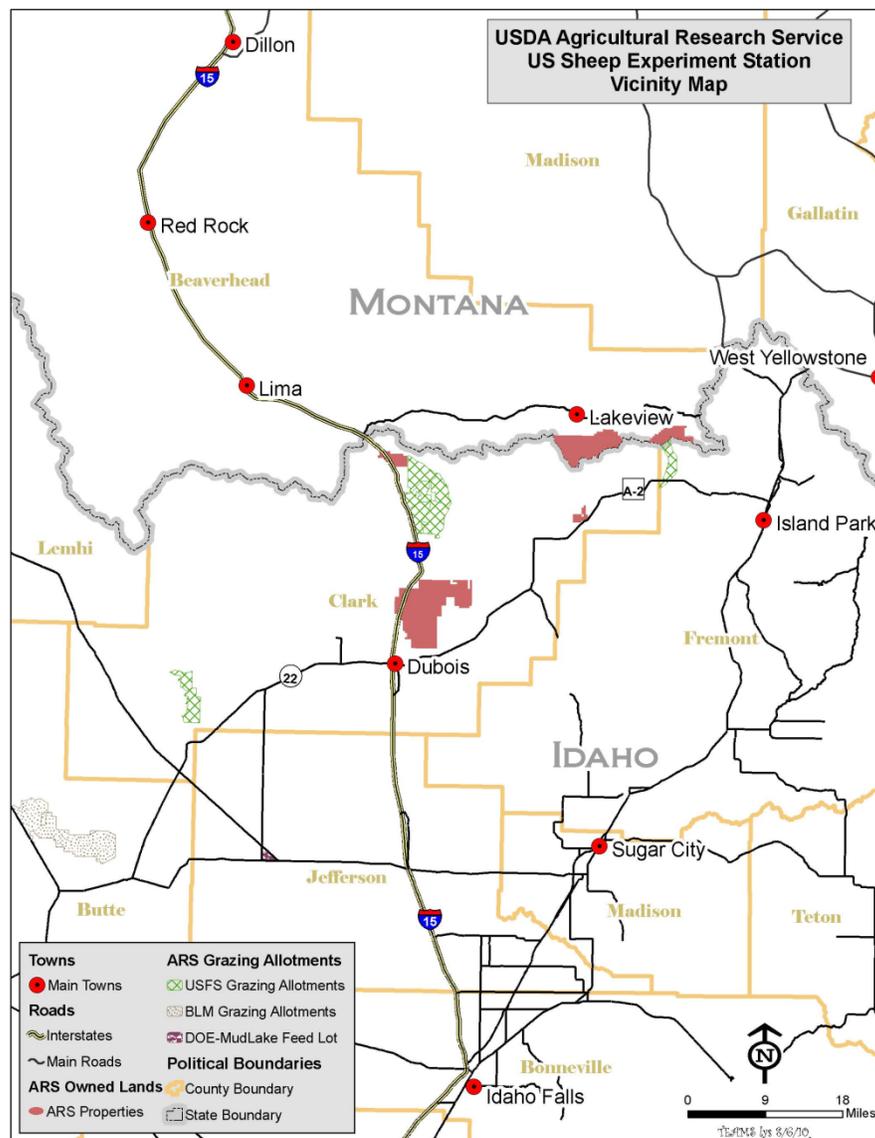


# Scoping Information

## U.S. Sheep Experiment Station Grazing and Associated Activities Project 2010

United States Sheep Experiment Station  
 Dubois, Clark County, Idaho



**For More Information Contact:**

Sue Wingate  
Environmental Coordinator  
TEAMS Enterprise Unit  
USDA Forest Service  
swingate01@fs.fed.us

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410, or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

---

## Where is this project in the NEPA process?

NEPA is a decision-making process. An acronym for the National Environmental Policy Act of 1969, NEPA provides opportunities for interested parties to give their ideas and opinions about federal actions. The following explains the steps of the NEPA process, and where the attached proposal is in that process.

