

**U.S. Department of the Interior
Bureau of Land Management
Gunnison Field Office
DOI-BLM-CO-S060-2009-0035-EA**

ENVIRONMENTAL ASSESSMENT

NUMBER: DOI-BLM-CO-S060-2009-0035-EA

CASEFILE/PROJECT NUMBER: Big Willow Allotment #16011

PROJECT NAME: Big Willow Allotment Grazing Permit Renewal

PLANNING UNIT:

Gunnison Resource Area Resource Management Plan (RMP) Management Units #1, 13, and 15

LEGAL DESCRIPTION: Gunnison County, Colorado; New Mexico Principal Meridian,

T. 47 N., R. 4 W., portions of sections 1, 2, 3, 10, and 15

T. 48 N., R. 3 W., portions of sections 29, 30, and 31

T. 48 N., R. 4 W., portions of sections 25, 26, 34, 35, and 36

APPLICANT: Big Willow Allotment permittee

I. INTRODUCTION

A. BACKGROUND/INTRODUCTION: The Big Willow Allotment #16011 is located approximately 5 miles south of Sapinero, Colorado in Gunnison County. The allotment consists of approximately 1,280 public land acres and 1,670 private land acres within one pasture. The allotment is a category "I" (improve) allotment.

The current permit is as follows:

Livestock number	Kind	Season of Use	Public Land	Active AUMs
320	Cattle	6/16 – 8/17	28%	186

Under the current permit, it was recognized that private lands make up a substantial portion of the carrying capacity of the Big Willow Allotment. Because of this, the BLM did not restrict the season of use or numbers of livestock so long as grazing use was not to the detriment of the public lands.

A land health determination was completed for this allotment in 2009. It was determined that all standards are being met, or current management is resulting in significant progress being made towards meeting standards, with the exception of Standard #3 for fisheries habitat in Willow

Creek which has been and is being de-watered and impacted by activities surrounding a privately owned water right along an irrigation ditch. The BLM has no control over this water right.

B. PURPOSE AND NEED: The purpose of the proposed action is to issue one permit to authorize livestock grazing on the Big Willow Allotment #16011 such that livestock grazing 1) is in compliance with the Gunnison Resource Area Resource Management Plan (RMP) objectives, and 2) achieves or makes significant progress towards achieving the Standards for Public Land Health in Colorado and complies with the Guidelines for Livestock Grazing Management in Colorado, in conformance with the Fundamentals of Rangeland Health (43 CFR 4180.1) and Standards and Guidelines (43 CFR 4180.2). This action is needed now because the previous term permit has expired and livestock grazing on the Big Willow Allotment is currently being authorized under the authority of the 2004 Appropriations Act (Public Law 108-108).

C. DECISION TO BE MADE: The BLM will decide what specific livestock and vegetation management actions will be implemented to continue to authorize livestock grazing in compliance with the RMP and Standards for Public Land Health in Colorado.

D. SCOPING AND PUBLIC INVOLVEMENT: On July 18, 2008, prior to the rangeland health assessments, scoping letters requesting any information concerning the allotment were sent to the permittee and 27 other entities, including 4 federal and state agencies and 23 organizations.

E. ISSUES AND CONCERNS: The following issues and concerns were identified through public scoping comments and interdisciplinary team review of the proposed action.

1. Issues to be Analyzed

- a. Cultural Resources – What effect would the proposed action have on cultural resources?
- b. Migratory Birds – What effect would the proposed action have on migratory birds?
- c. Threatened, Endangered, and Sensitive Species – What effect would the proposed action have on threatened, endangered, and sensitive species?
- d. Riparian Habitat – What effect would the proposed action have on riparian habitat, particularly along Cutler Draw and Little Willow Creek?

2. Issues Not Analyzed

See Appendix A for a discussion of other resources that either were not present or that were not affected to a degree that warranted detailed analysis.

II. DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES

A. Description of the Proposed Action

The proposed action is to issue a ten year term livestock grazing permit on the Big Willow Allotment #16011. The permit would include the following terms and conditions, goals, and objectives to achieve allotment specific objectives, that will, 1) meet the Gunnison Resource Area Resource Management Plan (RMP) objectives, 2) achieve or make significant progress towards achieving the Standards for Public Land Health in Colorado and comply with the Guidelines for Livestock Grazing Management in Colorado, in conformance with the Fundamentals of Rangeland Health (43 CFR 4180.1) and Standards and Guidelines (43 CFR 4180.2):

Livestock number	Kind	Season of Use	Public Land	Active AUMs
320	Cattle	6/16 – 8/17	28%	186

1. Livestock use rates will be as follows:

a. Total utilization of key herbaceous forage species within all riparian zones would be limited to 41-60% of the current year's growth, with a 2 ½ inch minimum stubble height maintained throughout the grazing season. These limits are needed to provide a minimum of plant residue to trap sediment during high flows, to buffer or reduce the energy of high flows and to protect stream banks.

b. Uplands will not exceed a utilization level of 41-60% of the current year's growth for available key forage during the grazing period of use.

c. Use limits for livestock within important sage grouse nesting and early brood rearing habitat will be as follows:

-Between March 15 and September 28, the grass droop height in the upland areas of a pasture will be 4-6 inches or greater (current year's growth). This applies to big sagebrush communities below 9200 feet and within 4 miles of a lek with understories dominated by herbaceous vegetation that has the potential to grow to 6 inches or greater.

d. Use limits for livestock within important sage grouse brood rearing habitat will be as follows:

- For riparian areas within 4 miles of a sage grouse lek, between June 15 and August 30, the stubble height of herbaceous vegetation in all riparian areas will be a minimum of 4-inches over 80% of each riparian area within the allotment. At all other times a minimum 2.5-inch stubble height will be maintained over 80% of the riparian area within the allotment throughout the period of use.

e. Use limits for livestock along the Willow Creek riparian fisheries corridor will be a minimum of 4 inches over 80% of the riparian area within the allotment.

If these utilization rates are reached within the allotment before the end of the scheduled use period, livestock will be removed from the allotment.

In situations where residual vegetation is not meeting the use objectives during/following livestock grazing, the potential of the area to achieve the resource and livestock use objectives will be determined prior to taking any permanent adverse actions against the livestock grazing permit.

2. Grazing use for the allotment would be in compliance with the Gunnison Resource Area RMP, which was amended to adopt the Colorado Standards for Public Land Health and Guidelines for Livestock in Colorado.

3. Grazing use would be in conformance with Canada lynx habitat standards:
 - a. Do not allow livestock use in openings created by fire or timber harvest that would delay successful regeneration of the shrub and tree components.
 - b. Manage grazing in aspen stands to ensure sprouting and sprout survival sufficient to perpetuate the long-term viability of the clones.
 - c. Within the elevational ranges that encompass forested lynx habitat, shrub-steppe habitats should be considered as integral to the lynx habitat matrix and should be managed to maintain or achieve mid-seral or higher condition.
 - d. Within lynx habitat, manage livestock grazing in riparian areas and willow carrs to maintain or achieve mid-seral or higher condition to provide cover and forage for prey species.
4. Any objects or sites of cultural or paleontological value, such as historic or prehistoric resources, graves or grave markers, human remains, ruins, cabins, rock art, fossils, or artifacts shall not be damaged or disturbed. If any such resources are encountered, the permittee shall notify BLM immediately.
5. Salt and/or mineral supplements will not be placed within ¼ mile of any riparian area, wet meadow, or temporary or permanent watering facility. Excess salt and/or mineral sources will be removed from the allotment following grazing use each year.
6. Temporary water hauling site locations shall be coordinated with the BLM. Troughs associated with these sites must have a wildlife escape ramp. To prevent wildlife deaths, these troughs must be removed or turned over each year when they are no longer needed for livestock grazing use.
7. The permittee shall provide the Bureau of Land Management with reasonable administrative access across private and leased lands for the orderly management and protection of the public lands.
8. When poisonous plants are identified as a threat to livestock, management actions to avoid grazing the area during the problem period would be developed. Infestations of noxious weeds would be incorporated into the Field Office noxious weed control program as they are identified.
9. All range improvements for which the permittee has maintenance responsibility, including fences, troughs, and reservoirs, must be properly maintained prior to livestock turnout. The permittee must notify the BLM prior to beginning any maintenance activities that require the use of heavy equipment, such as tractors, backhoes, or graders. Allotment boundary fences for which the permittee has maintenance responsibility must be maintained every year, even if the pasture is being rested.

Big Willow Allotment Range Improvements

Project	Location	Maintenance
---------	----------	-------------

Name	Number	Township	Range	Section	Subdivision	Responsibility
Ben Gray Reservoir	234184	48N	4W	25	SESE	Permittee
Ben Gray Division Fence	234175	48N	4W	36	NWNE	Permittee
Willow Drift Fence	230404	47N	4W	10	NWNE	BLM

B. ALTERNATIVES CONSIDERED BUT NOT ANALYZED IN DETAIL:

1. No Grazing Alternative

During scoping for other similar proposed actions, input from the public included the addition of a No Grazing Alternative. Under this alternative, no livestock grazing would be authorized for the Big Willow Allotment. The No Grazing Alternative was considered but not carried forward for detailed analysis because it would not conform to the Approved Gunnison Resource Area Resource Management Plan/Record of Decision (RMP/ROD). The RMP/ROD identified livestock grazing as an appropriate and suitable use on the Big Willow Allotment. In addition, a No Grazing Alternative would not meet the Purpose and Need for Action.

C. PLAN CONFORMANCE REVIEW:

The Proposed Action is subject to, has been reviewed for, and been found to be in conformance with, the following plan (43 CFR 1610.5, BLM 1617.3). The plan conformance review included consideration of Standard Management (pgs. 2-1 to 2-19), Management Unit Prescriptions (pgs. 2-19 to 2-39), and Standards for Public Land Health (pgs. 4-7).

