Posted: _____

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

ENVIRONMENTAL ASSESSMENT

NUMBER: DOI-BLM-LLCON02000-2010-0052-EA

PROJECT NAME: Coyote Creek Fertilization

LEGAL DESCRIPTION: Grand County
T. 2 N., R. 77 W. Sec. 13, 14, 6th P.M.

KREMMLING FIELD OFFICE, KREMMLING, COLORADO

APPLICANT: BLM

PURPOSE AND NEED FOR THE ACTION: The objective of proposed project is to improve the quality and quantity of forage for elk and mule deer as well as other wildlife species that depend on the sagebrush steppe vegetative type.

There is a need to consider the project because bitterbrush and other browse species are critical forage on winter range for big game species. Since development on adjacent private lands has increased, wildlife use on BLM-administered public lands has increased.

Background/Introduction/Issues and Concerns:
The browse species and bitterbrush found within the Creek area are extremely important winter forage for mule deer and elk. The Coyote Creek area has been a vital winter range for these animals because of the high amounts of shrubs and limited winter range in the area. Currently, the bitterbrush has been over-utilized by mule deer and elk. Since development on adjacent private lands has increased, elk and mule deer have been has forced to concentrate on BLM-administered public lands. The goal of this project is to help stimulate the browse species and provide better winter range for elk and mule deer. The project is in cooperation with Middle Park Habitat Partnership Program (HPP), Colorado Division of Wildlife (CDOW), and the BLM Kremmling Field Office (KFO). The Middle Park HPP would fund this proposal.

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES:

Proposed Action: The Proposed Action is to treat 330-350 acres of mixed sagebrush, grass, and antelope bitterbrush with ammonium nitrate granular fertilizer within the Coyote Creek area (see

map below). Ammonium nitrate fertilizer, which is 33 1/3 percent nitrogen, would be applied at a rate of 300 pounds-per-acre to achieve 100 pounds of nitrogen per-acre of habitat. This rate of application has been determined in past studies to be the most cost effective when improving sagebrush habitat. (Bayoumi, M.A. and A.D. Smith. 1976. *Response of big game winter range vegetation to fertilization.* Journal of Range Management. 29:44-48 and Bilbrough, C. J., and J. H. Richards. 1993. *Growth of Sagebrush and Bitterbrush Following Simulated Winter Browsing: Mechanisms of Tolerance.* Ecology 74:481–492.)

The fertilizer would be applied in low-level flight using a fixed-wing aircraft (contracted through Middle Park HPP) to a specific location within the Coyote Creek project area. The nitrogen would be applied in the spring (May/June) of 2011. The application would be accomplished in a single day. The goal of the project is to help stimulate browse, forb, and grass species.

<u>Design Features of the Proposed Action</u>:

- Surface application of fertilizer on frozen or snow-covered fields would be avoided.

- Application would not be done during windy conditions, during periods of low Colorado River flows, or when precipitation is expected within 48 hours of application. The application will strive to be done between late May to late June, depending on weather and streamflow conditions.

- BLM staff would notify adjacent landowners, grazing permittees and Special Recreation Permit holders within the area when and where the project would take place.

- The contractor applying the fertilizer will follow all FAA guidelines regarding operation of low flying fixed-wing aircraft, including the identification of hazards (e.g. powerlines).

