U.S. Department of the Interior
Bureau of Land Management
Glenwood Springs Field Office
50629 US Highway 6 & 24
Glenwood Springs, CO 81601

ENVIRONMENTAL ASSESSMENT

NUMBER: CO-140-2009-0044 EA

CASEFILE NUMBER:

PROJECT NAME: Grazing Permit Transfer and Issuance on the N Thompson Crk Com and Cantley Homestead Allotments

LOCATION: T8S R89W & T9&10S R86W – N Thompson Crk Com (No 08348) and Cantley Homestead (No. 08402) Allotments Refer to attached allotment maps.

APPLICANT: Grazing Permittees (Three permitees)

DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

Background: The current livestock grazing permit is set to expire on 02/28/2009. The current permittee has agreed to transfer and divide the preference between three applicants. The current preference and scheduled grazing use being transferred is shown below in tables 1 & 2.

Table 1 Current Scheduled Grazing Use

Operator No.	Allotment Name/Number	Livestock No. & Kind	Period of use	Percent Public Land	AUMs
0570618	N Thompson Crk Com /08348	217 Cattle	10/10 – 10/16	50	25
	Cantley Homestead/08402	50 Cattle	06/21 – 06/30	100	16

Table 2 Current Preference AUMs

Operator No.	Allotment Name/Number	Active	Suspended	Total
0570618	N Thompson Crk Com /08348	25	0	25
	Cantley Homestead/08402	17	0	17

Proposed Action: The Proposed Action is to issue three separate term grazing permits for the above applicants. The number/kind of livestock, period of use, percent public land and Animal Unit Months (AUMS) will essentially remain the same as the previous permit with the exception of being split between the three applicants. Specifically, Table 3 and Table 4 shown the how the previous permit will be divided. The permits would be issued for a 10-year period unless the base property is leased for less, but for purposes of the EA, we are assuming 10 years of grazing by this or another applicant (in case of transfer). The proposed action is in accordance with 43 CFR 4130.2. The tables below summarize the scheduled grazing use and grazing preference for the permits.

Table 3 Proposed Grazing Scheduled Use

Operator	Allotment Name & No.	Livestock No. & Kind	Period of use	Percent Public Land	AUMs
Applicant 1	Cantley Homestead/08402	50 Cattle	06/21 – 06/30	100	17
Applicant 2	N Thompson Crk Com /08348	104 Cattle	10/10 – 10/16	50	12
Applicant 3	N Thompson Crk Com /08348	113 Cattle	10/10 – 10/16	50	13

Table 4 Proposed Preference AUMs

Operator No.	Allotment Name & No.	Active	Suspended	Total
Applicant 1	Cantley Homestead/08402	17	0	17
Applicant 2	N Thompson Crk Com /08348	12	0	12
Applicant 3	N Thompson Crk Com /08348	13	0	13

The following terms and conditions were included on the previous (expiring) permit and will be carried forward on the issued permits:

- Maintenance of range improvements is required and shall be in accordance with all approved cooperative agreements and range improvement permits. Maintenance shall be completed prior to turnout.

The following allotment term and condition will be included on the issued permits.

- If an assessment of rangeland health results in a determination that changes are necessary in order to comply with the standards for public land health or the guidelines for livestock grazing management in Colorado, this permit will be reissued subject to revised terms and conditions.

- Education/Discovery stipulation: The permitee and all persons specifically associated with grazing operations must be informed that any objects or sites of cultural, paleontological, or scientific value such as historic or prehistoric resources, graves or grave markers, human remains, ruins, cabins, rock art, fossils, or artifacts shall not be damaged, destroyed, removed, moved, or disturbed. If in connection with allotment operations under this authorization any of the above resources are encountered, the proponent shall immediately suspend all activities in the immediate vicinity of the discovery that might further disturb such materials and notify the BLM authorized officer of the findings. The discovery must be protected until notified in writing to proceed by the authorized officer (36CFR800.110 & 112, 43CFR 0.4).

ALTERNATIVES CONSIDERED BUT ELIMINATED:

The No Grazing alternative has been eliminated from further consideration. No unresolved conflicts involving alternative use of available resources have been identified. For this reason, discontinuance of grazing use (No Grazing) will not be considered or assessed.

The No Action alternative has also been eliminated from further consideration. The No Action alternative would involve reissuing the permit/lease with current terms and conditions and no additional stipulations would be added to the permit/lease. Reissuing the permit/lease without the new stipulations would be unrealistic due to current Washington Office and Colorado State Office policies.

PURPOSE AND NEED FOR THE ACTION: These permits/leases are subject to renewal or transfer at the discretion of the Secretary of the Interior for a period of up to ten years. The U.S. Bureau of Land Management has the authority to renew the livestock grazing permits/leases consistent with the provisions of the Taylor Grazing Act, Public Rangelands Improvement Act, Federal Land Policy and Management Act, and Glenwood Springs Field Office's Resource Management Plan/Environmental Impact Statement. This Plan/EIS has been amended by Standards for Public Land Health in Colorado.

The renewal of the grazing permit is needed for the following reasons: (1) to meet the livestock grazing management objective of the Resource Management Plan of providing 56,885 animal unit months of livestock forage commensurate with meeting public land health standards, (2) to continue to allow livestock grazing on the specified allotment, (3) to meet the forage demands of local livestock operations, (4) to provide stability to these operations and help preserve their rural agricultural lands for open space and wildlife habitat, and (5) to allow use of native rangeland resource for conversion into protein suitable for human consumption.

PLAN CONFORMANCE REVIEW: The proposed action is subject to and has been reviewed for conformance with the following plan (43 CFR 1610.5, BLM 1617.3):

Name of Plan: Glenwood Springs Resource Management Plan.

Date Approved: Jan. 1984, revised 1988, amended in November 1991 - Oil and Gas Leasing and Development - Final Supplemental Environmental Impact Statement; amended Nov. 1996 - Colorado Standards and Guidelines; amended in August 1997 - Castle Peak Travel Management Plan; amended in March 1999 - Oil and Gas Leasing & Development Final Supplemental Environmental Impact Statement; amended in November 1999 - Red Hill Plan Amendment; and amended in September 2002 – Fire Management Plan for Wildland Fire Management and Prescriptive Vegetation Treatment Guidance.

Decision Number/Page: The action is in conformance with Administrative Actions (pg. 5) and Livestock Grazing Management (pg. 20).

Decision Language: Administrative actions states, "Various types of actions will require special attention beyond the scope of this plan. Administrative actions are the day-to-day transactions required to serve the public and to provide optimal use of the resources. These actions are in conformance with the plan". The livestock grazing management objective as amended states, "To provide 56,885 animal unit months of livestock forage commensurate with meeting public land health standards."

STANDARDS FOR PUBLIC LAND HEALTH:

In January 1997, Colorado Bureau of Land Management (BLM) approved the Standards for Public Land Health. The five standards cover upland soils, riparian systems, plant and animal communities, threatened and endangered species, and water quality. Standards describe conditions needed to sustain public land health and relate to all uses of the public lands.

The Roaring Fork Landscape which incorporates the N Thompson Creek Common and Cantley Homestead Allotments is scheduled to be assessed in 2010. As such, we are deferring making a determination on conformance with the Standards on this allotment until the formal Land Health Assessment is completed. If the authorized officer determines that existing livestock grazing management practices or levels of grazing use on public lands are significant factors in failing to achieve the standards and conform to the guidelines, the authorized officer shall take appropriate action as soon as practical (according to 43 CFR 4180.2) to achieve progress toward meeting the standards.

Because a standard exists for the five categories mentioned above, the impact analysis must address whether the proposed action or any alternatives being analyzed would result in impacts that would maintain, improve, or deteriorate land health conditions for that specific parameter. These analyses are located in specific elements listed below:

COMPLIANCE WITH SECTION 302 OF FLPMA RELATIVE TO THE COMB WASH DECISION

A review of applicable planning documents and a thoughtful consideration of new issues and new demands for the use of the public lands involved in this allotment have been made. This analysis concludes that the current land and resource uses are appropriate.

Reasons for the conclusion are: No new issues or new demands for the use of public lands involved in this grazing allotment have been identified since approval of the land use plan and amendments.

AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

This section provides a description of the human and natural environmental resources that could be affected by the proposed action and no action alternative. In addition, the section presents comparative analyses of the direct and indirect consequences on the affected environment stemming from the implementation of the various actions.

A variety of laws, regulations, and policy directives mandate the evaluation of the effects of a proposed action and alternative(s) on certain critical environmental elements. Not all of the critical elements that require inclusion in this EA are present, or if they are present, may not be affected by the proposed action and alternative (Table 1). Only those mandatory critical elements that are present and affected are described in the following narrative.

In addition to the mandatory critical elements, there are additional resources that would be impacted by the proposed action and alternative. These are presented under **Other Affected Resources.**

Critical Elements

Table 1. Critical Elements of the Human Environment									
Critical Element	*Present*		*Affected*		*Critical Element*	*Present*		*Affected*	
	Yes	No	Yes	No		Yes	No	Yes	No
Air Quality		X		X	Prime or Unique Farmlands		X		X
ACECs	X		X		Special Status Species*	X		X	
Cultural Resources	X			X	Wastes, Hazardous or Solid		X		X
Environmental Justice		X		X	Water Quality, Surface and Ground*	X		X	
Floodplains		X		X	Wetlands and Riparian Zones*	X		X	
Invasive, Non-native Species	X		X		Wild and Scenic Rivers	X			X
Migratory Birds	X		X		Wilderness/ WSAs	X			X
Native American Religious Concerns		X		X					

* Public Land Health Standard

AREAS OF CRITICAL ENVIRONMENTAL CONCERN

Affected Environment: The southern portion of the North Thompson Creek Common Allotment falls within the Thompson Creek ACEC. This ACEC was designated to protect important scenic, geologic, historic and ecological values.

Environmental Consequences/Mitigation: The proposed action authorizing grazing in the North Thompson Creek Common Allotment would not have a negative effect on the scenic, geologic or historic values found within the allotment. The proposed 7 days of fall grazing use would provide adequate growing season rest for plant health and would allow for seed dissemination and seedling establishment prior to grazing use. The proposed grazing use would not have any negative impacts on the ecological values within this allotment.

CULTURAL RESOURCES and NATIVE AMERICAN RELIGIOUS CONCERNS

Affected Environment: Range permit renewals are undertakings under Section 106 of the National Historic Preservation Act. Additional range improvements (e.g., fences, spring improvements) are subject to compliance requirements under Section 106 and will undergo standard cultural resources inventory and evaluation procedures. During Section 106 review, a cultural resource assessment (GSFO #1009-15) was completed for the N. Thompson Creek Common and Cantley Homestead Allotments on February 4, 2009 following the procedures and guidance outlined in the 1980 National Programmatic Agreement Regarding the Livestock Grazing and Range Improvement Program, IM-WO-99-039, IM-CO-99-007, IM-CO-99-019, CO-2001-026, and CO-2002-029. The results

of the assessment are summarized in the table below. A copy of the cultural resource assessment is available at the GSFO office.

Allotment Number	Acres Inventoried at a Class III level	Acres NOT Inventoried at a Class III Level	Percent (%) Allotment Inventory data Class III level	Number of Cultural Resources known in allotment	High Potential of Historic Properties (yes/no)	Management Recommendations (Additional inventory required and historic properties to be visited)
N. Thompson Creek Common	611	6058	9	13	No	No additional acres need to be inventoried to meet the 10% sampling threshold. 20% of the allotment has 30%+ slopes.
Cantley Homestead	13	4	327	0	No	No additional acres need to be inventoried to meet the 10% sampling threshold. 20% of the allotment has 30%+ slopes.
Total	624	6062	336	13		

Nine Class III cultural resource inventories have been conducted within these allotments resulting in the identification of one historic property. Historic properties are cultural resources that are considered eligible or potentially eligible for listing on the National Register of Historic Places and should be preserved by avoidance and/or require that adverse impacts be mitigate. Undiscovered historic era sites within this allotment could represent a time frame from the late 1800's through the 1950's; Native American sites could represent a time range from 200 to 10,000 years before present. Based on available data, there is a low to moderate potential for historic properties within these allotments.

Subsequent site field visits, inventory, and periodic monitoring may have to be done to identify if additional historic properties are present within the term of the permit and as funds are made available. If the BLM determines that grazing activities will adversely impact the properties, mitigation will be identified and implemented in consultation with the Colorado SHPO.

At present, there are is no known areas of Native American concern within this allotment. On November 7, 2008 the Glenwood Springs Field Office mailed an informational letter and maps to the Ute Tribe (Northern Ute Tribe), Southern Ute Tribe, and the Ute Mountain Ute Tribes, identifying the proposed 2009 grazing permit renewals. No response has been received. If new data is disclosed, new terms and conditions may have to be added to the permit to accommodate their concerns. The BLM will take no action

that would adversely affect these areas or locations without consultation with the appropriate Native Americans.

Environmental Consequences: The direct impacts that occur where livestock concentrate include trampling, chiseling, and churning of site soils, cultural features, and cultural artifacts, artifact breakage, and impacts from standing, leaning, and rubbing against historic structures, above-ground cultural features, and rock art. Indirect impacts include soil erosion, gullying, and increased potential for unlawful collection and vandalism. Continued grazing may cause substantial ground disturbance and cause cumulative, long term, irreversible adverse effects to historic properties.

Two historic properties were identified during the inventories for this allotment. A determination of "**Conditional No Adverse Affect"** has been made for this renewal. In order to mitigate this potential affect all ground disturbing activity and the placement of supplemental feed, etc, must be at least 100m from the areas of concern. The cultural resource specialist should be involved in discussions for improvements, maintenance, supplemental feeding areas, etc to ensure that the historic properties and area of concern is avoided.

Mitigation:_New improvements or maintenance of existing range improvements, additional feeding areas, etc may require cultural resource inventories, monitoring, and/or data recovery. This allotment may also contain undiscovered historic properties and/or resources protected under the National Historic Preservation Act (NHPA), American Indian Religious Freedom Act, Native American Graves Protection and Repatriation Act, E.O. 13007, or other statutes and executive orders. The BLM may require modification to development proposals to protect such properties, or disapprove any activity that is likely to result in damage to historic properties or areas of Native American concern.

Education/Discovery stipulation: The permitee and all persons specifically associated with grazing operations must be informed that any objects or sites of cultural, paleontological, or scientific value such as historic or prehistoric resources, graves or grave markers, human remains, ruins, cabins, rock art, fossils, or artifacts shall not be damaged, destroyed, removed, moved, or disturbed. If in connection with allotment operations under this authorization any of the above resources are encountered, the proponent shall immediately suspend all activities in the immediate vicinity of the discovery that might further disturb such materials and notify the BLM authorized officer of the findings. The discovery must be protected until notified in writing to proceed by the authorized officer (36CFR800.110 & 112, 43CFR 0.4).

ENVIRONMENTAL JUSTICE

Affected Environment: The table below reflects 2004 estimated median annual household income data,[1] and minority population data from July, 2005[2] for the proposed action and "no action" area.

