyoming

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Background Information

This allotment approximately 37,200 acres of National Forest System lands and is located within the following townships: T32N - R117W; T32N – R118W; T31N -R116W; T31N - R117W; T31N – R118W; T30N – R 117W and T30N – R118W (see Figure 1).

Dominant vegetation types are Douglas fir, spruce and upland grass/forb. The allotment mostly within Desired Future Condition (DFC) Classes 4 (municipal water supply) and 10 (wildlife habitat with timber harvest, grazing & minerals development) with portions in classes 1B (wood-fiber production, livestock production, and on other commodity outputs), 2A (non-motorized recreation) and 2B (motorized recreation).

Purpose and Need

This proposal was initiated in response to Section 504 (a) of the 1995 Rescission Act (Public Law 104-19), which requires the Forest Service to establish and adhere to a schedule for completion of National Environmental Policy Act (NEPA) analysis and final decisions for all allotments.

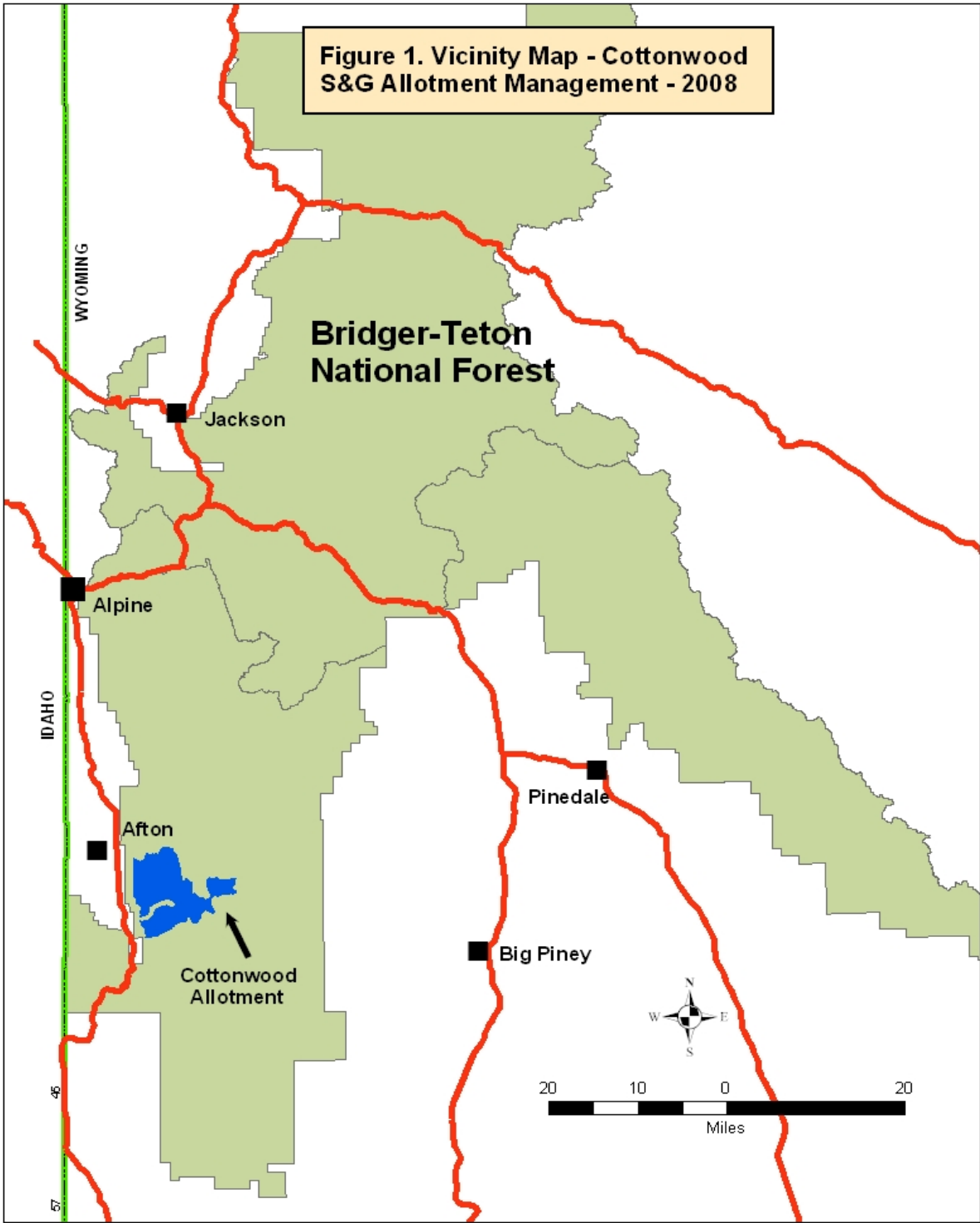
The purposes of and need for taking action are:

- To provide for the continuation of livestock grazing on the Cottonwood S&G allotment in support of the Multiple-Use Sustained Yield Act, federal regulation (36 CFR 222 Subpart A, 222.2 (c)), and direction provided in the BTNF Land and Resource Management Plan (Forest Plan): (1) Goal 1.1 — communities continue or gain greater prosperity; and (2) Objective 1.1(h) — provide forage for about 260,000 Animal Unit Months (AUMs) of livestock grazing annually. This is the primary purpose for reauthorizing livestock grazing on the allotment.
- To be in compliance with the 1995 Rescissions Act (Public Law 104-19).
- To update management direction in the allotment management plan (AMP) in a way that directs the livestock grazing program to be managed in a manner that allows resource conditions to remain at desired conditions or, where conditions are below desired conditions, allow resource conditions to reach or move toward desired conditions in a timely manner. The ultimate goal is to meet desired conditions defined by the Forest Plan, Forest Service Manual, and other direction.

The existing livestock grazing management program on this allotment has evolved over several decades to reduce impacts and better provide for the recovery of soil and vegetation. Currently permitted grazing within the area of the allotment has been reduced by approximately 90 percent since the 1920s and use of the livestock driveway that passed through the allotment has been substantially reduced. While grazing pressure by sheep (stocking rate) has declined substantially and although soil and herbaceous vegetation conditions have improved since the early 1900s, resource conditions are still 'at risk' or in unsatisfactory condition in many areas (including tall forb, dry forb, grassland, and big sagebrush vegetation types). These deteriorated conditions, particularly when located in headwater areas, continue to have effects throughout watersheds. Greatly extended fire-return intervals, for which livestock grazing and

management has played a small role, also affects the mix of age classes of several of the vegetation types and overall watershed health.

Figure 1. Vicinity Map - Cottonwood S&G Allotment Management - 2008



Desired Conditions

Desired conditions will be summarized in the AMP to make a clear link between allowable use guidelines, standards and the desired conditions they are meant to support. Desired conditions have been defined for riparian areas, rangelands, and forestlands in the allotments as targets to provide for healthy, properly-functioning conditions and to provide sufficient wildlife forage and cover.

The following desired conditions, derived from the Bridger-Teton Land Management Plan direction along with guidance provided in the Greys River Landscape Scale Assessment and Forest Service Handbook and scientific information, are proposed for inclusion into the AMP. Livestock grazing and management can influence the extent to which the desired conditions are achieved. However, livestock grazing and management are not the only factors that influence their achievement. Ecological conditions and succession (e.g., high sagebrush canopy cover) may also limit recovery of some plant communities more than the current effects of livestock grazing. Desired conditions for resources within the allotments are as follows:

- Soils are in satisfactory condition, including suitable levels of organic matter at the soil surface, according to site potential.
- Streambanks are generally in stable condition, with no more than isolated cases of reduced stability due to livestock effects (e.g., the total length of streambanks in stable condition is within 90% of what would occur in the absence of livestock, and streambank vegetation would be within 80% of what would occur in the absence of livestock).
- Riparian areas and wet meadows are characterized by $\geq 90\%$ ground cover, plant communities are dominated by native species representative of site potential, distribution and canopy cover of willow are at or near site potential, and the height and density of herbaceous vegetation is within the natural range of variability in a large portion of riparian acreage.
- Mountain big sagebrush type and mountain shrubland vegetation types are characterized by $\geq 70\%$ ground cover, head-cuts are absent, plant communities are dominated by native species representative of site potential, the height and density of herbaceous vegetation is within the natural range of variability in a large portion of the shrubland acreage, and age classes (seral stages) are within the natural range of variability.
- Aspen stands are characterized by $\geq 90\%$ ground cover, plant communities are dominated by native species representative of site potential, the height and density of herbaceous vegetation is within the natural range of variability in a large portion of aspen acreage, a sufficient number of aspen suckers survive to replace aspen overstory, and age classes (seral stages) are within the natural range of variability.
- Conifer forestlands are characterized by age classes (seral stages) that are within the natural range of variability.