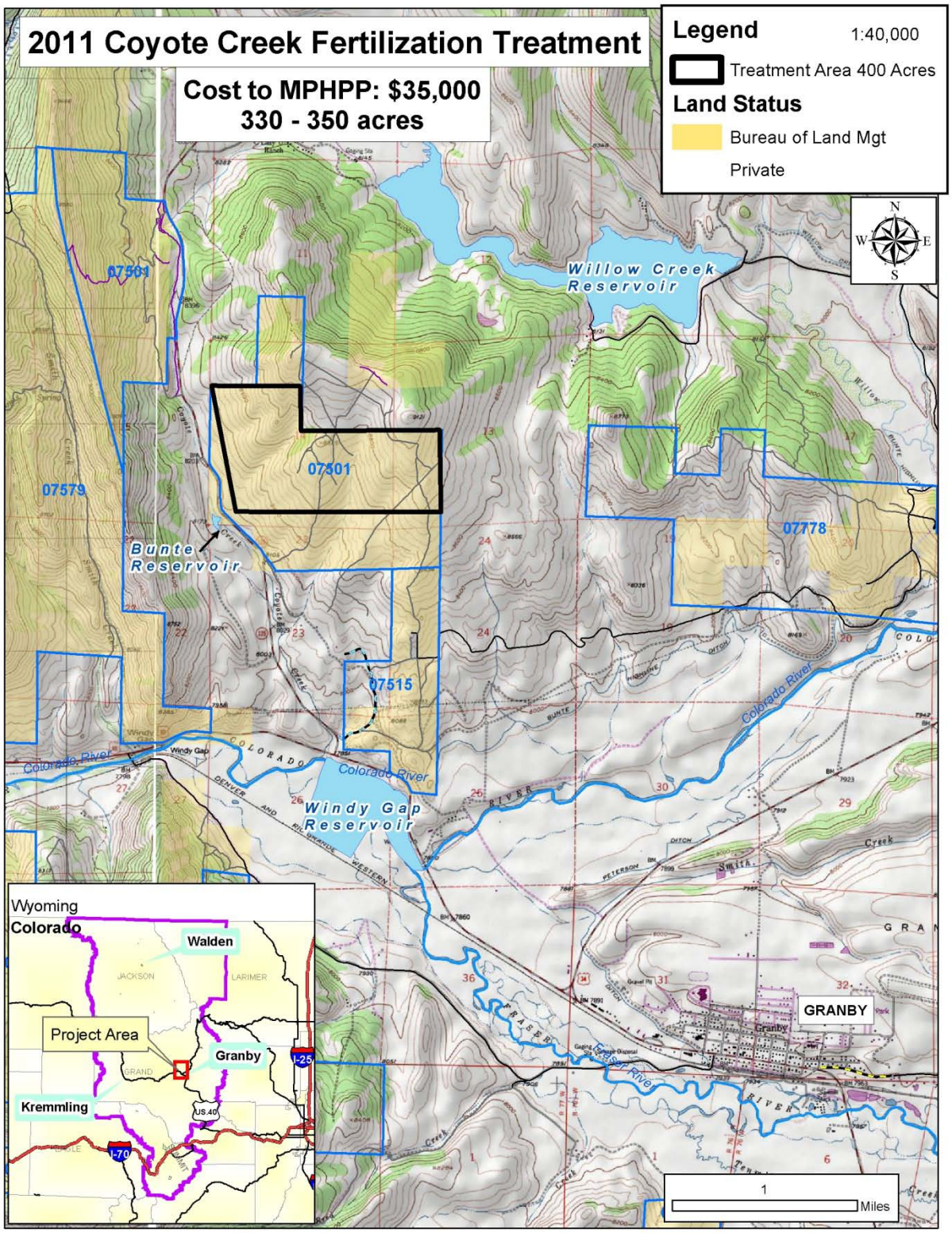
- BLM staff would be on-site during the application to answer questions and/or provide feedback to the contractor.

- The BLM would monitor the success of the treatment every year for up to 5 years.

- The applicator would be required to follow label instructions for applying the fertilizer and to maintain a file containing Material Safety Data Sheets (MSDS) for all chemicals, compounds, and/or substances which would be utilized during the course of this project.

- A minimum buffer of 500 feet would be maintained around Coyote Creek and wetlands. Wetlands would include any observed seeps, springs, or wetland vegetation. Buffers would be marked prior to the aerial application and be clearly visible from the air.

Map


2011 Coyote Creek Fertilization Treatment
Cost to MPHPP: $35,000
330 - 350 acres
Legend
1:40,000
Treatment Area 400 Acres
Land Status
Bureau of Land Mgt
Private
N
W
E
S
Willow Creek Reservoir
07501
07579
07778
07515
Bunte Reservoir
Windy Gap Reservoir
Colorado River
Fraser River
GRANBY
Wyoming
Colorado
Walden
Project Area
Granby
Kremmling
I-25
I-70
US 40
1
Miles

No Action Alternative: Under this alternative, the proposed treatment would not be conducted. This would maintain current habitat conditions for deer and elk and the improvement of vegetation would occur at a slower pace, or not at all if current wildlife and livestock grazing pressure remains.

Alternatives Considered But Eliminated From Further Analysis: Mechanical treatments (e.g. brush mowing and Dixie harrow) and seeding with nitrogen fixing legumes were considered but eliminated for further analysis. Steep slopes within the project area, and the limited effectiveness of establishing legumes where there is currently good ground cover and high competition from other grasses and forbs would limit the success of seeding. Mechanical treatments would reduce the shrub component, which would be contrary to the intent of the proposed project.

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; Updated February 1999

Decision Number/Page: Decision 5.a., page 7

Objective from the 1999 ROD Update: "Manage public land habitat to support optimum wildlife population levels as determined by the Colorado Division of Wildlife's Strategic Plan. Emphasis will be placed on intensively managing critical and important wildlife habitats 326,000 acres of upland, 3 miles of riparian, 3,000 acres of wetlands and 53 miles of stream. All threatened and endangered plant and wildlife habitats will be protected as required by law and regulation."

AFFECTED ENVIRONMENT / ENVIRONMENTAL CONSEQUENCES / MITIGATION MEASURES:

MIGRATORY BIRDS

Affected Environment: A variety of migratory bird species, primarily birds of prey and songbirds, have been observed in the project area. Surveys conducted in 1994 by the Colorado Breeding Bird Atlas Partnership recorded many species including Swainson's hawks, Red-tailed hawks, Green-tailed Towhee, Mountain and Western Bluebirds, Sage Thrasher, Horned Lark, Killdeer, Loggerhead Shrike, American Kestral, Common Nighthawk, and others. These species inhabit the sagebrush steppe uplands within the allotments.

Environmental Consequences, Proposed Action: The proposed treatment should improve habitat conditions for migratory birds using the treatment area. The proposed ammonium nitrate application would add nitrogen to area soils, resulting in increased vegetative productivity in the treated area. The expected increase in grass and forb productivity would provide additional high quality forage, cover, and nesting habitat.