Name of Plan: Gunnison Resource Area Resource Management Plan (including Adoption of Standards for Public Land Health and Guidelines for Livestock Grazing Management in Colorado)

Date Approved: February 1993 (amended February 1997)

Management Unit(s): 1 (part of the Alpine Triangle SRMA along the Gunnison River corridor)
13 (contains "I" category livestock grazing allotment)
15 (fishery stream along Willow Creek)

Decision Number/Page:

Standard Management Direction, pg. 2-1 to 2-19 and 3-1 to 3-8;

Decision Language: (pg. 3-5) "Grazing permits specifying the season of use, number, and kind of livestock will be issued to each operator for each allotment. Operators will have to obtain BLM approval before changing the grazing specifications outlined in their permits."

Management Unit 1 Direction, pg. 2-20 to 2-22 and 3-8;

Decision Language: (pg. 2-21) “Livestock grazing will continue to be authorized in the unit within the capabilities of the ecosystem involved.”

Management Unit 13 Direction, pg. 2-34 to 2-36 and 3-14;

Decision Language: (pg. 3-14) “The unit will be managed to maintain or improve ecological conditions. Suitable public lands will be available for livestock grazing.”

Management Unit 15 Direction, pg. 2-37 to 2-38 and 3-15;

Decision Language: (pg. 3-15) “When grazing occurs in the unit, a minimum stubble height of 4 inches will be maintained for key herbaceous forage species within riparian zones...”

Allotment Goal

The Big Willow Allotment will be managed to provide for a maximum achievable diversity and production of biological resources to improve and sustain habitat for wildlife, to help sustain the economic stability of the permittees, and to allow for quality opportunities for public land users while achieving or making significant progress toward achieving BLM's Standards for Public Land Health in Colorado and conformance to BLM's Guidelines for Livestock Management in Colorado.

Allotment Objectives

a. Native Uplands

The management objective for native upland vegetation on the Big Willow Allotment is to maintain or improve the vigor, production and diversity of desirable plants to support a variety of resource uses, including, but not limited to livestock grazing, wildlife habitat, and recreation. Native upland sites will be managed to achieve and maintain basal cover values which are equal to or greater than those listed for the slightly/moderately accelerated erosion threshold as described in the Montrose District Soil Erosion Monitoring Guidelines for each ecological site.

b. Riparian Areas

Riparian areas will be managed to maintain or achieve a mid-seral or later stage of ecological succession and to provide adequate herbaceous plant residue on stream banks and flood plains during seasons when high flows are likely (spring runoff and the thunderstorm season of July and August). Physical damage to stream banks by people, livestock and wildlife will not exceed 10% of the length of stream banks for any riparian area within a pasture. Physical damage is where stream banks are collapsed or soil is left bare by man or animal trampling. Management prescriptions in this proposed action are designed to maintain adequate vegetation cover over the entire riparian area(s) as stated in the Record of Decision for the Gunnison Resource Management Plan, and Rangeland Program Summary (page 3-4, #5 and #6; Feb. 1993). The intent of the management prescription is to maintain adequate vegetation cover over the entire riparian area(s).

Monitoring/Evaluation

The BLM would be responsible for implementing the following monitoring/ evaluation requirements:

The monitoring program would include appropriate consultation, cooperation and coordination with the rangeland users, other agencies, and interested publics. Close coordination between the permittees or their representatives, the Colorado Division of Wildlife, and the BLM of all livestock related field monitoring is essential to determine conformity with the terms and conditions of the permits.

Sufficient monitoring data would be collected to determine if management actions are, 1) contributing to the achievement of allotment objectives and the Gunnison Resource Area Resource Management Plan (RMP) management objectives, and 2) achieving or making significant progress toward achieving the Standards for Public Land Health in Colorado and conforming to the Colorado Livestock Grazing Management Guidelines.

The intensity and frequency of additional monitoring done on the allotment would be dependent on annual funding allocations and work priorities established for the Gunnison Field Office. Monitoring priorities for the allotment would be determined annually. Guidance provided in BLM Technical References, BLM Manuals, and the Gunnison Resource Area Rangeland Monitoring Plan, would be the basis for monitoring/inventory conducted on the allotment. Other appropriate guidance documentation would be considered when establishing, collecting and evaluating data.

Monitoring would include both short-term and long-term studies. Short-term monitoring would include compliance monitoring, actual use data, range readiness when necessary through a joint field inspection with the BLM and the permittees, utilization studies on riparian areas and uplands as well as climate and soil moisture data. Long term monitoring would document and measure trends toward or achievement of objectives over a period of years.

Evaluations may be conducted anytime during the implementation of this proposed action if monitoring data and/or other data support changes to the allotment objectives, management actions or annual permitted use.