\_\_\_\_\_ *Step One - Need for a Project*

The Agricultural Research Service or some other entity may identify the need for a project.

\_\_\_\_\_ *Step Two - Develop Project Proposal*

The Agricultural Research Service or a project proponent develops detailed, site-specific proposal.



***Step Three - Scoping (Public Input)***

The Agricultural Research Service solicits public input on the site-specific proposal to define the scope of environmental analysis and range of alternatives to be considered.

\_\_\_\_\_ *Step Four - Develop Reasonable Range of Alternatives*

Scoping determines need for an EA: Agricultural Research Service develops alternatives that meet the purpose and need identified for the project.

\_\_\_\_\_ *Step Five – Information for Formal Public Comment Period*

Agricultural Research Service performs analysis of environmental effects, identifies preferred alternative, and *may* solicit formal public comment.

\_\_\_\_\_ *Step Six – Environmental Analysis & Decision*

Agricultural Research Service finalizes the environmental analysis and makes decision to implement one of the alternatives.

\_\_\_\_\_ *Step Eight - Implementation*

Agricultural Research Service implements the project.

\_\_\_\_\_ *Step Nine - Monitor and Evaluate*

Agricultural Research Service monitors and evaluates project results.



## Table of Contents

|  |          |
|--|----------|
| <b>WHERE IS THIS PROJECT IN THE NEPA PROCESS? .....</b>                  | <b>3</b> |
| <b>PROPOSAL SUMMARY.....</b>   | <b>1</b> |
| <b>PROJECT LOCATION AND DESCRIPTIONS .....</b>                           | <b>1</b> |
| ARS, SHEEP STATION PROPERTIES.....                                       | 1        |
| NON ARS LANDS ADJACENT/WITHIN THE PROJECT AREA .....                     | 2        |
| <i>Other Areas Used by the Sheep Experiment Station .....</i>            | <i>2</i> |
| <b>PURPOSE AND NEED FOR ACTION .....</b>                                 | <b>2</b> |
| AGRICULTURAL RESEARCH SERVICE .....                                      | 2        |
| MISSION STATEMENT, U.S. SHEEP EXPERIMENT STATION, DUBOIS, IDAHO .....    | 2        |
| <i>Research at the U.S. Sheep Experiment Station, Dubois, Idaho.....</i> | <i>3</i> |
| <b>PROPOSED ACTION .....</b>   | <b>4</b> |
| <b>POSSIBLE ALTERNATIVES.....</b>  | <b>9</b> |
| <b>DECISIONS TO BE MADE .....</b>  | <b>9</b> |

## List of Figures

|                              |    |
|------------------------------|----|
| FIGURE 1. OVERVIEW MAP ..... | II |
|------------------------------|----|



## Proposal Summary

This project is being proposed by the U.S. Department of Agriculture, Agricultural Research Service (ARS), U.S. Sheep Experiment Station, Dubois, Idaho (Sheep Station). The purpose of the proposed action is to achieve the research goals and objectives (to develop integrated methods for increasing production efficiency of sheep and simultaneously to improve the sustainability of rangeland ecosystems) of the Sheep Station. To achieve those goals and objectives, the Sheep Station is proposing to continue historic (approximately 92 years) sheep grazing and associated activities currently occurring on ARS lands, U.S. Forest Service and Bureau of Land Management allotments, and a feedlot on Department of Energy land.

## Project Location and Descriptions

The Sheep Station is located in the upper Snake River plain at the foothills of the Centennial Mountains, approximately six miles north of Dubois, Idaho, which is the Clark County seat.