[1] **Source: U.S. Census Bureau, Data Integration Division, Small Area Estimates for Garfield and Pitkin Counties Release Date: December 2006**

2004 Estimated Median Household Income & 2005 Minority Data			
County	Estimate	90% Confidence Interval	Minority %
Pitkin	$60,662	$56,388 to $65,259	9.5

Environmental Consequences/Mitigation: Pitkin County is not considered to be impoverished, but is thought to be a wealthy county. The proposed action is not likely to create a disproportionately high and adverse human health impact or environmental effect on minority or low-income populations in the area.

INVASIVE, NON-NATIVE SPECIES

Affected Environment: Noxious weed inventory reports on the North Thompson Creek grazing allotment reveal houndstongue is located along the primary dirt road on the east side of the allotment. No noxious weeds have been identified on the Cantley Homestead grazing allotment.

Environmental Consequences/Mitigation: Wind, water, vehicles, animals, and people transport weeds. Weeds generally germinate and become established in areas of surface disturbing activities such as road construction and maintenance, vehicular traffic, big game and livestock grazing. Livestock grazing can contribute to the establishment and expansion of noxious weeds through various mechanisms. Improperly managed grazing, (over-grazing), can cause a decline in desirable native plant species and ground cover which provides a niche for noxious weed invasion. In addition, noxious weed seed can be transported and introduced to new areas by fecal deposition or by seed that clings to the animal's coat. Conversely, properly managed livestock grazing which does not create areas of bare ground and which maintains the vigor and health of native plant species, particularly herbaceous species, is not expected to cause a substantial increase in noxious weeds.

The proposed season-of-use and livestock numbers are designed to sustain the overall rangeland health of the allotments. By sustaining or improving rangeland health, noxious or invasive weeds would less likely become established and a reduced rate of spread would result.

MIGRATORY BIRDS

Affected Environment:
The 1988 amendment to the Fish and Wildlife Conservation Act mandates the U.S. Fish and Wildlife Service (USFWS) to "identify species, subspecies, and populations of all migratory nongame birds that, without additional conservation actions, are likely to

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[2] **Source: U.S. Census Bureau: State and County QuickFacts. Data derived from Population Estimates, Census of Population and Housing, Small Area Income and Poverty Estimates, State and County Housing Unit Estimates, County Business Patterns, Nonemployer Statistics, Economic Census, Survey of Business Owners, Building Permits, Consolidated Federal Funds Report**
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become candidates for listing under the Endangered Species Act (ESA) of 1973." *Birds of Conservation Concern 2008* (*http://www.fws.gov/migratorybirds/reports/BCC2008/BCC2008m.pdf*) is the most recent effort to carry out this mandate. The conservation concerns may be the result of population declines, naturally or human-caused small ranges or population sizes, threats to habitat, or other factors. The primary statutory authority for *Birds of Conservation Concern 2008* (*BCC 2008*) is the Fish and Wildlife Conservation Act of 1980 (FWCA), as amended. Although there are general patterns that can be inferred, there is no single reason why any species was is on the list. The Glenwood Springs Field Office is within the Southern Rockies/Colorado Plateau Bird Conservation Region (BCR). The 2008 list include the following birds: Gunnison Sage Grouse, American Bittern, Bald Eagle, Ferruginous Hawk, Golden Eagle, Peregrine Falcon, Prairie Falcon, Snowy Plover, Mountain Plover, Long-billed Curlew, Yellow-billed Cuckoo, Burrowing Owl, Lewis's Woodpecker, Willow Flycatcher, Gray Vireo, Pinyon Jay, Juniper Titmouse, Veery, Bendire's Thrasher, Grace's Warbler, Brewer's Sparrow, Grasshopper Sparrow, Chestnut-collared Longspur, Black Rosy-Finch, Brown-capped Rosy-Finch, and Cassin's Finch.

Habitat loss due to alteration or destruction continues to be the major reason for the declines of many species (*http://www.fws.gov/migratorybirds/reports/BCC2008/BCC2008m.pdf*). When considering potential impacts to migratory birds the impact on habitat, including: 1) the degree of fragmentation/connectivity expected from the proposed project relative to before the proposed project; and 2) the fragmentation/connectivity within and between habitat types (e.g., within nesting habitat or between nesting and feeding habitats. Continued private land development, surface disturbing actions in key habitats (e.g. riparian areas) and the proliferation of roads, pipelines, powerlines and trails are local factors that reduce habitat quality and quantity.

The GSFO planning area provides both foraging and nesting habitat for a variety of migratory birds that summer, winter, or migrate through the area. The habitat diversity provided by the broad expanses of sagebrush, mixed mountain shrub, aspen, pinyon-juniper woodlands, other types of coniferous forests, and riparian and wetland areas support many bird species. The pinyon jay is characteristically found in pinyon/juniper woodlands and the Brewer's sparrow *(Spizella breweri*) is found within sagebrush habitats. Other Birds of Conservation Concern 2008 may also occur locally. Many species of raptors (red-tailed hawks, golden eagles, northern goshawks, Cooper's hawks, kestrels and owls) not on the Fish & Wildlife Service's Birds of Conservation Concern list also could occur in the area.

Bald eagle (*Haliaeetus leucocephalus*). Bald eagles are known to winter along portions of the Colorado, Eagle and Roaring Fork Rivers and its major tributaries. Wintering bald eagles are generally present from mid-November to mid-April. Large mature cottonwood trees along the rivers and their major tributaries are used as roosting and perching sites, and these waterways provide the main food sources of fish and waterfowl. Upland habitats adjacent to these waterways are used as scavenging areas primarily for winter killed mule deer and elk. Major threats include habitat loss, human disturbance and

illegal shooting. Bald eagles are increasing in numbers throughout their range and were removed from the federal threatened and endangered species list in 2007 however bald eagles are still protected under the Migratory Bird Treaty Act. The allotments overlap with bald eagle winter range and winter foraging areas.

Environmental Consequences/Mitigation:
Limited bird count or species data exists for the area, however the greater concern is the continued fragmentation of habitat and losses of large blocks of contiguous habitat required by many bird species including bald eagles. No intentional take of native bird species is anticipated under the proposed action. Grazing by cattle could result in the accidental destruction of ground nests through trampling. This impact is expected to be minimal and isolated and would not influence populations of migratory birds on a landscape level. Given current overall existing habitat condition, livestock grazing, as proposed, will not negatively affect the degree of fragmentation/connectivity expected relative to the existing condition of the allotment and the fragmentation/connectivity within and between habitat types (e.g., within nesting habitat or between nesting and feeding habitats would also likely not change.

THREATENED, ENDANGERED, AND SENSITIVE SPECIES (includes a finding on Standard 4)

Affected Environment:
Listed, Proposed, Candidate Species:
According to the latest species list from the U. S. Fish and Wildlife Service (http://mountain-prairie.fws.gov/endspp/CountyLists/COLORADO.pdf), the following Federally listed, proposed, or candidate plant and animal species may occur within or be impacted by actions occurring in Pitkin County: Canada lynx (*Lynx canadensis*), Mexican spotted owl (*Strix occidentalis*), yellow-billed cuckoo (*Coccyzus americanus*), Uncompahgre fritillary butterfly (*Boloria acrocnema*), Ute ladies'-tresses orchid (*Spiranthes diluvialis*), razorback sucker (*Xyrauchen texanus*), Colorado pikeminnow (*Ptychocheilus lucius*), bonytail chub (*Gila elegans*), and humpback chub (*Gila cypha*)

Plants:
There is no suitable habitat for the Ute ladies'-tresses orchid within the North Thompson Creek or Cantley Homestead allotments.

Terrestrial Wildlife:
Special status terrestrial wildlife species are those whose populations have declined significantly. These declines may result from habitat loss, habitat modification, and changes in competition, predation, or disease. Habitat loss and modification by human activities are the primary causes of declining populations, particularly of species that are highly adapted to specific ecological niches. Such species may or may not be legally protected by federal or state agencies. BLM land management practices are intended to sustain and promote species that are legally protected and prevent species that are not yet legally protected from needing such protection. Limited inventories and surveys have been conducted for special status wildlife species other than Canada lynx *(Lynx canadensis).*

Mexican Spotted Owl (Strix occidentalis). Limited potential exists for Mexican spotted owl habitat within the GSFO. In fact the GSFO is relatively distant from any known active territories. Critical habitat has been designated for Mexican spotted owls within the state of Colorado, though none exists on BLM lands within the GSFO.

Western yellow-billed cuckoo (Coccyzus americanus). The western yellow-billed cuckoo is a federal candidate species that has declined due to loss of riparian habitat from agricultural and water use and road and urban development. Western cuckoos breed in large blocks of riparian habitats (particularly woodlands with cottonwoods (*Populus fremontii*) and willows (*Salix sp.*)). Dense understory foliage appears to be an important factor in nest site selection, while cottonwood trees are an important foraging habitat in areas where the species has been studied. The yellow-billed cuckoo is an uncommon summer resident of Colorado and only few records of cuckoos exist at all in the mountainous region of the state.

Canada lynx. Canada lynx are a federally threatened and Colorado endangered species. In 2000, the Canada lynx was listed under the ESA as a threatened species throughout its range in the contiguous United States. In February 2008 the USFWS proposed to revise the amount of critical habitat designated under the ESA for the federally threatened Canada lynx. None of the existing or proposed critical habitat is within the scope of this EA. BLM mapped potential Canada lynx habitat does exist within portions of the area with conifers (see Appendix A).

A site specific consultation was completed for grazing within the North Thompson Creek Allotment in July of 2000. Since this time a lynx habitat evaluation (2001) has been completed. No formal LHA has been completed for this allotment. Lynx habitat in this allotment is located on a steep northeast facing slope. The habitat was diverse with good vegetative structure and diversity. Vegetation was healthy with good production. Aspen at the site were healthy with at least 3 different age classes noted. Some recruitment was evident in the area. Some elk sign was noted as was bear sign. Livestock grazing is not occurring on this portion of the allotment due to the steep terrain and is not an issue. The site appears to be in late seral stage or nearing climax. The allotment was determined to be meeting Standard 4 for Canada lynx.

The Cantely Homestead Allotment contains 331 acres of BLM managed lands. Lynx habitat is comprised of 55 acres of winter foraging habitat and 145 acres of other habitat. Lynx habitat in this allotment is not currently located within an LAU, but lies adjacent to the White River National Forest's Snowmass LAU. Vegetation within lynx habitat is comprised primarily of aspen, spruce/fir and oakbrush. No formal LHA has been completed for this allotment. The allotment was visited in 2008 to assess lynx habitat. Lynx habitat within this allotment is very steep and probably receives little, if any, grazing from domestic livestock. Wild ungulate sign was noted just below mapped winter habitat. Although 145 acres of other lynx habitat is mapped within this allotment, most of the vegetation is oakbrush and is not considered to have high value to lynx or their prey species.

Environmental Consequences/Mitigation:
Listed, Proposed, Candidate Species:

Plants:
Due to the absence of occupied or suitable habitat for the Ute ladies'-tresses orchid within these two allotments, the proposed action would have **"No Effect"** on this threatened plant species.

Terrestrial Wildlife:
Canada lynx. The proposed action would not result in direct mortality of individual lynx. Excessive losses of forage on a large scale could result in a reduction in hiding and movement cover and directly affect lynx's ability to effectively move through the landscape. This is unlikely from grazing and is more consistent with actions such as a severe wildfire. Indirect impacts associated with grazing are mainly associated with competition between livestock and lynx prey species for available forage. The Canada Lynx Conservation Assessment and Strategy identified that "grazing, in conjunction with increasing elk populations, may have resulted in increased competition for forage resources with lynx prey". In summary, livestock compete with lynx prey species (snowshoe hare, jack rabbits, cottontails, blue grouse, voles, squirrels) for available forage. In addition, livestock can remove hiding cover important to the survival of prey species, which could ultimately result in lower prey species productivity and density.

Appendix A contains a habitat assessment specific to Canada lynx and land health standard 4 for the allotments. In summary, the lynx habitat portions of the allotments provided suitable habitat for lynx and their prey species and grazing management does not appear to be impacting the usability of lynx habitat. The proposed action will not result in the destruction or adverse modification of U.S. Fish & Wildlife Service designated critical habitat. Based on the proposed management, the proposed renewal of this livestock grazing permit "May Affect, but is not likely to Adversely Affect" the Threatened - Canada lynx. Furthermore, the proposed action is in conformance with the recently completed programmatic consultation for lynx regarding the GSFO livestock grazing program. Programmatic consultation for Canada lynx was completed on the entire grazing program as administered by the GSFO. A **"May Affect, Not Likely to Adversely Affect"** determination was made and concurrence was obtained from the FWS (ES/GJ-6-CO-03-F-013).

Affected Environment:
BLM Sensitive Species:

Fish:
A population of Colorado River cutthroat trout resides in North Thompson Creek located within the allotment. Ongoing genetic work is being conducted but currently, this population is not considered a conservation population due to introgression with non-native species. A Core Conservation population of Colorado River cutthroat trout resides in Middle Thompson Creek located 1/8 mile east of the allotments eastern boundary.

Plants:
Although complete surveys have not been done for special status plants on these allotments, several occurrences of the BLM sensitive plant, Harrington's penstemon (*Penstemon harringtonii*), have been documented immediately adjacent to the North Thompson Creek Common Allotment. Similar habitat is found on the allotment and it is presumed that some Harrington's penstemon plants occur on the allotment.

Terrestrial Wildlife:
Reptiles (Midget faded rattlesnake [Crotalus viridis concolor] and the Utah milk snake [Lampropeltis triangulum taylori]): Little is known about these reptiles. This snakes range from across Utah and portions of Wyoming into west-central Colorado, whose populations are in the eastern margin of this species' range. Utah milk snakes occupy various habitats, but many records have been noted within and near floodplains. The species are of concern in Colorado because of the small number of records and restricted range. Threats include development, outright killing, and illegal collection of individuals for commercial purposes.

Bats (Townsend's big-eared bat [Corynorhinus townsendii], fringed myotis [Myotis thysanodes], big free-tailed bat [Nyctinomops macrotis], Yuma myotis [Myotis yumanensis], and spotted bat [Euderma maculatum]). Bats prefer natural caves and abandoned mines for winter, summer, day, and maternal roost sites. These species typically forage on a variety of insects and may use a variety of habitats, including pinyon-juniper woodlands, riparian areas, montane forests, and semidesert shrublands. Although some occurrences have been recorded, little is known about the population sizes and distribution of bats within the GSFO. All of the bats listed above are BLM sensitive species, and the Townsend's big-eared bat is also a Colorado species of concern.

Black-footed ferret (Mustela nigripes). Black-footed ferrets, a state and federally endangered species, historically occurred throughout much of the western US, where large colonies of prairie dog towns were present. This species was likely never common within the GSFO due to the lack of suitable habitat. No black-footed ferrets have been documented in the GSFO, and the only known ferret population in Colorado is a recently reintroduced population in Moffat County.

River otter (*Lontra canadensis*). River otters inhabit riparian vegetation along rivers and streams. This species requires water year-round and feeds on fish and crustaceans. River otters were extirpated in Colorado until 1976, when the CDOW began reintroducing them into major waterways, including the Colorado River. Recent surveys have found signs of otters in both the Colorado and Roaring Fork Rivers.

