U.S. Department of the Interior
Bureau of Land Management
Kremmling Field Office
P.O. Box 68
Kremmling, CO 80459

ENVIRONMENTAL ASSESSMENT

NUMBER: CO-120-2007-16-EA

PROJECT NAME: BLM Grazing Permit renewal (#0501727) for the Tointon Ranches LLC.

LEGAL DESCRIPTION: All or part of BLM lands in
07044 T8NR80W Sec 2, 3, 4, 5, 6, 7, 8, 9, 10, 16, 17 and 18
07045 T8NR81W Sec12, 13
T8NR80W Sec 6, 7, 18
07046 T8NR80W Sec 2, 3, 9 and16
07048 T8NR80W Sec 6
07073 T9NR80W Sec 26, 27, 28, 32, 33
07084 T9NR80W Sec 26, 32, 33, 34, 35, 36
07085 T8NR80W Sec 7
07099 T8NR81W Sec 20, 21

APPLICANT: Tointon Ranches LLC/ Bob Tointion.

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES:

Background/Introduction/Issues and Concerns: The lands within Tointon Ranches LLC are a mixture of BLM and private land which is grazed in common. The grazing period and AUMs on this land were determined through negotiations with the past permittee and agency staff. This information is reviewed periodically to determine if public land health needs are meet as well as the needs of the private land owner.

Allotment # 07044 is comprised of 3,660 acres of public land and is managed as a Maintain allotment.

Allotment # 07045 is comprised of 824 acres of public land, 50 acres of State land and 192 acres of private land. The allotment is managed as a Maintain allotment

Allotment # 07046 is comprised of 1,060 acres of public land and is managed as an Improve allotment.

Allotment # 07048 is comprised of 101 acres of public land, 120 acres of state land, and 1,029 acres of private land. The allotment is managed as a Custodial allotment.

Allotment # 07084 is comprised 2,035 acres of public land and is managed as an Improve allotment.

Allotment # 07085 is comprised of 40 acres of Public land and 640 acres of private land. The allotment is managed as a Custodial allotment.

Allotment # 07099 is comprised of 71 acres of Public land and 2,040 acres of private land. The allotment is managed as a Custodial allotment.

Allotment # 07073 is comprised of 1,610 acres of public land and 50 acres of private land. The allotment is managed as a Maintain allotment.

Grazing allotments in the Kremmling Field Office (KFO) are prioritized for management according to one of three levels: Maintain, Improve, or Custodial. For Improve allotments, the BLM must improve forage production and condition in grazing allotments that are currently in unsatisfactory condition. For Maintain allotments, the BLM must maintain or improve forage production in grazing allotments that are currently in satisfactory condition. For Custodial allotments, the BLM must maintain the existing allotment situation and provide for management opportunities as needs arise for operators or other land use agencies.

Proposed Action: The Proposed Action would renew livestock grazing permit # 0501727 (see Attachment #1) that authorizes livestock grazing on allotments # 07044 (Tointon), # 07045 (Peterson Ridge West), # 07046 (Fish Hatchery), # 07048 (Headquarters), # 07073 (Playa A,B and D), # 07084 (Verner East), # 07085 (Verner West) and # 07099 (Beaver Creek) for a period of ten years beginning March 1, 2007 and expiring February 28, 2017, and with the Standard Terms and Conditions (see Attachment #2). A map of the proposed project area is included in Attachment #3. Grazing would continue to the following extent:

Allotment Number	**Allotment Name**	**Livestock**		**Grazing Period**		**Type of Use**	**% Public Land***	**AUMs****
		Number	**Cattle**	**Begin**	**End**			
07044	Tointon	276	C	6/15	7/19	A	100	318
07045	Peterson Ridge West	108	C	6/15	07/07	A	74	60
07046	Fish Hatchery	80	C	05/25	07/05	A	100	110
07048	Headquarters	22	C	06/01	9/30	A	11	10
07073	A	60	C	06/01	06/15	A	73	22
07073	B	72	C	06/01	07/31	A	100	144
07073	D	145	C	07/01	09/30	A	1	4
07084	Verner East	154	C	06/15	07/15	A	100	157
07085	Verner West	89	C	07/15	07/21	A	25	5
07099	Beaver Creek	200	C	06/01	09/30	A	3	24

*% Public Land is the percentage of forage within the public land (BLM) portion of the allotment.
**AUM = animal unit month = amount of forage required to support 1 cow and calf for 1 month.

A total of 852 AUMs would be permitted under the Proposed Action.

Alternative #1: Alternative #1 would implement a rotational grazing system for allotments # 07045 (Peterson Ridge West), # 07044 (Tointon), # 07084(Verner East), # 07073 (Playa) and # 07076 (Fish Hatchery). Part of the rotational grazing system limits use on allotment # 07044 to 34 days of use and livestock use would be limited to 289 AUMs for the next 4 years to determine if the rotational grazing system is working to protect the native vegetation. In addition to the rotational grazing system, the following changes would occur to the permit. The changes to the permit would allow for a longer grazing season to account for the longer season of use for the attached rotational grazing system.

Yearlings would be authorized on allotment # 07046 and would not exceed a rate of 1.5 yearlings per Cow/Calf pair.

Allotment	**Allotment**	**Livestock**		**Grazing Period**		**Type of Use**	**% Public Land***	**AUMs****
Number	**Name**	**Number**	**Cattle**	**Begin**	**End**			
07044	Tointon	142	C	6/1	8/7	A	100	317
07045	Peterson Ridge West	35	C	6/1	8/7	A	74	58
07046	Fish Hatchery	80	C	05/25	07/05	A	100	110
07048	Headquarters	22	C	06/01	9/30	A	11	10
07073	Playa A	9	C	06/01	09/10	A	73	22
07073	Playa B	72	C	06/01	07/31	A	100	144
07084	Verner East	70	C	06/01	08/07	A	100	156
07085	Verner West	89	C	07/15	07/21	A	25	5
07099	Beaver Creek	200	C	06/01	09/30	A	3	24

*% Public Land is the percentage of forage within the public land (BLM) portion of the allotment.
**AUM = animal unit month = amount of forage required to support 1 cow and calf for 1 month.

A total of 852 AUMs would be permitted under the Proposed Action. Allotment # 07073 (Playa D) would no longer be part of this permit. This pasture is not part of this permit because the permittee doesn't own the base property.

Alternatives Considered But Eliminated From Further Analysis:

No Grazing Alternative: No Livestock Grazing was considered, but eliminated from further analysis for the following reasons

- Livestock grazing within the Resource Area was fully analyzed and authorized in the RMP/EIS as recorded in the 1984 Approved Plan and Record of Decision. A "No Grazing Alternative" was considered at that time, and was not selected.

- This alternative is not consistent with the Federal Land Policy and Management Act of 1976 (FLPMA) policy that "the public lands be managed in a manner which recognizes the Nation's need for domestic sources of minerals, food, timber, and fiber from public

lands....."

- During the public scoping and staff review there were no issues or concerns identified that would support a "No Grazing Alternative".

- It has been determined that significant progress toward achieving the Standards for Public Land Health in Colorado would occur with appropriate grazing guidelines set forth in the Alternative #1.

No Action Alternative: Continuation of Current Management: Grazing use authorized under the No Action alternative would be the same as that authorized on the expiring grazing permit for the Tointon Ranches LLC ., because the applications for a permit are the same as the expiring permits (no changes in terms and conditions). Thus, the Proposed Action and the No Action alternative are the same, and impacts will be analyzed in the Proposed Action.

PURPOSE AND NEED FOR THE ACTION: The BLM is acting on a permit renewal request from Tointon Ranches LLC. #0501727 which authorizes livestock grazing on allotments # 07044, # 07045, # 07046, # 07048, # 07973, # 07084, # 07085 and # 07099. The permit is subject to renewal at the discretion of the Secretary of the Interior for a period of up to ten years. If approved, the permit would be renewed for a period of ten years.

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: Kremmling Resource Management Plan (RMP), Record of Decision (ROD)

Date Approved: December 19, 1984

Decision Number/Page: Livestock Grazing pages 6 through 8 as revised

Decision Language: Objectives of the RMP/ROD include allocation of a base level of livestock forage and maintaining or improving forage production and condition in areas where livestock grazing is a priority or compatible with the land use priority. Allotment 07044, 07084 and 07073 has a land-use priority of Coal and Livestock. Allotment 07045, 07046 has land-use priority of Livestock. Allotment 07048 has a land-use priority of Oil and Gas and Coal. Allotment 7085 has a land-use priority of Coal. Allotment 07099 has a land-use priority of Oil and Gas.