The Sheep Station has research land in two states:

- 27,930 acres of ARS land at Headquarters, which has office, laboratory, animal, equipment, and residential buildings, dry-lot facilities for research throughout the year, lambing facilities, and lands used for spring and autumn grazing and rangeland research;
- Approximately 16,600 acres of [unsurveyed] ARS land in the Centennial Mountains of Montana, which is used for summer grazing and rangeland research;
- 2,600 acres of ARS land at the Humphrey Ranch in Idaho, which is near Monida, Montana, has animal facilities and equipment buildings, and is used for spring, summer, and autumn grazing and rangeland research; and
- 1,200 acres of ARS land at the Henninger Ranch near Kilgore, Idaho, which has animal facilities and is used for summer grazing and rangeland research.

The lands range in elevation from approximately 4,800 feet to nearly 10,000 feet, with average annual precipitation that ranges from approximately 10 inches in the Snake River plain to greater than 21 inches in the Centennial Mountains. Because of its diverse geography, Sheep Station ARS lands contain subalpine meadow, foothill, sagebrush steppe, and desert shrubland ecosystems. This diversity provides unparalleled research opportunities within the ARS.<sup>1</sup>

## ARS, Sheep Station Properties

- Headquarters Property
- Henninger Ranch
- Humphrey Ranch
- Summer Range - split into East Summer Range and West Summer Range

---

<sup>1</sup> [http://www.ars.usda.gov/Main/site\\_main.htm?modecode=53-64-00-00](http://www.ars.usda.gov/Main/site_main.htm?modecode=53-64-00-00) (01/05/08)

## Non ARS Lands Adjacent/Within the Project Area

### *Other Areas Used by the Sheep Experiment Station*

Throughout the year, sheep utilize Bureau of Land Management, Forest Service, and Department of Energy lands. These lands will be included in this analysis as appropriate. However, use of these allotments for the allowed animal unit months (AUMs) and grazing inclusive dates is covered under separate agreements with those agencies and are covered by the appropriate National Environmental Policy Act (NEPA) documentation. Alternatives analyzed in this project are within the forage use decisions for the allotments.

### Allotments or Grazing Allotments

Caribou-Targhee National Forest grazed lands are allotments:

- Meyers Creek (Island Park Ranger District)
- East Beaver Creek (Dubois Ranger District)
- Snakey Canyon (Dubois Ranger District)
- Kelly Canyon (Dubois Ranger District)

Bureau of Land Management grazed lands include the Bernice allotment.

### Mud Lake Feedlot

Department of Energy land used by ARS is developed into a feedlot. It is referred to as Mud Lake Feedlot.

## Purpose and Need for Action

The purpose of the proposed action is to achieve the research goals and objectives (to develop integrated methods for increasing production efficiency of sheep and simultaneously to improve the sustainability of rangeland ecosystems) of the Sheep Station.

## Agricultural Research Service

The ARS is the intramural research agency for the U.S. Department of Agriculture (USDA), and is one of four agencies that make up the Research, Education, and Economics mission area of the department. As a research agency, the ARS is not required to, nor does it manage its lands for multi-purpose public use, as does Forest Service or Bureau of Land Management. The ARS conducts research to develop and transfer solutions to agricultural problems of high national priority and provide information access and dissemination to ensure high-quality, safe food and other agricultural products.

## Mission Statement, U.S. Sheep Experiment Station, Dubois, Idaho

The mission of the Sheep Station is to develop integrated methods for increasing production efficiency of sheep and simultaneously to improve the sustainability of rangeland ecosystems.

To contribute to USDA, ARS, National Programs (NP) and to accomplish the ARS mission at the Sheep Station, scientists address problems defined in the NP 101 and NP 215 (Formerly 205) Action Plans.

Because of the connectivity among the National Programs and their components, a single experiment at the Sheep Station may contribute to multiple components of NP 101 and NP 215. This feature of the National Programs and Sheep Station programs will lead to an understanding of the interactions between sheep and the environments in which they are produced that can be used to improve sheep production systems and ensure the sustainability of rangeland ecosystems.