Environmental Consequences, No Action Alternative: The No Action alternative would result in the continued limited productivity of vegetation within the project area. Food, cover, and nesting habitat for migratory birds would be limited in the future due to the low productivity of grasses and forbs in the sagebrush understory.

Mitigation Measures: None

THREATENED, ENDANGERED, AND SENSITIVE SPECIES

Affected Environment: No listed species would be impacted by the proposed project.
The proposed treatment area provides habitat for the Greater sage-grouse, a federal candidate and BLM-designated sensitive species. One sage-grouse breeding complex, known as a lek, is located within four miles of the treatment area. Since 80 percent of sage-grouse nesting occurs within four miles of a lek, sage-grouse likely nest in suitable habitat in the proposed treatment area. The area is also mapped as winter habitat identified by CDOW.

Environmental Consequences, Proposed Action: The proposed treatment should improve habitat conditions for Greater sage-grouse using the treatment area. The proposed ammonium nitrate application would add nitrogen to area soils, resulting in increased vegetative productivity in the treated area. The expected increase in grass and forb productivity would provide additional high quality forage, cover, and nesting habitat.

Environmental Consequences, No Action Alternative: The No Action alternative would result in the continued limited productivity of vegetation within the project area. Food, cover, and nesting habitat for Greater sage-grouse would be limited in the future due to the low productivity of grasses and forbs in the sagebrush understory.

Mitigation Measures: None

WATER QUALITY, SURFACE AND GROUND

Affected Environment: The proposed action is located on a hillslope adjacent to Coyote Creek, an intermittent tributary to the Colorado River immediately below Windy Gap Reservoir. Coyote Creek is a small stream that is often dry by late summer. The project area is primarily southwest aspects, with runoff occurring earlier in the season. Using the USGS 'Streamstats' model, the Coyote Creek drainage is approximately 2,106 acres. The proposed action is to treat approximately 16 percent of the watershed. The stream appears to be primarily used for private irrigation water, with seven decreed ditch rights and one storage right. Bunte Reservoir is located in the southwest corner of section 12 and stored approximately 17 acre-ft. of water. The state's diversion records indicate that the reservoir has not been actively used since the 1980s. The 2010 diversion record comment notes that the structure is not usable. The BLM consulted with the water commissioner, and found that flows entering the old reservoir are stored, but due to the condition of the outlet culvert, are gradually lost. Coyote Creek is designated by the state for water supply, potential primary contact recreation, aquatic life- coldwater class 1, and agricultural uses. There are no state identified impairments of these uses.

The Coyote Creek drainage has some water quality based on data from the Grand County Landfill located south of the proposed action. In October, 2002, the Coyote Creek segment in Section 12 had ammonia, aluminum, copper, iron, and silver detected at concentrations exceeding the State standards. The following May, this segment exceeded the state standard only in iron. It appears that the temporal and discharge differences (spring was much wetter) may account for some of the differences, but the small number of samples does not allow for further determination. Aluminum and iron sources do appear to be tied to the natural background levels. The BLM does not routinely monitor Coyote Creek due to the limited public ownership and low flows.

Geology and hydrology of the treatment area appears to be similar to the landfill. The landfill site has a shallow soil layer overlying bedrock, with several seeps. The landfill consisted of two parts- the uphill, more recent landfill and the southern lower historic landfill that had been closed for many years. The water table at the site is approximately 10 ft. below the ground's surface and occurs in the weathered Pierre Shale, a clayey formation over 3,000 ft. thick. The hydraulic conductivity of the Pierre Formation is 10^{-8} cm per second. Both groundwater and interflow (water just below the surface) travel in a southwesterly direction. The Old Granby Landfill Site Investigation did not identify Windy Gap Reservoir as a potential target for surface or groundwater pathways, despite its proximity, due to the dominant pathways being downstream of the reservoir. The EPA officially identified the landfill as needing no further remedial action, and was removed from the Superfund list in November, 2008.

Most of the proposed treatment area has gentle to moderate slopes, although approximately 77 acres (approximately 20 percent of the project's area) in the S1/2 of the NW1/4 of section 12 have slopes greater than 35 percent. This mapping includes, however, slope breaks and changes, with more moderate slopes interspersed in this block. The steeper soils tend to have higher runoff rates and are more erosive. The rest of the proposed treatment area has lower runoff rates and good infiltration. The most extensive soil mapping unit within the project area is a Youga loam, with loam layers approximately 14 inches thick, with an effective rooting depth of 60 inches or more. There have been no soil analyses done for the proposed treatment area, but proposed application rates are based on past Middle Park fertilization projects and recommended application rates. There are approximately three distinct ephemeral drainages within the treatment area, draining to the southwest to Coyote Creek. Aerial photographs indicate there may be seeps within or adjacent to the proposed treatment boundaries, which would be consistent with the landfill's geology.

