



Sage Hen Integrated Restoration Project: Range Effects Analysis

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For: Emmett Ranger District, Boise National Forest

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1. Issues Addressed

This section includes issues pertaining to Range that have been identified for detailed analysis. “An issue is a statement of cause and effect linking environmental effects to actions” (FSH 1909.15). No Range issues have been identified for detailed analysis.

Issue 1: Grazing will spread weeds and result in resource damage.

Issue 2: location of and potential impacts to grazing allotments.

Changes to livestock grazing are done through grazing permits and annual operating instructions. Therefore no issues will not be analyzed in detail as no changes to livestock grazing are proposed in this project.

2. Methodology

The analysis area for evaluating rangeland resources is consistent with the Sage Hen project area and this report provides basic rangeland resource information within the project area. Discussion regarding the project area discusses the grazing allotments and their respective pastures for the purpose of addressing grazing permit administrative impacts or impacts to permittees.

Range vegetation monitoring has been conducted within the grazing allotments located within the project area. Range administration is conducted yearly by both the Forest Service and permittees to meet terms and conditions of the grazing permit.

2.1. Information Sources

Multiple sources were used for the basis of effects and factors being analyzed. Boise National Forest Rangeland Management, Grazing and Livestock Use Permit System file documents, and GIS data were analyzed to discuss past actions such as livestock grazing, past harvest, road activities, fire activities, and recreation activities. Desired conditions were determined from the Forest Plan. Primary factors analyzed were the current permitted livestock in the project area; response of forage availability and production following timber harvest and thinning; response of forage to prescribed burning; the effects of timber harvest on range improvements; and the effects of accessibility on range improvement maintenance.

2.2. Desired Condition

A sustainable level of forage, consistent with other resource management direction, is available for use through the Forest Service grazing permit system. Rangeland forage quality is maintained or improved in areas where vegetation management projects and range management actions occur. Riparian areas continue to be a focal point for providing vegetative diversity, landscape capability, soil productivity, wildlife habitat, proper stream channel function and water quality important to sustaining beneficial uses. Riparian areas are functioning properly and/or have improving trends in vegetative composition, age class

structure and vigor. Upland range vegetation is contributing to proper hydraulic function. The composition and densities of shrubs, grasses and forbs are variable and dynamic across the landscape (USDA Forest Service 2010a, page III-46)

2.3. Resource Indicators and Measures

Table 1. Resource condition indicators and measures for assessing effects

Issue	Indicator or Measure	Source
Potential damage to Range improvements and Resources.	All range improvements must be functioning before livestock turn out into pasture.	Boise National Forest Land and Resource Management Plan

Affected Environment

The temporal boundaries for analyzing the direct and indirect effect are during project implementation and no more than 10 years after implementation because the effects to the range resource is short term with limited long term positive effects. The spatial boundaries for analyzing the direct and indirect effects to the range resource are the project boundary, because effect to the range resource does not exist outside of the project area.

Past, Present, and Foreseeable Activities Relevant to Cumulative Effects Analysis

Past actions in the project area include past harvest, livestock grazing, past road activities, wild and prescribed fires, historic fire suppression, and recreation activities. Foreseeable future actions include continued livestock grazing at varying levels, noxious weed control, prescribed fire, analysis and revision of allotment management plans, and an increase in use by the general public.

The Sage Hen project is located within portions of three livestock grazing allotments on the Boise National Forest. All grazing allotments (Ola C, Payette, and Tripod) are administered by the Emmett Ranger District in Emmett, Idaho.

Livestock grazing in these allotments is currently permitted by six Term Grazing Permits (see table 2 below). The allotments are usually grazed between June 1 and October 15 under annual authorizations, depending on climatic conditions and the attainment of forage use objectives.

Table 2. Term grazing permits within the Sage Hen project area, by allotment

Allotment	Permittee	Permitted Season	Acres in Project Area	Percentage of Project Area
Ola C	JR Simplot Company	6/16 – 10/15	36,270	54
	Tom and Drew Blessinger			
	Vaughn Spiker			
	Mike and Robin Rood			
Payette	JR Simplot Company	6/16 – 10/5	23,571	34
	Silver Sage			
Tripod	Warner Trenton	6/16 – 9/30	7,947	12

The majority of the rangeland that is affected by the project consists of dry plant associations of mixed conifer and bunch grasses. Forage consists of cool-season grasses such as Idaho fescue and bluebunch wheatgrass. Elk sedge and pine grass are abundantly present in upland habitats where Douglas-fir and ponderosa pine are present. The majority of the desirable livestock forage is in the form of a variety of hydric sedges in riparian zones, especially in the later summer season when adjacent upland forage is dry. Desirable riparian dependent species are increasing as livestock management is focused toward reducing utilization of greenline vegetation such as carex species and willows. Major riparian areas include Squaw, Second Fork Squaw, Third Fork Squaw, Sage Hen, Renwyck, Joes, Kimball, and Pole creeks. There are also numerous smaller streams that do not have water year round but still provide areas of high quality forage.

There are 21 miles of permanent livestock control fences, approximately 17 spring developments with troughs, and an earthen pit tank have been previously mapped within the project boundary. However, some of these developments(?) are likely abandoned and no longer functional.

3. Environmental Consequences

3.1. Environmental Consequences of No Action

This section discloses the environmental impacts of no action.

