

U.S. Department of the Interior
Bureau of Land Management
Little Snake Field Office
455 Emerson Street
Craig, CO 81625-1129

ENVIRONMENTAL ASSESSMENT

EA NUMBER: DOI-BLM-CO-N010-2010-0076-EA

BIOLOGICAL CONTROL APPLICATION RELEASE PROPOSAL#: 10-CO-100-600

PROJECT NAME: Release of *Aphthona* spp., *Oberea erythrocephala*, and *Spurgia esulae* for the control of leafy spurge in Teepee Draw

LEGAL DESCRIPTION: T7N, R100W, Sec. 28 SWNE; also see map (Attachment #1).

APPLICANT: BLM Little Snake Field Office

PLAN CONFORMANCE REVIEW: The Proposed Action and Alternatives are subject to the following plan:

Name of Plan: Little Snake Resource Management Plan and Record of Decision

Date Approved: April 26, 1989

Results: As required by the U.S. Department of Interior regulations (43 CFR 1610.5-3) the proposed action and analyzed alternatives are subject to and in conformance with the current Little Snake Field Office (LSFO) Resource Management Plan (1986).

The proposed action is in conformance with management objectives throughout the LSFO. This includes:

- environmentally sound exploration and development of coal, oil and gas, and other minerals exploration and development (p. 6-10, 1989 LSFO RMP);
- improving range conditions in terms of species diversity, and abundance as well as increasing carrying capacities for both livestock and wildlife (p. 10, 1989 LSFO RMP);
- maintaining rangelands that are at their desired plant communities (p. 12, 1989 LSFO RMP);
- protecting, conserving and managing Threatened/Endangered, Candidate, and sensitive species plants (p. 14, 1989 LSFO RMP);
- preventing deterioration of soil conditions and stabilize and rehabilitate areas where accelerated erosion and runoff have resulted in unacceptable resource conditions (p. 16, 1989 LSFO RMP).

NEED FOR PROPOSED ACTION:

Both BLM policy and Colorado State law require landowners to control noxious weed infestations. The Little Snake Field Office implements Integrated Weed Management techniques to manage weed infestations on BLM land throughout the resource area. This infestation of leafy spurge is categorized as a List B weed species by the Colorado Department of Agriculture which classifies it as a noxious weed that should be managed to stop the continued spread (control).

PUBLIC SCOPING PROCESS: The action in this EA is included in the NEPA log posted on the LSFO web site: http://www.blm.gov/co/st/en/BLM_Information/nepa/lisfo.html. Additionally, letters of project proposal were sent to the grazing permittee, adjacent private landowners, Dinosaur National Monument and other affected interests.

BACKGROUND: The infestation in the Teepee Draw area is a historical infestation that has been present in the area for quite some time (~1950s) reportedly as a result of an emergency feeding operation for stranded livestock. The infested area encompasses about 66 acres of both private (42 acres) and BLM land (24 acres) with outlying infestations on BLM along the two track road leading from the main infestation area to the pond (.59 miles) and an additional infestation area at the pond to the south of the infestation (1.6 acres). These areas are shown on the attached map. The main infestation seems to have stayed within this general area of Teepee Draw and with some satellite infestations in the surrounding areas. The location is very remote with somewhat limited access by private land ownership. The release site is within the Teepee Draw grazing allotment (#04309).

Elevation at this site is about 6,950 feet. The infestation is in a depression with slopes on both sides of the area. Vegetation in the area consists of Wyoming big sagebrush, rabbitbrush (green and rubber), sego lilly, phlox, Sandberg bluegrass, western wheatgrass, needle and thread, bottlebrush squirreltail and Utah juniper. Land health assessments within the area have failed to meet standards due to the extent of the leafy spurge infestation at this site.

Photo 1
Large infestation area as viewed from east side.





Photo 2
Infestation to the south off of the dam face looking down the draw.