III. AFFECTED ENVIRONMENT / ENVIRONMENTAL EFFECTS

A. Cultural Resources – What effect would the proposed action have on cultural resources?

Affected Environment

Range permit renewals are federal undertakings (as defined in 36 CFR 800.16(y)) that fall under Section 106 of the National Historic Preservation Act. Range improvements associated with the allotment (*e.g.*, fences, spring improvements, construction of permanent water structures, etc.) are subject to compliance requirements under Section 106 and will undergo standard cultural resource inventory and evaluation procedures. During Section 106 review, a cultural resource assessment was completed for the allotment (CR Report 09GN042) following the procedures and guidance outlined in the following: The 1980 National Programmatic Agreement Regarding the Livestock Grazing and Range Improvement Program, Instructional Memorandum (IM)-WO-99-039, IM-CO-99-007, IM-CO-99-019 and IM-CO-2001-026. BLM Manuals and Colorado Protocol between the BLM and State Historic Preservation Office (SHPO 1998) provide

guidance in meeting BLM's responsibilities under the National Historic Preservation Act. The results of these assessments are summarized below. Copies of the cultural resource assessment are located in the archaeological files at the Gunnison Field Office. Cultural resources are fragile, non-renewable and significant sites and are protected by law, and various regulations.

The cultural resources in the Gunnison Field Office span approximately 12,000 years and are represented by Paleoindian, Archaic, Formative, Ute and Euro-American cultures. Sites include lithic scatters, quarries, temporary camps, extended camps, village, rock shelters, rock art, wickiups, scarred trees, hunting sites, kill/butchering sites, processing areas, tree platforms, eagle traps, vision quest sites, caves, trails, roads, water resource sites, homesteads, ranches, cabins, mills, railroads, transmission lines, mines, trash dumps, aspen art, isolated artifacts, graves, etc. Many of these sites have the potential to be directly affected and impacted by livestock grazing. Continued grazing may cause substantial ground disturbance and cause cumulative, long term, irreversible adverse effects to significant cultural properties.

No known significant resources have been discovered in the Big Willow allotment and no areas of livestock concentration have been identified. Based on the lack of concentration areas within the allotment, no additional archeological inventory is necessary for the renewal of the grazing permit.

The following tribes were notified of the Big Willow Range Permit Renewal via certified letter in February of 2010: the Ute Indian Tribe, the Southern Ute Indian Tribe, and the Ute Mountain Ute Indian Tribe. They were asked to identify traditional cultural places or any other areas of traditional cultural importance that need to be considered within the area of potential effect. The BLM-GUFO did not receive any comments or concerns from the three tribes. As a result, there are currently no known areas of Native American Religious Concern located within this allotment.

Environmental Consequences and Mitigation:

Proposed Action:

Direct and Indirect Effects

Cattle concentration areas have a high potential to directly damage surface and subsurface cultural resources in the following ways: trampling and churning of site soils, features and artifacts; breakage of artifacts; and impacts from standing or rubbing against structures, surface features or rock art. Indirect impacts can include increased soil erosion and substantial ground disturbance, which can lead to irreversible damage over time. Significant historic properties that may be identified within cattle concentration areas will need to be monitored for future grazing impacts.

Cumulative Effects

Continued grazing may cause substantial ground disturbance and cause cumulative, long term, irreversible adverse effects to significant cultural properties.

The proposed action will have no environmental consequences requiring mitigation since there are no known sites eligible for listing on the National Register of Historic Places (NRHP) within the allotment.

If future cultural resource inventories identify significant sites, the sites will need to be monitored to determine if adverse effects are occurring to the sites. If adverse effects are found, mitigation measures will need to be implemented. These can include, but are not exclusively limited to, decrease in the AUMs, construction of fenced exclosures around the sites, excavation of the sites or installation of erosion control devices.

B. Migratory Birds – What effect would the proposed action have on migratory birds?

Affected Environment

Bird species on the list for the Southern Rockies/Colorado Plateau region which could breed within this proposed project area include the flammulated owl (*Otus flammeolus*), Virginias warbler (*Vermivora virginiae*), Green-tailed towhee (*Pipilo chlorurus*), Black-throated gray warbler (*Dendroica nigrescens*), Red-naped sapsucker (*Sphyrapicus nuchalis*), Loggerhead shrike (*Lanius ludovicianus*), Western bluebird (*Sialia mexicana*), Wilson's warbler (*Wilsonia pusilla*), Williamsons sapsucker (*Sphyrapicus thyroideus*), Band-tailed pigeon (*Patagioenas fasciata*), Broad-tailed hummingbird (*Selasphorus platycercus*), MacGillivrays warbler (*Oporornis tolmiei*), Wilson's phalarope (*Phalaropus tricolor*), Violet green swallow (*Tachycineta thalassina*), Brewer's sparrow (*Spizella breweri*), Sage sparrow (*Amphispiza belli*), and Swainson's hawk (*Buteo swainsoni*). Williamson's sapsuckers, flammulated owls, and Violet green swallows are all cavity nesters that may nest within the scattered mixed conifer/aspens stands or riparian areas. Broad-tailed hummingbirds are a tree nesting species with populations recorded in montane forest and shrub habitats throughout the foothills, reaching their greatest breeding densities in aspen forests. Wilson's phalarope has strong preference for moist sedge and rush meadows characterized by low plant height in the western slope and prairie marshes. The Black-throated gray warbler spends its spring and fall amongst piñon-juniper, scrub oak, riparian lowlands (cottonwoods [*Populus*], willows [*Salix*], tamarisk [*Tamarix*]), and riparian transition (cottonwood, willow, and alder [*Alnus*]) habitats (Kingery 1988). Nesting occurs off the ground in the midstory branches of Douglas fir-oak forest. Red-naped sapsucker habitat is composed of aspen, willows and cottonwoods. There is a preference for aspen groves in open rangeland, birch groves, montane coniferous forests and subalpine forest edges. Aspen groves that lack a nearby willow riparian habitat are rejected. Wilson's warbler populations are restricted to mesic shrub thickets of riparian habitats, edges of beaver ponds, lakes, bogs, and overgrown clear-cuts of montane and boreal zone; may reach into alpine zone (Finch 1989, EMA). MacGillivrays warbler requires aspen forests with a dense shrubby understory. Habitat can also be composed of coniferous forest clearcuts with spruce and Douglas fir or mixed deciduous forests with birch, aspen, or poplar. They nest in clumps of grass on the ground or near the ground in shrubs. The Western bluebird is fond of pinyon-juniper and ponderosa pine woodlands with an open overstory. However, the bluebird typically will use nest boxes in atypical habitat such as grass and shrublands. The Loggerhead shrike prefers open areas with short and shrubby vegetation. The Green-tailed towhee breeds in dry shrubby hillsides and scattered aspen trees intermixed with shrubs. Virginia's warblers nest primarily in Gamble oak but are also recorded in dense shrublands and on scrub-adorned slopes of mesas, foothills, open ravines, and mountain valleys in semiarid country. The Band-tailed pigeon is found mostly in forests of ponderosa pine but also found in spruce-fir forests and scrub oak shrublands. Brewers