Reviewing Riverwatch water quality data for the Colorado River at Windy Gap, there was limited water quality data. The station is located below the reservoir, and data for ammonia levels, pH, and nitrate/nitrite concentrations were queried from their database. There were five sampling dates within the database for ammonia and nitrate/nitrites, from the fall of 2006 to spring of 2010. Ammonia and nitrate/nitrite values were generally 0 mg/L. The only nitrate/nitrite reading occurred in late November, when flows were estimated to be about 66 cfs. The highest ammonia reading (0.05 mg/L) occurred in May at 510 cfs, although last year's May reading was 0 mg/L at 479 cfs. Readings of pH were plentiful, and the average pH was 8.2 from 1999-2010. The minimum value was 7.44 and the maximum value was 9.19. All values of 9 and above were reviewed, and all occurred in August or later. Reviewing USGS data for the river segment indicated similar patterns with values generally increasing with warmer water. The Colorado River has been added to the state's impaired waters list- the 303(d) List, for the

segment downstream of Windy Gap Reservoir, starting at the Hitching Post (County Road 587) bridge to the confluence with the Blue River, for temperatures. This location is 1.34 miles below the confluence with Coyote Creek. It is over two and a half miles downstream of the project area. Monitoring data has generally shown temperature concerns occur during the low flow periods experienced in the hot summer periods of late July through early September.

Environmental Consequences, Proposed Action: From a review of the available water quality and hydrology of the landfill, the proposed treatment area could have areas with an elevated water table, especially during the spring. The proposed buffer for all observed seeps or wetland areas will help protect groundwater from direct application of fertilizer. A one-time direct water application would not be expected to affect long-term water quality, but could result in a short term exceedance of state standards. Due to the proposed application during a time of active plant growth and expected dry weather, and buffering any seeps or surface water by 500 feet, it is unlikely that nitrogen would reach the groundwater. (Anderson, C.W.2001, *Ecological effects on streams from forest fertilization- literature review and conceptual framework for future study in the western Cascades;* U.S. Geological Survey Water Resources Investigations Report 01-04047, 49 p.). If there was some runoff that occurred immediately after the application, the 500 foot buffer, including Coyote Creek's riparian vegetation, would readily take up any remaining nitrogen. The project design features are likely to maintain and protect the designated uses of the surface waters.

Ideally, soil analyses are done to determine what nutrient levels are low in the soil and fertilizer selection and application rates are adjusted for that soil. Since the soil nitrogen levels are not known, a spring application could result in some excess nitrogen remaining in the soil, which is available for volatilization, leaching to water tables, and transport with runoff. The proposed application rate, during the active growing period, reduces this potential. (Waskom, R.M. XCM 172, *Best Management Practices for Nitrogen Fertilization.* 1994). The project area has good vegetative cover which would readily absorb the applied fertilizer. The application will occur after snowmelt from the project area, so snowmelt will not transport any fertilizer. By applying the fertilizer during an expected dry period, it is unlikely that runoff would transport the fertilizer to surface waters.

In the spring, the water table is elevated and there is a potential for runoff. The higher soil moistures and larger streamflows, however, should help dilute or attenuate the concentrations. The downstream use of the water is irrigation. If nitrogen levels are increased, there could be some vegetation blooms, especially in Bunte Reservoir, but not to a degree that would impair agricultural use of the water. Private irrigated hay meadows are generally fertilized in the spring, but there are no meadows upstream from the unit. If the private land west of the highway is fertilized, there could be additive amounts to Coyote Creek, but again would not be expected to impair the current use of the water. Any increase would be of very short duration.

It is unlikely that surface runoff from the project area would transport increased nitrogen levels to the Colorado River. The applied fertilizer begins to rapidly go through chemical changes, including volatization, plant uptake and breakdown. The proposed application would occur after Coyote Creek's peak flows, and the project area would be dry. If any did reach the Colorado River, it would be a very small concentration compared to the expected Colorado River flows, and would be quickly diluted. Fertilization would not affect the levels of metals (iron, aluminum, copper, or silver) in the surface or ground waters. By buffering the defined drainages

and any seeps, the possible concentration of fertilizer reaching waters is reduced. Due to the small amount of acreage, the one-time application, and the volumes of spring runoff, there should be no significant increase in ammonia in Coyote Creek or the Colorado River, and any increase would dissipate quickly.

Environmental Consequences, No Action Alternative: Under the No Action Alternative, the fertilization on public lands would not occur. Private irrigators and other land owners could still fertilize their lands. Generally hay meadows are irrigated in the spring, with a liquid application. Some irrigators use their irrigation systems to apply the fertilizer. There are too many unknowns to predict if private fertilization would occur and if it would reach any surface or ground waters. Big game wildlife could browse heavier on the riparian/wetland vegetation and private lowland property. If wildlife concentrations were impacting these areas, there could be increased sediments in Coyote Creek from bank trampling and poor willow and floodplain vegetative conditions. The opportunity to improve wildlife habitat in an upland area would be foregone.