The use of biological control agents to control leafy spurge has been in practice for many years (~15 years). The original releases of these insects occurred in the United States during the 1980s. Prior to their release the Animal Plant and Health Inspection Service (APHIS) conducted extensive testing and selection processes that included population sustainability, preferable diet selection, and effectiveness of control. In order to release these biocontrol agents APHIS had to show suitability to targeted habitat as well as specificity of host/forage plant. Currently, these biocontrol insects have shown success in controlling leafy spurge infestations once a population has been established. They have shown continued selectivity for leafy spurge as well.

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES:

Proposed Action

The BLM would release biocontrol agents in the Teepee Draw leafy spurge infestation area at the site shown on Attachment #1. A combination of the species shown in Table 1 would be released. The insects would be purchased from a private supplier. They would be deposited on site from the shipping container as insects become available in June or July. The initial release would occur in 2010 with potential releases to occur in 2011 or 2012 depending on establishment success of an insect population. Initially, approximately 3,200 of the *Apthona* spp would be released along with 100 of the *Spurgia esulae*. Based on site specific data the combination of species would be selected for appropriateness for release site when ordered. This would ensure that the species are suitable for the site selected.

Table 1.

Insect	Mode of Action/Damage	Description
<i>Apthona nigriscutis</i>	Root mining beetles	This insect seems to prefer dry habitats with coarse, well drained soils. Needle-and-thread is considered a good indicator of suitable site.
<i>Apthona flava</i>	Root mining beetles	Immature larvae feed on root hairs then as they get larger they migrate to larger roots. Recommended for south slopes and areas 18-20 in. precip./year.
<i>Apthona cyparissiae</i>	Root mining beetles	This insect prefers warm open sunny areas but tolerate more moisture. Soils with high sand content and green needle grass indicate favorable sites.
<i>Apthona lacertosa/czwalinae</i>	Root mining beetles	Basically indistinguishable from each other these black colored beetles are very effective. They are by far the most actively redistributed <i>Apthona</i> spp.
<i>Apthona</i> spp. – These flea beetles are very effective insects that develop within the spurge root system. The larvae feed on root hairs and young roots, compromising the plant’s ability to take up moisture and nutrients. Adults feed on the foliage in the summer.		
<i>Oberea erythrocephala</i>	Stem mining and girdling beetle	The adults girdle the stem causing shoot death. Developing larvae feeding in the stem may also cause shoot death. Larval feeding in the crown and root tissues diminishes reserves. These insects thrive in shady riparian habitat.
<i>Spurgia esulae</i>	Gall forming midge	The larvae attack the growing shoot tips, preventing flowering. Recommended release sites have cool climates and dense spurge.

Monitoring of this biocontrol release would evaluate insect establishment and vegetative control. The infestation would be evaluated and swept with insect nets in the years following the release to determine population establishment. Photo plots and transects would be established to measure the amount of leafy spurge control. Also, the perimeter of the primary infestation would be mapped.

No Action Alternative

No biological control agents would be released in the Teepee Draw leafy spurge infestation.

AFFECTED ENVIRONMENT/ENVIRONMENTAL CONSEQUENCES/MITIGATION MEASURES

CRITICAL RESOURCES

AIR QUALITY

Affected Environment: There are no special designation air sheds or non-attainment areas nearby that would be affected by either alternative.

Environmental Consequences, both alternatives: The biocontrol agents themselves would have no effect on local or regional air quality. Activities associated with the release and associated monitoring that may affect air quality, namely dust and exhaust from vehicles, are non-existent or negligible in the scope of EPA emission standards for the six criteria pollutants of concern (sulfur dioxide, nitrogen oxide, ground-level ozone, carbon monoxide, particulate matter [both PM2.5 and PM10], and lead). Not releasing the biocontrol insects would have no impacts on air quality. Impacts to air quality caused by either alternative are therefore considered negligible.