Direct and Indirect Effects of No Action

There are no activities planned in the no action alternative, therefore there will be no direct effects to range resources as a result. Livestock grazing will continue as authorized in the allotments in the project area. Range improvements would not be damaged as a result of activities associated with timber harvest, thinning activities or prescribed fire. Without new vectors for weeds from timber harvest, thinning and prescribed burning livestock would continue to spread weeds at the current rate from existing populations. Livestock movement around the allotment during the grazing season would not be additionally impacted by harvest or thinning activities. No roads would be closed or decommissioned, therefore there would be no impact to permittees range improvement maintenance and movement on roads for livestock management activities.

Indirectly as the canopy continues to close and shade out desirable forage as well as intercepting precipitation, there would be a decrease in the quality and availability of forage in the allotments as a result of no treatment. Forage would also be impacted from accumulating duff near trees that would not be treated. Herbaceous seed production would also be reduced in closed woodlands (Miller, et al, 2005). The continued decrease in forage would eventually result in a change in grazing as the carrying capacity would decrease, meaning a reduction in the number of livestock that could graze without causing damage would need to occur, possibly causing a hardship to permittees that graze these allotments.

Declining resource conditions and increased canopy cover would favor larger high-intensity wildfires in the long term. With more intense fire regimes, less palatable or non-native invasive species are likely to increase.

3.2. Environmental Consequences of the Proposed Action

This section discloses the environmental impacts of the proposed action.

Direct and Indirect Effects of the Proposed Action

There would be no change to existing term grazing permits from implementation of the proposed action. Annual authorized use for each allotment would be dependent more on current climate conditions and

forage availability except where large areas are burned. Burning would initially cause a reduction in the amount of available forage which may require modifications to grazing schedules and livestock numbers in the short term.

The grazing permits associated with the allotments in the planning area would not change under this action alternative. However, there would be effects to livestock movement and grazing activities in the allotment due to proposed activities. Any harvest, thinning, or restoration activities that occur during the grazing season would change the use of the allotment by livestock because livestock will be pushed away from areas of activity thus increasing utilization in other areas of the allotments. It is possible that total numbers of livestock would be adjusted, or the season of use would be adjusted during grazing seasons with active timber harvest and thinning to compensate for changes in resource conditions during these activities. These would be short term effects (3 to 5 years) to range resources during the active timber management activities. After treatments and/or burnings have occurred, there would be an increase in forage available for grazing as a result of the canopy being opened up, increasing the amount of sunlight and moisture that reach the understory (Hall 2007).

Range improvements could possibly be damaged as a result of harvest and prescribed fire activities. Repairs would need to occur before grazing could resume. Livestock movement would also be affected by gates being left opened or breaches in existing fencing. To ensure proper livestock distribution across the landscape and prevent livestock from congregating in grazing areas away from harvest activities, permittees could be required to implement additional herding and riding in order to comply with prescribed use objectives. Affected permittees would likely incur unplanned additional costs in employee man-hours, equipment, and fuel expenses. With an increase in vectors for weeds from timber harvest, thinning, and prescribed burning the likelihood of livestock spreading weeds would increase. Proposed road closures would not impact permittees as long as they continue to have access to range improvements beyond closed roads, such as permitted use beyond a gate.

Cumulative Effects of the Proposed Action

Past actions in the project area include past harvest, livestock grazing, past road activities, wild and prescribed fires, historic fire suppression, and recreation activities. Future activities include ongoing grazing, and recreation in addition to the proposed action.

Cumulative effects of this alternative would include an increased availability of forage for ungulates to graze. Proposed vegetation treatments would counter historic fire suppression efforts that have allowed an increase in the canopy closure that has slowly reduced the amount of forage available for grazing. “On forest rangeland, tree cover and competition can influence herbaceous vegetation at least as much as livestock. Thinning to low stand densities provides room for trees to grow and room for herbaceous vegetation to flourish” (Hall 2007). The cumulative effect from the proposed treatment and burning will be positive for rangeland resources in the increased vigor and amount of future available forage.

4. Consistency with Relevant Laws, Regulations, and Policy

4.1. Land and Resource Management Plan

The Boise National Forest Land and Resource Management Plan provides standards and guidelines for the rangeland resource. This project is located within management Area 16 Sage Hen Reservoir.

4.2. Other Relevant Law, Regulation, or Policy

Project will be consistent with Range Resources standards and guidelines in the Boise Forest Plan as documented in the Forest Plan Consistency Checklist (located in the project record).

The Multiple Use Sustained Yield Act of 1960 – establishes the policy and purpose of the National Forests to provide for multiple-use and sustained yield of products and services.

Forest and Range Renewable Resources Planning Act of 1974 – establishes public land policy and guidelines for the management, protection, development, and enhancement of the public lands.

5. Conclusion

The Sage Hen project may temporarily affect livestock distribution due to increased activity from logging and restoration activities. Prescribed burning could affect livestock rotations as vegetation would need time to grow before grazing post-fire. Increased recreation and logging activities may lead to gates being left open and livestock accessing unauthorized areas. Fences and livestock developments may be damaged during logging and would need to be repaired before livestock grazed the area. While there may be short term negative impacts, long term effects from the proposed treatment and burning will be positive for rangeland resources in the increased vigor and amount of future available forage.

6. References Cited

Frederick C. Hall, 2007. Variation in Shrub and Herb Cover and Production on Ungrazed Pine and Sagebrush Sites in Eastern Oregon: A 27 Year Photomonitoring Study.

Richard F. Miller, et al, 2005. Biology, Ecology, and Management of Western Juniper.

Emmett Ranger District 2210 and 2230 files. Range Resources for the Emmett Ranger District on the Boise National Forest.

USDA Forest Service (2010) Land and Resource Management Plan for the Boise National Forest, 2003-2010 Integration, Volumes 1-2, amended July 2010. Boise National Forest, Boise, ID.

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