### *Research at the U.S. Sheep Experiment Station, Dubois, Idaho*

The Sheep Station is known worldwide for its research and sheep breeds. Scientists, sheep producers, students, and industry personnel from throughout the United States and other countries visit, and many more contact, the Sheep Station each year to learn more about the research or ask for comments on various issues associated with sheep production and rangeland management.

Since its research began, circa 1918, the Sheep Station is credited with developing three breeds of sheep (i.e., Columbia, Targhee, and Polypay) and has been making germplasm (i.e., breeding stock) available to sheep breeders in North America since the 1920s. Based on numbers of registrations, Columbia has been one of the 10 most popular breeds of sheep in the United States since 1965. Grazing and rangeland research at the Sheep Station has been ongoing since the 1930s, and the research has produced unmatched information on managing grazing on sagebrush steppe to preserve native ecosystems.

Current Sheep Station research is aimed at:

- Developing new or improving existing genetic lines of sheep that specialize in paternal and maternal traits that enhance lamb production (i.e., number of lambs born and weaned per ewe), lamb growth, lamb carcass merit, and yield of marketable product;
- Improving nutrient management throughout the sheep production cycle;
- Developing monitoring technologies for landscape-scale assessment of plant communities and for determining the effects of rangeland management activities, including grazing and fire, on vegetation, ground cover, and herbivore selectivity; and
- Developing science-based grazing and prescribed burn management strategies and decision support systems that can be used to guide managers to maintain or improve the ecological function of western rangelands.

In addition to the scientists at the Sheep Station in Dubois, Idaho, Sheep Station research involves at least 34 scientists at nine ARS locations in seven states and at ten universities in seven states. Most of the research spans multiple years, and some of the long-term sheep genetics and rangeland research spans more than seven decades. To provide a clear understanding of the long-term consequences of various management strategies, the Sheep Station at Dubois, in many cases, has been the only location in North America with the land and animal resources to conduct this specific research and is also the only location in North America able to establish direct linkages between new research and research conducted during the last 90 years. The Sheep Station research is published in peer-reviewed scientific journals and is often rewritten for various trade magazines.

Sheep Station research has been used to:

- Train new scientists;
- Write textbooks to educate university students in animal and rangeland sciences;
- Develop outreach programs that benefit farmers, ranchers, small business owners, agribusiness corporations, and land managers;
- Develop or improve sheep breeds that increase the efficiency of food and fiber production;

- Preserve or improve rangeland ecosystems; and
- Preserve or improve wildlife habitat.

## Proposed Action

The proposed action is a continuation of historic and ongoing sheep grazing and associated activities (status quo). Because the proposed action is to maintain the status quo, it also serves as the no new federal action alternative. Proposed activities include:

### Operations:

Traditional and on-going activities associated with sheep grazing research: the annual movement of approximately 3,000 mature sheep and attendant young sheep between the various ARS properties, allotments, and the Mud lake feedlot. The total number of sheep soon after the end of the lambing period is approximately 6,500. The numbers of mature and young sheep retained vary according to research needs. Sheep in excess of those needed for hypothesis-driven research are not retained. The sheep harvest most of their feed through grazing. Sheep numbers are kept below range carrying capacity to maintain favorable range conditions. Sheep graze across the landscape on a seasonal basis. Sheep numbers used to determine animal unit months (AUMs) are based on a 10-year sheep inventory high of approximately 3,330 head. Winter range allotments are grazed every year. However, some areas within the winter grazed allotments are rested one in three years. There are small groups, up to 200 sheep, grazed at Headquarters from mid October to early December for research purposes, while most sheep are at the Mud Lake facility. In addition, horse and cattle grazing may be done at Headquarters, Humphrey, and Henninger during this period. Two out of every three years sheep graze East Summer Range and the Meyers Allotment. During the third year these areas are rested.