- Noxious weeds comprise no more than a minor component of any given plant community.

It is recognized that, while livestock grazing and management has a large influence on the health and functionality of some vegetation types (e.g., tall forb, dry forb, big sagebrush), it only has limited influence on other types (e.g., age classes in conifer forestlands). In many cases, achieving desired conditions depends on managing livestock and livestock grazing in ways that (1) reduce the interference they would otherwise have on the desirable ecological processes and (2) minimize limitations on vegetation treatments to restore or sustain desired conditions.

Current Management

Basic information characterizing current management on the Cottonwood S&G allotment is summarized in the following table:

Allotment	Permitted Number of Livestock	Permitted Season of Use	Permitted Number of Days	Permitted AUMs
Cottonwood	120ewes &lams	7/11 - 9/15	67	796

Under current management, the allotment is grazed each season and managed for “once-over” or light grazing. Currently, two areas along the grazing route are passed through twice each summer. A large portion of the allotment is not being grazed due to limited access.

BEST MANAGEMENT PRACTICES

The following best management practices are included in recent AOI’s.

- Livestock are not allowed to enter the allotment or portion of the allotment until the soils are dry enough to prevent damage and key plant species are ready to withstand grazing (range readiness).
- Each year, actual use dates are dependent on forage utilization and resource conditions. The permittee is responsible for remaining aware of forage use levels relative to allowable use standards. If the allowable use is reached on key areas prior to the scheduled off-date, permittees are expected to remove their livestock from the allotment earlier than scheduled. If actual use on the key areas is less than the allowable use standards by the scheduled off-date, permittees may request approval to remain on the allotment for an additional period of time.
- Permittees shall move livestock as often as necessary in order to protect meadows, sensitive or fragile areas. It is important to note that reaching the allowable use or other resource condition standards will result in early livestock removal from an allotment.
- Permittees are responsible to provide sufficient herding to ensure that all livestock remain within the allotment boundaries.

- Salt can be used to improve distribution of livestock into areas of light use and to lessen grazing impacts to key areas. In no case can salt be placed outside of the allotment boundaries. All salt is to be placed away from key areas and available water (e.g., no closer than ¼-mile of streams and wetlands).
- Three bands of sheep are currently authorized to travel through the Sheep Pass area. Trailing of sheep through this area would continue under strict limits with designated routes, timing and duration of use.

Proposed Action

The proposed action has two main components. The first is to reauthorize livestock grazing on the Cottonwood S&G allotment, in support of Goal 1.1 and Objective 1.1(h) of the Forest Plan, through the issuance of a 10-year term permit containing the parameters under which livestock grazing would be implemented.

The second component is to implement a revised AMP that directs livestock grazing and management to be carried out in a way that allows resource conditions to remain at desired conditions or, where conditions are below desired conditions, allow resource conditions to move steadily toward desired conditions. Authorizing and implementing livestock grazing is based on managing the effects of grazing on associated resources, not solely on managing forage production. While continuing to contribute to Goal 1.1 and Objective 1.1(h) to the greatest extent possible, the Greys River Ranger District in general proposes to:

1. Retain elements of the current livestock grazing management that are allowing watershed, rangeland, and wildlife habitat conditions to be sustained at desired conditions — where they are at desired conditions; and
2. Make adjustments to current livestock grazing management, as necessary, to promote a sustained upward trend in watershed, rangeland, and wildlife habitat conditions — where existing conditions do not meet desired conditions — in order to restore resources to desired conditions.

Details on the second component are outlined below as best management practices, allowable-use standards, allotment configuration adjustments, structural improvements, and livestock numbers, season of use, and the grazing system. The best management practices, allowable-use standards, and other livestock grazing and management practices described in the following sub-sections were designed to allow desired conditions to be restored and sustained.

BEST MANAGEMENT PRACTICES

- The Cottonwood allotment would be managed under a rest-rotation grazing system with approximately one-half of the allotment being rested each year by alternating grazing routes through the allotment.