<u>Environmental Consequences/Mitigation:</u>
BLM Sensitive Species:

Fish:
The proposed action calls for the dividing of one permittees permit into thirds amongst two other permittees on the North Thompson Creek Common allotment, and another individual who would obtain the Cantley Homestead allotment preference. The action

would not result in any grazing use changes. Continued livestock grazing activities across the entire allotment would result in some soil compaction and displacement and increase the likelihood of erosional processes, especially on steep slopes, areas devoid of vegetation, and in concentration areas such as salting sites, stock waters, and drainage bottoms. Soil detachment and sediment transport are likely to occur during runoff events associated with spring snowmelt and short-duration high intensity thunderstorms. Due to the close proximity of grazing to area drainages, there is potential that additional sediment associated with grazing practices could reach North Thompson Creek. Excessive sediment can impact cutthroat trout by silting in important spawning substrates or in the event eggs are present, by smothering eggs resulting in reduced productivity. In addition, important micro habitats such as pools needed for overwinter and oversummer thermal protection can be silted in which reduces depth and makes these areas less usable. Aquatic insect productivity can also be reduced due to excessive sediment. This can result in reduced food sources for fish and terrestrial bird and bat species.

Grazing only occurs on the allotment for 7 days by two permittees in the fall. Thus adequate growing season rest is provided for on the allotment. This allows for plant rest and recovery and should ensure good grass and forb productivity. Little impact to Colorado River cutthroat trout is anticipated from this action.

Plants:
Harrington's penstemon flowering stalks are palatable to both livestock and wildlife. Heavy grazing on penstemon flower stalks each year could result in a decline in the reproductive capability of the species. As old plants eventually die, the population would decline if grazing precludes recruitment of young plants. Light grazing or grazing outside of the flowering period should result in few flower stalks being removed and would not affect the long-term reproductive capability of the population.

The North Thompson Creek Common Allotment would be grazed by two permittees for 7 days in October. This period of grazing use would provide adequate growing season rest for plant health and would allow for seed dissemination and seedling establishment prior to grazing use. The proposed grazing use would have no negative impacts on the long-term viability of Harrington's penstemon plants on this allotment.

Terrestrial Wildlife:
Due to the absence of any known critical, occupied or suitable habitat for BLM sensitive species, the proposed action would have no impact on BLM sensitive terrestrial wildlife species.

Finding on the Public Land Health Standard for Threatened & Endangered Species:
The Glenwood Springs Field Office is scheduled to complete the Roaring Fork Land Health Assessment in summer 2010 that would include the North Thompson Creek Common and Cantley Homestead Allotments. The proposed grazing use on these two allotments should provide adequate growing season rest for plant recovery and seed

dissemination. The proposed grazing on these allotments should not result in a failure to achieve Standard 3 for plant and animal communities.

WATER QUALITY, SURFACE AND GROUND (includes an analysis on Standard 5)

Affected Environment: The North Thompson Creek Common Allotment is located southwest of the Town of Carbondale, west of the Crystal River and Highway 133, and northwest of the perennial Thompson Creek. The northern portion of the allotment is within the 8,042 Edgerton Creek 6th field watershed that contains the ephemeral Edgerton Creek and its unnamed ephemeral tributaries; which are directly tributary to the Crystal River to the east. The southern portion of the allotment is within the 23,941 acre North Thompson Creek 6th field watershed that contains the perennial North Thompson Creek and its unnamed ephemeral tributaries; which are tributary to the perennial Thompson Creek to the east.

The Cantley Homestead Allotment is located west of the City of Aspen and Highway 82, west of the Roaring Fork River, west of the perennial Snowmass Creek, and east of the White River National Forest boundary. This allotment contains small unnamed ephemeral tributaries to Snowmass Creek to the east and is within the 7,309 acre Lower Snowmass Creek 6th field watershed.

According to the State of Colorado's *Stream Classifications and Water Quality Standards* (CDPHE, Water Quality Control Commission, Regulation No. 33) list, the drainages mentioned above are classified aquatic life cold 1, recreation E, water supply, and agriculture. Aquatic life cold 1 indicates that this water course is capable of sustaining a wide variety of cold water biota. Recreation class E refers to waters in which primary contact recreation is presumed to be present. In addition, this segment is suitable or intended to become suitable for potable water supplies and agricultural purposes that include irrigation and livestock use.

The drainages mentioned above are not currently listed on the State of Colorado's *303(d) List of Water Quality Limited Segments Requiring TMDLS* (CDPHE, Water Quality Control Commission, Regulation No. 93) or the *Monitoring and Evaluation List* (CDPHE, Water Quality Control Commission, Regulation No. 94) as waterbodies suspected to have water quality problems. In addition, no water quality data are currently available for these drainages.

Environmental Consequences/Mitigation: Grazing activities would result in soil compaction and displacement that increase the likelihood of erosional processes, especially on steep slopes and areas devoid of vegetation. Soil detachment and sediment transport are likely to occur during runoff events associated with spring snowmelt and short-duration high intensity thunderstorms. In addition, the number of livestock in the area would increase the amount of feces present in close proximity to nearby drainages and could lead to stream bank trampling. The introduction of livestock feces to waterbodies often leads to water quality degradation by increasing fecal coliform bacteria levels and often leads to algal blooms which increase water temperatures. While no

perennial drainages with the exception of North Thompson Creek are within the allotments, there is potential that additional sediment associated with grazing practices as well as fecal coliform bacteria from livestock feces could reach area drainages. However, based on the period of use, existing riparian corridors, and the distance from major perennial drainages with the exception of a segment of North Thompson Creek, the potential for measureable water quality degradation is minimal.

Finding on the Public Land Health Standard 5 for water quality: The Glenwood Springs Field Office is scheduled to complete the Roaring Fork Land Health Assessment in summer 2010 that would include the North Thompson Creek Common and Cantley Homestead Allotments. Based on the scheduled period of use and the distance from major perennial drainages with the exception of North Thompson Creek, the proposed activities would not likely prevent Standard 5 for Water Quality from being met.

WETLANDS & RIPARIAN ZONES (includes a finding on Standard 2)

Affected Environment: The table below lists known riparian areas and their Proper Functioning Condition (PFC) assessment for each allotment:

Allotment	Riparian Area Name	Miles	Year Assessed	Condition Rating
N Thompson Creek Com	North Thompson Creek	1.8	1994	Proper Functioning Condition
Cantley Homestead	Snowmass Creek	0.1		Not assessed

The Proper Functioning Condition assessment above did not raise or identify any issues with livestock grazing. Riparian photo plots and utilization stubble height measurements were established on North Thompson Creek in 2005. Photos show the riparian zone to be in good condition (i.e., high production and good cover). Stubble height measurements showed more than adequate residual vegetation was left after grazing. There is no current monitoring, inventory or documented field observations for the affected riparian areas other than what is discussed above.

Environmental Consequences/Mitigation: Under the proposed grazing schedule, the N Thompson Creek Allotment would be grazed for a seven day period in the fall. The Cantley Homestead Allotment would be grazed for a 10 day period in the early summer. The duration and period of grazing use on both allotments would allow for ample grazing rest and recovery time for riparian plant species. In consideration of this and the condition of riparian zones described in the Affected Environment, renewal of the grazing permit is not expected to cause adverse impacts to riparian zones. The condition of riparian areas would be maintained or improved. There would be no cumulative impacts.

Finding on the Public Land Health Standard for riparian systems: The proposed action would not result in failure to achieve this standard and should maintain and/or improve land health conditions for riparian systems.

WILD AND SCENIC RIVERS

Affected Environment: The North Thompson Creek Common Allotment encompasses portions of the North Fork of Thompson Creek which was found to be "Eligible" under a Wild and Scenic River Study done in 2007. The study identified 3 different Outstandingly Remarkable Values that include: Scenic, Geologic, and Historic. This segment was determined to have a preliminary classification of "scenic". All management actions within ¼ mile of the creek must protect the identified ORV's and not change the preliminary classification until a suitability study is completed.

Environmental Consequences/Mitigation: The proposed action authorizing grazing in the North Thompson Creek Common Allotment will not have a negative effect on the scenic, geologic or historic values found within the stream corridor.

WILDERNESS

Affected Environment: The Cantley Homestead is within the Maroon Bells Addition/Eagle Mountain WSA. In addition, portions of the North Thompson Creek Common Allotment are within an area that has been proposed by the public for wilderness designation.

Environmental Consequences/Mitigation: Grazing is an allowed for activity under the Wilderness Act of 1964. No direct impacts to wilderness characteristics have been directly identified from grazing itself. This proposed action does not authorize any new projects or related developments. Therefore, there are no effects to wilderness character within these areas.

NON-CRITICAL ELEMENTS

The following elements **must** be addressed due to the involvement of Standards for Public Land Health:

SOILS (includes a finding on Standard 1)

Affected Environment: According to the *Soil Survey of Aspen-Gypsum Area, Colorado: Parts of Eagle, Garfield, and Pitkin Counties* (USDA 1992), the North Thompson Creek Common (*soils: 9, 12, 18, 25, 30, 33, 64, 95, 104*) and Cantley Homestead (*9, 11, 104, 110*) Allotments contain 11 different soil map units that can be identified by the numerical code assigned by the soil survey. These soil map units are scattered throughout the allotments and some of them have been identified as having severe erosion hazards. In addition, a high percentage of these allotments are mapped as CSU 4 (Controlled Surface Use) for erosive soils on slopes greater than 30% and NSO 15 (No Surface Occupancy) for slopes greater than 50% regardless of soil type. Following is a brief description of the 11 soil map units found within the North Thompson Creek Common and Cantley Homestead Allotments.

- Ansel-Anvik association (9) – This soil map unit is found on fans, foot slopes, and mountainsides at elevations ranging from 7,500 to 9,500 feet and on slopes of 25 to

45 percent. Approximately 70 percent of this unit is Ansel soil and 20 percent Anvik soil with 10 percent consisting of other soil types. The Ansel soil is deep, well drained, and formed in alluvium derived from material of mixed mineralogy. Runoff for this soil is rapid and the water erosion hazard is moderate to severe. The Anvik soil is deep, well drained, and formed in alluvium and colluvium derived from material of mixed mineralogy. Runoff for this soil is rapid and the water erosion hazard is moderate to severe. Primary uses for this soil map unit include woodland and wildlife habitat.

- Anvik-Skylick-Sligting association (11) – This soil map unit is found on fans and mountainsides at elevations ranging from 7,500 to 9,500 feet and slopes of 25 to 50 percent. Approximately 30 percent of the unit is Anvik soil, 30 percent Skylick soil, and 30 percent Sligting soil. The Anvik soil is deep, well drained and is derived from alluvium and colluvium of mixed mineralogy. The surface runoff for this soil is rapid and the water erosion hazard is moderate to severe. The Skylick soil is deep, well drained and is derived from sandstone colluvium. The surface runoff for this soil is rapid and the water erosion hazard is moderate to severe. The Sligting soil is deep, well drained and is derived from sandstone and basalt colluvium. The surface runoff for this soil is rapid and the water erosion hazard is moderate to severe. Primary uses for this soil map unit include woodland, wildlife habitat, and rangeland.
- Arle-Ansari-Rock outcrop complex (12) – This soil map unit is found on mountain and valley sides at elevations ranging from 6,000 to 8,200 feet and on slopes of 12 to 50 percent. Approximately 40 percent of this unit is Arle very stony loam, 30 percent Ansari loam, 20 percent Rock outcrop, and the other 10 percent a mixture of soil types. The Arle soil is moderately deep, well drained and is derived from redbed sandstone and shale. Surface runoff is medium and the water erosion hazard is slight to severe. The Ansari soil is shallow, well drained and is derived from redbed sandstone and shale. Surface runoff is rapid and the water erosion hazard is slight to severe. The Rock outcrop component of this unit consists of exposed sandstone. Primary uses for this soil map unit include rangeland, wildlife habitat, and homesite development.
- Cochetopa-Antrobus association (18) - This soil map unit is found on mountainsides and alluvial fans at elevations ranging from 8,500 to 10,500 feet and on slopes of 12 to 25 percent. Approximately 45 percent of this unit is Cochetopa loam and 35 percent of this unit is Antrobus very stony loam. The other 20 percent of this unit is composed of other soil types. The Cochetopa soil is deep, well drained and derived from basaltic alluvium and colluvium. The surface runoff is rapid and the water erosion hazard is moderate. The Antrobus soil is deep, well drained and derived from basaltic alluvium and colluvium. The surface runoff is rapid and the water erosion hazard is moderate. Primary uses for this soil map unit include rangeland and homesite development.
- Cushool-Rentsac complex (25) – This soil map unit is found on mountains and mesa side slopes at elevations ranging from 6,200 to 7,600 feet and on slopes of 15 to 65 percent. Approximately 45 percent of this soil map unit is Cushool soil and 40 percent Rentsac soil. The Cushool soil is moderately deep, well drained, derived from sandstone and shale, and is found on slopes of 15 to 50 percent. Surface runoff for this soil is rapid and the erosion hazard is classified as severe. The Rentsac soil is

shallow, well drained, derived from sandstone, and is found on slopes of 25 to 65 percent. Surface runoff for this soil is rapid and the erosion hazard is classified as severe. Primary uses for this soil map unit include rangeland, wildlife habitat, Christmas trees, firewood, and fence posts.

- Dollard-Rock outcrop, shale complex (30) – This map unit is found on ridges, mountainsides, and valley sides at elevations ranging from 6,800 to 8,500 feet and on slopes of 25 to 65 percent. Approximately 45 percent of this unit is Dollard soil, 45 percent shale Rock outcrop, and the other 10 percent being a mixture of soil types. The Dollard soil is moderately deep, well drained and is derived from Mancos shale. Surface runoff is rapid and the water erosion hazard is severe. The Rock outcrop portion of this unit is slightly weathered exposures of Mancos shale. Primary uses for this unit include rangeland and wildlife habitat.
- Earsman-Rock outcrop complex (33) – This soil map unit is found on mountainsides and ridges at elevations ranging from 6,000 to 8,500 feet and on slopes of 12 to 65 percent. Approximately 45 percent of this unit is Earsman very stony sandy loam and 35 percent Rock outcrop. The Earsman soil is shallow, excessively drained, and derived from calcareous redbed sandstone. Surface runoff for this soil map unit is rapid and the water erosion hazard is classified as slight to severe depending on slope. Primary uses for this soil map unit include rangeland, wildlife habitat, fence posts, and firewood.
- Jerry loam (64) – This deep, well drained soil is found on alluvial fans and hills at elevations ranging from 7,500 to 9,500 and on slopes of 25 to 65 percent. This soil is derived from sandstone and shale alluvium. Surface runoff is very rapid and the water erosion hazard is moderate. This soil is used primarily for rangeland purposes.
- Showalter-Morval complex (95) – This soil map unit is found on alluvial fans, high terraces, and valley sides at elevations ranging from 7,000 to 8,500 feet and on slopes of 15 to 25 percent. Approximately 45 percent of this unit is Showalter very stony loam, 35 percent Morval loam, and the other 20 percent a mixture of soil types. The Showalter soil is deep, well drained and is derived from basaltic alluvium. Surface runoff is medium and the water erosion hazard is moderate. The Morval soil is deep, well drained and is derived from basaltic alluvium. Surface runoff is medium and the water erosion hazard is slight. Primary uses for this soil map unit include rangeland, hayland, and homesite development.
- Torriorthents-Camborthids-Rock outcrop complex (104) – This soil map unit occurs on south-facing mountainsides, hills, and ridges with slopes ranging from 6 to 65 percent. Approximately 45 percent of this unit is Torriorthents, 20 percent Camborthids, and 15 percent Rock outcrop. The Torriorthents are shallow to moderately deep, well drained, and are derived from sedimentary rock. Surface runoff is rapid and the water erosion hazard is severe. The Camborthids are shallow to deep, well drained, and are derived from sandstone, shale, and basalt. Surface runoff is rapid and the water erosion hazard is severe. The Rock outcrop component of this unit consists of exposed sandstone, shale, and basalt. This soil map unit is used primarily for wildlife habitat.
- Uracca, moist-Mergel complex (110) – This stony soil map unit is found on alluvial fans and valley sides at elevations ranging from 6,800 to 8,400 feet and on slopes of 25 to 65 percent. Approximately 45 percent of this unit is Uracca soil and 40 percent

is Mergel soil with the other 15 percent consisting of similar soil types. The Uracca soil is deep, well drained and was formed in alluvium derived from igneous and metamorphic rocks. Runoff for this soil is medium and the water erosion hazard is moderate. The Mergel soil is deep, well drained and was formed in glacial outwash. Runoff for this soil is medium and the water erosion hazard is moderate. Primary uses for this soil map unit include rangeland and wildlife habitat.