Mitigation Measures: None

VEGETATION

Affected Environment: The project area is in a sagebrush steppe vegetation community. It is dominated by big sagebrush (*Artemisia tridentata)* with an understory of native, cool season grasses and forbs. Bitterbrush (*Purshia* tridentata) is an important species within the project area. The bitterbrush has been over-utilized by mule deer and elk. A few other shrubs such as snowberry (*Symphoricarpos* spp) and serviceberry (*Amelanchier alnifolia*) occupy the project area. Prominent grasses include bluebunch wheatgrass (*Pseudoroegneria spicata*), western wheatgrass (*Pascopyrum smithii*), bluegrasses (*Poa* spp), fescues (*Festuca* spp), pine needlegrass (*Achnatherum pinetorum*), Indian ricegrass (*Achnatherum hymenoides*), and bottlebrush squirreltail (*Elymus elymoides*). Forbs can vary greatly in variety and vigor from year to year depending on local precipitation timing and intensity. Forbs include wild buckwheat (*Eriogonim* spp), daisies (*Erigeron* spp), phlox (*Phlox* spp), pussytoes (*Antennaria* spp), and beard tongues (*Penstemon* spp).

Environmental Consequences, Proposed Action: The Proposed Action would apply fertilizer to the area which would increase the vigor and production of the existing vegetation, including the bitterbrush and other important big game browse species.

Environmental Consequences, No Action Alternative: The No Action alternative would result in the continued limited productivity of vegetation within the project area due to over-utilization by big game species.

Mitigation Measures: None

WILDLIFE, TERRESTRIAL

Affected Environment: The proposed project area provides important habitat for a variety of wildlife including mule deer, pronghorn antelope, Rocky Mountain elk, white-tailed jackrabbits, coyotes and several species of small rodents. Deer and elk inhabit the units proposed for

fertilization during winter, while pronghorn are spring and summer residents. The other mammals listed above are yearlong residents.

The proposed treatment area is classified as important deer and elk winter range by the CDOW. CDOW personnel assisted the KFO with the selection of these parcels because of their importance to upland wildlife, especially mule deer and Rocky Mountain elk.

Environmental Consequences, Proposed Action: The proposed ammonium nitrate application would add nitrogen to area soils, resulting in increased vegetative productivity in the treated area which would add forage and cover to the area. This would indirectly benefit wildlife by increasing forage, thus increasing the potential to attract and hold deer and elk.

Environmental Consequences, No Action Alternative: The No Action alternative would result in the continued limited productivity of vegetation within the project area. Food and cover for terrestrial wildlife would be limited in the future due to the low productivity of grasses and forbs in the sagebrush understory.

Mitigation Measures: None

CUMULATIVE IMPACTS SUMMARY:
Geographic Scope of the Cumulative Analysis:

For the purpose of this EA, the general geographic area for cumulative impact analysis is allotments # 07501 and 7515 which are grazed by the C Lazy U Ranch and Horn Ranch respectively. This land is found north of the Upper Colorado River drainage area west of Granby, Colorado.

The timeframe for the cumulative impact analysis is three years for short-term effects and seven years for long-term effects. These timeframes are based on the duration of the effects anticipated, primarily on soil resources.

Past Present and Reasonably Foreseeable Action:

No past actions are known to have occurred in this area, although they could have included, but are not limited to, mechanical or chemical treatments, fire (prescribed or wild), and range improvement projects (e.g., livestock tanks, riparian fencing). Before 2010, the health of sagebrush is generally described as even-aged, old and decedent. This resulted in less desirable habitat for wildlife and also resulted in reduced forage for livestock.

For migratory birds, terrestrial wildlife, threatened, endangered, and sensitive species, vegetation, and water resources, the cumulative impact of the proposed project would improve habitat, improve vegetation production and health, and potentially result in a short-term exceedance of state water quality standards.

Future actions, such as wildlife and livestock grazing are anticipated to continue within this allotment. Surface disturbance from future projects to improve habitat for wildlife or livestock, would create a small, incremental increase in surface disturbance, when combined with other

surface disturbances if other authorized activities were to occur in the allotment, such as powerline construction, off-highway vehicle (OHV) use, and livestock grazing. Any project proposal would require an EA and potential impacts would be analyzed at a site-specific level. Design features and mitigation measures would be applied to reduce or eliminate impacts affecting the resources mentioned above.

Under the No Action alternative, there would be impacts from existing activities, such as those mentioned above. The No Action alterative would reduce the ability to improve overall land health within the allotment. This would result in less desirable habitat for migratory birds and wildlife and less desirable livestock forage. Other impacts, such as mentioned above, would be reduced or eliminated by practices such as careful design of projects or management of OHV use.

PERSONS / AGENCIES CONSULTED: Middle Park Habitat Partnership committee members and the Colorado Division of Wildlife were consulted. There was strong support for this project. In addition, the permittees and adjacent landowners were notified by mail for request for comments.

INTERDISCIPLINARY REVIEW: See IDT-RRC in Appendix 1.

Finding of No Significant Impact and Decision Record
Bureau of Land Management
Kremmling Field Office

Environmental Assessment DOI-BLM-LLCON02000-2010-0052-EA

Case File No. **N/A**

Proposed Action Title/Type: Coyote Creek Fertilization

Applicant/Proponent: BLM

Location of Proposed Action: Grand County
T. 2 N., R. 77 W. Sec. 13, 14, 6th P.M.

USGS Topographical Map: See EA.