### Sheep Trail and Driveway Use and Maintenance:

Trails and driveways are used to move sheep between grazing areas. Sheep are trailed along existing roads to move sheep from Headquarters and Henninger properties to other grazing areas. Sheep are moved along driveways (travel route used to move sheep from one grazing location to another in the summer ranges) through timbered areas on East and West Summer Ranges. Herders on horseback use working dogs to herd sheep from one grazing location to another. There are about four miles of maintained sheep driveways through timbered areas on the West and East Summer Ranges.

### Stock Water Operations:

In areas where water is not readily accessible at Headquarters, water is trucked to the sheep and unloaded into water troughs 12 feet long, 12 inches high, and 12 inches wide. Troughs are moved as grazing progresses across the pastures. Henninger and Humphrey pastures have surface water available for watering sheep. Summer Ranges have surface water available for sheep and horses with developed sites on Big Mountain pasture.

- Humphrey and Henninger - Irrigation was in place and ongoing before the USDA predecessor of the ARS purchased the properties. Humphrey and Henninger Ranches have constructed ditches to divert water onto grazing pastures while sheep are grazing the areas. Flood irrigation water is used to water sheep.
- West Summer Range - There are five water developments in the West Summer Range in Montana on the Big Mountain area. Springs are developed with permanent troughs to collect water in low-flow

areas needed to water 350 to 900 ewes and 1,250 to 1,400 lambs at one time. Water developments are also used by wildlife.

### Camp Tending - Sheep Herding Camps:

- Headquarters, Humphrey and Henninger are administered from existing roads. Herder camps on low elevation spring, fall and winter pastures are equipped with a 12-foot long by 7-foot wide, four-wheel living quarters trailer and a tow-behind camp commissary to transport dog food, oats, saddles, and other gear. These camps are located near existing roads and are moved with pickups as sheep graze through the pastures.
- Summer camps include a seven foot by seven foot teepee tent, with no trough. Horses are watered at natural water sites or developments where sheep are watered, one horse is picketed, and one horse is loose.

### Maintenance and repair of existing permanent fence:

There are about 180 miles of permanent sheep fence on Headquarters, Humphrey, and Henninger ranches. All fences are inspected and repaired annually. Sheep proof fences at Headquarters, Humphrey, and Henninger are maintained to confine sheep. An eight-foot high coyote proof fence is maintained at Headquarters. The fence was constructed circa 1976 for coyote-sheep interaction research; the research project ended circa 1987, and the fence is maintained to provide a safe location for certain ewe-lamb studies. The horse corral fence on West Summer Range (Odell pasture) was constructed and is maintained to confine horses used for sheep trailing, camp tending, and other sheep grazing management and research activities. All of the corral fencing on Odell pasture is let-down type and is let down each year after grazing operations are complete. Enclosures at Headquarters are sheep-proof fence, maintained to keep sheep from grazing excluded areas. The West Summer Range enclosures are drop fences, put up to exclude sheep when pastures in the enclosure areas are grazed. These drop fences are let down after sheep are removed from the pasture. An eight-foot-high wildlife enclosure fence in the West Summer Range is maintained to exclude wild ungulates and sheep. An adjacent four-foot-high sheep proof enclosure is maintained to compare grazing effects. This wildlife and sheep enclosure includes a riparian area. These enclosures are located and designed to compare and evaluate domestic and wild ungulate grazing effects on willow and other riparian vegetation. The entire fenced area is less than 1/2 acre.

### Maintenance and repair of existing roads and firebreaks:

Annual maintenance is done on main roads as needed. Road segments with ruts or other maintenance needs are bladed or improved for efficient motorized travel. Road maintenance is contained within the existing road right-of-way. The firebreak around the headquarters area is maintained annually with a motor grader to provide a mineral soil break about 20 feet wide. Chemicals may be used to control noxious weeds on the Headquarters firebreak. Weed management is described in the pest control section below. Firebreaks 15 to 20 feet wide down to mineral soil are constructed around prescribed burn areas including blackline burn areas.