Environmental Consequences/Mitigation: As mentioned above, a high percentage of the two allotments occur on soils with severe erosion hazards and on slopes greater than 30% (17°). Grazing activities would result in soil compaction and displacement that increase the likelihood of erosional processes, especially on steep slopes and areas devoid of vegetation. Soil detachment and sediment transport are likely to occur during runoff events associated with spring snowmelt and short-duration high intensity thunderstorms. There is potential that additional sediment associated with grazing practices could reach North Thompson Creek or Snowmass Creek. However, based on the scheduled period of use, existing riparian corridors, and the distance from major perennial drainages with the exception of a segment of North Thompson Creek, the potential for measureable sediment transport and negative soil impacts is minimal.

Finding on the Public Land Health Standard 1 for upland soils: The Glenwood Springs Field Office is scheduled to complete the Roaring Fork Land Health Assessment in summer 2010 that would include the North Thompson Creek Common and Cantley Homestead Allotments. Based on the scheduled period of use, the proposed activities would not likely prevent Standard 1 for Upland Soils from being met.

VEGETATION (includes a finding on Standard 3)

Affected Environment: The public portion of the North Thompson Creek Common allotment consist mostly of steep slopes vegetated with pinyon-juniper woodlands and dense oakbrush which are largely unsuitable for cattle grazing. Small sagebrush parks are present on the north and south end of the allotment. The Cantley Homestead allotment is on the steep slopes of Eagle Mountain north of the Snowmass Ski area. The allotment consists primarily of aspen woodlands and oakbrush/mixed mountain shrublands with some pockets of conifers on steep drainages and north-facing slopes.

Environmental Consequences/Mitigation:
Under the proposed grazing schedule, the North Thompson Creek Common allotment would be grazed by two permittees for seven days in October. Most of the grazing on the public land portion of the North Thompson Creek Common allotment occurs along North Thompson Creek and in the small, relatively-flat sagebrush parks on the north and south ends of the allotment. Monitoring data indicate that utilization on grasses has generally been slight to light. Utilization of shrubs has been moderate to severe, but this is attributable primarily to big game use of the area.

The Cantley Homestead Allotment would be grazed for a 10 day period in the early summer. Virtually all of the Cantley Homestead allotment is largely unsuitable for cattle grazing due to the steep slopes and little grazing utilization has been noted in the past.

The duration and period of grazing use on both allotments would provide adequate growing season rest for plant health and would allow for seed dissemination and seedling establishment prior to or following grazing use. The renewal of the grazing permit is not expected to have any adverse impacts on plant community health.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Wildlife, Aquatic and Wildlife, Terrestrial): A formal Land Health Assessment has not been completed on these allotments. The proposed action should have little impact on the ability of the area to meet Standard 3 for plant communities.

WILDLIFE, AQUATIC (includes a finding on Standard 3)

Affected Environment:
The North Thompson Creek Common allotment contains one perennial stream, North Thompson Creek. In addition to the Colorado River cutthroat trout addressed in the TES section above, this creek contains rainbow and brown trout, and aquatic insects. Middle Thompson Creek is located 1/8 mile east of the allotment and in addition to Colorado River cutthroat trout addressed in the TES section above, this portion of the creek contains rainbow and brown trout, mottled sculpin, and aquatic insects. The Cantley Homestead allotment contains one perennial stream Snowmass Creek. This stream contains rainbow, brown, and brook trout and mottled sculpin as well as aquatic insects.

Environmental Consequences/Mitigation:
Continued grazing activities would result in soil compaction and displacement and increase the likelihood of erosional processes, especially on steep slopes, areas devoid of vegetation, and at livestock concentration areas such as stock waters, salting sites, and drainage bottoms. Soil detachment and sediment transport are likely to occur during runoff events associated with spring snowmelt and short-duration high intensity thunderstorms. Due to the close proximity of grazing to area drainages, there is potential that additional sediment associated with grazing practices could reach the perennial streams identified above.

Sediment can impact trout and sculpin by silting in important spawning substrates and smothering eggs which can lead to reduced productivity. Excessive sediment can also fill in pools reducing their depth and usability during critical summer and winter periods when they are critical as thermal refuge areas. Aquatic insect productivity can be impaired as sediment covers clean gravels and cobbles needed by these insects. This can reduce food sources for fish and terrestrial bird and bat species. Proposed grazing allows for adequate plant rest and recovery periods on these allotments which should maintain good vegetative cover and help to limit offsite soil movement.

Finding on the Public Land Health Standard 3 for Plant and Animal Communities (partial, see also Vegetation and Wildlife, Terrestrial):

A formal Land Health Assessment has not been completed on these allotments. The proposed action should have little bearing on the areas ability to meet Standard 3 for aquatic wildlife.

WILDLIFE, TERRESTRIAL (includes a finding on Standard 3)

Affected Environment:
The allotments provide important habitat for a variety of obligate species of birds, raptors, small mammals, reptiles, and are particularly important as food and cover for wintering big game. Pinyon-juniper woodlands provide important foraging and nesting habitat for some raptor species and many migratory song birds, and provide security, foraging, and thermal cover for a variety of small game, big game, and nongame wildlife. Mixed mountain shrub and oak habitats are important to turkey, black bear, and lion among others.

Terrestrial habitats have been altered by roads, fences, public recreation use, residential and commercial development, vegetative treatments and livestock and wild ungulate grazing. These human uses contribute to degradation of habitat quality, fragmentation of habitat for several species and the expansion of areas supporting noxious and exotic vegetative species.

Species of High Public Interest. Mule deer and elk usually occupy the area yearround however the sagebrush-dominant ridges and south-facing slopes are important big game winter habitat. BLM lands within these allotments provide a large portion of the less-developed winter and summer range available to deer and elk. The allotments overlap with CDOW mapped deer and elk winter concentration area, severe winter along with summer range. Winter concentration areas are that part of the winter range where densities are at least 200% greater than the surrounding winter range density during the same period used to define winter range in the average five winters out of ten. Severe winter range is considered that part of the overall range where 90% of the individuals are located when the annual snowpack is at its maximum and/or temperatures are at a minimum in the two worst winters out of ten. Summer range is that part of the overall range where 90% of the individuals are located between spring green-up and the first heavy snowfall. Summer range is not necessarily exclusive of winter range; in some areas winter range and summer range may overlap.

The *Lower Colorado River Habitat Management Plan 2008-2012* states the 2006 post-hunt elk population is about 3,400 for Data Analysis Unit (DAU) E-15 (Game Management Units 43 and 471). The CDOW recommended population objective is 4,500 for DAU E-15. The *Lower Colorado River Habitat Management Plan 2008-2012* states the 2006 post-hunt deer population is about 16,500 for DAU - D-13 (Game Management Units 43, 47 and 471). The CDOW recommended population objective is 10,500 for DAU - D-13.

Environmental Consequences/Mitigation:

Environmental Consequences/Mitigation: The fall grazing period on the North Thompson Creek common allotment allows grazing for 217 cattle on 3,260 acres for 7 days during the period October 6 through October 10. The Cantley Homestead allotment allows 50 cattle from June 21 to June 30 on approximately 331 acres. Although not mentioned in the proposed action, this allotment is used for trailing and the 50 cattle would be moving through the allotment for the permit period of 10 days.

It is unlikely that the proposed action would create long-term negative impacts to terrestrial wildlife or their habitat. Under the proposed action, the allotment would be grazed intensively for short durations and direct competition with wildlife for forage would occur. Livestock would be moved through pastures so no area would receive season-long grazing. This grazing schedule together with the expected spatial distribution would allow wildlife population levels to be maintained commensurate with the species and habitat's potential.

Species of High Public Interest. The magnitude of competitive interactions between big game and livestock is poorly understood. Livestock and wild ungulate carrying capacities should be evaluated holistically and be used to guide stocking rate decisions and wild ungulate population objectives. Since these allotments are part of big game winter ranges, the short-term grazing schedules will likely leave sufficient residual vegetation that is necessary for wintering big game. Regrowth areas previously used by cattle in the spring/early summer may even be favored because of the resultant increase in forage palatability.

Qualitatively viewing the big game population trends and objectives in relationship to the consistent level of livestock AUMs, it can be assumed that the current stocking rates will continue to be compatible with CDOW big game objectives.

Analysis on the Public Land Health Standard 3 for Plant and Animal Communities (partial, see also Vegetation and Wildlife, Aquatic): The Glenwood Springs Field Office is scheduled to complete the Roaring Fork Land Health Assessment in summer 2010. If the formal land health assessment determines that current livestock grazing is a significant factor in failing to meet or make progress towards meeting Standard 3 for wildlife, the grazing permit may be modified to achieve this objective.

OTHER NON-CRITICAL ELEMENTS: For the following elements, those brought forward for analysis will be formatted as shown above.

Table 2. Other Resources Considered in the Analysis.

Resource	*NA or Not Present*	*Present and Not Affected*	*Present and Affected*
Access and Transportation		X	
Cadastral Survey	X		
Fire/Fuels Management		X	
Forest Management		X	
Geology and Minerals	X		
Law Enforcement	X		

Paleontology	X		
Noise	X		
Range Management		X	
Realty Authorizations	X		
Recreation		X	
Socio-Economics	X		
Visual Resources		X	

SUMMARY OF CUMULATIVE IMPACTS

No cumulative impacts were identified.

PERSONS AND AGENCIES CONSULTED:

Notices of public scoping were issued through the Colorado BLM's Internet web page providing the public an opportunity to obtain information or offer concerns on grazing permits or allotments scheduled for renewal. News releases were issued…There have been no responses received specific to the permit renewal or allotments addressed in this NEPA document. The Glenwood Springs Field Office Internet NEPA Register also lists grazing permit renewal NEPA documents that have been initiated. They are generally posted approximately one month prior to the estimated completion date.

Southern Ute Tribe
Northern Ute Tribe
Ute Mtn. Ute Tribe

INTERDISCIPLINARY REVIEW:

Name	***Title***	***Responsibility***
Dereck Wilson	Rangeland Management Specialist	NEPA Lead, Noxious and Invasive Species, Range Management
Michael Kinser	Rangeland Management Specialist	Wetlands and Riparian Zones
Jeff O'Connell	Hydrologist/Geologist	Soil, Air, Water, Geology
Kay Hopkins	Outdoor Recreation Planner	WSR, Wilderness, VRM, Recreation, Transportation
Cheryl Harrison	Archaeologist	Cultural Resources and Native American Concerns
Jeff Cook	Wildlife Biologist	Migratory Birds, T/E/S Wildlife, Terrestrial Wildlife
Carla DeYoung	Ecologist	ACEC, Vegetation, T/E/S Plants, Land Heath Stds

Tom Fresques	Fisheries Biologist	T/E/S Aquatic Species, Aquatic Wildlife
Jeff Cook	Wildlife Biologist	Terrestrial Wildlife