Conformance with Applicable Land Use Plan:

These plans have been reviewed to determine if the proposed action conforms to the land use plan terms and conditions as required by 43 CFR 1610.5. This proposed action is in conformance with the following land use plan:

The Proposed Action is in conformance with the Record of Decision for the Kremmling Resource Management Plan approved in 1984 and updated in 1999,

BACKGROUND

The Kremmling Field Office of the Bureau of Land Management (BLM) is proposing to treat 330-350 acres of mixed sagebrush, grass, and antelope bitterbrush with ammonium nitrate granular fertilizer within the Coyote Creek area. Ammonium nitrate fertilizer, which is 33 1/3 percent nitrogen, would be applied at a rate of 300 pounds-per-acre to achieve 100 pounds of nitrogen per-acre of habitat.

Finding of No Significant Impact

The Kremmling Field Office interdisciplinary review and analysis determined that the proposed action would not trigger significant impacts on the environment based on criteria established by regulations, policy and analysis.

I have reviewed the above mentioned NEPA compliance document (EA). I have determined that the proposed action and the alternatives are in conformance with the Kremmling Resource Management Plan.

I have determined, based on the analysis in DOI-BLM-LLCON02000-2010-0052-EA that this is not an action that would significantly affect the quality of the human environment and, therefore, an Environmental Impact Statement is not required. This determination is based on the rationale

that the significance criteria, as defined by the Council on Environmental Quality (CEQ) (40 CFR 1508.27) have not been met.

The following rationale was used to determine that significant impacts were not present for each criteria mentioned in Title 40 CFR 1508.27:

1. *Beneficial and adverse impacts.*
   The Proposed Action has the potential to improve the quality and quantity of forage for elk and mule deer as well as other wildlife species that depend on the sagebrush steppe vegetative types within the project area.

2. *The degree to which the proposed action affects public health or safety.*
   The Proposed Action does not affect public health or safety.

3. *Unique characteristics of the geographic area.*
   None.

4. *The degree to which the effects on the quality of the human environment are likely to be highly controversial.*
   The Proposed Action is not a highly controversial project.

5. *The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.*
   The possible effects of the Proposed Action on the human environment are not highly uncertain and do not involve unique or unknown risks.

6. *The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.*
   The Proposed Action does not establish a precedent for future actions with significant effects and does not represent a decision in principle about a future consideration.

7. *Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.*
   Past, present, and foreseeable future individual actions do not result in cumulatively significant impacts

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 scientific, cultural, or historical resources.*
   The Proposed Action will not adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places and will not cause loss or destruction of significant scientific, cultural, or historical 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.*
   The Proposed Action will not adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act.

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 will not threaten a violation of Federal, State, or local law or requirements imposed for the protection of the environment

Decision: It is my decision to authorize the Proposed Action as described in the attached EA DOI-BLM-LLCON02000-2010-0052-EA. This decision is contingent on meeting all monitoring requirements listed below.

Mitigation Measures: None

Compliance/Monitoring: The BLM would monitor the success of the treatment every year, for up to five years. Effectiveness monitoring would be implemented with water quality samples collected pre- and post- fertilizer application, if Coyote Creek has any surface water below the project area. This will help inform adaptive management and future projects.

Reviewer: _/s/Susan Cassel_____ Date____4/20/11_____
Environmental Coordinator

Authorized Officer: __/s/ Dave Stout_____ Date:__4/20/11_____

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Kremmling Field Office
2103 E. Park Avenue
Kremmling, CO 80459
www.blm.gov/co/kremmling

Coyote Creek Fertilization
Decision Record
May 20, 2011

1.0 Introduction and Background

The browse species and bitterbrush found within the Coyote Creek area are extremely important winter forage for mule deer and elk. The Coyote Creek area has been a vital winter range for these animals because of the high amounts of shrubs and limited winter range in the area. Currently, the bitterbrush has been over-utilized by mule deer and elk. Since development on adjacent private lands has increased, elk and mule deer have been forced to concentrate on BLM-administered public lands. The goal of this project is to help stimulate the browse species and provide better winter range for elk and mule deer. The project is in cooperation with Middle Park Habitat Partnership Program (HPP), the Colorado Division of Wildlife (CDOW), and the BLM Kremmling Field Office (KFO). The Middle Park HPP would fund this proposal.

2.0 Decision and Rationale

2.1 Alternatives Considered but not Selected

Under the No Action alternative, the proposed treatment would not occur. This would maintain current habitat conditions for deer and elk and the improvement of vegetation would occur at a slower pace, or not at all if current pressure remains. An alternative to treat vegetation by mechanical means was considered but not selected because it would be contrary to improving browse vegetation for wildlife.

2.2 Decision and Rationale

Based on information in the EA, the project record, and consultation with my staff, and support provided in public comments, I have decided to proceed as described in the EA.

3.0 Consultation and Coordination

No federally listed animal or plant species (or their habitats) were identified; therefore, consultation with USFWS is not necessary. Cultural resources would not be impacted by the proposed project, therefore, Section 106 consultation is not required. Written consultation was initiated with Native American tribes and to date no tribe has identified any area of traditional

cultural concern. Middle Park Habitat Partnership committee members and the Colorado Division of Wildlife were consulted. There was strong support for this project. Permittees and adjacent landowners were notified by mail of the proposed project and their comments were requested.

