

## 3.5 RANGE

### Existing Conditions

There are four range allotments within the analysis area, two cattle and two sheep. North Randolph and South Randolph formerly the Randolph Allotment are cattle allotments and Crawford-Frazier and Bug Lake are sheep allotments. A fifth allotment, Red-Wells/Rock Cr. sheep, is adjacent to the Big Creek Area, but lies further west and is just outside of the analysis area. All four allotments in the analysis area are managed under a deferred rotation grazing system. The range analysis on these allotments was done in the 1960's; a review of that data indicated that the current stocking rates are within the tentative grazing capacities or are reasonably close to it. The tentative capacities were based on 40% use of key species.

The condition ratings used in the 1960's range analysis generally indicated conditions of fair and poor or mid and low seral ecological status respectively, on these allotments. (See Table 3.5.1).

**Table 3.5.1. Condition ratings.**

Allotment	HM Permitted	REA Tentative Capacity	Suitable Acres	Ecological Status Acres
North and South Randolph	963 (North) 571 (South) total = 1,534	1,873	10,579	High Status- 467 Mid Status- 4,473 Low Status- 4,497
Crawford-Frazier 580 sheep FS; 677 sheep Pvt. 7/16- 8/31 & 9/16-9/30	2,602	2,524	6,633	High Status-550 Mid Status-1,521 Low Status-4,562
Bug Lake*	4,290*	3,258*	640*	High Status-263 Mid Status-2,598 Low Status-1,654

\*Grazed by one herd of 1,100 sheep, on the allotment for 4,290 total Sheep Months of which only 640 acres of the allotment are in the Big Creek analysis area. Therefore, the grazing impact to that portion is minimal.  
HM = Head Months; REA = Range Environmental Assessment.

Additional studies have been done since the 1960's on the allotments, which indicate they are meeting or moving toward Revised Forest Plan standards on North and South Randolph. In 1989 what was then known as the Randolph cattle allotment was divided into the North Randolph and South Randolph allotments. More extensive and intensive studies and analysis (Environmental Assessment) were done in conjunction with dividing the one big allotment into two smaller separate allotments.

**The North Randolph Allotment** uses a three pasture grazing system. The U. S. Department of Agricultural, Forest Service (USFS); U.S. Department of Interior, Bureau of Land Management (BLM); and the grazing permittees of the North Randolph cattle allotment (USFS) and New Canyon cattle allotment (BLM) use a cooperative management agreement and Memorandum of Understanding in areas where both the Forest Service and BLM lands make up the total grazing unit.

Two pastures, the lower and middle pastures, are on BLM land. Cattle start the grazing season on the BLM, move to the upper pasture, on Forest Service administered land mid-season, and then return to the BLM units to finish the grazing season. This system of grazing has helped improve range conditions on all lands in the grazing unit from what the 1960's range analysis indicated. The permitted season of grazing on the Forest unit is 6/21 to 9/05 with an actual on date of 8/05 to 9/05 on an on/off provision of the grazing permit. Eight permittees graze approximately 419 head of livestock.

The number of livestock varies from year to year depending on the individual operations of the permittee for that year, or range conditions such as drought or wild or prescribed fire which require less numbers of

livestock and in some cases total rest for a minimum of two to three years, depending on the establishment or recovery of the vegetation following treatment or incident.

**The South Randolph Allotment** is grazed with a deferred-rotation grazing system on Forest Service administered land and has approximately 1,200 acres of unfenced private land within the allotment boundaries under private land grazing permits. Range analysis studies in the 1960's indicated this allotment was mostly in fair and poor condition or mid to low seral ecological status. The High Country pasture, which makes up the higher elevation, west side of the allotment, is currently closed to grazing. Recent studies have indicated this unit still has a need to be rested to improve ground cover. (See Alma Winward's study).

This allotment shows movement toward Forest Standards but is not moving as rapidly as the North Randolph allotment. Cattle graze only in the lower elevations on the east side of the allotment and rotate through the allotment using a three pasture grazing system. The permitted grazing season for this allotment is 6/21 to 8/31. Six permittees graze approximately 204 head of livestock.

As with the other allotments, the number of livestock varies from year to year depending on the individual operations of the permittee for that year, or range conditions such as drought or wild or prescribed fire which require less numbers of livestock and in some cases total rest for a minimum of two to three years, depending on the establishment or recovery of the vegetation following treatment either natural or prescribed. Some recent studies (S. Goodrich, Ashley National Forest and R. Campbell, Fishlake National Forest as well as others) suggest some areas of vegetative treatment are able to recover without any protection from livestock grazing or adjustments in livestock grazing systems/patterns. These studies would be considered with the treatment proposed by the Big Creek project.