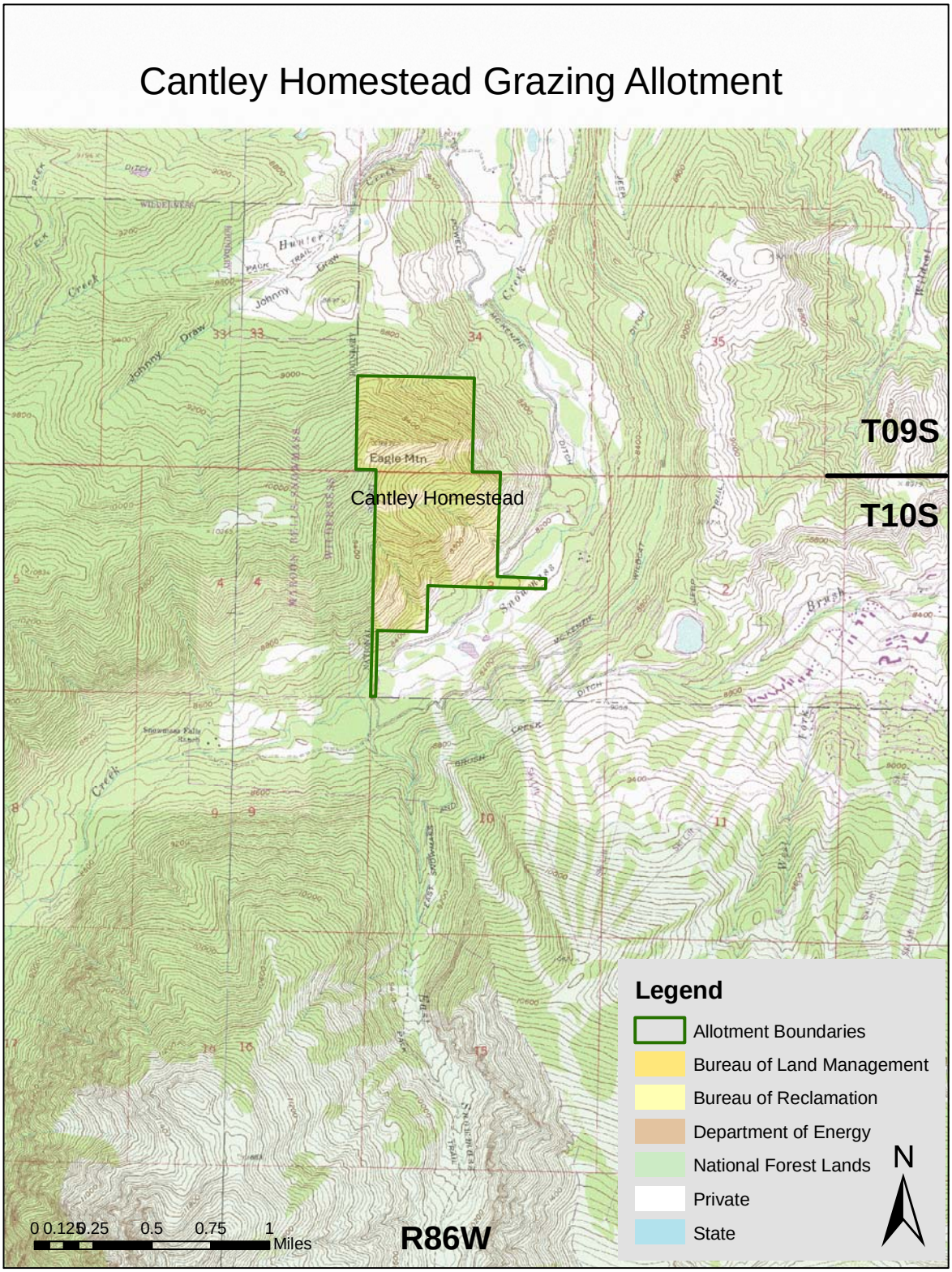
ATTACHMENTS: Allotment Maps

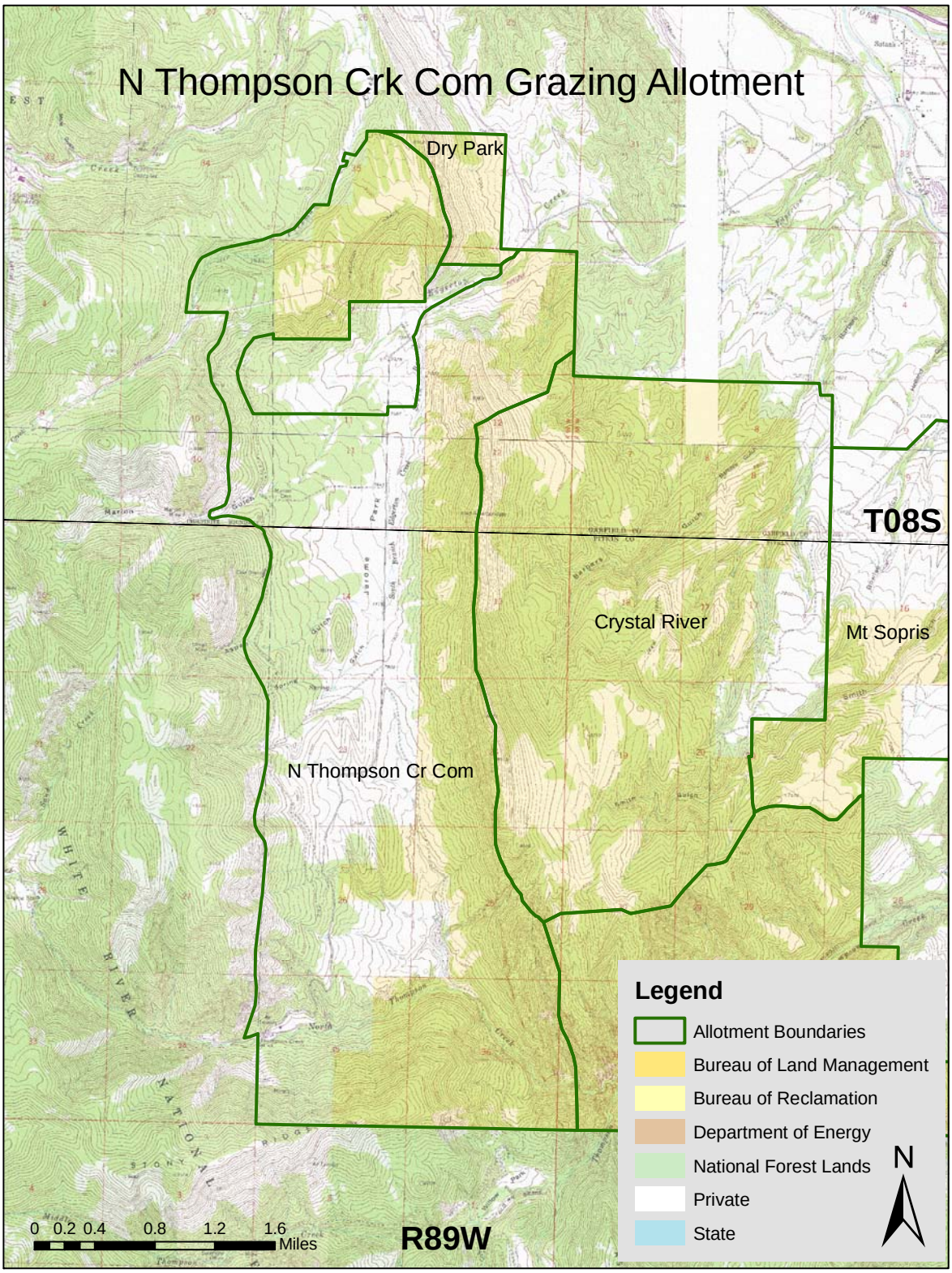
APPENDICES:

A - Biological Assessment for the Glenwood Springs Field Office Regarding Grazing Permit Renewals and Canada Lynx – FY 2009

B – Biological Opinion ES/GJ-6-CO-03-F-013

Cantley Homestead Grazing Allotment




N Thompson Crk Com Grazing Allotment
Dry Park
T08S
Crystal River
Mt Sopris
N Thompson Cr Com
R89W
0 0.2 0.4 0.8 1.2 1.6
Miles
Legend
Allotment Boundaries
Bureau of Land Management
Bureau of Reclamation
Department of Energy
National Forest Lands
Private
State
N

APPENDIX A

Biological Assessment for the Glenwood Springs Field Office Regarding Grazing Permit Renewals and Canada Lynx – FY 2009

Garfield, Routt, Eagle and Pitkin Counties, Colorado

February 12, 2009

Submitted by:

Bureau of Land Management

Glenwood Springs Field Office

Glenwood Springs, CO

Prepared by:

Desa Ausmus, Wildlife Biologist

Bureau of Land Management

Little Snake Field Office

Craig, CO

I. Introduction

The Canada lynx was listed as a threatened species under the Endangered Species Act (Federal Register, Volume 65, No. 58, March 24, 2000) effective April 24, 2000. In the proposed rule, the U.S. Fish and Wildlife Service concluded that the population in the United States is threatened by human alteration of forests, low numbers as a result of past overexploitation, expansion of the range of competitors and elevated levels of human access into lynx habitat. The final rule designating critical habitat was published in the Federal Register on November 9, 2006. There is no critical habitat designated in Colorado.

Threatened and endangered species are managed under the authority of the Endangered Species Act of 1973 (PL 93-205, as amended). The Endangered Species Act requires Federal agencies to ensure that all actions which they authorize, fund, or carry out are not likely to jeopardize the continued existence of any endangered or threatened species, or result in the destruction or adverse modification of their critical habitat. This Biological Assessment regarding the renewal of 12 livestock grazing permits was prepared in accordance with the above provisions.

II. Project Description and Location

The proposed action consists of the renewal of term grazing permits on twelve allotments that either contain mapped lynx habitat, are located within a mapped landscape linkage or both. Each permit will be issued for a 10-year period, unless the base property is leased for less, but for purposes of the BA, we are assuming 10 years of grazing by the current applicant, or another applicant, in the case of a transfer. These allotments are all located within the Glenwood Springs Field Office (GSFO). Table 1 identifies the twelve allotments and lists allotment name, allotment type, acres of public land and predominant habitat type.

All 12 allotments were included in the Glenwood Springs Field Office's programmatic biological assessment. Site-specific consultation has not been completed for four of the allotments. Eight of the allotments have already had site-specific consultations and these permits are being re-issued for another 10 year period. Each consultation made a "May Affect, Not Likely to Adversely Affect" determination and a concurrence letter was received from FWS. Additional data, supporting this determination for these eight allotments, is included in this BA.

Table 1. Allotment Type, Size and Dominant Habitat Type in Lynx Habitat

ALLOTMENT NAME	LIVESTOCK TYPE	ACRES OF PUBLIC (BLM) LAND	PREDOMINANT HABITAT TYPE
Antelope Creek	cattle	3,820	pinyon-juniper/ sagebrush/aspen/ lodgepole
Cantley Homestead	cattle	331	aspen/oakbrush/fir
Jackson	cattle	322	oakbrush/spruce-fir/aspen
W. Hardscrabble Common	cattle	16,300	oakbrush/sage/aspen/ conifer
Spruce Gulch Common	cattle	1,715	oakbrush/aspen/Douglas-fir/ ponderosa pine
Red Hill Common	cattle	11,936	pinyon-juniper/sage
Porcupine Common	cattle	1,927	oak brush /juniper /moutain shrub
E. Hardscrabble	cattle	7,614	pinyon-juniper /mountain shrub
Salt Creek Forest	cattle	780	pinyon-juniper /mountain shrub/ sage
E. Divide Common	cattle	13,777	oakbrush/aspen/spruce-fir
N. Thompson Creek Common	cattle	3,415	oakbrush /pinyon-juniper
Harris Gulch	sheep	2,238	conifer/aspen/oakbrush

Total = 12 **Total Acres = 64,175**

III. Consultation History

To date, the GSFO has completed 8 project level consultations regarding livestock grazing and Canada lynx. These were all specific to individual permits up for renewal for a given year for permits/leases on grazing allotments that contained mapped lynx habitat. Each consultation made a "May Affect, Not Likely to Adversely Affect" determination and a concurrence letter was received from FWS.

In addition, programmatic consultation (ES/GJ-6-CO-03-F-013) for Canada lynx was completed on the entire grazing program as administered by the GSFO. A "May Affect, Not Likely to Adversely Affect" determination was made and concurrence was obtained via a Biological Opinion from the FWS. A Biological Opinion was required at the time due to the Kessler Court Decision. Since that time, that decision has been remanded and a BO is no longer required for NLAA determinations. Copies of all of these Biological Assessments, concurrence letters, and the Biological Opinion are available for review at the Glenwood Springs Field Office.

This Biological Assessment is for Canada lynx, and is at the site-specific project level and tiers to the programmatic grazing consultation noted above.

IV. Species Considered & Species Evaluated

Table 2 below, contains a list of Threatened, Endangered, Proposed, and Candidate species located or with potential to be located on lands administered by the Bureau of Land Management's Glenwood Springs Field Office. Although all of the below listed species are found on the GSFO species list, the only species addressed under this consultation is Canada lynx. Other species would be consulted on in the event of any "May Effect" determination through NEPA analysis.

Table 2. List of Threatened, Endangered and Candidate Species

Common Name	Scientific Name	Federal Status
Bony-tailed chub	*Gila elegans*	Endangered
Colorado pikeminnow	*Ptychocheilus lucius*	Endangered
Humpback chub	*Gila cypha*	Endangered
Razorback sucker	*Xyrauchen texanus*	Endangered
Black-footed ferret	*Mustela nigripes*	Endangered
Uncompahgre fritillary butterfly	*Boloria acrocnema*	Endangered
Canada lynx	*Lynx candensis*	Threatened
Ute ladies'-tresses orchid	*Spiranthes diluvialis*	Threatened
Uinta Basin hookless cactus	*Sclerocactus glaucus*	Threatened
Mexican spotted owl	*Strix occidentalis lucida*	Threatened
Parachute penstemon	*Penstemon debilis*	Candidate
DeBeque phacelia	*Phacelia scopulina var. submutica*	Candidate
Yellow-billed cuckoo	*Coccyzus americanus*	Candidate

V. Description of the Species (Canada Lynx) and their Habitat

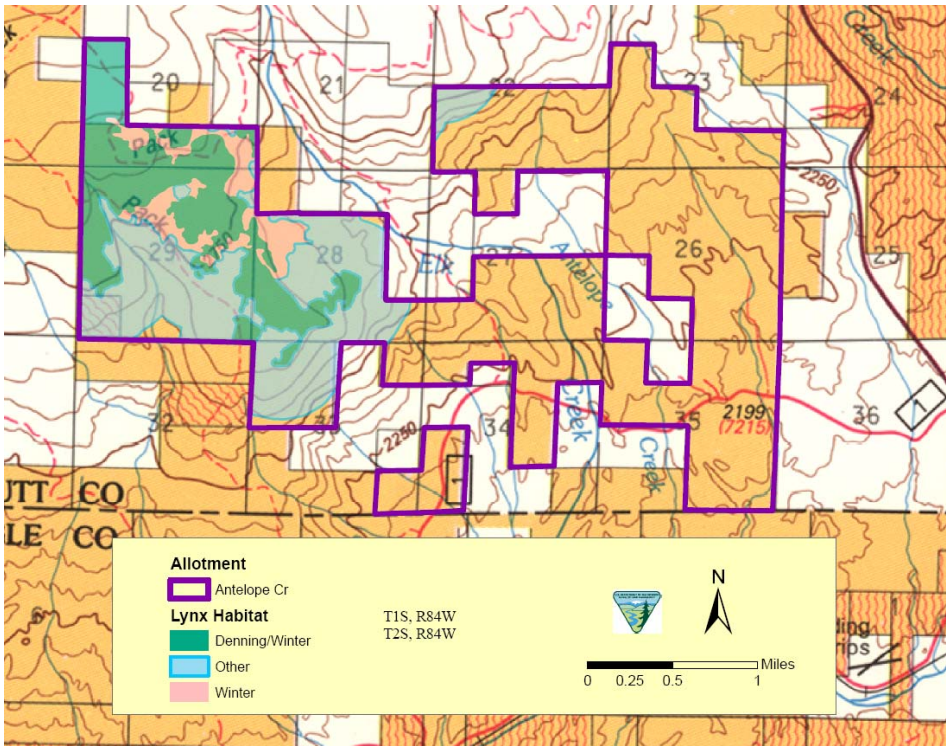
The general summary of lynx habitat was discussed in the Programmatic Consultation ES/GJ-6-CO-03-F-013, which this BA is tiered to. Below is site specific information on local habitat conditions within the 12 livestock grazing allotments being addressed in this BA. Information includes proposed management, allotment habitat characteristics, existing range data, and data collection associated with Land Health Assessments (LHA) regarding Standard 4 for lynx that was conducted on the allotments.

<u>Allotments without site specific consultations</u>

1. Antelope Creek

Background

The Antelope Creek Allotment contains 3820 acres of BLM managed lands. Lynx habitat is mapped in the north-west portion of the allotment and is comprised of 559 acres of winter/ denning habitat, 162 acres of winter foraging habitat and 736 acres of other habitat. Lynx habitat in this allotment is not currently located within an LAU, but lies within the Egeria Landscape Linkage. Vegetation within lynx habitat is comprised primarily of lodgepole pine, ponderosa pine, spruce and aspen.



Map displaying lynx habitat on the Antelope Creek allotment

The Antelope Creek Allotment is located in the Colorado River - Burns to State Bridge watershed. A formal LHA was completed for this landscape in 2006/2007. All of the sites visited in lynx habitat were found to be meeting Standard 3 for healthy plant and animal communities. All areas containing lynx habitat were found to be in good condition, providing healthy and productive habitat for lynx and their prey. Based on the overall condition of upland and riparian habitats located on public lands, Standard 4 for Canada lynx was being met within the Colorado River – Burns to State Bridge watershed. Movement is not being impeded and vegetation capable of providing alternative prey for lynx is abundant.