Standards for Public Land Health: In January 1997, Colorado Bureau of Land Management (BLM) approved the Standards for Public Land Health. Standards describe conditions needed to sustain public land health and relate to all uses of the public lands. The following are the approved standards:

Standard	Definition/Statement
#1 Upland Soils	Upland soils exhibit infiltration and permeability rates that are appropriate to soil type, climate, land form, and geologic processes. Adequate soil infiltration and permeability allows for the accumulation of soil moisture necessary for optimal plant growth and vigor, and minimizes surface runoff.

#2 Riparian Systems	Riparian systems associated with both running and standing water, function properly and have the ability to recover from major surface disturbances such as fire, severe grazing, or 100-year floods. Riparian vegetation captures sediment, and provides forage, habitat and bio-diversity. Water quality is improved or maintained. Stable soils store and release water slowly.
#3 Plant and Animal Communities	Healthy, productive plant and animal communities of native and other desirable species are maintained at viable population levels commensurate with the species and habitat's potential. Plants and animals at both the community and population level are productive, resilient, diverse, vigorous, and able to reproduce and sustain natural fluctuations, and ecological processes.
#4 Threatened and Endangered Species	Special status, threatened and endangered species (federal and state), and other plants and animals officially designated by the BLM, and their habitats are maintained or enhanced by sustaining healthy, native plant and animal communities.
#5 Water Quality	The water quality of all water bodies, including ground water where applicable, located on or influenced by BLM lands will achieve or exceed the Water Quality Standards established by the State of Colorado. Water Quality Standards for surface and ground waters include the designated beneficial uses, numeric criteria, narrative criteria, and anti-degradation requirements set forth under State law as found in (5 CCR 1002-8), as required by Section 303(c) of the Clean Water Act.

Because a standard exists for these five categories, a finding must be made for each of them in the environmental analysis. These findings are located in specific elements below or in the Interdisciplinary Team Analysis Review Record and Checklist (IDT-RRC) (Appendix 1).

The following table is a summary of the current situation and the total number of acres that have been assessed. A BLM interdisciplinary (ID) team assessed the allotment for compliance with the standards in 2005. The ID team determined allotments # 07044, # 07045, # 07046, # 07084 and # 07073 were in compliance with all of the Standards. Project areas have been assessed for all standards; however, not all standards necessarily apply to all acres in the project area. "NA" denotes where a standard does not apply and does not influence the overall land health.

Allotments #07048, 07085 and 07099 were not assessed for standards because of their small acreages of BLM lands within the allotment boundaries.

CURRENT SITUATION **Total # of Acres Assessed in allotment** **07044 3660** **07045 825** **07046 1060** **07084 2035** **07073 1610** **Total acres 9185**				**PROPOSAL** **(With Mitigation)**	
Standards	**Acres Achieving or Moving Towards Achieving**	**Acres Not Achieving**	**Causative Factors**	**Acres Achieving or Moving towards Achieving**	**Acres Not Achieving**
Std. 1 Soils	9185	0		9185	0
Std. 2	81	0	Includes allotments	81	0

Wetlands			7048, 7085 and 7099		
Std. 3 Vegetation	9185	0		9185	0
Std. 3 Wildlife	9185	0		9185	0
Std. 4 T&E	9185			9185	
Std. 5 H20 Qual.	9185	0		9185	0
Totals	9185	0		9185	0

AFFECTED ENVIRONMENT / ENVIRONMENTAL CONSEQUENCES / MITIGATION MEASURES:

CRITICAL ELEMENTS: The following critical elements: Air Quality, Areas of Critical Environmental Concern, Environmental Justice, Farmlands- Prime and Unique, Floodplains, Wastes- Hazardous or Solid, Native American Religious Concerns, Wild and Scenic Rivers, and Wilderness were evaluated and determined that they were not present or that there would be no impact to them from the Proposed Action, Alternative #1, or No Action Alternative. See IDT-RRC in Appendix 1 for further information.

The following critical elements were determined to be potentially impacted and were carried forward for analysis from the IDT-RRC in Appendix 1.

CULTURAL RESOURCES

Affected Environment: Range permit renewals are undertakings under Section 106 of the National Historic Preservation Act. Range improvements associated with the allotment (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 was completed for each allotment in January and February 2007, 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, and IM-CO-00-026. The results of the assessment are summarized in the table below. Copies of the cultural resource assessments are in the Kremmling Field Office archaeology files.

Allotment Number	**Acres Inventoried at a Class III level**	**Acres NOT Inventoried at a Class III Level***	**Percent -%- of Allotment Inventoried at a 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)**
07044	Approx. 150 ac.	Approx. 3,450	4%	3	Y = Moderate	Conduct a Class III inventory of approx. 266 ac.; Conduct a Class II inventory of approximately 560 acers targeting ridges, knolls and benches. Previously recorded site 5JA31 NEEDS DATA.
07045	Approx. 242 ac.	Approx. 824 ac.	22%	na	Y = moderate to high	Conduct a Class III inventory of approx. 752 ac.; Conduct a Class II inventory of approx. 148 acres targeting ridges, knolls and benches.

Allotment Number	Acres Inventoried at a Class III level	Acres NOT Inventoried at a Class III Level*	Percent -%- of Allotment Inventoried at a 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)
07046	Approx. 40 ac.	Approx. 1,020	3%	1	Y = Moderate	Conduct a Class III inventory of approx. 253 ac.; Conduct a Class II inventory of 136 ac. Targeting ridges, knolls, saddles and benches. Previously recorded site 5JA341 NEED DATA.
07048	Approx. 55 ac.	Approx. 1,195 ac.	4%	2	Y = Moderate	Conduct a Class III inventory of approx. 98 ac.. Previously recorded sites 5JA74.1 and 5JA72.1 NEED DATA.
07073	Approx. 160 ac.	Approx. 1,450 ac.	9%	2	Y = Moderate to High	Conduct a Class III inventory on approx. 344 ac.; Conduct a Class II inventory on approx. 471 ac. Targeting prominent points and ridges.
07084	Approx. 40 ac.	Approx. 1,995 ac.	2%	1	Y = Moderate to High	Conduct a Class III inventory on approx. 274 ac.; Conduct a Class II inventory on approx. 393 ac. Targeting low ridges, knolls and benches. Previously recorded site 5JA1024 NEED DATA.
07085	Approx. 175 ac.	Approx. 505 ac.	26%	4	Y = Low	Conduct a Class III inventory on approx. 11 ac.
07099	Na	Approx. 2,111 ac.	Na	1	Y = Moderate	Conduct a Class III inventory on approx. 42 ac.. Previously recorded site 5JA1271.2 NEEDS DATA and evaluation.

Class III field inventory is to be completed within the ten year expiration period of the grazing permit. If historic properties are located during the subsequent field inventory, and BLM determines that grazing activities has or will adversely impact the properties, mitigation will be

identified and implemented in consultation with the Colorado SHPO. The livestock impacts will be assessed within the ten-year period of the permit.

Environmental Consequences: In general, direct impacts 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.

The Class I revealed that there were no known significant sites within the parcel. Thus, there would be no impacts to cultural resources.

In order to assess impacts to cultural resources from livestock grazing, the BLM will undertake a program to inventory public lands associated with this permit/lease and to document impacts by monitoring NRHP eligible or need data sites that are known or discovered as a result of cultural inventory. Cultural resources concerns identified as a result of the EA will be addressed through a Programmatic Agreement (PA) with the SHPO and the Advisory Council on Historic Places. The PA will outline steps to prioritize and schedule affirmative actions to remedy these concerns.

Mitigation Measures: The BLM standard "discovery" stipulations are made part of this environmental assessment.

INVASIVE, NON-NATIVE SPECIES

Affected Environment: Currently the above allotments have no known weed infestations.

Environmental Consequences/Mitigation: Livestock operations can contribute to the introduction and spread of noxious weeds on public land because livestock are a vector which noxious weed seeds can be transported. Thus, a noxious weed stipulation is included in the Standard Terms and Conditions of livestock grazing permits/leases (see Attachment #2). The stipulation informs the permittee/lessee of their responsibility to notify the BLM of any weeds in the allotment that may be caused by their livestock operation. If the BLM is notified of any weeds in the allotment, control measures would be implemented by the BLM, in partnership with the Jackson County.