### Range Improvement (NP215, Objective A.2):

- Prescribed Burning – The Sheep Station plans to burn Headquarters pasture areas about every 30 years, this would equal about 900 acres each year. Actual burned area over the past 30 years, 13,867 acres, has been less than the planned average 900 acres per year. Burning, for research to evaluate plant and soil dynamics after fires and to improve forage production, provides wildlife habitat and other resources as secondary benefits.
- Seeding – Seeding is proposed for Headquarters and Humphrey properties within the next five years:

- a. To rehabilitate an historic gravel pit
- b. To revegetate burned areas in collaboration with another ARS research unit to evaluate the varieties under high-elevation, sagebrush-steppe conditions.; and
- c. To accomplish research objectives

### Cattle and Horse Grazing:

November and December cattle and horse grazing use has been variable since 1997 when this practice was begun. Cattle and horse grazing with cooperative research is used periodically to maintain or improve sheep range conditions. Cattle and horses consume vegetation that sheep typically do not harvest, create more uniform pastures for grazing research, reduce residual on-site forage for other rangeland research, and reduce fuel loads and fire risk. Cattle and horse grazing is used mainly on the Humphrey Ranch and Headquarters Property, with occasional cattle grazing on the Henninger Ranch. The number of animals used varies from year to year depending on research needs and vegetation conditions.

### Predator Avoidance and Abatement:

Records indicate that conflicts between large predators (bears, wolves, mountain lions) and sheep grazing have not been a substantial or recurring issue on Agricultural Research Service lands, even though those species have inhabited Agricultural Research Service lands for a number of years. It can be expected that a limited number of encounters with carnivores would continue to occur. The primary methods of limiting encounters with predators include;

- Avoidance over a large-sized land base grazed with relatively few livestock;
- The presence of full time sheep herders, guard dogs, and herd dogs; and
- The removal of associated trash and/or carcasses that might attract predators.

To date, these practices have proven effective in keeping the number of conflicts with large carnivores to a minimum. When encounters or conflicts do occur, they are addressed differently depending on the species present, and the level of threat to the livestock or herder.

Grizzly bear trapping, transportation, or lethal removal is outside the scope of this project and thus, if needed, would require the Sheep Station to re-initiate consultation or conduct an emergency consultation, in order to consider the probability of incidental take.

### Integrated Pest Management (NP215, Objective A.2):

There are few weed problems on Sheep Station pasturelands. Weeds become established along roads where seeds are transported by vehicles and populations persist where there is no sheep grazing. The Sheep Station uses an adaptive management/integrated pest management approach for control and eradication of exotic, invasive weeds. This integrated approach is coupled with research on ecosystem functions and native plant communities and with research on weed seed production and spread. As primary weed control, this integrated approach includes the use of strategic sheep grazing as a biocontrol method to reduce the production of weed seed and spread of weeds. Specific beetle species are also used for biocontrol alone or with grazing to eliminate noxious weeds. Herbicides are used on invasive weed species that are not consumed by sheep. Herbicides are sprayed annually along some roads and in sheep pens where invasive weeds are present. Herbicides have been used to control weeds along roadsides, in feedlots and corrals, small pastures (less than 25 acres), and near building structures for about 30 years. Herbicide use is more effective in these weed invasion areas than sheep grazing. Herbicide application methods include spot, handwand application to control weeds along roadsides, in dry-lots and corrals, and

near building structures. Four-wheeler-mounted and tractor-mounted boom-sprayer application is done to control weeds in small pastures and in large dry-lots. Aerial application is not used.