4.0 Public Involvement

Scoping was announced for the project on March 16, 2011, by postal mail. The EA was available for a formal 30-day public comment period on April 20, 2011, by being posted at the Kremmling Field Office website. Comment letters were received from the Colorado Division of Wildlife and Grand County.

Comment:
Grand County raised concerns about water quality and not including Windy Gap Reservoir in the discussion of potential impacts.

Response:
The surface and groundwater pathways do not suggest that Windy Gap Reservoir would be impacted by this project. Groundwater pathways are not only to the southwest, downstream from Windy Gap Reservoir, but are not expected to be contaminated. The transmissivity rates of the underlying shale are very slow, and the application rate and time period would reduce the likelihood of reaching the interflow.

The discussion of the Colorado River's water quality has been expanded in the Environmental Assessment. From a review of the data, stream temperature and pH are consistently more of a concern during low flow periods during the hot summer time periods. The expected flows in the Colorado would be expected to have lower stream temperatures and lower pH levels during the time of application. If Coyote Creek did receive any fertilizer-contaminated runoff, and had sufficient flows to transport it to the Colorado River, it would be quickly diluted by the river's volume. The 11.7 acres of the project that are within the Fraser River watershed, and the 19.5 acres that are within the Willow Creek watershed are even more unlikely to impact the water quality of those watersheds, especially as the actual proposed acreage to be treated is smaller than the mapped project's extent.

The County comments that BLM acknowledges that Coyote Creek sometimes exceeds the state standards for ammonia and some metals. that the BLM has only sampled Coyote Creek a few times, and one sample had ammonia concerns, in the fall, and that the BLM states there is insufficient data to make any conclusions about the water quality, except that irrigation uses would not be affected by any increases in forms of nitrogen, if they were to occur. From groundwater and surface water samples, it appears that the some metals are naturally occurring due to the geology. The assertion that nutrients are highest in the spring runoff is not shown in the Colorado River data, nor that this action would "exacerbate already high nutrient levels." The time of application is after Coyote Creek's peak flows, during a dry-time period, and includes a large buffer from any surface waters. The application rate for an actively growing, well-vegetated site is based on research and is not expected to result in leaching to the groundwater or runoff to the surface waters.

Comment:

The Colorado Division of Wildlife expressed support of the project.

5.0 Plan Consistency

Based on information in the EA, the project record, and recommendations from BLM specialists, I conclude that this decision is consistent with the Kremmling RMP.

6.0 Administrative Remedies

Administrative remedies may be available to those who believe they will be adversely affected by this decision. Appeals may be made to the Office of Hearings and Appeals, Office of the Secretary, U.S. Department of Interior, Board of Land Appeals (Board) in strict compliance with the regulations in 43 CFR Part 4. Notices of appeal must be filed in this office within 30 days after publication of this decision. If a notice of appeal does not include a statement of reasons, such statement must be filed with this office and the Board within 30 days after the notice of appeal is filed. The notice of appeal and any statement of reasons, written arguments, or briefs must also be served upon the Regional Solicitor, Rocky Mountain Region, U.S. Department of Interior, 755 Parfet Street, Suite 151, Lakewood, CO 80215.

The effective date of this decision (and the date initiating the appeal period) will be the date this notice of decision is posted on the BLM's Kremmling Field Office internet website.

__/s/ David Stout_____ ____5/20/11_____
David Stout Date
Field Manager, Kremmling Field Office

Appendix 1

INTERDISCIPLINARY TEAM ANALYSIS REVIEW RECORD AND CHECKLIST:

Project Title: Coyote Creek Fertilization
Project Leader: Megan McGuire
Date Proposal Received: (Only for external proposals) N/A
Date Submitted for Comment: 8/2/2010
Due Date for Comments: 12/1/2010

Need for a field Exam: (If so, schedule a date/time) N/A

Scoping Needs/Interested or Affected Publics: (Identify public scoping needs)

Consultation/Permit Requirements:

Consultation	Date Initiated	Date Completed	Responsible Specialist/ Contractor	Comments
Cultural/Archeological Clearance/SHPO	NA	3/12/2011	B. Wyatt	Section 106 consultation is not required.
Native American	2/17/2011	3/18/2011	B. Wyatt	Written consultation was initiated and to date no tribe has identified any area of traditional cultural concern.
T&E Species/FWS	N/A	N/A	M. McGuire	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 (USFWS) March 11, 2010.
Permits Needed (i.e. Air or Water)	N/A	N/A	P. Belcher	