MIGRATORY BIRDS

Affected Environment: The majority of the allotments included in the proposed grazing permit renewal are dominated by dry sagebrush steppe habitat with a mix of grass and forb species. A variety of migratory birds inhabit this habitat including burrowing owls, short-eared owls, golden eagles, Northern harriers, prairie falcons, sage sparrows, Brewer's sparrows, and mountain bluebirds. Swainson's Thrushes, Ruby-crowned Kinglets, Townsend's Solitaires, Red-tailed hawks, Cooper's hawks, and goshawks are likely residents of the forest habitat in allotment #07073 (Pasture D). American Wigeons, Blue-winged Teals, Cinnamon Teals, Killdeer, Broad-tailed Hummingbirds, Dusky Flycatchers, Sharp-shinned Hawks, and Willow

Flycatchers are some of the common species that utilize the open water and riparian habitats along the North Platte River and Beaver Creek in allotments # 07048 and # 07099.

Environmental Consequences/Mitigation: The Proposed Action, Continuation of Current Management, would implement grazing practices which involve the same numbers of livestock grazing at the same period of time each year. The vegetative productivity is expected to remain the same and would not result in more food and nesting cover for migratory birds. Alternative #1 would implement a rotational grazing system for allotments # 07045 (Peterson Ridge West), # 07044 (Tointon), # 07084(Verner East), # 07073 (Playa) and # 07076 (Fish Hatchery) which would provide deferment from livestock grazing to each allotment or pasture. This type of system would be more beneficial to migratory birds since grass and forb production would likely increase as compared to the continuation of current grazing management. The deferred grazing system would allow grazed plants to re-grow and thereby produce more plant material which would be available for bird use, especially by those species that nest on the ground.

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

Affected Environment: A list of threatened, endangered, and candidate species which could inhabit the proposed project area was received from the U.S. Fish and Wildlife Service on February 27, 2007. Analysis of this list indicated that no threatened, endangered, or candidate species would be negatively impacted by the proposed permit renewal.

Several populations of North Park Phacelia (*Phacelia formosula*), a federally listed endangered plant species, have been recorded in T8N R80W in sections 5 and 6 (allotment # 07044) and T9N R80W sec 32 (# 07073 and # 07085). The last known observations were in 1995, but are likely still in the area. These plants occur on sandstone outcrops and ridges which is typically poor habitat for other vegetative species. Little competition for water and nutrients exists between *Phacelia formosula* and other plant species.

Greater sage-grouse, a BLM-designated Sensitive Species, inhabit all the allotments (except Pasture D in # 07073) included in the proposed grazing permit renewal. One sage-grouse strutting ground (lek) is located within allotment # 07044 and three more leks are within 2 miles of the allotments. Each of these allotments include sagebrush habitat which provides suitable nesting cover and brood rearing habitat for sage-grouse. Since research has determined that 80% of sage-grouse hens nest within two miles of the leks where they are bred, nesting is occurring in these allotments.

Environmental Consequences/Mitigation: Livestock grazing impacts to the North Park Phacelia population that exists in the above allotments would not change with either the Proposed Action or Alternative #1. The phacelia populations are located in areas where cattle do not graze since these sites do not produce enough forage species to attract them. Past monitoring efforts on other populations have not identified any livestock grazing use or trampling of the phacelia plants. Since the Proposed Action or Alternative #1 would change livestock use on the sites occupied by North Park phacelia, the proposed grazing permit renewal would have "no affect" on North Park phacelia.

Implementation of the Proposed Action would not allow understory grass and forb production to increase in sage-grouse nesting habitat in any allotments since livestock grazing season and

length would not change from year to year. Alternative #1 would be more beneficial to sage-grouse since livestock grazing in some of the allotments which support sage-grouse would be intensively managed by implementing rest rotation grazing systems. The rest rotation systems would increase grass and forb productivity in the allotments where nesting and brood rearing habitat occurs. This increase in production would enhance sage-grouse nesting success since more cover would be available to conceal nests from predators and adverse weather events. Brood survival would also increase since more cover and food would be available as a result of Alternative #1.

Finding on the Public Land Health Standard for Threatened & Endangered Species: Allotments # 07044, # 07045, # 07046, # 07084 and # 07073 were assessed in 2005 and found these allotments to be meeting this standard. Allotments # 07048, # 07085 and # 07099 were not assessed due to the small acreage of BLM land within those allotments. The change in grazing management in Alternative #1 would improve the health of the allotments included in the deferred grazing system and improve habitat conditions for sage-grouse.

WATER QUALITY, SURFACE AND GROUND (includes a finding on Standard 5)

Affected Environment: The allotments are within the Upper North Platte River, North Platte River above 3 Way, and the Illinois River 5th Order Watersheds. Only three of the allotments include public lands with perennial stream segments, as most of the allotments rely on wells for livestock water. If any of the parcels had runoff leave the public lands, the potential receiving waters include the North Platte River, Beaver Creek- a tributary of the Roaring Fork Creek (a North Platte River tributary), and Potter Creek- a tributary of the Illinois River. The attached Water Quality Report details each allotment.

Reviewing the state's 303(d) List, the 305(b) Report, and the Monitoring and Evaluation List, only the Illinois River has identified water quality concerns. Allotments within this watershed include portions of # 07044, # 07046, # 07073, and # 07084. Allotments # 07073 and # 07084's runoff would be detained in the Walden Reservoir prior to reaching the Illinois River. The allotments are located near the lower end of the river. The Illinois River is listed in the 2006 303(d) List for Iron levels, and has a moderate priority level for the state to develop a Total Maximum Dissolved Limit (TMDL). At this time, no TMDL has been developed. The BLM ownership within the entire Illinois River watershed is estimated at 21%, with less than 6 miles of perennial tributary or river stream segments.

Most of the wells within the allotment have been sampled for water quality at some point in time, except for the more recent wells (allotment # 07073 and # 07044). The water quality met agricultural uses and there were no concerns. Green Spring is the only developed spring, and the source area is protected from livestock grazing. The many small seeps that are found in the allotments may not be tied to a ground water source, but may be a result of the heavy clay layers below the surface and seasonal storms/runoff. Livestock use of these areas could result in elevated nutrient levels, and were incorporated to the surface runoff pathways. Most times of the year, the pathway would be short due to the aridness of the area.

Environmental Consequences/Mitigation: Due to the amount of irrigated private land, the small BLM parcels, and their locations within the allotments, it is unlikely that livestock concentrate on public lands in allotment # 07048, # 07084, and # 07099. Wetland mapping in

allotment # 07099 supports this assumption. Alternative #1's rotational grazing plan is viewed as a best management practice by limiting grazing use by utilization levels and alternating seasons of use. The plan should maintain or improve overall watershed condition on allotments # 07044, # 07045, # 07046, and # 07084. Allotment # 07046's north pasture, which had large interspaces (some due to soils), would be rested every other year. Allotment # 07073 is not part of any rotation or grazing system.

Although there is a potential that the allotments could impact water quality, no further review is recommended at this time. When a TMDL is developed for the Illinois River, additional review of the BLM lands would be necessary, and if needed, additional best management practices implemented.

Finding on the Public Land Health Standard for water quality: Allotments # 07045, # 07048, # 07085, and # 07099 have no known water quality concerns and are considered to be meeting the Standard. The field visited allotments that have some land within the Illinois River watershed (# 07044, # 07046, # 07073, and # 07084), and all met the Land Health Standards for vegetation and soils. There were no obvious watershed condition concerns, and Alternative #1's grazing plan is a best management practice to maintain or improve ground cover and vegetative production. Due to the small percentage of public land ownership within the Illinois River watershed and the runoff pathways, this action is considered adequate at this time. Continued monitoring is recommended to adjust the livestock use as needed.

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

Affected Environment: The allotments' wetland or riparian acreage primarily consists of small portions of floodplains along the North Platte River and Beaver Creek. Approximately 80.9 acres and 0.5 miles of this riparian habitat are on public lands in this grazing permit. The Beaver Creek mire (allotment # 07099) was inventoried in 2002 and found to be in good condition, with the BLM portions receiving little livestock use. This willow lined stream receives quite a bit of irrigation return water from private lands to the west-southwest and is an important mire (see attached Water Quality Report). Small seeps occurring along intermittent drainages have the potential for wetland vegetation, but have not been inventoried. Many of the small sinks and seeps have been dry in recent years, and may not be tied to a true groundwater source.