sparrows and Sage sparrows are tied closely to sagebrush. Brewer's sparrows breed in tall dense stands of sagebrush broken up with grassy openings. Sage sparrows nest within sizable (>30 acres), low-elevation (<8400 ft), semi-open to dense stands of 0.5 to 2 m (1.5 to 6.5 ft) tall sagebrush (Colorado Partners in Flight website; Lambeth 1998) which are uncommon but could occur within this allotment. They typically arrive in Colorado by April, initiate nesting in May, and fledge young during June and July. They construct cup nests, usually at mid-bush level with sufficient foliage above to conceal the nest (Lambeth 1998). Swainson hawks typically nest in scattered trees within grassland, shrubland, riparian, or agricultural landscapes. They forage in open stands of vegetation.

Environmental Consequences/Mitigation:

Livestock grazing will not directly affect cavity and tree nesting species including flammulated owls, Williamson's sapsuckers, Western bluebird, Broad-tailed hummingbirds, Loggerhead shrike, Violet-green swallow, Black-throated gray warbler, Band-tailed pigeon, Red-naped sapsucker, and Swainson's hawks. Therefore, no take of these species or their nests is expected to occur as a result of grazing under this alternative. The ground nesting of the MacGillivray's warbler, Wilson's phalarope, Virginia's warbler, Wilson's warbler, and Green-tailed towhee will not be inadvertently affected due to the nest being located in dense vegetation usually beneath shrubs or dense undergrowth. Although the Brewers sparrow's and Sage sparrow's nesting period overlaps the livestock grazing season in the Big Willow Allotment, placement of their nests off the ground and well within a sagebrush plant would protect them from being trampled by livestock.

C. Threatened, Endangered, and Sensitive Species – What effect would the proposed action have on threatened, endangered, and sensitive species?

Of the threatened, endangered and sensitive species within the Gunnison Field Office, those that warrant discussion are Gunnison milkvetch, Canada lynx, Gunnison sage-grouse, and bald eagle. Canada lynx is threatened under the endangered species act while Gunnison milkvetch, Gunnison sage-grouse and bald eagle are BLM sensitive species.

Gunnison milkvetch

The Gunnison milkvetch is endemic to the Gunnison Basin and is known to occur within the allotment. Within its range, it is widely scattered and fairly abundant, most commonly growing on south to southwestern-facing slopes of 2 to 20 degrees. It is typically found on dry, gravelly flats and hillsides at elevations ranging from 7,500 to 9,400 ft. Associated vegetation includes black sagebrush, big sagebrush, rabbitbrush, phlox, and grasses.

Canada lynx

The Big Willow Allotment is within the Lake Fork of the Gunnison Lynx Analysis Unit (LAU). There are 1268 acres mapped as lynx habitat within the allotment. There are 50 acres of "other" habitat and 112 acres of "winter" habitat. The "other" habitat consists of aspen/Douglas-fir forests and sagebrush shrublands which may provide habitat for lynx prey species, and therefore, lynx foraging habitat. The "winter" habitat consists of mixed stands of aspen, Douglas-fir, blue and Engelmann spruce, subalpine fir, and lodgepole pine.

The LAU's are based on the home range of an individual lynx and provide a frame of reference for monitoring habitat changes over time. Canada lynx habitat is characterized by spruce/fir dominated communities and basically parallels habitat of their primary prey species, the snowshoe hare. In the southern Rocky Mountains, primary vegetation that contributes to lynx habitat is lodgepole pine, subalpine fir, and Engelmann spruce. The winter habitat consists of mixed stands of aspen, Douglas-fir, blue and Engelmann spruce, subalpine fir, and lodgepole pine. The "other" habitat consists of aspen/Douglas-fir forests and sagebrush shrublands which may provide habitat for lynx prey species, and therefore, lynx foraging habitat.