### Design Features, Best Management Practices, Monitoring:

- Wildlife Conservation Measures - The U. S. Sheep Experiment Station implements a number of conservation measures to reduce the likelihood of potential conflicts with grizzly bear (as well as other predators) and domestic sheep/livestock. They include:
  - a. Grizzly bear trapping, transportation, or lethal removal is outside the scope of this project. Thus, if needed, it would require the U.S. Sheep Experiment Station to re-initiate consultation or conduct an emergency consultation with the U.S. Fish and Wildlife Service.
  - b. When creating research plans that include a sheep grazing component, considering the history of livestock-bear conflicts within Agricultural Research Service lands. If conflicts ever developed and created the likelihood of habituation, the U.S. Sheep Experiment Station would modify the grazing schedule and/or sheep movements to avoid recurring conflicts.
  - c. Using good husbandry practices so that sheep are as healthy as possible, are suitable for research, and the number sick/stray animals is kept to a minimum. An institutional animal care and use committee evaluates research protocols and livestock management practices to ensure they are consistent with good animal husbandry, and comply with Federal laws that govern the use of agricultural animals in research. Protocols and practices that do not comply are not approved.
  - d. Shepherders, working dogs, and guard dogs are kept with the sheep full-time when on rangelands to reduce the likelihood of encounters, and to assist in efficient and prompt movement of animals when necessary. In the summer range, sheep are accompanied by a minimum of two guard dogs, two herd dogs, and a full time shepherd. Very few stray animals occur over the course of the season because of the close contact the shepherders have with sheep. In the evenings, sheep are bedded on an approximate one-acre area. On moonlit nights when sheep have the tendency to get up and graze, extra vigilance is necessary to watch over sheep. Lameness that may occur on occasion are watched closely because of the impact they have on moving the herd, and because animals need to be accounted for to maintain research objectives. Therefore, when lame animals do not recover, they are subsequently removed from the herd within a short period of time, (approximately every three days when the camp tender brings supplies) and transported back to the headquarters property.
  - e. All unnatural attractants to bears are minimized. This includes treatment or removal of livestock carcasses, and proper storage of human foods, garbage, and dog food. Approved "bear-proof" containers are used, and damaged containers are repaired or replaced so that they work as designed. Camp tenders and managers make periodic visits (approximately every three days) to remove trash and/or dead animal carcasses in order to eliminate potential bear attractants. In some locations, it is not feasible to remove carcasses (due to degree of decomposition and/or access to get them out). In such cases, a carcass is left in place and decomposition expedited with the addition of lime.
  - f. At least two formal training-orientation meetings are conducted annually with U.S. Sheep Experiment Station employees and herders to review identification of grizzly bear, black bear, bighorn sheep, Canada lynx, mountain lions, etc. In addition, they discuss U.S. Sheep Experiment Station sanitation and garbage removal practices, nonlethal procedures to address