In allotment # 07045, a remnant wetland has been identified but is in poor condition as the associated drainage historically downcut and is still used by livestock to trail to the wetland area. See the Attached Water Quality Report for additional information about each allotment.

Environmental Consequences/Mitigation: Most of the allotments have developed water to help improve livestock distribution, but this is still difficult to accomplish. The current permittee has been hauling water to insure sufficient water in some pastures and to keep livestock in the uplands. Alternative #1's rotational grazing system should also help benefit the small seeps, which have the greatest potential for impact in this permit. The small wetland in allotment # 07045 might have some potential for recovery (a small exclosure may help determine this). This action would be outside of the grazing permit renewal.

Finding on the Public Land Health Standard for riparian systems: The public land riparian systems within this permit are considered to be meeting the Standard and in good

condition. In general, grazing has very little impact on these small stream segments. The small seeps need additional review to determine if they support wetlands, but the proposed grazing system is beneficial to them regardless.

NON-CRITICAL ELEMENTS: The following non-critical elements were determined to be potentially impacted and were carried forward for analysis from the IDT-RRC in Appendix 1.

SOILS (includes a finding on Standard 1)

Affected Environment: The allotments consist of many different soil mapping units, and are detailed to some extent in the attached Water Quality Report (Appendix 2). In general, the larger BLM allotments consist of Fleutsch-Tiagos association, Tealson-Rock land associations, and Cryorthents in the uplands. These soils generally have sandy loam textures and fairly good plant available moisture. The swales and low lying areas are often Spicerton sandy loams, which have a very shallow sandy loam layer, underlain by clays. These soils tend to accumulate salts, and can have "slick spots" without vegetation. These are areas where salt levels hinder plants' ability to take moisture out of the soil. Also within the permit are Cryaquents, which are wetland soils along floodplains. These soils have water tables at or near the surface most of the year and are subject to flooding.

Environmental Consequences/Mitigation: Most of the allotments have soils that are common to the North Park area, supporting Dry Mountain Loam/Valley Bench range sites. During field review, the assessed allotments were found to be meeting the standards, although some areas could continue to improve. Alternative #1's proposed grazing schedule which includes some rotations and a few reduced AUMs should help maintain or improve overall ground cover and vegetative production, which help protect soil health. Continued monitoring would help identify if any other additional adjustments are needed.

Finding on the Public Land Health Standard for upland soils: The assessed allotments are considered to be meeting this standard and there are no other known soil or erosion concerns on the other allotments.

VEGETATION (includes a finding on Standard 3)

Affected Environment: Allotments #07044 (Tointon), #07045 (Peterson Ridge West), #07046 (Fish Hatchery), #07048 (Headquarters) #07073 (A, B and D pastures) and #07073 (Verner East and West) and #07099 (Beaver Creek) comprised of a mixture of sagebrush with an understory of grasses. Big sagebrush (*Artemisia tridentata*) is the dominant shrub with minor amounts of antelope bitterbrush (*Purshia tridentata*), serviceberry (*Amelanchier alnifolia*), rabbitbrush (*Chrysothamnus* spp), and snowberry (*Symphoricarpus* spp). Grasses and forbs make up the majority of the forage available to livestock and wildlife. Prevalent grasses include bluebunch wheatgrass (*Pseudoroegneria spicata*), pine needlegrass (*Stipa pinetorum*), needle-and-thread (*Hesperostipa comata*), Indian ricegrass (*Achnatherum hymenoides*), western wheatgrass (*Pascopyrum smithii*), and bluegrasses (*Poa* spp). Forbs that are found include buckwheat (*Eriogonum* spp), rose pussytoes (*Antennaria rosea*), fringed sage (*Artemisia frigida*), chiming bells (*Mertensia* spp), penstemon (*Penstemon* spp), lupine (*Lupinus* spp), and milkvetch (*Astatragalus* spp), among others. The forb component can vary greatly in species composition

and production from year to year depending on precipitation timing and amounts. Allotment #07099 (Beaver Creek) also has a riparian component for sedges and rushes.

Environmental Consequences/Mitigation: Under the Proposed Action, the permit would be renewed without any changes. Under Alternative # 1, the permit would be renewed with the implementation of a rotational grazing system for allotments # 07045 (Tointon), # 07084 (Verner East), # 07073 (Playa) and # 07084 (Verner East, West and Middle). This rotational grazing system would provide deferment from livestock grazing to each allotment or pasture. This system would provide for more plant energy to be put into growing vegetation and less into maintaining root production during the critical peak growing season. The vigor, diversity and production of plant vegetation would increase over time. In addition, allotment # 07044 would not exceed 34 days of use and livestock use would be limited to 289 AUMs for the next 4 years to determine if the rotational grazing system is working to protect the native vegetation. Under Alternative #1, allotment # 07046 (Fish Hatchery) would be grazed so there would be a rest pasture each year.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Wildlife, Aquatic and Wildlife, Terrestrial): Allotment # 07044, # 07045, # 07046, # 07084 and # 07073 were assessed for standards in 2005. The ID team found these allotments to be meeting this standard. Allotment # 07048 and # 07085 and # 07099 were not assessed for standards. These allotments were not assessed because the federal lands within these allotments were small isolated tracts of land.

WILDLIFE, TERRESTRIAL (includes a finding on Standard 3)

Affected Environment: The allotments included in the proposed grazing permit renewal provide habitat for a variety of upland wildlife species. Pronghorn, moose, mule deer, coyotes, badgers, and a variety of small rodents inhabit the allotments at least part of the year. Mule deer and Pronghorn use the allotments primarily during winter while the others listed above are generally yearlong residents. Moose concentrate along the riparian areas adjoining the North Platte River and Beaver Creek.

Environmental Consequences/Mitigation: The Proposed Action, Continuation of Current Management, would limit the amount of forage available for wildlife as compared to Alternative #1. The Proposed Action would allow livestock grazing at the same numbers and season for the life of the permit renewal. This type of management would not allow the vegetative conditions to improve as would Alternative #1. Alternative #1would implement an intensive livestock grazing management using a deferred rotation grazing system on select allotments. This type of management would improve the productivity of vegetation in the allotments and thereby provide more cover and forage for wildlife. This additional vegetation would be especially important to deer and pronghorn that use the allotments during winter.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation and Wildlife, Aquatic): Allotments # 07044, # 07045, # 07046, # 07084 and # 07073 were assessed in 2005 and found these allotments to be meeting this standard. Allotments # 07048, # 07085 and # 07099 were not assessed due to the small acreage of BLM land within those allotments. This standard would continue to be met with implementation of the proposed

permit renewal. Alternative #1 would be preferred since it involves intensive livestock grazing management in selected allotments included in the renewal.

PALEONTOLOGY

Affected Environment: Allotment # 7044: The primary rock units are the North Park formation (fm.), and the Coalmont fm. The North park fm. is classified as Class I. this classification indicates that, "Fossils of scientific significance are frequently found in the fm." The Coalmont fm. is classified as Class II. This classification indicates that, "Fossils of scientific significance are occasionally found in the fm."

Allotment # 7045: The primary rock units are Unconsolidated alluvium, the Coalmont fm. and the North park fm. The Unconsolidated alluvium and the Coalmont fm. are classified as Class II. This classification indicates that, "Fossils of scientific significance are occasionally found in the fm." The North Park fm. is classified as Class I. This classification indicates that," Fossils of scientific significance are frequently found in the fm."

Allotment # 7046: The primary geologic rock unit is the Coalmont fm. This unit is classified Class II. This classification indicates that, "Fossils of scientific significance are occasionally found in the fm."

Allotment # 7048: The primary geologic rock units are the Coalmont fm., and unconsolidated Old gravels (pre-Bull Lake). The Coalmont fm. is classifed Class II. This classification indicates that, "Fossils of scientific significance are occasionally found in the fm." The unconsolidated Old gravels are classified as Class III. This classification indicates that," Fossils of some significance (usually due to fragmentary of poor preservation) are found within the fm."

Allotment # 7073: The primary geologic rock units are the Coalmont fm. and unconsolidated alluvium along the North Platte River. The Coalmont fm. and the unconsolidated alluvium are classified as Class II. This classification indicates that, "Fossils of scientific significance are occasionally found in the fm."