Mitigative Measures: None

Name of specialist and date: Emily Spencer, 4/22/10

AREA OF CRITICAL ENVIRONMENTAL CONCERN

Affected Environment: Not Present

Environmental Consequences: Not Applicable

Mitigative Measures: None

Name of specialist and date: Gina Robison, 5/3/10

CULTURAL RESOURCES

Affected Environment: Cultural resources, in this region of Colorado, range from late Paleo-Indian to Historic. For a general understanding of the cultural resources in this area of Colorado, see *An Overview of Prehistoric Cultural Resources, Little Snake Resource Area, Northwestern Colorado*, Bureau of Land Management Colorado, Cultural Resources Series, Number 20, *An Isolated Empire, A History of Northwestern Colorado*, Bureau of Land Management Colorado, Cultural Resource Series, Number 2 and *Colorado Prehistory: A Context for the Northern Colorado River Basin*, Colorado Council of Professional Archaeologists.

Environmental Consequences, both alternatives: The proposed project, Release of *Apthona spp.*, *Oberea erythrocephala*, and *Spurgia esulae* for the control of leafy spurge in Teepee Draw,

has not undergone a Class III cultural resource survey. Neither alternative has the potential to effect cultural resources and no Class III cultural resource survey is necessary.

Mitigative Measures: The following standard stipulations apply for this project:

All persons who are associated with the operations must know that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials or human remains are encountered or uncovered during any project activities, the BLM employee is to immediately stop activities in the immediate vicinity of the find and immediately contact their supervisor..

Name of specialist and date: Robyn Watkins Morris, 4/26/10

ENVIRONMENTAL JUSTICE

Affected Environment: The proposed action would be located in an area of isolated dwellings. Oil & gas development and ranching are the primary economic activities.

Environmental Consequences, both alternatives: The proposed action would not directly affect the social, cultural or economic well-being and health of Native American, minority or low-income populations. The project area is remote and relatively isolated from population centers, so no populations would be affected by physical or socioeconomic impacts of the proposed action.

Mitigative Measures: None

Name of specialist and date: Barb Blackstun, 4/22/10

FLOOD PLAINS

Affected Environment: There are no 100-year floodplains present on public lands within the proposed project area.

Environmental Consequences, both alternatives: None

Mitigative Measures: None

Name of specialist and date: Emily Spencer, 4/22/10

INVASIVE, NONNATIVE SPECIES

Affected Environment: Invasive and noxious weeds are present in the affected area. Invasive annuals such as cheat grass and yellow alyssum occur in or near the project area. In addition to the large leafy spurge infestation white top, Canada thistle and other biennial thistles are found nearby. Invasive annual weeds are typically established in disturbed and high traffic areas, whereas, biennial and perennial weeds are less common in occurrence. Cheat grass is on the Colorado List C of noxious weeds while leafy spurge, Canada thistle and white top are on List B. The BLM Little Snake Field Office cooperates with Moffat County Pest Management

program to employ the principals of Integrated Weed Management (IWM) to control noxious weeds on public lands.

Environmental Consequences, Proposed Action: *Apthona spp.* flea beetles are natural predators of leafy spurge. Adults feed on leaves and bracts in the summer but the most significant damage is caused by root-feeding larvae. The adults and the larvae stress the plants and create wounds that allow pathogens to invade the plant and cause additional damage. This stress results in delayed emergence, thinner stands, weaker plants, delayed maturity and flowering, and decreased seed production. These affects allow other vegetation to out compete leafy spurge. Biocontrol insects typically take several years to impact infestations. Once established however, these species show effectiveness. Additionally, stress by insects can make leafy spurge more susceptible to other control methods such as grazing and herbicide. This can be an effective part of an integrated weed management program. It is important to understand that the insects will never eliminate leafy spurge as this would eliminate their population. A threshold balance of plants and insects would eventually be established.

Biocontrol insects are highly selective. There have been no non-target plants affected in release areas utilizing these biocontrol insects.

Vehicular access to public lands for dispersed recreation, hunting, grazing operations, livestock and wildlife movement, as well as wind and water, can cause weeds to spread into new areas. Surface disturbance from livestock concentration and human activities associated with grazing operations can also increase weed presence. The largest concern would be for biennial and perennial noxious weeds to establish and not be detected. Once an infestation is detected it could be controlled with various IWM techniques. The proposed action would contribute to the control of the primary noxious weed of concern, leafy spurge.