Habitat assessments specific to Canada lynx were completed for this allotment in 2008. Sites in both winter foraging and other habitat were evaluated. Overall, the allotment was in good condition. Utilization ranged from none to slight, with only wild ungulate sign noted. Abundant grasses and forbs were present with good diversity and productivity in aspen stands. Areas dominated by lodgepole pine forest had a sparse, but appropriate understory. The Antelope

Creek Allotment was meeting Standard 4 and current grazing management does not appear to be impacting the usability of lynx habitat.

Photos of lynx habitat on the Antelope Creek Allotment

The main riparian areas within this allotment are Antelope Creek, Elk Creek, Stifel Creek and Tepee Creek. A riparian condition assessment (PFC) was done in 2006 and all sections of the above creeks within the Antelope Creek Allotment were rated as Proper Functioning. Riparian vegetation was in good condition and was providing suitable cover for wildlife movement.

Proposed Action

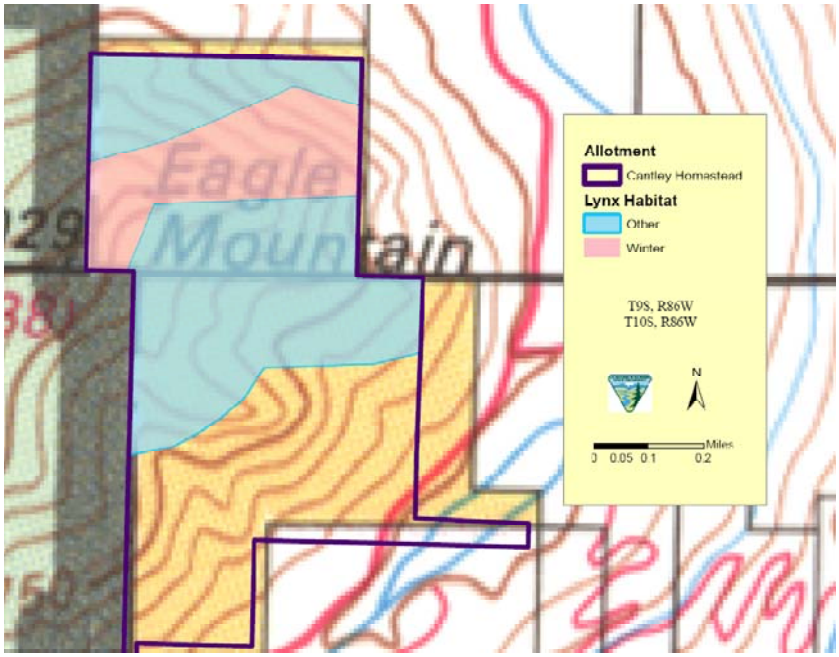
Public Land Acres	Livestock Kind & No.	Period of use	% Public Land	AUMs
3820	107 Cattle	05/01 – 07/31	100	324

Grazing in this allotment is permitted from the beginning of May through the end of July. Cattle are moved through the allotment during the three month grazing period, ensuring that no area receives season long grazing. This grazing system allows for sufficient growing season rest and adequate plant recovery periods. Seed production, dissemination, and seedling establishment are not hindered from livestock grazing.

2. Cantley Homestead

Background

The Cantely Homestead Allotment contains 331 acres of BLM managed lands. Lynx habitat is comprised of 55 acres of winter foraging habitat and 145 acres of other habitat. Lynx habitat in this allotment is not currently located within an LAU, but lies adjacent to the White River National Forest's Snowmass LAU. Vegetation within lynx habitat is comprised primarily of aspen, spruce/fir and oakbrush.



Map displaying lynx habitat on the Cantley Homestead Allotment.

No formal LHA has been completed for this allotment. The allotment was visited in 2008 to assess lynx habitat. Lynx habitat within this allotment is very steep and probably receives little, if any, grazing from domestic livestock. Wild ungulate sign was noted just below mapped winter habitat. Although 145 acres of other lynx habitat is mapped within this allotment, most of the vegetation is oakbrush and is not considered to have high value to lynx or their prey species.

Proposed Action

Public Land Acres	**Livestock Kind & No.**	**Period of use**	**% Public Land**	**AUMs**
331	50 cattle	6/21 – 6/30	100	17

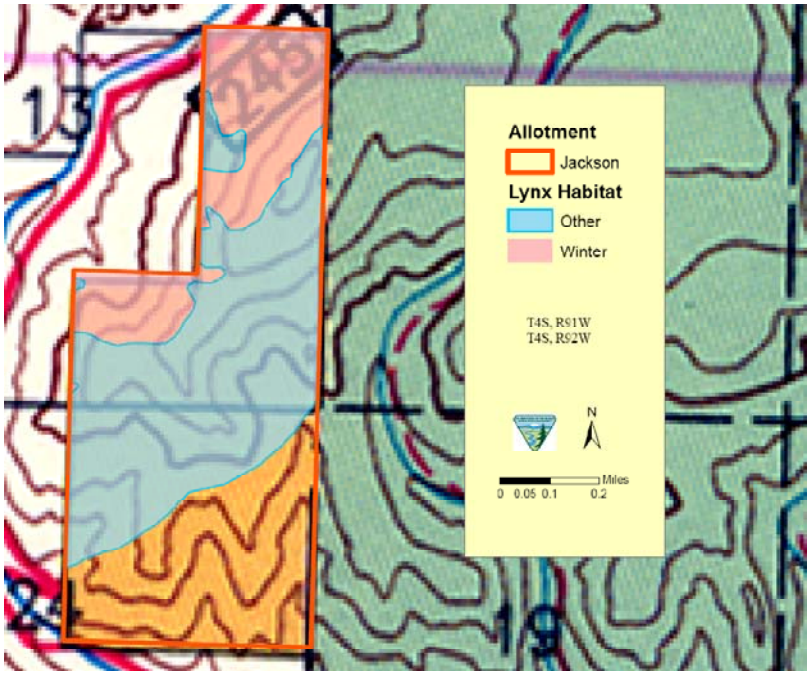
Livestock grazing is permitted on the Cantley Homestead Allotment for 10 days each June. Cattle are basically trailed through the lower elevations of the allotment on their way to the White River National Forest. This allotment receives adequate growing season rest which allows for plant rest and recovery. Seed production, dissemination, and seedling establishment is not being hindered. It is unlikely that grazing is impacting lynx habitat on the Cantley Homestead Allotment.

Photos of lynx habitat on the Cantley Homestead Allotment

3. Jackson

Background

The Jackson Allotment contains 322 acres of BLM managed lands. Lynx habitat is mapped in the northern two thirds of the allotment and is comprised of 70 acres of winter habitat and 159 acres of other habitat. Lynx habitat in the allotment is not within a LAU, but is adjacent to the White River National Forest BarHL LAU. Vegetation in mapped lynx habitat is comprised of aspen/spruce-fir and oakbrush.



Map displaying lynx habitat on the Jackson Allotment.

Photo of lynx habitat on the Jackson allotment

A formal LHA was completed for this allotment in 2007/2008. Due to the steep topography, the allotment was assessed from the base of the hill. No evidence of livestock grazing or any land health issues were noted. Since much of the lynx habitat within this allotment is very steep, it probably receives little, if any, grazing from domestic livestock. Although 145 acres of other lynx habitat is mapped within this allotment, most of the vegetation is oakbrush and is not considered to have high value to lynx or their prey species.

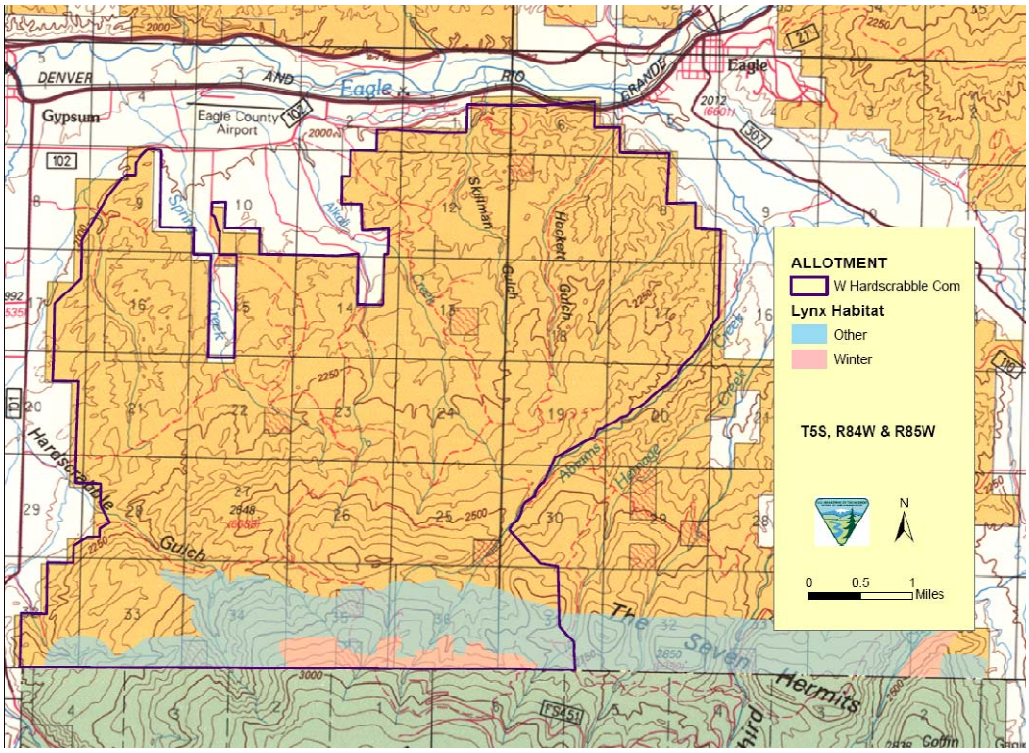
Proposed Action

Public Land Acres	Livestock Kind & No.	Period of use	% Public Land	AUMs
322	20 Cattle	06/16 – 07/31	100	30

Grazing is permitted on the allotment for about six weeks during the summer. Only the flatter portion of the allotment, at the top of the slope is likely utilized by livestock. The allotment is being managed within BLM's guidelines and receives adequate rest for plant recovery.

4. W. Hardscrabble Common

The W. Hardscrabble Common Allotment contains 16,300 acres of BLM managed lands. Lynx habitat is mapped in the extreme southern portion of the allotment and consists of 325 acres of winter habitat and 1765 acres of other habitat. Lynx habitat in the allotment is not within a LAU, but is adjacent to the White River National Forest's Battlement LAU. Vegetation in mapped lynx habitat includes lodgepole pine, aspen stands, sagebrush and oakbrush.



Map displaying lynx habitat on the W. Hardscrabble Allotment.

The W. Hardscrabble Common Allotment is located in the Eagle River South watershed. A formal LHA was completed for this landscape in 2002/2003. The allotment as a whole was considered to be meeting Standard 3 for healthy plant and animal communities, with some problem areas. The main problems were found on the lower elevation sagebrush sites. On these sites, sagebrush was in poor condition with pinyon-juniper encroachment. Many sites had low vigor and productivity, possible due to drought conditions that year. Higher elevation areas containing lynx habitat were found to be in good condition, providing healthy and productive habitat for lynx and their prey. The allotment was determined to be meeting Standard 4 for Canada lynx.

Habitat assessments specific to Canada lynx were completed for this allotment in 2003. Sites in both winter foraging and other habitat were evaluated. Overall, lynx habitat in the allotment was in good condition. Grazing in areas dominated by aspen and lodgepole pine was low. Some weeds, such as Canada thistle, musk thistle and houndstongue were noted. The W. Hardscrabble Common Allotment was meeting Standard 4 and current grazing management does not appear to be impacting the usability of lynx habitat.

Photo of lynx habitat on the W. Hardscrabble allotment

Proposed Action

Public Land Acres	Operator number	Livestock Kind & No.	Period of use	% Public Land	AUMs
16,300	1	395 cattle	5/01 – 6/30	100	597
		10 cattle	10/16 – 10/31	100	5
	2	128 cattle	5/01 – 6/30	100	194
		10 cattle	10/16 – 10/31	100	5
	3	100 cattle	5/01 – 6/30	100	151
		10 cattle	10/16 – 10/31	100	5

The West Hardscrabble Allotment is under an Allotment Management Plan (AMP). The AMP specifies a grazing system in which cattle are rotated amongst five different "areas" of the allotment during the spring use period. Period of use in each grazing area varies from 10 to 15 days. The AMP acknowledged that pastures could not be designated due to the lack of fencing and water availability. Given the lack of pasture fencing and lack of water in some areas of the allotment, cattle are actually rotated amongst three to four areas of the allotment. Lower elevation areas of the allotment are used first then cattle are moved to higher elevation areas prior to moving onto the adjacent National Forest allotment. Period of use varies from two to three weeks in each area of the allotment; however, due to lack of pasture fencing there is always some livestock drift between the grazing areas.

Grazing in this allotment is permitted from the beginning of May through the end of June. Grazing also occurs for about two weeks in the fall. Cattle are moved through the allotment during both grazing periods, ensuring that no area receives season long grazing. This grazing

system allows for sufficient growing season rest and adequate plant recovery periods. Seed production, dissemination, and seedling establishment are not hindered from livestock grazing.

Allotments with completed site-specific consultations

Allotment specific consultations have been completed for the following eight allotments. One allotment, Harris Gulch, is proposed to have a change in livestock class. The other seven allotments will have no change or very minor changes to the grazing permits. The proposed action is to re-issue the grazing permit for another 10 years. Since the grazing schedules have already been consulted on, they will not be re-stated in this BA. New information collected since the initial consultation, supporting the NLAA determination is presented below.

1. Harris Gulch

A site specific consultation was completed for grazing within the Harris Gulch Allotment in 2008. The permittee would like to change the class of livestock from cattle to sheep.

A formal LHA was completed for this allotment. Four sites throughout the allotment were visited, three outside of lynx habitat and one in lynx habitat. Overall, the allotment was in good condition and was meeting the standard for healthy and productive plant and wildlife communities**.** One site visited in the allotment did not meet standard 3 for healthy vegetative communities due to weeds. This was a small livestock concentration area which represents less that 10% of the allotment. The most recent range monitoring was completed in the summer of 2005, outside of lynx habitat. This allotment is meeting Standard 4 and livestock grazing is not degrading lynx habitat.

Proposed Action

Previous Grazing Schedule:

Public Land Acres	Livestock Kind & No.	Period of use	% Public Land	AUMs
3316 acres	78 cattle	6/15 to 8/31	90%	180

Proposed Grazing Schedule:

Public Land Acres	Livestock Kind & No.	Period of use	% Public Land	AUMs
3316 acres	800 sheep	06/15 – 07/15	90%	147
	800 sheep	10/19 – 10/25	90%	33

The Harris Gulch Allotment would be grazed for four weeks in the early summer and again in the fall for six days. This would provide adequate growing season rest which allows for plant rest and recovery. Seed production, dissemination, and seedling establishment would not be hindered. The allotment is currently in good condition, and the proposed changes to the permit are not expected to change the condition of lynx habitat on the allotment.