Allotment # 7084: The primary geologic rock unit is the Coalmont fm. The Coalmont fm. is classifed Class II. This classification indicates that, "Fossils of scientific significance are occasionally found in the fm."

Allotment # 7085: The primary geologic rock units are the Coalmont fm. and unconsolidated Young and Old gravels. The Coalmont fm. and the Young gravels are classified as Class II. This classification indicates that," "Fossils of scientific significance are occasionally found in the fm." The unconsolidated Old gravels are classified as Class III. This classification indicates that," Fossils of some significance (usually due to fragmentary of poor preservation) are found within the fm."

Allotment # 7099: The primary geologic rock units are the Coalmont fm. and Young gravels and unconsolidated alluvium. The Coalmont fm. and the Young gravels are classified as Class II. This classification indicates that," "Fossils of scientific significance are occasionally found in the fm."

Environmental Consequences/Mitigation: There would be no impacts to paleontological resources from renewing the grazing permit. Ground disturbing projects will be reviewed to determine the need for paleontological inventory.

RANGE MANAGEMENT

Affected Environment: In general, the grazing practices on this allotment and most allotments in North Park are geared toward getting the livestock off the private hay meadows in the spring (June 1) and onto the BLM lands. This allows for irrigation of hay meadows for hay production and provides a place for the livestock which were grazing the hay meadows. This is also the most opportune time to graze the BLM lands because the grass has greened up making it more palatable to livestock. After haying, the livestock are removed from the federal lands and put back on the private hay meadows in the fall (September 30).

Environmental Consequences/Mitigation: Under the Proposed Action, the permittee would continue to graze this allotment as he has in the past. No rest or rotation would be provided to the allotments.

Under Alternative #1, a different pasture or allotment would be provided deferment as outlined in the grazing plan. This would benefit the grass and forbs species and could also benefit the operator by providing one pasture each year with more grass. The long term goal is to improve the overall rangeland health and increase grass production.

CUMULATIVE IMPACTS SUMMARY: Livestock grazing has been an important use of the public lands in the Kremmling Field Office since the introduction of domestic livestock in the 1870s. Presently, the Field Office supports a grazing program on approximately 378,000 acres of BLM-administered public lands. Currently, these public ranges are licensed at a level of approximately 39,726 Animal Unit Months (AUMs) for livestock.

For the purpose of this EA, the general geographic boundary for cumulative impact analysis is North Park. The Kremmling Field Office is divided east to west by the Continental Divide. The public lands to the north of the divide are generally referred to as North Park, and those to the south of the divide, Middle Park. In North Park, there are approximately 260,000 acres of BLM-administered public lands that are currently being grazed, and 26,656 AUMs that are licensed.

In looking at past actions within the geographic area over the past ten years, there have not been any major changes to the North Park allotments. A majority of the allotments have been assessed for standards and the permits modified where needed due to non-compliance with specific standards or new information that has arrived (i.e. new sage grouse lek). A BLM interdisciplinary Team (IDT) assessed the specific allotment for compliance with the Colorado Public Land Health Standards in 2005, and found the allotment to be in compliance with all of the standards. There are not any reasonably foreseeable actions outside of minor range improvement projects that are projected to occur in the North Park allotments.

Greater sage-grouse, a BLM-designated Sensitive Species, inhabit all the allotments except Pasture D in # 07073. The Proposed Action and Alternative #1 would not change the number of AUMs that have been authorized on the allotment for the past ten years. Thus, there would be minimal cumulative impacts to Greater sage-grouse and to the over-all public land health.

In terms of cumulative impacts to cultural resources, grazing may cause substantial ground disturbance and cause cumulative, long term, irreversible adverse effects to historic properties throughout the Kremmling Field Office. However, as part of the BLM permit renewal process, allotments are being assessed and inventoried for cultural resources. If resources are found, and eligible for NRHP, mitigation is implemented. This process is attempting to mitigate any major cumulative impacts to cultural resources in the Kremmling Field Office.

PERSONS / AGENCIES CONSULTED: Starting in January 2006, a scoping process was begun to request information concerning the renewal of grazing permits/leases and to prioritize areas or allotments with issues and concerns. The Field Office sent scoping letters, along with land status maps showing the affected allotments, to the following groups and agencies: Colorado Division of Wildlife (Steamboat, Walden, Hot Sulphur Springs, Ft Collins); District Board of Grazing Advisors; County Commissioners (Grand, Jackson); Stock Growers (Middle Park, North Park, Upper Big Laramie River Ranch Assoc.); Northwest Resource Advisory Council; United States Forest Service (Silverthorne, Granby, Walden); US Fish and Wildlife Service (Arapaho Wildlife Refuge); Tribal Councils (Arapaho, Shoshone, Southern Ute); Colorado Commission of Indian Affairs; Ute Indian Tribe Uintah & Ouray Agency Business Committee; Colorado Environmental Coalition; Colorado State Land Board.

The BLM Colorado State Office also mailed outreach letters, concerning the renewal of grazing permits/leases, to all Congressional offices, State and Federal agencies, and major environmental, conservation, and user group organizations.

In addition, individual letters were sent to the affected permittees/lessees informing them that their permit/lease was up for renewal and requested any information they wanted included in, or taken into consideration, during the renewal process. A Notice of Public Scoping was posted on the Internet, at the Colorado BLM home page, asking for public input on permit/lease renewals and the assessment of public land health standards within the Field Office. This notice was followed up in October with an Internet posting of the Field Office prioritization of allotments and a determination as to which allotments would be assessed according to the land health standards. The proposed project was also posted on the Kremmling Internet NEPA Register.

INTERDISCIPLINARY REVIEW: See IDT-RRC in Appendix 1.

FONSI

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Based on the analysis of potential environmental impacts contained in the attached environmental assessment, and considering the significance criteria in 40 CFR 1508.27, I have determined that Alternative #1 will not have a significant effect on the human environment. An environmental impact statement is therefore not required.

DECISION RECORD

DECISION: It is my decision to implement Alternative #1 and renew livestock Grazing Permits # 0501727 (Tointon Ranch) until February 28, 2017. The new permit will be subject to the authorized grazing plan and mitigation measures included below.

RATIONALE: When a livestock grazing permit/lease expires, it is subject to renewal at the discretion of the Secretary of the Interior for a period of up to ten years. Livestock grazing, when properly managed in accordance with good rangeland ecology practices, has been proven to result in improved land health. The public benefits from public lands which are maintained in a healthy condition and are able to produce sustainable resources for a variety of uses.

The livestock producer benefits from a renewed livestock grazing permit/lease to graze forage on BLM managed land. Livestock grazing on BLM managed land is an integral part of the livestock producer's operation, and an important part of local rural economies

MITIGATION MEASURES: (see below and Attachment #2)

Cultural:

Class III field inventory is to be completed within the ten year expiration period of the grazing permit.

If historic properties are located during the subsequent field inventory, and BLM determines that grazing activities has or will adversely impact the properties, mitigation will be identified and implemented in consultation with the Colorado SHPO. The livestock impacts will be assessed within the ten-year period of the permit.

When known historic properties are field visited to assess the livestock grazing impacts, BLM will determine if grazing activities has or will adversely impacts the properties. Mitigation measures, identified in consultation with the Colorado SHPO, will be implemented within the ten year period of the permit.

If historic properties are located during the subsequent field inventory, BLM will determine if grazing activities has or will adversely impact the properties. Mitigation measures, identified in consultation with the Colorado SHPO, will be implemented with the ten year period of the

permit.

The holder is responsible for informing all persons in the area who are associated with this project that they will be subject to prosecution for disturbing historic or archaeological sites, or for collecting artifacts.

The holder shall immediately bring to the attention of the Authorized Officer any and all antiquities, or other objects of historic, paleontological, or scientific interest including but not limited to, historic or prehistoric ruins or artifacts DISCOVERED as a result of operations under this authorization (16 U.S.C. 470-3, 36 CFR 800.112). The holder shall immediately suspend all activities in the area of the object and shall leave such discoveries intact until written approval to proceed is obtained from the Authorized Officer. Approval to proceed will be based upon evaluation of the object(s). Evaluation shall be by a qualified professional selected by the Authorized Officer from a Federal agency insofar as practicable (BLM Manual 8142.06E). When not practicable, the holder shall bear the cost of the services of a non-Federal professional.