Environmental Consequences, No Action Alternative: Under this alternative leafy spurge would continue to be present and provide a seed source to spread this noxious weed. This alternative would not facilitate control of leafy spurge.

Mitigative Measures: None

Name of specialist and date: Christina Rhyne, 4/30/2010

MIGRATORY BIRDS

Affected Environment: The LSFO provides both foraging and nesting habitat for a variety of migratory bird species. Several species on the U.S. Fish & Wildlife Service (USFWS) List of Conservation Concern (2008) occupy these habitats within the LSFO.

Specific to the project area, native plant communities are comprised of Wyoming big sagebrush, rabbitbrush (green and rubber), sego lilly, phlox, Sandberg bluegrass, western wheatgrass, needle and thread, bottlebrush squirreltail and Utah juniper. Three sagebrush obligate species listed on USFWS's Bird of Conservation Concern (BCC) List, the sage thrasher, Brewer's sparrow and

sage sparrow may nest in the area. Two pinyon-juniper obligate species listed on USFWS's BCC List, the pinyon jay and juniper titmouse may nest in the general project area. Other species that are not on the BCC list but associated primarily with this habitat type include ash-throated flycatcher, gray flycatcher and black-throated gray warbler. There are no active raptor nests in the vicinity of the proposed action.

Environmental Consequences, Proposed Action: The intent of the proposed action is to reduce the severity of leafy spurge infestation, thus improving migratory bird habitat. Introducing biological control insects to reduce noxious weeds could have unintentional effects on the wildlife community by establishing a new food source – the insects. If generalists respond positively to the new food source it may increase their populations. This could in turn increase competition for specialist species food sources. Biological treatment impacts to wildlife would be indirectly beneficial, long-term and minor. There would be no chance of take with the release of biocontrol insects.

Environmental Consequences, No Action: Long-term positive impacts on wildlife communities (i.e., improvements in habitat and ecosystem function) would be much less under this alternative than under the proposed action. Invasive plant populations would likely continue to expand at the current rate or greater, increasing damage to native plant communities and wildlife habitat and inhibiting associated ecosystem functions.

Mitigative Measures: None

Name of specialist and date: Gail E. Martinez, 4/27/10

NATIVE AMERICAN RELIGIOUS CONCERNS

A letter was sent to the Eastern Shoshone, Uinta and Ouray Tribal Council, Southern Ute Tribal Council, Ute Mountain Ute Tribal Council on May 26, 2009. The letter listed the FY2010 projects that the BLM would notify them on and projects that would not require notification. A followup phone call was performed on July 26, 2009. No comments were received (Letter on file at the Little Snake Field Office). This project requires no additional notification.

Name of specialist and date: Robyn Watkins Morris, 4/26/10

PRIME & UNIQUE FARMLANDS

Affected Environment: No Prime and/or Unique Farmlands are present in the vicinity of the proposed project.

Environmental Consequences, both alternatives: None

Mitigation Measures: None

Name of specialist and date: Emily Spencer, 4/22/10

T&E AND SENSITIVE ANIMALS

Affected Environment: No threatened or endangered animal species or suitable habitat is present in the project area.

Environmental Consequences: None

Mitigation Measures: None

Name of specialist and date: Gail Martinez, 04/21/10

T&E AND SENSITIVE PLANTS

Affected Environment: There are no federally listed threatened or endangered or BLM sensitive plant species present within or in the vicinity of the treatment area.

Environmental Consequences, Proposed Action: Due to the selectivity of these insects for leafy spurge, the proposed action would not impact any existing sensitive plant populations within the larger landscape.

Environmental Consequences, No Action: The primary infestation of leafy spurge has remained confined to the basin of the original establishment site. Additional populations can be found spreading to the south in Teepee Draw. These satellite populations may continue to spread under this alternative and threaten populations of special status plants in the larger landscape.