2. E. Hardscrabble

A site specific consultation was completed for grazing within the E. Hardscrabble Allotment in July of 2000. Since this time, a formal land health assessment (2002/2003) and a lynx habitat evaluation (2000) have been completed.

The E. Hardscrabble Allotment is located in the Eagle River South watershed. A formal LHA was completed for this watershed in 2002/2003. Some sites within the allotment were found to not be meeting Standard 3 for health plant and animal communities. The main problems were found on the lower elevation sagebrush sites. On these sites, sagebrush was in poor condition with pinyon-juniper encroachment. Many sites had low vigor and productivity, possible due to drought conditions that year. Weeds were also found on several of these sites. Vegetative communities in upper elevations were in much better condition. Aspen and conifer stands had better vigor and productivity than lower elevation sites. All sites within mapped lynx habitat were found to be meeting Standard 3 and provided suitable habitat for lynx and their prey.

Habitat assessments specific to Canada lynx were completed for this allotment in 2000, after the initial consultation was complete. Nine sites were visited within the allotment. Overall, lynx habitat in the allotment was in good condition. Utilization ranged from none to slight and livestock sign was noted at five of the sites. Milk thistle and hounds tongue were found at one site. The E. Hardscrabble Common Allotment was meeting Standard 4 and current grazing management does not appear to be impacting the usability of lynx habitat.

3. Salt Creek Forest

A site specific consultation was completed for grazing within the Salt Creek Forest Allotment in July of 2000. Since this time, a formal LHA and a lynx habitat evaluation have been completed.

The Salt Creek Forest Allotment is located in the Eagle River South watershed. A formal LHA was completed for this watershed in 2002/2003. The allotment was found to be meeting Standard 3 for healthy plant and animal communities. The allotment is in good condition and provides productive habitat for Canada lynx. The Salt Creek Forest Allotment was meeting Standard 4 and current grazing management does not appear to be impacting the usability of lynx habitat.

Habitat assessments specific to Canada lynx were completed for this allotment in 2000, after the initial consultation was complete. Two sites were visited within lynx habitat. Utilization was none to slight with no evidence of livestock use. The vegetative community was in good condition and aspen regeneration was abundant at one site. At least 4 different age classes of aspen were noted with many small saplings present. Understory grasses, shrubs, and forbs were diverse and abundant and in good condition. The allotment was meeting Standard 4.

4. Porcupine

A site specific consultation was completed for grazing within the Porcupine Allotment in July of 2000. Since this time, a formal LHA and a lynx habitat evaluation have been completed.

The Porcupine Allotment is located in the Rifle-West watershed. A formal LHA was completed for this watershed in 2004/2005. One site within lynx habitat was visited. Mapped habitat in the allotment is located on steep side hills or within steep drainages that are not being accessed by livestock. Lynx habitat in the allotment was in good condition. Understory vegetation was in good condition and aspen and conifer trees were healthy. Based on the overall condition of habitat, Standard 4 for Canada lynx was being met.

Habitat assessments specific to Canada lynx were completed for this allotment in 2000, after the initial consultation was complete. One site was assessed but a larger portion was hiked through. This allotment is mostly mixed mountain shrub with some Doug-fir and aspen in the southeast corner. Evidence of livestock use was apparent. Utilization was light except for along the main cattle trail through the heavy oakbrush where in small openings use was moderate to heavy. Understory grasses were productive and vigorous. Canada thistle and broader areas of houndstongue were noted. Livestock sign was far less evident farther up the steep slope to the east. This is where the best lynx habitat was located with a denser stand of Doug-fir and a couple of aspen stringers. Several small seeps and springs with cottontails were noted. Lynx habitat within the Porcupine Allotment is in good condition and the allotment was meeting Standard 4.

5. North Thompson Creek

A site specific consultation was completed for grazing within the North Thompson Creek Allotment in July of 2000. Since this time a lynx habitat evaluation (2001) has been completed. No formal LHA has been completed for this allotment.

Lynx habitat in this allotment is located on a steep northeast facing slope. The habitat was diverse with good vegetative structure and diversity. Vegetation was healthy with good production. Aspen at the site were healthy with at least 3 different age classes noted. Some recruitment was evident in the area. Some elk sign was noted as was bear sign. Livestock grazing is not occurring on this portion of the allotment due to the steep terrain and is not an issue. The site appears to be in late seral stage or nearing climax. The allotment was determined to be meeting Standard 4 for Canada lynx.

6. Spruce Gulch Common

A site specific consultation was completed for grazing within the Spruce Gulch Common Allotment in November of 2000. Since this time, a formal LHA has been completed. A wildfire burned some of the lynx habitat within this allotment in 2008.

The Spruce Gulch Common Allotment is located in the Rifle-West watershed. A formal LHA was completed for this watershed in 2004/2005. One site within lynx habitat was visited. Mapped habitat in the allotment is located on steep side hills or within steep drainages that are not being accessed by livestock. Lynx habitat in the allotment was in good condition.

Understory vegetation was in good condition and aspen and conifer trees were healthy. Based on the overall condition of habitat, Standard 4 for Canada lynx was being met.

7. Red Hill Common

A site specific consultation was completed for grazing within the Red Hill Common Allotment in November of 2000. Since this time, a formal LHA and a lynx habitat evaluation have been completed.

The Red Hill Common Allotment is located in the Eagle River South watershed. A formal LHA was completed for this watershed in 2002/2003. For the most part, the Red Hill Common Allotment was meeting land health standards. Overall, ground cover was adequate to protect soils and vegetation was in fair to good condition. Some issues were found on the lower elevation sagebrush sites. Vegetative communities in upper elevations were in much better condition. All sites within mapped lynx habitat were found to be meeting Standard 3 and provided suitable habitat for lynx and their prey.

Habitat assessments specific to Canada lynx were completed for this allotment in 2001. One site was visited within the allotment. The habitat was diverse with good vegetative structure. Vegetation was healthy with good production. Aspen at the site were healthy with 3 different age classes noted. Some recruitment was evident. Mountain mahogany was moderately browsed and elk and some deer sign was evident. No livestock sign was noted and use was obviously slight. The allotment was meeting Standard 4 and was providing productive habitat for Canada lynx.

8. East Divide Common

A site specific consultation was completed for grazing within the East Divide Common Allotment in December of 2001. Since this time, a lynx habitat evaluation has been completed.

Habitat assessments specific to Canada lynx were completed for this allotment in 2002. Three sites were assessed in lynx habitat on this allotment. Aspen were very healthy and large but age class diversity was somewhat lacking. At least 3 age classes were noted and some regeneration was occurring across the area but small saplings were being stripped of their leaves. This was likely from elk and possibly cattle. It appeared that aspen regeneration may be being hindered across large portions of the allotment. Conifers were in good condition with smaller and larger trees present. Understory was diverse with good structure and good productivity. Livestock sign was present but use was light in the forested, heavy canopied areas. Small openings showed slightly higher use on grasses. Overall, the allotment was found to be meeting Standard 4 and providing suitable and productive habitat for Canada lynx.

VI. Effects of Proposed Action on Canada Lynx

The general effects of livestock grazing were disclosed and discussed in the Programmatic Consultation ES/GJ-6-CO-03-F-013, which this BA is tiered to. Site specific effects related to the renewal of these twelve grazing permits are discussed below.

VI.1. Proposed Action(s) Relative Effects to Lynx Productivity Risk Factors

The biggest potential effect to lynx is livestock competition with lynx prey species for forage resources. Any reductions in forage that would lead to a reduction in prey or prey density could result in lower lynx productivity over time. However, based on existing range data for these allotments, utilization levels within lynx habitat are generally in the slight to light category with occasional areas of moderate use. Given the grazing management strategies in place, it is unlikely that any allotment will receive heavy or severe grazing pressure. Livestock are distributed across the allotments primarily within the rangeland habitats (sagebrush, p/j) outside of forested lynx habitats, and generally do not concentrate in any one area too long.

All of the allotments containing lynx habitat and addressed in this BA are being managed to meet one or more of the following guidelines:

- Periodic rest or deferment from grazing during the critical [plant] growth periods
- Adequate [plant] recovery and regrowth periods
- Opportunity for seed dissemination and seedling establishment

Each of the allotments incorporates at least some rest during the growing season and adequate plant recovery and regrowth periods via the implementation of rotation, deferral, or season of use. As such, it is likely that opportunities for seed dissemination and seedling establishment are occurring, given localized climate conditions related to moisture capture and drought. Managing these allotments within the above guidelines should ensure that these allotments continue to meet the Public Land Health Standards. Water developments for livestock are generally located within the sagebrush – grassland habitats away from mapped lynx habitat. This helps to distribute livestock use away from the more densely forested habitats, and limits use within riparian areas.

VI.2. Proposed Action(s) Relative Effects to Lynx Movement Risk Factors

General Movement and Dispersal

The LCAS identified several risk factors that could affect lynx movements, including the alteration of shrub-steppe habitat which could contribute to reduced incidence and success of lynx dispersal across shrub-steppe habitats. It is plausible that over grazing by livestock could be a factor contributing to the decline of the shrub-steppe plant community, thus reducing forage availability to the point that it limits leoprid population density. The LCAS states that livestock grazing within shrub-steppe within the elevational ranges of forested lynx habitat should be managed to maintain or achieve mid seral or higher condition, to maximize cover and prey availability.

Identified Habitat Linkages

Four habitat linkages have been identified and mapped within the GSFO. These linkages are comprised of public, private, state and USFS lands and serves as likely corridors in which lynx

might travel during dispersal movements. These corridors link larger forested landscapes located on adjacent White River and Routt National Forest lands. Small portions of the each linkage provide the vegetative components (summer forage, winter forage, and possibly some denning habitat) necessary to support and possibly sustain lynx. However, the majority of vegetation located within these linkages does not provide lynx habitat. These vegetative communities provide habitat for alternative prey species and cover for movement and dispersal. The Antelope Creek Allotment is located within the Egeria Landscape Linkage.

It is plausible that over-grazing by livestock could be a factor contributing to the decline of the functionality of landscape linkages. A reduction in forage availability could limit prey population density. In addition, a reduction in vegetative cover could impair lynx's ability to successfully move through the landscape.

However, based on how the Antelope Creek Allotment would be managed, impacts to lynx and lynx habitat should be insignificant. The permit calls for growing season rest and ample opportunity for plant regrowth and recovery. Seed production, dissemination and seedling establishment should not be hindered under the proposed management schemes. Continued livestock grazing should create no barrier to potential lynx movement.

VII. Inter-related and Inter-dependant Effects

Wild ungulates also play a role in the overall condition of vegetation across the 568,000-acre GSFO. The GSFO serves as primary mule deer and elk winter range for several CDOW Data Analysis Units (DAU's). Most elk move to high elevations and other landownership (National Forest Service Lands) as snow melts in the spring. Deer disperse more than elk across all elevations in the summer. Thus, grazing ungulates are relatively constant on many portions of all allotments throughout the year. The conditions of all allotments change annually with varying weather patterns (e.g. drought) and varying ungulate utilization and distribution. Elk in particular may be having some localized impacts to aspen stands, due to high utilization levels on young saplings. Deer concentrate more heavily on browse and may be partially to blame for poor sagebrush condition in some heavily used winter ranges.

VIII. Cumulative Effects

As it pertains to ESA, cumulative effects are defined as: *those effects of future State or private activities, not involving Federal activities that are reasonably certain to occur within the action area of the Federal action subject to consultation.* [50 CFR 402.02]

Cumulative effects do not include any past or ongoing action, but "involve only future non-Federal actions". Future Federal actions requiring separate consultation (unrelated to the proposed action) are not considered in the cumulative effects section.

In addition to public lands, the GSFO planning area contains a large amount of private land, and some scattered parcels of state land and state wildlife area lands. An undetermined amount, and diverse variety of land management activities are ongoing on private and state lands adjacent to BLM administered lands within the GSFO. Future actions reasonably certain to occur are

numerous and varied on these lands. Human development is occurring at an ever-increasing rate as native rangelands and ranches are being converted to residential and commercial properties. This trend is reasonably certain to continue to some degree. In addition, farming, ranching, and various recreational activities are ongoing and are reasonably certain to continue on other private and state lands. Livestock grazing is also occurring on some private and state lands within the area, and is reasonably certain to continue in some areas despite an overall reduction in grazing and other agricultural activities due to the selling of ranches and resulting residential and commercial developments.

Cumulatively, many of the future actions planned on private and state lands may have some undetermined effect on lynx and lynx habitat. The proposed action is not anticipated to result in negative cumulative impacts to lynx when viewed in conjunction with those activities currently occurring and reasonably certain to occur on adjacent private and state lands.

IX. Determination of Effects

Based on the proposed management, the proposed renewal of these twelve livestock grazing permits "MAY AFFECT, BUT IS NOT LIKELY TO ADVERSELY AFFECT" the Threatened - Canada lynx. Furthermore, the proposed action is in conformance with the recently completed programmatic consultation for lynx regarding the GSFO livestock grazing program. None of the actions will result in the destruction or adverse modification of Fish & Wildlife Service designated critical habitat.

Due to this determination, Formal Consultation is not determined to be necessary. This Biological Assessment is being submitted in order to obtain concurrence with our determination that management of these twelve grazing allotments is within the guidance outlined in the Programmatic Biological Opinion. In addition we seek to have this BA appended to the Programmatic Biological Opinion.

Rationale:

1. Permit standards and guidelines that result in acceptable residual herbivore forage and acceptable riparian conditions are design features of all BLM livestock grazing permits/allotment management plans as directed in the *Glenwood Springs Resource Management Plan* (1984, revised 1988), and *Colorado Public Land Standards for Public Land Health and Guidelines for Livestock Grazing* (1997).

2. Range and Land Health Assessment data shows that lynx habitat within these twelve allotments are in good condition. Where livestock grazing is occurring utilization has generally been light with some areas of moderate use. Light to moderate use should leave sufficient forage for lynx prey species and provide adequate cover for movement and dispersal.

APPENDIX B

Biological Opinion ES/GJ-6-CO-03-F-013

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ecological Services
764 Horizon Drive, Building B
Grand Junction, Colorado 81506-3946

IN REPLY REFER TO:
ES/GJ-6-CO-03-F-013
TAILS 65413-2009-I-0066

April 2, 2009

Memorandum

To: Field Manager, Bureau of Land Management, Glenwood Springs Field Office, Glenwood Springs, Colorado

From: Acting Western Colorado Supervisor, Fish and Wildlife Service, Ecological Services, Grand Junction, Colorado

Subject: Comments on Storm King Allotment Livestock Grazing Permit issuance under Programmatic Biological Opinion ES/GJ-6-CO-03-F-013

Your letter dated February 13, 2009, included the project level Biological Assessment (BA) for the effects of renewing 10-year grazing permits on 12 allotments. Your letter was received in our office on February 17, 2009. Your project level BA tiers to programmatic biological opinion ES/GJ-6-CO-03-F-013, and provides information which updates our programmatic consultation. The programmatic opinion analyzed the effects of your grazing program on Canada lynx.