Within five working days the Authorized Officer will inform the holder as to:

-whether the materials appear eligible for the National Register of Historic Places;

-the mitigation measures the holder will likely have to undertake before the site can be used (assuming in situ preservation is not necessary); and

-a timeframe for the Authorized Officer to complete an expedited review under 36 CFR 800.11 to confirm, through the State Historic Preservation Officer, that the findisns of the Authorized Officer are correct and that mitigation is appropriate.

If the holder wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the Authorized Officer will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the holder will be responsible for mitigation costs. The Authorized Officer will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the Authorized Officer that the required mitigation has been completed, the holder will then be allowed to resume construction.

Antiquities, historic, prehistoric ruins, paleontological or objects of scientific interest that are outside of the authorization boundaries but directly associated with the impacted resource will also be included in this evaluation and/or mitigation.

Antiquities, historic, prehistoric ruins, paleontological or objects of scientific interest, identified or unidentified, that are outside of the authorization and no associated with the resource within the authorization will also be protected. Impacts that occur to such resources that are related to the authorizations activities will be mitigated at the holder's cost.

Pursuant to 43 CFR 10.4(g), the holder of this authorization must notify the Authorized Officer, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR

10.4 (c) and (d), you must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the Authorized Officer.

COMPLIANCE/MONITORING: Compliance with the renewed livestock grazing permit and its associated terms and conditions will be accomplished through the Kremmling Field Office Range Management Program. Livestock grazing will be monitored by the range staff and other area personnel, as appropriate, to ensure compliance. The Kremmling Field Office Range Monitoring Plan will be used to schedule periodic utilization checks, collect trend data, and evaluate allotment condition. When activity plans have been developed covering an allotment, monitoring methods and schedules included in them will be applied to the allotment. Changes will be made to the permit, based on monitoring, when changes are determined necessary to further protect land health.

Water Quality/Surface and Ground:

-Continued monitoring is recommended to adjust the livestock use as needed.

NAME OF PREPARER: Pete Torma

NAME OF ENVIRONMENTAL COORDINATOR: Joe Stout

DATE: 4/4/07

SIGNATURE OF AUTHORIZED OFFICIAL: /s/ Peter McFadden

DATE SIGNED: 4/23/07

ATTACHMENTS:

1). Livestock Grazing Permit #0501727
2). Standard Terms and Conditions
3). Project Map

APPENDICES:

Appendix 1 – Interdisciplinary Team Analysis Review Record and Checklist
Appendix 2 – Water Quality Report

Appendix 1

INTERDISCIPLINARY TEAM ANALYSIS REVIEW RECORD AND CHECKLIST:

Project Title: BLM Grazing Permit renewal (#0501727) for the Tointon Ranches LLC
Project Leader: Peter Torma
Date Submitted for Comment: 1/9/07
Due Date for Comments: 3/9/07

Need for a field Exam:

Scoping Needs/Interested or Affected Publics: See Persons/Agencies Consulted section.

Consultation/Permit Requirements:

Consultation	Date Initiated	Date Completed	Responsible Specialist/ Contractor	Comments
Cultural/Archeological Clearance/SHPO	1/1/07	2/28/07	B.Wyatt	
Native American	1/11/05	2/28/07	B.Wyatt	
T&E Species/FWS	N/A	N/A	M. Mcguire	
Permits Needed (i.e. Air or Water)	N/A	N/A	P. Belcher	None needed

(NP) = Not Present
(NI) = Resource/Use Present but Not Impacted
(PI) = Potentially Impacted and Brought Forward for Analysis.
(N/A) = Not applicable

NP NI PI	Discipline/Name	Date Review Comp.	Initials	**Review Comments** (required for Critical Element NIs, and for elements that require a finding but are not carried forward for analysis.)
CRITICAL ELEMENTS				
NI	Air Quality **Belcher**	3/20/07	PB	The grazing permit renewal would not affect air quality, which is considered good and meeting the National Air Quality ambient air quality standards.
NP	Areas of Critical Environmental Concern **Stout**	4/4/07	JS	There are no Areas of Critical Environmental Concern in the proximity of the proposed project area.
PI	Cultural Resources **Wyatt**	2/28/07	BW	See analysis in EA.
NP	Environmental Justice **Stout**	4/4/07	JS	According to the most recent Census Bureau statistics (2000), there are no minority or low income communities within the Kremmling Planning Area.
NP	Farmlands, Prime and Unique **Belcher**	3/20/07	PB	There are no prime or unique farmlands within the allotments. There are privately owned farmlands of state or local importance within some of the allotments, but their farmland values would not be impacted by this permit.
NI	Floodplains **Belcher**	3/20/07	PB	The North Platte River floodplain is located within some of the allotments. Its ability to

				function and the flood hazard would not be affected by this grazing permit.
PI	Invasive, Non-native Species **Torma**	2/14/07	PT	See analysis in EA.
PI	Migratory Birds **McGuire**	3/8/07	MM	See analysis in EA.
NI	Native American Religious Concerns **Wyatt**	3/9/07	BW	In February 2006, the Kremmling Field Office sent scoping letters to the Native American tribes that are concerned parties in the livestock grazing permit renewal process within the Kremmling Field Office. No comments were received from any of the Native American tribes that were solicited for comments concerning the 2006 livestock grazing permit renewals. Thus, there would be no impacts.
PI	T/E, and Sensitive Species (Finding on Standard 4) **McGuire**	3/8/07	MM	See analysis in EA.
NP	Wastes, Hazardous and Solid **Hodgson**	3/12/07	KH	There are no quantities of wastes, hazardous or solid, located on BLM-administered lands in the proposed project area, and there would be no wastes generated as a result of the Proposed Action, Alternative #1, or No Action Alternative.
PI	Water Quality, Surface and Ground (Finding on Standard 5) **Belcher**	3/20/07	PB	See analysis in EA attached Water Quality Report (Appendix 2)
PI	Wetlands & Riparian Zones (Finding on Standard 2) **Belcher**	3/20/07	PB	See analysis in EA attached Water Quality Report (Appendix 2)
NP	Wild and Scenic Rivers **Sterin**	3/1/07	BS	The Illinois River was evaluated for Wild and Scenic River Eligibility, and was not recommended as eligible. Thus, there would be no impacts.
NP	Wilderness **Monkouski**	2/27/07	JM	There is no designated Wilderness or Wilderness Study Areas in the proximity of the proposed project area.
NON-CRITICAL ELEMENTS (A finding must be made for these elements)				
PI	Soils (Finding on Standard 1) **Belcher**	3/20/07	PB	See analysis in EA attached Water Quality Report (Appendix 2)
PI	Vegetation (Finding on Standard 3) **Torma**	2/14/07	PT	See analysis in EA.
NI	Wildlife, Aquatic (Finding on Standard 3) **McGuire**	3/8/07	MM	Neither the Proposed Action or Alternative 1 would be expected to change conditions for aquatic wildlife. Finding: same as finding on terrestrial wildlife (see analysis).
PI	Wildlife, Terrestrial (Finding on Standard 3) **McGuire**	3/8/07	MM	See analysis in EA.
OTHER NON-CRITICAL ELEMENTS				
NI	Access/Transportation **Monkouski**	2/27/07	JM	There would be no change is access, thus there would be no impacts.
NP	Forest Management **Rosene**	3/16/07	RR	There would be no impact to forestry resources.
NI	Geology and Minerals **Hodgson**	3/12/07	KH	There would be no impacts from the Proposed Action.
NI	Hydrology/Water Rights **Belcher**	3/20/07	PB	The grazing permit would not impact water rights, federal or private. Water rights are administered by the state and the BLM must follow state law. Hydrology issues are addressed in the Water Quality, Wetlands, and

				Soil Sections of the EA. See the attached Water Quality Report for details.
NI	Paleontology **Rupp**	4/19/2007	FGR	There would be no impacts from livestock grazing. Ground disturbing projects or undertakings will be reviewed to determine the need for paleontological inventory.
NI	Noise **Monkouski**	2/27/07	JM	There would be no noise impacts.
PI	Range Management **Torma**	2/14/07	PT	See analysis in EA.
NI	Lands/ Realty Authorizations **Cassel**	1/12/07	SC	There are no leases or permits in the location of the proposed action. There are multiple ROW's to Centurytel of Eagle, Jackson County, DOW, WAPA, Aluminum Flowlines and Mountain Parks Electric in the location of the proposed action. These ROW's would not be affected by the proposed action.
NI	Recreation **Monkouski**	2/27/07	JM	There would be no changes in use thus recreation would be unaffected.
NI	Socio-Economics **Stout**	4/4/07	JS	There would be no socio-economic impacts.
NI	Visual Resources **Straub**	2/20/07	RS	Allotments 7044 is Class III, 7045 is Class II, 7046 is Class III, BLM land for 7048 is approx. 25% Class II and 75% Class III, 7073 is approx. 10% Class II and 90% Class III, 7084 Class III, 7085 is approx. 50% each Class II & III, 7099 Class III
NI	Cumulative Impact Summary **Stout**	4/4/07	JS	There would be no cumulative impacts.
FINAL REVIEW				
	P&E Coordinator **Stout**	4/20/07	JS	
	Field Manager **McFadden**			