- The creation of additional grazing routes would allow for once-over grazing to occur throughout the majority of the allotment. Trailing of three bands of sheep through the Sheep Pass area would continue with strict limits with designated routes, timing and duration of use.
- Livestock are moved through the allotment based on allowable use standards designed to ensure that the remaining herbaceous plant material is sufficient to provide for plant vigor, litter, soil protection, sediment trapping (in riparian zones), wildlife forage (e.g., leaves, seedheads, flowers), wildlife cover (e.g., for nesting and hiding) and fine fuel for fire spread when needed.
- Entry onto an allotment or portion of an allotment is at a time when key plant species have sufficient growth and development to adequately provide for their vigor.
- Entry onto an allotment or portion of an allotment is at a time when soils are dry enough to prevent damage from concentrated hoof action.
- Livestock would be loosely herded to minimize trampling and soil compaction.
- Once-over light grazing would be practiced. No area would be grazed twice during the same season.
- Bed and/or shade sheep at different locations each day in areas away from streams and wetlands and place salt inside containers to prevent salt leaching into the soil, and place salt no closer than ¼-mile to the nearest water.
- Part 3 Special Terms and Conditions of the Term Grazing Permit allows for Interdisciplinary Teams to recommend certain standards as part of the Forest Plan.
- Occasional adjustments may be needed to accommodate prescribed burning and mechanical vegetation treatments in order to restore proper functioning conditions and age mixes in several vegetation types. Permittees would be notified up to one year prior to implementation of any treatment.

ALLOWABLE-USE STANDARDS

Sheep grazing management (herding) would be guided by functional condition of vegetation and soils. Table 2 displays the grazing practices necessary to allow for recovery and maintenance of desired conditions. Monitoring vegetation and soil conditions throughout the allotment is a key component of meeting desired conditions.

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Table 2. Sheep grazing practices to allow recovery toward desired conditions.	
Soil and Vegetation Conditions	Sheep Grazing Practices
Functioning	A. Areas where soil and vegetative conditions are at or above desired condition may be lightly grazed once during a season and, where appropriate, bedding, salting and shading may occur.
Functioning at Risk	B. Areas where soil or vegetation conditions are below expected potential and trend is upward, may be lightly

	<p>grazed once during a season and, where appropriate, bedding, salting and shading may occur.</p> <p>C. Areas where soil or vegetation conditions are below expected potential and trend does not appear to be upward, must be periodically assessed. One-time light grazing, bedding, salting or shading may be authorized.</p>
Non-functioning	D. These areas may be used for crossing but grazing, bedding and salting are prohibited.

Notes:

Functionality determinations for ground cover are based on direction given in R4 amendment to FSH 2209.21_22.1 Upland Rangeland Health Criteria and are as follows for each plant community type: Upland Forb = 80%, Mountain Big Sage = 70%, Dry Forb = 70%, Tall Forb = 80% and Silver Sagebrush = 80%. Functioning at Risk for ground cover for all community types is ground cover at least 60% but less than that specified for Functioning condition. Any site with less than 60% basal ground cover is considered to be Non-Functioning. Ground cover is a percent measure of litter, basal vegetation, moss and rocks greater than ¼ inch diameter.

Functionality for plant species composition is at least 80% desirable species and no undesirable or noxious weed species. A site is considered to be Functioning at Risk when less than 80% desirable species or any undesirable plant species are present. Non-Functioning ratings for plant species is given for any site that contains noxious weeds. The presence of Canada thistle (*Cirsium ravenis*), was not considered to be an automatic justification for a site as “non-functioning”. Other, more aggressive weed species would meet this justification. Areas dominated by *Wyethia (Wyethia amplexicaulis)* and/or Western coneflower (*Rudbeckia occidentalis*) may be considered Non-Functioning due to species composition; however, observations indicate that these areas usually have less than 60% basal ground cover and would be given a Non-Functioning rating on that basis alone.

The term “light grazing” is used to describe herding practices where sheep are allowed to graze through any given area at their own pace and are not allowed to graze in the same area again during the same season. The intent of this practice is to prevent heavy initial grazing and grazing of regrowth that occurs during the season.

Allowable use standards may be adjusted, as needed, to better allow desired conditions to be met.