Project Description

The proposed action consists of the renewal of 10-year grazing permits on 12 allotments that are within a lynx landscape linkage or contain mapped lynx habitat. These allotments are located within the Glenwood Springs Field Office (GSFO). All 12 allotments up for renewal were previously addressed during the programmatic consultation. Eight of the allotments were issued 10-year permit renewals in the past and are now up for renewal again. The remaining four allotments have not been analyzed at the site-specific level and are addressed herein.

Allotments with prior section 7 consultation

Harris Gulch
Section 7 consultation was completed for the Harris Gulch allotment in 2008. However, the permittee has proposed to change the class of livestock from cattle to sheep. The proposal will allow sheep grazing on the 3,316 acre allotment as follows:

- 800 sheep/ grazing period from June 15 – July 15/ 147 animal unit months (AUMs)
- 800 sheep/ grazing period from October 19 – October 25/ 33 AUMs

Section 7 consultation has been completed on seven additional allotments (see following list) in the past to address the effects of grazing on lynx. With the exception of the Harris Gulch allotment (above), no proposed changes in livestock class, timing restrictions or requirements are proposed in the following allotments. Specifics regarding livestock class, timing restrictions or requirements within these allotments are documented in the programmatic biological opinion.

East Hardscrabble
Salt Creek Forest
Porcupine
North Thompson Creek
Spruce Gulch Common
Red Hill Common
East Divide Common

Allotments without prior site specific section 7 consultation

The following allotments were identified in the programmatic BO ES/GJ-6-CO-03-F-013. However, site specific information was not provided and project level analysis under section 7 was never completed.

Antelope Creek
The Antelope Creek allotment consists of 3,820 acres, grazes 107 cattle during a period spanning May 1 – July 31 and yielding 324 AUMs. Livestock are moved throughout the allotment during the three month grazing period to ensure that no area receives season long grazing pressure.

Cantley Homestead
The Cantley Homestead allotment contains 331 acres, grazes 50 cattle during a period spanning June 21 – June 30 yielding 17 AUMs. Livestock are trailed through the lower elevation of the allotment on the way to grazing allotments on the White River National Forest.

Jackson
The Jackson allotment contains 322 acres, grazes 20 cattle, during a period spanning June 16-July 31.

West Hardscrabble Common
The West Hardscrabble Common allotment contains 16,300 acres and is used by three separate operators. The grazing season within this allotment is split with the first rotation occurring between May 1 – June 30 and the second rotation occurring October 16 – October 31. All three operators graze during the same time period, grazing 623 cattle in the first rotation yielding 942 AUMs. The second rotation allows a total of 30 cattle (10 per operator), yielding a total of 15 AUMs (5 per operator). The West Hardscrabble allotment is under an allotment management plan (AMP), which specifies that cattle will be rotated amongst five different "area" of the allotment during the first rotation. Each "area" is grazed for a period of 10-15 days.

Status of the Species and Environmental Baseline

The status of the species tiers to the extensive description of the status of the species in biological opinion ES/GJ-6-CO-03-F-013 and is updated with the following information.

Lynx in Colorado are considered a portion of the lower 48 distinct population segment currently listed under the Act. The Colorado Division of Wildlife (CDOW) is currently tracking approximately 43 adult lynx. Two hundred eighteen lynx have been released during the reintroduction program. There are 114 known mortalities and 61 missing animals (Shenk, CDOW, pers. comm., 2009). The CDOW continues to monitor the population to the extent possible. It has become nearly impossible to determine the extent of the lynx population in Colorado due to failed collars, unknown mortalities, etc. Highway mortality ranks as one of the highest human caused mortalities factors for the Colorado lynx reintroduction overall, only exceeded by animals that have been shot. Three release protocols were used during the initial releases of lynx. By adjusting the release protocol, CDOW observed a reduction in the number of starvation deaths (Shenk 2004). Shenk (pers. comm. 2008) observed that 3 lynx have died of starvation under their current release protocol, one each in years 2000, 2001, and 2008. One hundred sixteen kittens have been born in Colorado (Shenk 2006), but survival of kittens is currently unknown. The CDOW reported zero reproduction in 2007 and 2009.

Table 2. Kittens born in Colorado

Year	Number of Kittens
2003	16
2004	36
2005	46
2006	11
2007	0
2008	0

In addition, on August 20, 2008, the Service issued biological opinion ES/LK-6-CO-08-F-024, to the U.S. Forest Service for a proposal to amend seven Forest Plans within the Southern Rocky Mountain Geographic area (i.e. Colorado and southeastern Wyoming). Biological opinion number ES/LK-6-CO-08-F-024 contains the latest range-wide status of the Canada lynx and is incorporated here by reference.

Environmental Baseline

The environmental baseline for the proposed action is generally described in programmatic biological opinion ES/GJ-6-CO-03-F-013. Standards and guidelines that direct livestock grazing for the Glenwood Field Office are designed to allow grazing at a sustainable level. However, conditions within individual allotments may be influenced by other things, including wild ungulate populations, drought, etc.

The BA reported that all of the 12 grazing allotments are in good condition within the lynx habitat areas and are meeting standard 4 of the Colorado Standards for Public Land Health. The BA reported that aspen regeneration may be hindered across large portions of the East Divide Common allotment but reported that standard four was still being met. In addition, the BA reported that a fire occurred within the Spruce Gulch Common Allotment.

Effects Analysis

The general effects of livestock grazing are contained in the programmatic biological opinion ES/GJ-6-CO-03-F-013.

The biggest potential effect to lynx is livestock competition with lynx prey species for forage resources. Any reductions in forage that would lead to a reduction in prey or prey density could result in lower lynx productivity over time. Given the existing and proposed grazing management strategies, BLM believes that reauthorization of grazing permits for the allotments discussed herein will continue to meet the Public Land Health Standards. As stated in the programmatic opinion, we have concluded that the Standards for public land health are adequate to support lynx conservation. The existence of these standards alone does not necessarily ensure compliance with the standards.

Two of the allotments were reported to have somewhat degraded condition. A fire was reported to have occurred within the Spruce Gulch Common allotment. However, the fire occurred in very steep terrain and livestock grazing is not anticipated to occur within the burned area and will not effect regeneration of the vegetation. Regeneration of aspen clones have been hindered within the East Divide Common allotment. Based on information documented in the programmatic biological opinion ES/GJ-6-CO-03-F-013, the current conditions within the East Divide Common allotment represent degraded conditions compared to past evaluations of habitat conditions. However, the BA concluded that the allotment was meeting standard 4 of the Colorado Standards for Public Land Health.

The lynx habitat components contained within the allotments considered herein make up only a portion of the lynx habitat within their respective landscapes including lynx analysis units and landscape linkages. The majority of lynx habitat lies within the U.S. Forest Service boundary. Therefore, lynx habitat contained within the allotments described herein function as part of a larger landscape and management of the larger landscape for lynx requires a coordinated effort between land management agencies. Several of the allotments considered herein fall within one or more of the landscape linkages, and compliance to the standards for public land health will ensure that the appropriate habitat conditions exist within each linkage to facilitate movement of lynx across the landscape.

Updated Cumulative Effects Analysis

In addition to public lands, the Glenwood Springs Field Office planning area contains a large amount of private land, and some scattered parcels of State land and State wildlife area lands. An undetermined amount, and diverse variety of land management activities are ongoing on private and State lands adjacent to Bureau of Land Management administered lands within the Glenwood Springs Field Office area. Future actions reasonably certain to occur are numerous and varied on these lands. Human development is occurring at an ever-increasing rate as native rangelands and ranches are being converted to residential and commercial properties. This trend is reasonably certain to continue to some degree. In addition, farming, ranching, and various recreational activities are ongoing and are reasonably certain to continue on other private and

State lands. Livestock grazing is also occurring on some private and State lands within the area, and is reasonably certain to continue in some areas despite an overall reduction in grazing and other agricultural activities due to the selling of ranches and resulting residential and commercial developments.

Cumulatively, many of the future actions planned on private and State lands may have some undetermined effect on lynx and lynx habitat. The proposed action is not anticipated to result in negative cumulative impacts to lynx when viewed in conjunction with those activities currently occurring and reasonably certain to occur on adjacent private and state lands.

Conclusion

After reviewing the current status of the Canada lynx, the environmental baseline for the action area, the effects of the action, and the cumulative effects, it is the Service's opinion that the proposed renewal of grazing permits on the subject allotments, is not likely to jeopardize the continued existence of the Canada lynx. Furthermore, the Service concurs with the "may affect, not likely to adversely affect" determination of the BA.

On November 9, 2006, the Service published its final rule designating critical habitat for lynx. Habitats within Colorado were not included in the final rule. Therefore, no adverse modification of critical habitat will result from the proposed action.

Rationale

Permit standards and guidelines that result in acceptable residual herbivore forage and acceptable riparian conditions are design features of all BLM livestock grazing permits/allotment management plans as directed in the *Glenwood Springs Resource Management Plan* (1984, revised 1988), and *Colorado Public Land Standards for Public Land Health and Guidelines for Livestock Grazing*. These same standards and guidelines are consistent with Lynx Conservation Assessment and Strategy (LCAS) standards and guidelines. Therefore, grazing as proposed is predicted to only result in insignificant and/or discountable effects to lynx and their habitat. Although regeneration of aspen trees within the East Divide Common Allotment may be inhibited by livestock grazing, other factors may be contributing to this condition, including impacts from wild ungulates. In addition, lynx habitat within the allotment is a minor contributor to larger blocks of habitat on the White River National Forest.

Incidental Take Statement

Take is to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct (Endangered Species Act, 16 U.S.C. 1531 et seq.).
Harm is an act which actually kills or injures wildlife. Such acts may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering (50 CFR 17.3).

Harass is an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering (50 CFR 17.3). Incidental take is a taking that results from, but is not the purpose of, carrying out an otherwise lawful activity conducted by the Federal agency or applicant (50 CFR § 402.02).

Section 9 of the Act and Federal regulation pursuant to section 4(d) of the Act prohibit the take of endangered and threatened species, respectively, without special exemption. Under the terms of section 7(b)(4) and section 7(o)(2), taking that is incidental to and not intended as part of the agency action is not considered to be a prohibited taking under the Act, provided that such taking is in compliance with the terms and conditions of an Incidental Take Statement.

Amount or extent of take anticipated

In issuing an incidental take statement, the Service provides a statement of anticipated incidental take. Generally, incidental take is expressed as the number of individuals reasonably likely to be taken or the extent of habitat likely to be destroyed or disturbed, and over what time period the anticipated take will occur. We do not anticipate that the proposed action will result in take of lynx.

Comment/Recommendations

We will attach this project level analysis to biological opinion number ES/GJ-6-CO-03-F-013. It may be necessary to reinitiate consultation at the programmatic level if an individual project generated by the BLM's grazing program results in jeopardy or adverse modification determination, or an adverse effect determination is made for any allotment permit renewal.

KBroderdorp:BLM\GSFO\StormKingAllotment\LivestockGrazingPermitCL..doc:040209

Literature Cited

Shenk, T.M. 2004. Colorado Division of Wildlife Job Progress Report. Post Release Monitoring of Lynx Reintroduced to Colorado. 9 pp.

Shenk, T.M. 2006. Colorado Division of Wildlife Research Report. Post Release Monitoring of Lynx Reintroduced to Colorado. 46 pp.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
GLENWOOD SPRINGS FIELD OFFICE

FINDING OF NO SIGNIFICANT IMPACT

Grazing Permit Transfer/Issuance on the N Thompson Crk Com and Cantley Homestead Allotments

DOI-BLM-CO140-2009-0044-EA

Finding of No Significant Impact
I have reviewed the direct, indirect and cumulative effects of the proposed action documented in the EA for the grazing permit issuance on the N Thompson Ck Com and Cantley Homestead Allotments. The effects of the proposed action are disclosed in the Alternatives and Environmental Impacts sections of the EA. Implementing regulations for NEPA (40 CFR 1508.27) provide criteria for determining the significance of the effects. Significant, as used in NEPA, requires consideration of both *context* and *intensity* as follows:

(a) Context. This requirement means that the significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality. Significance varies with the setting of the proposed action. For instance, in the case of a site-specific action, significance would usually depend upon the effects in the locale rather than in the world as a whole. Both short and long-term effects are relevant (40 CFR 1508.27):

The disclosure of effects in the EA found the actions limited in context. The planning area is limited in size and activities limited in potential. Effects are local in nature and are not likely to significantly affect regional or national resources.

(b) Intensity. This requirement refers to the severity of the impact. Responsible officials must bear in mind that more than one agency may make decisions about partial aspects of a major action. The following are considered in evaluating intensity (40 CFR 1508.27).

1. Impacts that may be both beneficial and/or adverse.

Impacts associated with the livestock grazing permit renewal are identified and discussed in the Environmental Impacts section of the EA. The proposed action will not have any significant beneficial or adverse impacts on the resources identified and described in the EA.

2. *The degree to which the proposed action affects health or safety.*

The proposed activities will not significantly affect public health or safety. The purpose of the proposed action is to allow for multiple uses while maintaining or improving resource conditions to meet standards for rangeland health in the allotment. Similar actions have not significantly affected public health or safety.

3. *Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.*

A determination of "May Adversely Affect" has been made for historic properties that occur in the allotments; however, this determination is based on impacts from the construction and/or maintenance of range improvements which is not the proposed action (i.e., renewal of the livestock grazing permit). Although there is generic discussion of adverse impacts that could occur to cultural resources from livestock grazing, no specific impacts from livestock grazing have been identified to the historic properties that occur within these allotments. No other unique characteristics are known to occur in the allotments.

4. The degree to which the effects are likely to be highly controversial.

The analysis did not identify any effects that are highly controversial.

5. The degree to which the effects are highly uncertain or involve unique or unknown risks.

The possible effects on the human environment are not highly uncertain nor do they involve unique or uncertain risks. The technical analyses conducted for the determination of the impacts to the resources are supportable with use of accepted techniques, reliable data, and professional judgment. Therefore, I conclude that there are no highly uncertain, unique, or unknown risks.

6. The degree to which the action may establish a precedent for future actions with significant effects or represent a decision in principle about a future consideration.

This EA is specific to the N Thompson Ck Com and Cantley Homestead Allotments. It is not expected to set precedent for future actions with significant effects or represent a decision in principle about a future management consideration in or outside of this allotment.

7. Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.

The analysis in the EA did not identify any related actions with cumulative significant effects.

8. The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant, cultural, or historical resources.

The proposed action is not considered to adversely affect districts, sites, highways or structures. Refer to the discussion for No. 3 for impacts to cultural/historic resources.

9. The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.

Canada Lynx habitat occurs on both the Cantley Homestead and N Thompson Ck Com allotments. The proposed action has undergone consultation with Fish and Wildlife. Based on the proposed management, the proposed renewal of these twelve livestock grazing permits "MAY AFFECT, BUT IS NOT LIKELY TO ADVERSELY AFFECT" the Threatened - Canada lynx.

10. *Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.*

The proposed action does not violate or threaten to violate any Federal, State or local laws or requirements imposed for the protection of the environment.

Based upon the review of the test for significance and the environmental analyses conducted, I have determined that the actions analyzed in the EA will not significantly affect the quality of the human environment. Accordingly, I have determined that the preparation of an Environmental Impact Statement is not necessary for this proposal.

Authorized Official
Glenwood Springs Field Office

Date 4/27/2009