**Crawford-Frazier Allotment** – In the late 1960's the separate Crawford and Frazier sheep allotments were combined to form the Crawford-Frazier sheep allotment to make a more manageable sheep grazing unit. State and private land make up a little more than ½ of the land area within the allotment boundaries. For the most part these State and private lands are unfenced. Private Land Grazing permits are issued to manage the private lands within the grazing unit. Range conditions in the 1960's studies on Crawford-Frazier indicated the allotment was mostly in poor condition or low seral status.

The allotment at this time is slowly moving toward the Revised Forest Plan Standards. The permitted grazing season for this allotment is 7/16 to 8/31 and 9/16 to 9/30. Two permittees are permitted to graze 580 sheep on the Forest Service portion and 677 head on private and State lands. Ewes and lambs graze for the first season interval then the herd is pulled off the allotment, the lambs are sold and the ewes are placed back on the allotment for two weeks. The grazing system is a deferred-rotation system which alternates the entry location each year and the sheep move through the allotment once over light grazing one year then reverse the movement of the sheep the next year.

**The Bug Lake Sheep Allotment** currently has one permittee with 1,100 head of sheep permitted to graze from 6/6 to 9/30 of which only 74% would be on National Forest System lands at any one time under what is called an "on/off" portion of the grazing permit. Only 600 acres of this allotment are in the project area and most years the sheep don't get to those areas to graze. This portion of the allotment is in fair condition or mid seral ecological status and is moving toward Revised Forest Plan standards.

## **Environmental Consequences**

### **a. Alternative 1 – Proposed Action**

#### **1. Direct and Indirect Effects**

Long-term benefits for livestock grazing would occur following the proposed treatments, as available forage would increase, and Revised Forest Plan standards and guidelines would be met later in the grazing season. More forage available for livestock would make grazing more flexible and would allow the cattle to disperse throughout the allotments better.

Revised Forest Plan Guideline (G73) states, “Delay livestock use in post-fire and post-harvest created forest openings until successful regeneration of the shrub and tree components occurs (aspen trees reach an average height of 6 feet)” (USDA Forest Service 2003, p. 4-52). Short-term, negative economic effects to the permittee may be realized in some treated areas, as they may have to be rested from livestock grazing following treatment to allow for the re-establishment of the vegetation.

During field inspection of the project area in the summer of 2006, forest specialists made observations in an adjacent area on the Randolph/Woodruff side of the project area. In the 1990s, a fire burned towards Randolph, Utah on BLM lands. Notice was given that aspen and sagebrush regeneration were doing well in the area following past treatment, fire, and no rest from domestic or wildlife grazing.

Some range studies (S. Goodrich, R. Campbell) indicate that some re-vegetated areas don't need active protective structures such as fences to keep the cattle out or off the treated areas. Aspen tend to regenerate well in some areas without protecting them from grazing. Dale Bartos, aspen specialist, states that the critical time for protection is after the first frost and early in the spring. In some cases, with short grazing seasons like South Randolph cattle allotment with a season of June 21<sup>st</sup> to August 31<sup>st</sup> the cattle would be off the allotment before the critical time for the recovering plants and protection (specifically in the fall) would not be necessary.

If areas of aspen are isolated patches and are treated, they may attract livestock at unusual numbers as they may seek shade during the recovery period or water if they are used to going to those areas.

If it is determined, based on interdisciplinary input that the treated areas would have to be rested or deferred, adjustments to the grazing systems would be needed and could include resting or deferring pastures and adjustments in the timing and duration of grazing for the season. Construction of minimal amounts of fencing (specifically electric fence), may be needed, but only as a last resort to control livestock, where monitoring indicates that livestock are (or are likely to be) impacting vegetative recovery. Location of treatment areas each year is critical for livestock. Care should be taken not to plan on treating too much of the allotment at one time forcing the permittees to stay off the entire allotment. Some portions of the allotments could be grazed while others would be rested or deferred. Care should also be taken to not treat too close to established livestock watering ponds or troughs or expect to not allow some use on portions of the allotments for recovery of the treated areas.

Treatment areas should be scheduled for treatment in conjunction with the livestock operations on the grazing allotments. In areas where prescribed fire isn't occurring, livestock can be used to reduce fine fuels if needed.

Range structures such as fences and water developments would be protected during the prescribed burns.

## **b. Alternative 2 – No Action**

### **1. Direct and Indirect Effects**

Long-term benefits of having more available forage for livestock in the treated areas would not be realized. Revised Forest Plan standards and guidelines for forage utilization may be reached sooner each year with less forage and livestock may have to leave the forest sooner, especially during drought years.

Long-term economic benefits to the permittees, from having more available forage on the grazing allotments would not be realized.

Short-term, negative benefits of having to reduce the stocking and/or alter grazing management plans would not occur without treatment.

Range developments would not be at risk from treatment damage.