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

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.)
NI	Air Quality **Belcher**	8/31/10	PB	Current air quality is good, and the proposed action would be of such short duration and limited aerial extent that there would be no impacts to the air quality. There would be no impact from the No Action Alternative.
NP	Areas of Critical Environmental Concern **McGuire**	8/2/2010	MM	There are no Areas of Critical Environmental Concern in the proximity of the proposed project area.
NI	Cultural Resources **Wyatt**	3/12/2011	BBW	Aerial application of fertilizer is not a Section 106 undertaking and would not have an effect to known cultural resource sites, and there

				would be no historic properties that would be affected.
NP	Environmental Justice **Cassel**	9/20/2010	SC	According to the most recent Economic Census Bureau statistics (2009), there are minority and low income communities within the Kremmling Planning Area. There would be no direct impacts to these populations.
NP	Farmlands, Prime and Unique **Belcher**	8/31/10	PB	There are no farmlands, prime or unique, in the proximity of the proposed project area.
NP	Floodplains **Belcher**	8/31/10	PB	The proposed action occurs outside of the Colorado River floodplain and would not indirectly affect it.
NI	Invasive, Non-native Species **Johnson Torma Hughes**	8/05/2010	ZH	There is a small population of known invasive or non-native species within the study area. The population of invasive species within the project area is sparse and scattered with most invasive species occurring along the roadways within the project area. The application of fertilizer would not contribute to an increase or expansion of invasive species.
PI	Migratory Birds **McGuire**	8/2/2010	MM	See analysis.
NP	Native American Religious Concerns **Wyatt**	3/18/2011	BBW	To date no American Indian Tribe has identified any area of traditional cultural concern.
PI	T/E, and Sensitive Species (Finding on Standard 4) **McGuire**	8/2/2010	MM	See analysis.
NP	Wastes, Hazardous and Solid **Hodgson**	9/20/2010	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 or No Action alternative.
PI	Water Quality, Surface and Ground (Finding on Standard 5) **Belcher**	8/31/10	PB	See the Water Quality Section.
NI	Wetlands & Riparian Zones (Finding on Standard 2) **Belcher**	8/31/10	PB	Only potential isolated wetlands within the proposed unit, which should be avoided due to water quality concerns. Fertilization could benefit the vegetation short term, but otherwise no affect. No impact from the no action Alternative.
NP	Wild and Scenic Rivers **Monkouski**	9/20/2010	JJM	There are no eligible Wild and Scenic River segments in the proposed project area.
NP	Wilderness **Monkouski**	9/20/2010	JJM	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)				
NI	Soils (Finding on Standard 1) **Belcher**	8/31/10	PB	Soil microbe populations are generally reduced initially after fertilization, but tend to rebound within 2-3 years after treatment. There are no other soil impacts from the Proposed Action. There are no impacts from the No Action Alternative.
PI	Vegetation (Finding on Standard 3) **Johnson Torma**	9/3/2010	RJ	See analysis.
NP	Wildlife, Aquatic (Finding on Standard 3) **McGuire**	8/2/2010	MM	No aquatic wildlife present. Finding: N/A
PI	Wildlife, Terrestrial (Finding on Standard 3) **McGuire**	8/2/2010	MM	See analysis.

NI	Access/Transportation **Monkouski**	9/20/2010	JJM	The proposed action would not restrict access or travel opportunities within the project area. Staff would be on-site to answer questions and assist visitors with alternative opportunities within the area. No impacts from the proposed action or no action alternative.
NI	Forest Management **K. Belcher**	8/29/2010	KB	No impact to forest resources.
NI	Geology and Minerals **Hodgson**	9/13/2010	KH	No impacts from the proposed action or no action alternative.
NP	Fire **Wyatt**	8/13/2010	BBW	No effect.
PI	Hydrology/Water Rights **Belcher**	8/31/10	PB	See water quality section.
NI	Paleontology **Rupp**	8/09/2010	FGR	Paleontological resources may be present within the APE, but are not affected by aerial spraying of fertilizer.
NI	Noise **Monkouski**	9/20/2010	JJM	The proposed action is short term duration in an area with existing noise impacts. Within a one mile radius there is heavy equipment being utilized within the Grand County landfill, Ranch Creek Ranch lumber mill, a private closed circuit dirt bike track and moderate to heavy travel along Us Highway 40 and Colorado Highway 125. Additionally, the Granby airport is within a five radius to the project location. No impacts from the proposed action or no action alternative.
NI	Range Management **Johnson**	9/3/2010	RJ	The application of fertilizer would not affect the livestock grazing within the project area.
NI	Lands/ Realty Authorizations **Sperandio**	8/16/2010	AS	There are two power lines for Mt. Parks (COC-12512 and COC-04878) adjacent to the project boundary and one buried phone line for Qwest (COC-53365) within the SW corner of the project boundary. No impacts would occur in the proposed project area.
NI	Recreation **Monkouski** **Windsor**	9/20/2010	JJM	The proposed action is within the Extensive Recreation Management Area. Current recreational activities within the area include horseback riding, hunting and camping. Minimal OHV recreation on BLM-administered lands occurs within the project area due to private property boundaries. A big Game guiding and outfitting permittee and a horseback trail ride permittee are currently authorized for activities under Special Recreation Permits. With the short term duration of the project there would be no impacts to recreation from the proposed action or the no action alternative.
NI	Socio-Economics **Cassel**	9/3/2010	SC	There would be no impacts to socio-economics of the area by the proposed action or the no action alternative.
NI	Visual Resources **Hodgson**	9/13/2010	KH	No impact.
NI	Cumulative Impact Summary	2/7/11	MM	See summary.
FINAL REVIEW				
	P&E Coordinator **Cassel**			