Appendix 2

Permit #0501727 Water Quality Report **CO-120-2007-16-EA**
NEPA Compliance Record Rationale

Renewal of grazing permit #0501727 required an assessment of compliance with the Clean Water Act and the Colorado Land Health Standard #5. The permit authorizes grazing on allotments 7044. 7045, 7046, 7048, 7073, 7084, 7085, and 7099 which are located in the North Platte River Basin. A review of Colorado's Nonpoint Source Assessment Report (plus updates), the 305(b) Report, the 303(d) List, the Monitoring and Evaluation List, and BLM field data was done to determine if water quality concerns exist. Specific stream segments and runoff pathways from the allotments are detailed in the Discussion Section.

Summary:
The grazing permit consists primarily of rangeland allotments that have no perennial streams on public lands. The allotments are within the Upper North Platte River, the North Platte River above 3 Way, and the Illinois River 5th Order watersheds. Receiving streams would include the North Platte River, Beaver Creek- a tributary to the Roaring Fork Creek and the North Platte River, and Potter Creek- a tributary to the Illinois River. Due to the land ownership along these streams, the BLM generally does not monitor their water quality.

Allotments 7048, 7085, and 7099 have no known water quality concerns and are considered to be meeting the Standard. Due to the amount of irrigated private land, the small BLM parcels, and their locations within the allotments, it is unlikely that livestock concentrate on public lands in allotment. Wetland mapping in allotment 7099 supports this assumption.

Reviewing the state's 303(d) List, the 305(b) Report, and the Monitoring and Evaluation List, only the Illinois River has identified water quality concerns. Allotments within this watershed include portions of 7044, 7046, 7073, and 7084. Allotments 7073 and 7084's runoff would be detained in the Walden Reservoir prior to reaching the Illinois River. The allotments are located near the lower end of the river. The Illinois River is listed in the 2006 303(d) List for Iron levels, and has a moderate priority level for the state to develop a Total Maximum Dissolved Limit (TMDL). At this time, no TMDL has been developed. The BLM ownership within the entire Illinois River watershed is estimated at 21%, with less than 6 miles of perennial tributary or river stream segments.

Alternative #1's rotational grazing plan is viewed as a best management practice by limiting grazing use by utilization levels and alternating seasons of use. Due to the small percentage of public land ownership within the Illinois River watershed and the runoff pathways, this action is considered adequate at this time. Continued monitoring is recommended to adjust the livestock use as needed. The plan should maintain or improve overall watershed condition on allotments 7044, 7045, 7046, and 7084. Allotment 7073 is not part of any rotation or grazing system. Allotment 7046's north pasture which had large interspaces (some due to soils) will be rested every other year. The field visited allotments that have some land within the Illinois River watershed (7044, 7046, 7073, and 7084) all met the Land Health Standards for vegetation and soils. There were no obvious watershed condition concerns.

Although there is a potential that the allotments could impact water quality, no further review is recommended at this time. If additional water quality concerns are identified or a TMDL is developed, the BLM will review these allotments and if necessary, other best management practices implemented. Compliance monitoring would then be initiated.

Discussion:

Allotment 7044: Allotment 7044 is entirely public land, and is located within 3 different 5th Order Watersheds: the Upper North Platte, the Illinois River, and a small portion of the North Platte above 3 Way. The western half is moderately sloped and drains towards the North Platte River, which is about a one mile pathway. There are no perennial streams and livestock water is provided by a well located in the southwest corner. There are two inventoried ephemeral seeps that occur on this western portion also. The eastern portion travels about a mile, across flat, ephemerally ponded land to Potter Creek. The USFWS has developed several waterfowl ponds on Potter Creek, which is eventually tributary to the Illinois River. There are two wells on the eastern portion of the allotment, along with an inventoried ephemeral seep in the center of the allotment. A very small portion of the allotment (the northwest boundary) would produce runoff that would have to travel north across a fairly flat swale approximately to miles to reach the North Platte River. From the files (current production could vary), the wells produce enough water to support the permitted 276 cattle.

The Soil Survey maps the northern portion of the allotment as predominantly Tealson- Rock land association. Tealson sandy loam soils are about 55% of the association and are within a Valley Bench range site. Runoff is medium to slow, and plant available water is low. The soils tend to be shallow with sandstone within 16-20 inches of the surface. A few of the swales are mapped as Spicerton sandy loam soils(Salt Flats range site), which tend to experience run-on in the spring and accumulate salts from the uplands. The southern portion of the allotment is mostly Fleutsch-Tiagos association, sandy loam to fine sandy loam soils that make up the largest public soil unit in Jackson County. The Dry Mountain Loam/Valley Bench range sites have slow to medium runoff and moderate water erosion. The soils have high plant available moisture and tend to have rapid to moderate permeability.

There is a main two-track that is mapped as dividing the allotment into a north and south half. In the northern portion are some vegetative treatments to improve sage grouse habitat. The areas had fairly heavy sagebrush cover, which now provides surface litter. The treatments opened up the canopy and should improve overall ground cover with more forb and grass production, in addition to young sagebrush plants. This will also improve livestock distribution in the allotment. Currently the allotment is not fully stocked and is part of a rotational grazing system. AUMs will not be increased for at least 4 years, at which time full preference is allowed if supported by the monitoring results. During the field assessment, the area was meeting Standards 1 and 3.

Allotment 7045: This allotment is located on the uplands adjacent to the North Platte River. Any runoff that leaves the allotment would travel ephemeral/intermittent drainages to the river. Allotment 7045 also contains no perennial streams and at present, the permittee hauls water to the southern ridge to water livestock. The mapped intermittent drainage does have a few seeps areas. At least one of these appears to have once been a wetland, perhaps even a fen. Historically, the entire drainage was probably a swale that had an elevated water table. The drainage is mapped as a Spicerton sandy loam, which is a clay soil and subsoil, below the shallow surface horizion. The soil tends to have a seasonally high water table and receives run-on, especially in the spring. Livestock traveled the drainage up and down to the North Platte River, concentrating in the swale that had water and better vegetation than the uplands. These trails eventually eroded, creating the present gully system. It is unknown whether fencing of the small seep could help restore its wetland values, especially due to the amount of soil loss.

The rest of the allotment has soils common to 7044- and consists of Dry Mountain Loam and Valley Bench range sites. On the ridge to the south are some Blevinton sandy loams, which are

Mountain Loam range sites. There are some older vegetative treatments along this ridge which "take advantage" of these better soils and better grass production. Under the Proposed Action, the allotment would be grazed yearly during the prime portion of the growing season. Alternative #1 reduces the number of cows (AUMs are basically the same), and places the allotment in a rotational grazing system. Livestock use will alternate between early June and late July for a period of 9 days. This is expected to benefit the overall condition of the allotment, improving vegetative production and ground cover.

Allotment 7046: Allotment 7046 consists of two separate parcels of BLM land which are both located within the Illinois River 5th Order Watershed. The north parcel is a trapezoid shape, with the northern half having gentle slopes and is mapped as Tealson-Rock land association. The southern flat half is mapped as Boettcher-Bundyman association. This association is generally 70% Boettcher clay loam, which formed in material weathered from Coalmont Shale. Both soils generally have shale bedrock within 20-40 inches from the surface. The Boettcher clay loam surface is underlain by clay and the subsurface soils are moderately to strongly alkaline. Bundyman soils are heavy clay loams and have mildly alkaline surface soils. Permeability is slow and plant available water is low for both soils. The soils are in the Alkaline Slopes range site. A small (3 acre) pond occurs in the southwest portion of the allotment.

Vegetation in the southern portion of the parcel is poor. The interspaces are large, and greasewood dominates the vegetation. The permittee had a year where several cows were lost to alkaline poisioning. The actual potential of the parcel was difficult to determine, but the interdisciplinary team felt some improvement was possible. It was felt that surface disturbing treatments would not impact the natural soil surface, as no cryptograms, lichens, algaes were observed.