ALLOTMENT CONFIGURATION

The area in the south-west corner of the Cottonwood allotment (area between Wagner and Cedar Creeks) is currently not grazed due to limited access from other areas of the allotment. The Proposed Action would move the allotment boundary in this area to the north and allow sheep from the North Salt allotment to graze in this area. This would reduce grazing pressure (stocking rate) on other parts of the North Salt allotment and would not affect management opportunities on the remainder of the Cottonwood allotment.

The Proposed Action would also analyze the potential of access routes to Spring Creek basin and Red Top Creek. These areas are currently permitted for grazing but acceptable routes are needed to access these areas.

STRUCTURAL IMPROVEMENTS

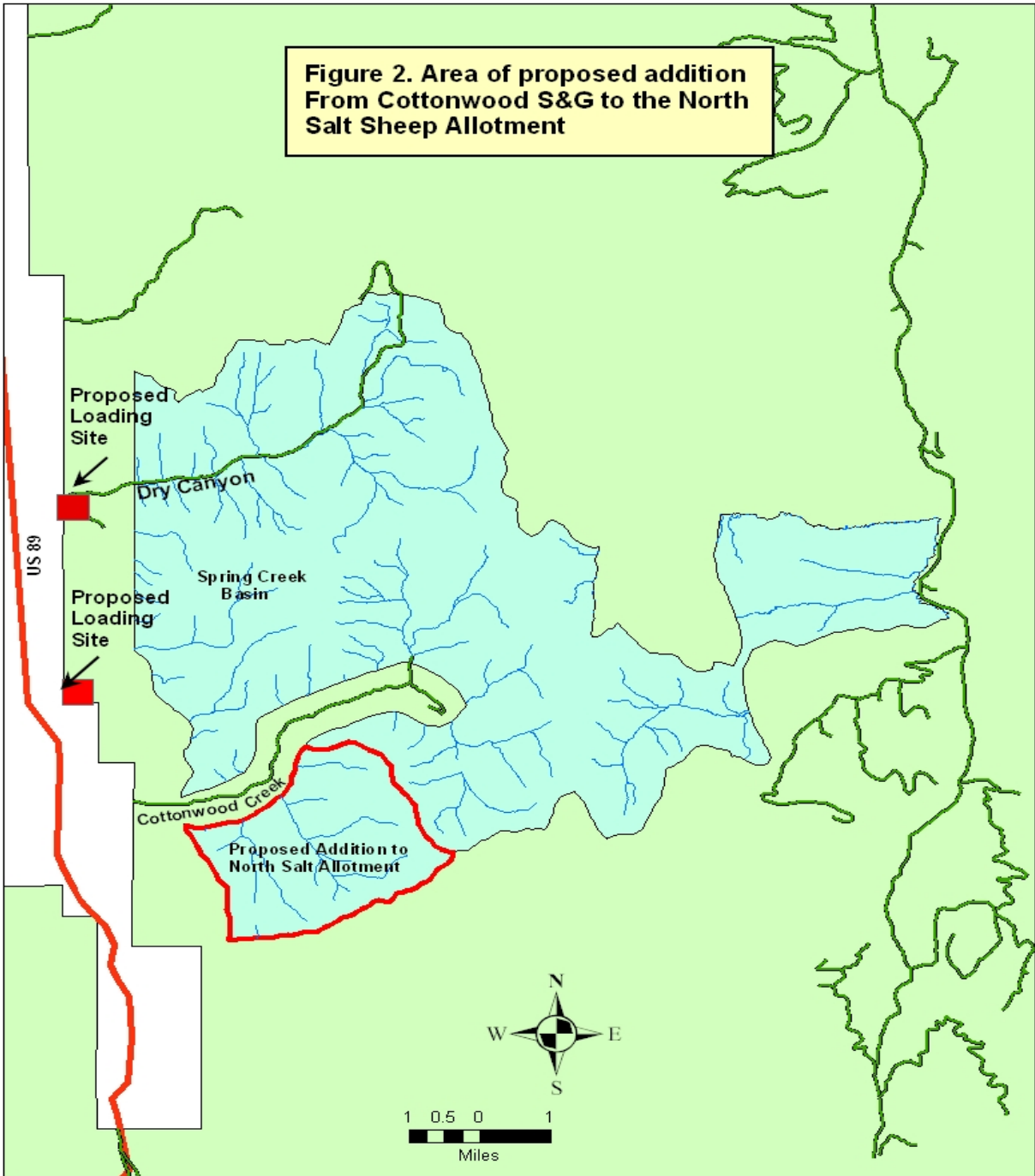
Two new sheep unloading sites are proposed for this allotment. The analysis will include the construction of loading sites in the mouth of Dry Canyon Creek (east of Smoot) and in Wickiup Canyon (east of Osmond). These unloading sites would be constructed on the existing roadway in Wickiup Canyon and at the Dry Canyon Creek gravel pit. These areas would consist of a level, all-weather gravel surface of sufficient size to park and