- livestock-wildlife encounters, and who to contact should encounters occur. Training and education are ongoing and not limited to formal meetings.
- g. Regarding grizzly bears, herders are instructed to avoid an encounter. Moving the sheep to other areas of the pasture may occur to avoid an immediate threat, and moving sheep to other pastures/locations would occur if encounters persist.
  - h. Shepherders carry rifles to protect the sheep and bear spray for personal safety and to scare off inquisitive animals. If a grizzly bear threatened the sheep, herders may discharge their rifle into the air if they think it would help frighten the bear (hazing). A herder may shoot directly at a grizzly bear only if his personal safety is threatened, however this situation has never occurred with U.S. Sheep Experiment Station grazing, and is not expected to occur.
  - i. Herders are to report all bear sightings to their supervisor. When on Agricultural Research Service land, all existing and suspected bear activity and (or) conflicts are reported directly to Animal and Plant Health Inspection Service (APHIS), Wildlife Services. APHIS Wildlife Services then contacts state and federal agencies as necessary to conduct damage investigations.
  - j. Any sighting that was a confirmed grizzly bear, or show positive evidence of grizzly bear in the vicinity of livestock would be reported by APHIS Wildlife Services to the Interagency Grizzly Bear Study Team (IGBST). Additional details may be developed through consultation with the U.S. Fish and Wildlife Service.
  - k. When on USDA, Forest Service, or on DOI, Bureau of Land Management land, all existing and suspected bear activity and(or) conflicts are reported directly to the Forest Service or Bureau of Land Management contacts as well as APHIS Wildlife Services.
  - l. In an interagency agreement with the U.S. Forest Service (USDA Forest Service, 2007), the U.S. Sheep Experiment Station agrees they would comply with meeting grizzly bear management goals on the Meyers Creek and East Beaver Allotments (USDA Forest Service, see page) including notifying appropriate personnel of encounters, and temporarily stopping or modifying grazing as necessary, should bear conflicts arise with humans or livestock. Refer to the specific interagency agreement for details. This agreement may be updated based on future consultation between U.S. Forest Service and the U.S. Fish and Wildlife Service regarding use of the Meyers Creek Allotment. Refer to the most up to date interagency agreement for details.
- Old Road to Blair Lake – This road was closed: parts several years ago and the remainder within the last three years. Neither a new nor alternative road was constructed. Mitigations to reduce, and prevent, erosion, are needed from where the road was closed as it entered ARS land to where the road ended, near Blair Lake. As needed, install water bars at noticeable gradient breaks on ruts and road to eliminate surface runoff from old road and harden the sheep driveway across the stream.
  - Sheep Crossings – As needed, place water bars at key locations or embed 12-inch logs at these gradient breaks and harden the stream banks with rock.
  - Heritage - A Heritage Management Plan outline has been compiled to ensure the protection of cultural resources. The foundation of this outline is three fold: provide Section 106 services, record and provide management guidelines for Sheep Station historic properties, and develop and implement a survey strategy for the ARS, Sheep Station, Dubois, Idaho, properties. If unanticipated discoveries are found during project activities, cease all operations in the vicinity of the discovery until assessed by a professional archaeologist or historian.

- Best Management Practices - Best Management Practices (BMPs) would be implemented for herbicide application. BMP measures have been proven effective across the country in managing non-point sources of pollution, and their implementation is required in both Idaho and Montana as part of the Clean Water Act. A contingency plan, or emergency spill plan, would document notification requirements, time requirements for notification, spill management, and parties responsible for clean up. Factors to be considered during spill cleanup are the substance spilled, the quantity, and toxicity, proximity to waters and hazard to life, property, and environment, including aquatic organisms. During pesticide application, an untreated buffer would be left alongside surface waters, wetlands, and riparian areas.

## Possible Alternatives

In addition to the proposed action/no-new federal action, the EIS may consider the following alternatives:

1. Cessation of grazing: No grazing would occur on the Headquarters, East Summer, West Summer, Henninger, and Humphrey Pastures as well as on the following four Forest Service allotments and one Bureau of Land Management allotment: Snakey Kelly, East Beaver, Meyers Creek, and Bernice. Sheep would be confined to the Mud Lake feedlot.

Under Alternatives 3-4 grazing and associated activities would be eliminated on the designated parcels, and could continue on the remaining parcels as indicated in the proposed action, but may be with a reduced number of sheep.

2. No grazing would occur on the East Summer, West Summer, and Humphrey Pastures as well as on the East Beaver and Meyers Creek Forest Service allotments;
3. No grazing would occur on the East Summer Range as well as on the Forest Service Meyers Creek allotment; and
4. No grazing would occur on the Forest Service Snakey and Kelly allotments and the Bureau of Land Management Bernice allotment.

## Decisions to Be Made

An environmental analysis would evaluate the site-specific issues the public has with the proposed action, consider reasonable alternatives to the proposed action, and analyze effects of the proposed action and reasonable alternatives on the environment. Based on the purpose and need identified for the USSES Grazing and Associated Activities Project, the scope of the project is limited to decisions concerning activities within the USSES Grazing and Associated Activities Project Area. The environmental analysis would provide the deciding official with the information to make the following decisions with regard to the Interim USSES Grazing and Associated Activities Project:

- Which actions, if any, will be approved, and
- What additional mitigation measures and monitoring requirements may be needed to protect resources?

The deciding official is Andrew C. Hammond, Agricultural Research Service Pacific West Area Director.