Gunnison sage-grouse

There are no leks located within the allotment but one lek within a half mile of the allotment. Most of the sage-grouse habitat on the allotment is in good condition and offers habitat for all life stages of the grouse.

Bald eagle

The Big Willow Allotment does not contain bald eagle winter concentration corridors.

Proposed Action:

Direct and Indirect Effects

Gunnison milkvetch

Although Gunnison milkvetch is present and flowering during the period that livestock grazing would occur in the allotments, there is no evidence that Gunnison milkvetch is a livestock forage species. However, there is potential for livestock to trample and cause physical damage to plants. There is greater potential for trampling as stocking densities increase. Because these plants have co-existed with livestock grazing for decades and are widespread throughout the Gunnison basin, implementation of this alternative is not expected to adversely affect the continued existence of this species.

Canada lynx

The Canada lynx habitat is scattered patches of trees. These offer very little habitat for lynx.

Gunnison sage-grouse

Successful implementation of the proposed action is expected to continue to improve the condition of sage-grouse habitat throughout the allotment. Anticipated changes in plant vigor, productivity and cover will continue to address the habitat needs of sage-grouse during critical biological periods. The current livestock management will facilitate the improvement of sage-grouse habitat and allow continued progress in moving toward achieving this standard.

D. Riparian Habitat – What effect would the proposed action have on riparian habitat, particularly along Cutler Draw and Little Willow Creek?

All riparian areas in the Big Willow allotment, including Cutler Draw and Little Willow Creek, are currently meeting land health standards under current management. Because the proposed

action is to continue current livestock grazing, these riparian areas should continue to meet the standards in the land health assessment and maintain adequate vegetative cover over the entire riparian area(s).

Affected Environment

The majority of riparian areas within the allotment are on private lands. Only small portions of Willow Creek, Cow Gulch, Cutler Draw, and Little Willow Creek run through public lands.

Environmental Consequences/Mitigation:

To protect riparian areas, in order to meet the Gunnison Resource Area Resource Management Plan (RMP) objectives, achieve or make significant progress towards achieving the Standards for Public Land Health in Colorado, and to comply with the Guidelines for Livestock Grazing Management in Colorado, in conformance with the Fundamentals of Rangeland Health (43 CFR 4180.1) and Standards and Guidelines (43 CFR 4180.2):

- a. Total utilization of key herbaceous forage species within all riparian zones would be limited to 41-60% of the current year's growth, with a 2 ½ inch minimum stubble height maintained throughout the grazing season. These limits are needed to provide a minimum of plant residue to trap sediment during high flows, to buffer or reduce the energy of high flows and to protect stream banks.
- b. For riparian areas within 4 miles of a sage grouse lek, between June 15 and August 30, the stubble height of herbaceous vegetation in all riparian areas will be a minimum of 4-inches over 80% of each riparian area within the allotment. At all other times a minimum 2.5-inch stubble height will be maintained over 80% of the riparian area within the allotment throughout the period of use.
- c. Use limits for livestock along the Willow Creek riparian fisheries corridor will be a minimum of 4 inches over 80% of the riparian area within the allotment.
- d. Salt and/or mineral supplements will not be placed within ¼ mile of any riparian area, wet meadow, or temporary or permanent watering facility. Excess salt and/or mineral sources will be removed from the allotment following grazing use each year.

E. CUMULATIVE IMPACTS SUMMARY:

The cumulative effects of drought, excessive big game use, and historic livestock grazing use are generally concerns in many grazing allotments throughout the Gunnison Basin. However, the livestock grazing management in the Big Willow Allotment has resulted in, and is expected to continue to maintain, satisfactory conditions in plant vigor and productivity and vegetative cover. With the exception of the poor fisheries habitat conditions that exist in Willow Creek due to fluctuating ditch levels associated with the private water rights, the land health standards on this allotment are all being met, or existing management is making significant progress towards meeting standards.

IV. TRIBES, INDIVIDUALS, ORGANIZATIONS, OR AGENCIES CONSULTED:

On July 18, 2008, prior to the rangeland health assessments, scoping letters requesting any information concerning the allotment were sent to the permittee and 27 other entities, including 4 federal and state agencies and 23 organizations. The following entities were contacted; the permittee and one interest group (WildEarth Guardians, a synthesis of Forest Guardians, Sinapu, and the Sagebrush Sea Campaign) responded.

Colorado Division of Wildlife	Colorado State Forest Service
USDI National Park Service	Western Area Power Administration
Sierra Club	Trout Unlimited
Colorado Trail Riders	Western Colorado Congress
Forest Guardians	Colorado Mountain Club
High Country Citizen's Alliance	Colorado Cattlemen's Association
Colorado Native Plant Society	Gunnison County Stock-Grower's Association, Inc.
National Wildlife Federation	Colorado Environmental Coalition
Colorado Off-Highway Vehicle Coalition	The Wilderness Society
The Nature Conservancy	Sinapu
Rocky Mountain Biological Lab	Colorado Outfitters Association
Center for Native Ecosystems	Rocky Mountain Resource Management Services
American Lands Alliance	The Sagebrush Sea Campaign
Western Watersheds Project	Big Willow Allotment permittee

Following this scoping, one additional interested public (Trout Unlimited) has been identified.