turn six semi tractor trailers. The proposed locations are shown in Figure 2. The proposed loading sites would be maintained by the Forest Service.

LIVESTOCK NUMBERS AND SEASON OF USE

The number of livestock permitted on allotment would remain at 1200 head of ewes and lambs. The permitted season would be extended by ten days with a permitted season of 7/6 through 9/20. This would allow the permittee to better coordinate a schedule for trucking his sheep to and from the allotment. The proposed loading sites would be maintained by the Forest Service.

**Figure 2. Area of proposed addition
From Cottonwood S&G to the North
Salt Sheep Allotment**



MONITORING

The following items would continue to be monitored:

- Once-over light grazing, bedding grounds, salting methods and locations (implementation monitoring)
- Trend studies of ground cover and species composition (effectiveness monitoring)
- Streambank stability and riparian community cross-sections (effectiveness monitoring)
- Cultural resources (effectiveness monitoring)

Implementation monitoring would be conducted more frequently than effectiveness monitoring. Management practices may be further adapted, based on monitoring results relative to desired conditions, as needed to move toward achievement of Forest Plan goals, objectives, and standards. This includes any mitigation measures that may be needed as a consequence of changed conditions and as governed by applicable laws.

The Forest Service would monitor at the end of each livestock grazing season to determine whether allowable use standards were met in each allotment.

Effectiveness monitoring would also be carried out at regular time intervals to track progress toward meeting Forest Plan objectives and desired conditions. Results of effectiveness monitoring over the long term would be used to adjust allowable-use standards as needed to meet Forest Plan objectives and desired conditions.

RESTORATION ACTIVITIES, INCLUDING VEGETATION TREATMENTS

Given the provisions of the proposed action (e.g., best management practices, allowable use standards), no additional restoration activities, with respect to effects of livestock grazing and management on riparian and rangeland functionality and wildlife habitat suitability, would be needed. From the standpoint of livestock grazing and management, it is anticipated that no additional restoration activities — beyond what is already built into the proposed action — would be needed to address wildlife habitat suitability issues affected by livestock grazing.

There also is a need to restore ecological conditions that are not directly limited by current livestock grazing, but that currently limit rangeland productivity, a balanced mix of vegetation age classes, and recovery of aspen communities. This primarily involves a need for converting late seral communities (i.e., old age classes) to early seral communities through fire, mechanical treatment, or other vegetation treatments (see Best Management Practices). While the EA will not analyze the effects of specific projects, the EA and forthcoming AMP will identify the need and may identify future vegetation treatment projects. Environmental analysis of these projects would need to be completed prior to their implementation. Again, while this would benefit livestock production and ecological conditions, this is separate and distinct from livestock grazing management, which is the topic of AMPs.

Preliminary Assessment of Effects of Proposed Action (Summary)

We anticipate that the proposed action would have the following environmental effects related to the need for action and relative to the effects of current management:

- The proposal to add additional unloading sites would facilitate the grazing of 5,400 acres of the Spring Creek drainage that are not currently being utilized.
- Creating additional access to the area south of Gomm Hollow and in Slide Canyon would provide an additional 3,200 acres of forage that is currently unused.
- Discontinuing the practice of trailing sheep twice through the head of Timber and Trail Fork Canyons would reduce grazing pressure and trampling and provide for improvement in vegetative composition, vigor and cover.
- Recognizing, in AMPs, that adjustments in livestock grazing management will occasionally need to be made — to accommodate prescribed burning, wildland fire use, and possibly other vegetation treatments — would, along with pre- and post-rest as necessary, be conducive to restoring a healthy mix of age classes in sagebrush, mountain shrubland, and forest vegetation types.