The south parcel has steeper slopes along the southern boundary (Tealson-Rock land association) and flat, seasonally ponded areas (Fleutsch-Tiagos association) in the north. The midslope is mapped as Blevinton sandy loams, supporting a Mountain Loam range site. Vegetation is better than the north parcel and was considered to be meeting standards.

Runoff from both parcels, if any, would travel to Potter Creek, where it would be detained in waterfowl ponds. Eventually, it would be tributary to the Illinois River. Alternative #1 would rest each parcel on alternate years. The grazed parcel would be used for 17 days, starting at the end of May, for the fully permitted AUMs. Monitoring of the use and the condition of the parcels will help determine the allotment's potential.

Allotment 7048: Allotment 7048 consists of almost entirely private lands, including the North Platte River and irrigated hay meadows. The allotment is within the Upper North Platte River 5th Order watershed, and BLM lands would be tributary to the river. BLM lands are located in the eastern corner of the larger pasture, and are mapped as mostly Valley Bench-Rock lands in the north portion and Bosler sandy loams (Valley Bench) to the south. Bosler soils have moderate permeability, moderate plant available water, and are considered highly wind erodible. Runoff is slow and very gravelly loamy coarse sand is with two feet of the surface. Approximately 1390 feet of the North Platte River cross the corner of the public parcel, for about 17 acres of floodplain. The floodplain is mapped as Cryaquents (Mountain Meadow range site), with a water table within 2 feet of the surface and seasonal flooding. It appears that the Tealson soils

are primarily used as a parking area to access the river, and aerial photographs show large loops from vehicles turning around.

Due to the small amount of public lands, their location, and the percent private hay meadows within the allotment, it is unlikely that livestock graze the public lands for any significant amount. Unless problems are identified in the future, no more review of this allotment will be done.

Allotment 7073: Allotment 7073 is a long east-west allotment that consists primarily of BLM lands. The western portion (about 96 acres) of the west pasture is within the Upper North Platte River 5th order watershed. There are no perennial or intermittent waters within this portion. The remaining portion of the west pasture and the west most (150 acres) of the east pasture are within the North Platte River Above 3 Way 5th Order Watershed. The largest portion of the allotment is within the Illinois River 5th Order Watershed.

The BLM lands in the west pasture are Fleutsch-Tiagos in the western portion, and from the drainage to the road are Spicerton sandy loams. Any runoff leaving the allotment to the west would be intercepted by the Ellen ditch that borders the North Platte River floodplain. Any runoff that leaves to the north would travel in the intermittent drainage to the North Platte River, about a half mile away. Slopes are low to gentle in the pasture.

The central portion of the east pasture is mapped as primarily Fleutsch-Tiagos association (Dry Mountain Loam/Valley Bench). The ridges and slopes in the very west are Dry Exposures, which drain to the west into the east pasture's drainage and on to the North Platte River. The rest of the allotment drains to the east, reaching Section 26 and the east half of Section 27, which are low lying Salt Flats. Runoff from this portion of the pasture drains to the low areas and flats surrounding Walden Reservoir, and may eventually reach the reservoir. In recent years, two wells have been drilled, Fliniau's Well #2 and Fenian Well. The wells provide dependable livestock water and improve distribution in the pasture.

Some of the drainages within the allotment have small seep areas. Originally these areas were treated as groundwater sources. It is now unclear if they are truly groundwater or just tied to the water table. The underlying clays in the drainages increase the runoff and may result in these 'sink area' wetlands. If well production affects these areas, then a ground water source would be definite.

Alternative #1 places the allotment within a rotational grazing schedule, but neither pasture will be in a rotation. The west pasture will be used by bulls from 8/1-9/1 and the east pasture will be a cow/calf herd from June 5th-July 3rd. Both pastures will have the full permitted AUMs. The east pasture is permitted at 9.83acres/AUM. Continued monitoring, especially in the low lying areas, is recommended to help evaluate this yearly season of use.

Allotment 7084: Allotment 7084 has three pastures which are all public lands. The West Pasture is within 3 watersheds, while the Middle and East Pastures are both within the Illinois River 5th Order Watershed. The pastures contain no perennial streams, but are dissected by ephemeral drainages.

Public lands in section 32 are the West Pasture's portion within the Upper North Platte River watershed. The slopes are gentle and if any runoff leaves the Dry Mountain Loam/Valley Bench (DML/VB) lands, it would travel to the North Platte River less than a ¼ mile away. Most of Section 33 is within the North Platte River Above 3 Way watershed, and drains to the north. The intermittent drainage is mapped as a salt flat with DML/VB to the west and the steeper ridge to the east as Dry Exposure. These Dry Exposures tend to be shallow soils overlying sandstone outcrops. The soils have little horizon development due to the harsh exposure, steep slopes, and underlying rock. The rest of the allotment is within the Illinois River watershed. The pastures are generally steeper in the south and then flatten out nearer the highway to the north. Runoff from this portion of the allotment, if any, would travel to the intermittent drainages and sinks surrounding and tributary to Walden Reservoir. The pastures are mapped as Tealson-Rock land association, a Valley Bench/rock range site. The low lying areas around Green Spring in the Middle Pasture are mapped as Salt Flats.

Allotment 7084 was placed in a rotational grazing system in 1973. Since that time, the allotment has changed permittees and some of the original vegetation improvements have deteriorated, especially during the drought years. The new permittee (applicant) has agreed to a rotational grazing system (Alternative #1) for the allotment that limits utilization to 50%. Although none of the three pastures receive rest, they do vary in the season of use and each are limited to 5 days (41 AUMs) of use. The suggested AUMs are 53, with the Middle Pasture recommended for 51 AUMs. The West Pasture has a well located at its south boundary, the Middle Pasture has Green Spring, located at its northeast boundary, and the East Pasture has a developed well/spring. Using office files, production is adequate for the permitted cows. Continued monitoring is recommended to verify that the rotational schedule and permitted numbers are maintaining or improving range conditions.

Allotment 7085: Allotment 7085 consists almost entirely of private lands, with a small public parcel located in the southeast corner of the allotment. The BLM lands are bordered by the North Platte River to the west and the road to the east. Due to the location of the land in the allotment, it is unlikely that much livestock occurs. If any does occur, it would be along the North Platte River, which has about 1335 feet on public lands, and the 32 acres of Cryaquents (Mountain Meadow) that occurs in the floodplain. This portion of the North Platte River is within the Upper North Platte River 5th Order watershed.

Allotment 7099: Allotment 7099 consists of private land except for three BLM corners that protrude into the allotment. The three public land triangles occur along the eastern border of the allotment, which includes private irrigated hay meadows and the Beaver Creek riparian zone. Beaver Creek is a perennial tributary of the Roaring Fork Creek, which flows into the North Platte River. The entire allotment is within the Upper North Platte River 5th Order watershed. The northern public parcel does not contain any length of stream, but does include approximately 2 acres of the floodplain and subirrigated soils. The rest of the parcel is primarily Dry Exposures overlooking the floodplain. The middle (and largest) parcel straddles 0.4 miles of Beaver Creek and 25 acres of the floodplain and Mountain Meadow range sites. The rest of the parcel is the steep Dry Exposure slopes above the creek. The southern parcel has 4.5 acres of floodplain and a few segments of Beaver Creek that add up to 0.2 miles. The BLM portions of the floodplain are also mapped as a portion of the Beaver Creek mire. This wetland was inventoried and mapped by Johnson Environmental Consulting for the BLM. Johnson's 2002 report summarized the entire mire as having "mire vegetation (that) is typical of that found along North Park

streams, dominated by tall willows interspersed with meadow areas… The hydrology of this site appears complicated, consisting of groundwater discharge, fluvial inputs and irrigation. The wetland lies below a very large irrigated terrace and probably receives irrigation return flow from that land surface. In spite of the hydrologic modifications, the site is in very good condition and appears highly functional, containing a diverse array of habitats. This wetland is an important hydrologic source for Beaver Creek. Grazing impacts vary with landownership along the approximately 2 mile length of the wetland. Little grazing occurs on the BLM portion of the mire." Johnson recommended additional studies of the area, especially if private landowner cooperation could be secured, to help determine the hydrologic relationships. He feels this is a major wetland for the region.

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