V. LIST OF PREPARERS:

<u>Name</u>	<u>Title</u>	<u>Area(s) of Responsibility</u>
Sally Thode	Recreation Planner	Wild and Scenic Rivers Wilderness Access and Transportation Recreation Visual Resources Areas of Critical Environmental Concern
Tara de Valois	Rangeland Management Specialist	Invasive, Non-Native Species Upland Vegetation Rangeland Management
Andrew Breibart	Natural Resource Specialist	Floodplains Water Quality Wetlands and Riparian Areas Soils Air Quality Hydrology and Water Rights

Russell Japuntich	Wildlife Biologist	Migratory Birds Threatened, Endangered and Sensitive Species Wildlife
David Lazorchak	Geologist	Geology and Minerals Hazardous Materials
Marnie Medina	Realty Specialist/NEPA Coordinator	Lands Authorizations NEPA Environmental Justice Prime and Unique Farmlands
Elizabeth Francisco	Archaeologist	Cultural Resources Native American Religious Concerns Paleontology
Brian Brown	Forester	Forestry
Brian Stevens	Prescribed Fire Specialist	Fire and Fuels Management
Jake Schmalz	Rangeland Management Specialist	Rangeland Management Invasive, Non-Native Species Upland Vegetation

**APPENDIX A
INTERDISCIPLINARY TEAM ANALYSIS RECORD CHECKLIST**

NUMBER: DOI-BLM-COS060-2009-0035- EA

PROJECT NAME: Big Willow Allotment Grazing Permit Renewal

DETERMINATION OF STAFF: (Choose one of the following abbreviated options for the left column)

NP = not present in the area impacted by the proposed or alternative actions

NA = present, but not affected to a degree that detailed analysis is required

PA = present and requires further analysis because 1) analysis of the issue is necessary to make a reasoned choice between alternatives, or 2) analysis of the issue is necessary to determine the significance of impacts.

NC = (DNAs only) actions and impacts not changed from those disclosed in the existing NEPA documents cited in Section C of the DNA form.

PHYSICAL RESOURCES			
Air Quality (Clean Air Act)	Determination	Signature	Date
	NA	<i>Andrew Breitbart</i>	3/8/11
	Rationale for Determination: Livestock grazing has a negligible effect on air quality in the project area.		
Geology/Minerals	Determination	Signature	Date
	NA	DL	07/22/2009
	Rationale for Determination: There are no active mining operations in this area. Livestock grazing has no effect on geologic or mineral resources in the project area.		
Paleontology	Determination	Signature	Date
	NA	<i>Elizabeth Francisco</i>	3/14/2011
	Rationale for Determination: Livestock grazing has no effect on paleontological resources in the project area.		
Soils (includes Public Land Health Standard 1)	Determination	Signature	Date
	NA	<i>Andrew Breitbart (based on LHD)</i>	3/8/11
	Rationale for Determination: Progress is being made towards meeting this standard in the allotment.		
Floodplains (EO11988)	Determination	Signature	Date
	NP	<i>Andrew Breitbart</i>	3/8/11
	Rationale for Determination: This standard is being met in the allotment.		
Water Quality (drinking/ground) (Clean Water Act and others) (includes Public Land Health Standard 5)	Determination	Signature	Date
	NA	<i>Andrew Breitbart (based on LHD)</i>	3/8/11
	Rationale for Determination: This standard is being met in the allotment.		

BIOLOGICAL RESOURCES			
Fire and Fuels Management	Determination	Signature	Date
	NA	<i>Brian Stevens</i>	12/08/09
	Rationale for Determination: Livestock grazing has no effect on fire and fuels management in the allotment.		
Invasive, Non-native Species (Federal Noxious Weed Act and EO 13112)	Determination	Signature	Date
	PA	<i>Jake Schmalz</i>	2/1/11
	Rationale for Determination: The upland vegetation standard is being met on the allotment; however, small amounts of cheatgrass are present in and adjacent to the allotment. Livestock grazing practices may play a role in reducing the likelihood of invasive species populations expanding.		
Forest Vegetation (includes portion of Public Land Health Standard 3)	Determination	Signature	Date
	NA	<i>Brian Brown</i>	3/8/2011
	Rationale for Determination: This standard is being met in the allotment.		
Upland Vegetation (includes portion of Public Land Health Standard 3)	Determination	Signature	Date
	NA	<i>Jake Schmalz</i>	2/1/11
	Rationale for Determination: This standard is being met in the allotment.		
Riparian Zones and Wetlands (EO 11990) (includes Public Land Health Standard 2)	Determination	Signature	Date
	NA	<i>Andrew Breitbart</i>	3/8/11
	Rationale for Determination: This standard is being met in the allotment.		
Wildlife (includes portion of Public Land Health Standard 3)	Determination	Signature	Date
	NA	<i>Russell Lapuntich</i>	9/11/2009
	Rationale for Determination: With the exception of fisheries habitat in Willow Creek, this standard is being met in the allotment.		
Migratory Birds (EO 13186 and Migratory Bird Treaty Act)	Determination	Signature	Date
	PA	<i>Russell Lapuntich</i>	9/11/2009
	Rationale for Determination: This issue will be carried forward for analysis to demonstrate compliance with migratory bird laws and regulations.		
Threatened, Endangered, Candidate (ESA), and/or Sensitive Animal Species (includes Public Land Health Standard 4)	Determination	Signature	Date
	PA	<i>Russell Lapuntich</i>	9/11/2009
	Rationale for Determination: This standard is being met in the allotment, but the issue will be carried forward for analysis to demonstrate compliance with ESA and Sec. 107 consultation.		