### **c. Alternative 3 – Reduced Treatment and Wildlife Emphasis**

#### **1. Direct and Indirect Effects**

Environmental consequences for this alternative as it relates to grazing and livestock will be much the same as Alternative 1. Long-term benefits for livestock grazing would be realized following the proposed treatments as available forage would increase, and Revised Forest Plan standards and guidelines would be met later in the grazing season. More forage available for livestock would make grazing more flexible, improve the rangelands, and would allow the cattle to disperse throughout the allotments better. With reduced treatment the forage available for livestock would also be reduced.

Revised Forest Plan Guideline (G73) states, “Delay livestock use in post-fire and post-harvest created forest openings until successful regeneration of the shrub and tree components occurs (aspen trees reach an average height of 6 feet)” (USDA Forest Service 2003, 4-52). Short-term, negative economic effects to the permittee may be realized in some treated areas, as they may have to be rested from livestock grazing following treatment to allow for the re-establishment of the vegetation.

Some range studies (S. Goodrich, R. Campbell) indicate that some re-vegetated areas don’t need active protective structures such as fences to keep the cattle out or off the treated areas. Aspen tend to regenerate well in some areas without protecting them from grazing. Dale Bartos, aspen specialist, states that the critical time for protection is after the first frost. In some cases, with short grazing seasons like South Randolph cattle allotment with a season of June 21<sup>st</sup> to August 31<sup>st</sup> the cattle would be off the allotment before the critical time for the recovering plants and protection (specifically in the fall) would not be necessary.

If areas of aspen are isolated patches and are treated, they may attract livestock at unusual numbers as they may seek shade during the recovery period or water if they are used to going to those areas to water.

If it is determined, based on interdisciplinary input that the treated areas would have to be rested or deferred, adjustments to the grazing systems would be needed and could include resting or deferring pastures and adjustments in the timing and duration of grazing for the season. Construction of minimal amounts of fencing (specifically electric fence), may be needed, but only as a last resort to control livestock, where monitoring indicates that livestock are (or are likely to be) impacting vegetative recovery. Location of treatment areas each year, are critical for livestock. Care should be taken not to plan on treating too much of the allotment at one time forcing the permittees to stay off the entire allotment. Some portions of the allotments could be grazed while others would be rested or deferred. Care should also be taken to not treat too close to established livestock watering ponds or troughs or expect to not allow some use on portions of the allotments during recovery of the treated areas.

Treatment areas should be scheduled for treatment in conjunction with the livestock operations on the grazing allotments. In areas where prescribed fire isn’t occurring, livestock can be used to reduce fine fuels if needed.

Range structures such as fences and water developments would be protected during the prescribed burns. However, in Alternative 3, the protection required would be reduced proportionately to the reduced treatment areas.

#### **d. Cumulative Effects**

The North Randolph, South Randolph, Crawford-Frazier, and the Bug Lake Sheep Allotments extend beyond the Big Creek project area (see Appendix A, Map 10). There are some reasonably foreseeable prescribed burns proposed outside of the Big Creek watershed in adjacent watersheds (see Table 3.1.1). It is possible that some of these reasonably foreseeable prescribed fire activities in combination with proposed activities, and drought or wildfire will impact permittees in the amount of time required for resting the allotments prior to and following treatment. In order to minimize cumulative effects, during implementation treatment areas should be scheduled for treatment in conjunction with the livestock operations on the grazing allotments.

## **PRIVATE LAND INHOLDINGS**

### **Affected Environment**

Approximately 3,100 acres of private land is intermingled within the project area and is largely owned by Randolph Land & Livestock Co. There are a few parcels that belong to separate individuals. The close proximity of the private land with the project treatment areas presents an opportunity to develop partnerships with these landowners for fire management activities as well as the other methods of treatment. If agreements cannot be developed no treatments will be applied to private lands and measures will be taken prior to any treatment to ensure these lands are not affected. For example where fire treatments are prescribed, care will be taken to prepare the borders of the burn units by disking or harrowing or both to prevent any spread of fire onto private land. The effects to private lands are described below only in general terms since there are no formal or actual proposals with site specific acres. Because potential actions on private lands are not at a stage that the effects can be meaningfully evaluated with great specificity, the extent of their disclosure is limited.

### **Environmental Consequences**

#### **a. Alternative 1 – Proposed Action**

If agreements can be reached, treatments will benefit the private lands by increasing vegetative diversity and reducing brushy fuels. A greater biodiversity will produce a healthier ecosystem.

#### **b. Alternative 2 – No Action**

Without any treatment, ground fuels will continue to increase, diversity in the vegetation community will decrease and the risk of wildfire to private lands will increase.

#### **c. Alternative 3 – Reduced Treatment and Wildlife Emphasis**

This alternative would be the same as Alternative 1, with slightly fewer or less effects because less area would be treated. If agreements can be reached, treatments will benefit the private lands by increasing vegetative diversity and reducing brushy fuels. A greater biodiversity will produce a healthier ecosystem. Wildlife benefits will be greater with an emphasis on wildlife and increase in vegetative diversity. Private land owners would benefit from potential increase in wildlife through increased hunting or viewing opportunities.