HERITAGE RESOURCES and HUMAN ENVIRONMENT			
Cultural Resources (National Historic Preservation Act)	Determination	Signature	Date
	PA	<i>Elizabeth Francisco</i>	3/14/2011
	Rationale for Determination: This issue will be carried forward for analysis to demonstrate compliance with NHPA and Sec. 106 consultation.		
Environmental Justice (EO 12898)	Determination	Signature	Date
	NA	<i>Jake Schmalz</i>	2/1/11
	Rationale for Determination: The proposed action has no disproportionate impact on any racial, ethnic, or socioeconomic group.		
Native American Religious Concerns (American Indian Religious Freedom Act)	Determination	Signature	Date
	NP	<i>Elizabeth Francisco</i>	3/14/2011
	Rationale for Determination: No Native American religious concerns have been identified in the project area.		
Socio-economics	Determination	Signature	Date
	NA	<i>Jake Schmalz</i>	2/1/11
	Rationale for Determination: The proposed action has no effect on socioeconomics in the project area, including on the individual permittee.		
Visual Resources	Determination	Signature	Date
	NA	<i>Sally Thode</i>	3/8/2011
	Rationale for Determination: The proposed action has no effect on visual resources in the project area.		
Wastes (hazardous or solid) (RCRA and CERCLA)	Determination	Signature	Date
	NP	<i>David Lazorchak</i>	02/22/2010
	Rationale for Determination: There were no hazardous or solid wastes identified on public land in the project area.		
LAND USES and SPECIAL DESIGNATIONS			
Areas of Critical Environmental Concern (FLPMA)	Determination	Signature	Date
	NP	<i>Sally Thode</i>	3/8/2011
	Rationale for Determination: There are no designated ACEC's in the project area.		
Farmlands (Prime or Unique) (SMCRA and Farmland Protection Policy Act)	Determination	Signature	Date
	NP	<i>Marnie Medina</i>	6/8/11
	Rationale for Determination: There are no prime or unique farmlands in the project area.		
Lands/Realty Authorizations	Determination	Signature	Date
	NP	<i>Marnie Medina</i>	6/8/11
	Rationale for Determination: There are several lands/realty authorizations in the project area. These include five road ROW's (COC-23835, COC-35395, COC-118256, 118257, 118259), one buried phone line ROW (COC-54329), and one overhead powerline (COC-19498), which is the Tri-State line to Lake City. None of these ROW's		

	would have any effect on, nor be affected by, livestock grazing management. In addition, there is a ROW for an irrigation ditch and adjacent access road. As long as the ROW is managed according to the stipulations, and the grazing permit is managed according to the terms and conditions, the ROW should not affect, or be affected by, livestock grazing management.		
Rangeland Management	Determination	Signature	Date
	NA	<i>Jake Schmalz</i>	<i>2/1/11</i>
	Rationale for Determination: The proposed action continues current management and so has no effect on rangeland management.		
Recreation	Determination	Signature	Date
	NA	<i>Sally Thode</i>	<i>3/8/2011</i>
	Rationale for Determination: The proposed action has no effect on recreation in the project area.		
Access and Transportation	Determination	Signature	Date
	NA	<i>Sally Thode</i>	<i>3/8/2011</i>
	Rationale for Determination: The proposed action has no effect on access in the project area.		
Wild and Scenic Rivers (Wild and Scenic Rivers Act)	Determination	Signature	Date
	NA	<i>Sally Thode</i>	<i>3/8/2011</i>
	Rationale for Determination: There are no designated wild or scenic rivers in the project area.		
Wilderness (FLPMA and Wilderness Act)	Determination	Signature	Date
	NP	<i>Sally Thode</i>	<i>3/8/2011</i>
	Rationale for Determination: There is no designated Wilderness in the project area.		
Lands with Wilderness Characteristics (Wildlands)	Determination	Signature	Date
	NA	<i>Sally Thode</i>	<i>3/8/2011</i>
	Rationale for Determination: The allotment does not meet any of the size criteria and, therefore, does not have wilderness characteristics.		

FINAL REVIEW:

Reviewer Title	Signature	Date	Comments
NEPA Coordinator	<i>Marnie Medina</i>	6/8/11	
Field Manager	Brian St. George	7/12/11	