Mitigative Measures: None

Name of specialist and date: Hunter Seim, 4/22/10

WASTES, HAZARDOUS OR SOLID

Affected Environment: There are no hazardous wastes present at the site or within the allotment.

Environmental Consequences, Proposed Action: Potential releases of hazardous materials could occur due to vehicular access during release and monitoring. Coolant, oil, and fuel are materials that could potentially be released. Due to the limited amount of vehicular activity that would be required, the potential for releases of any of these materials is low and if a release were to occur, it would be minimal and highly localized and not result in an adverse impact to the allotment.

Environmental Consequences, No Action: Under this alternative there would be no consequences associated with hazardous or solid wastes.

Mitigative Measures: None

Name of specialist and date: Christina Rhyne, 4/29/10

WATER QUALITY - GROUND

Affected Environment: There are no recorded water wells within the vicinity of the proposed project.

Environmental Consequences, both alternatives: None

Mitigation Measures: None

Name of specialist and date: Marty O'Mara, 4/26/10

WATER QUALITY - SURFACE

Affected Environment: Surface runoff from the proposed project area would drain into Teepee Draw, an ephemeral tributary to the Yampa River. The proposed project location is approximately five miles upstream of Teepee Draw's confluence with the Yampa River.

As of 2010 the Yampa River (from Elkhead Creek to the Green River) is on the Colorado Department of Public Health and Environment's (CDPHE) Section 303(d) list of Water Quality Limited Segments because of a high priority iron impairment (CDPHE 2010). This segment is also on CDPHE's Monitoring and Evaluation List for a suspected water quality problem regarding sediment load (CDPHE 2010). Water quality for this reach of the Yampa River must support Aquatic Life Warm 1, Recreation E, Water Supply, and Agricultural beneficial uses.

Reference: Colorado Department of Public Health and Environment Water Quality Control Commission. 2010. Regulations #33, 37, and 93. <http://www.cdphe.state.co.us/regulations/wqccregs/index.html>

Environmental Consequences, Proposed Action: The intended environmental impact of the proposed action is a reduction in the severity of leafy spurge infestations over the long term with consequent improvement in range conditions and the return of a mixed community of native vegetation. Healthy, vigorous, and diverse vegetation communities are the best protection against degraded water quality, as the potential for sedimentation via soil erosion is reduced or eliminated. The release of biocontrol insects would not influence or exacerbate existing water quality issues or impairments and is expected to contribute to the overall improvement and maintenance of water quality over the long term.

Environmental Consequences, No Action: If the release does not occur, range degradation is expected to continue over time as leafy spurge infestations expand and the potential for soil loss increases. This upland degradation may contribute to sedimentation issues (as well as weed seed spread) down Teepee Draw during runoff events. Without biological control, chemical control might be necessary in the future to manage the infestation, which poses more of a risk to surface water quality. Because the infestation is mostly on private lands, use of herbicides on BLM-managed lands only would be less effective overall unless the private landowner also invests in a similar management strategy.

Mitigative Measures: None

Name of specialist and date: Emily Spencer, 4/22/10

WETLANDS/RIPARIAN ZONES

Affected Environment: There are no wetlands or riparian areas identified within the vicinity of the proposed project.

Environmental Consequences, both alternatives: None

Mitigation Measures: None

Name of specialist and date: Emily Spencer, 4/22/10

WILD & SCENIC RIVERS

Affected Environment: Not Present

Environmental Consequences: Not Applicable

Mitigative Measures: None

Name of specialist and date: Gina Robison 5/3/10

WSAs, WILDERNESS CHARACTERISTICS

Affected Environment: Although Teepee Draw was identified as having wilderness characteristics along with Ant Hills, Chew Winter Camp, Petersen Draw, and Vale of Tears in the 1980 wilderness inventory, it was dropped from further wilderness recommendation and removed from wilderness study in the 1989 Little Snake Record of Decision (ROD). The seven remaining Wilderness Study Areas collectively make up the Dinosaur Adjacent (also referred to as Dinosaur Wilderness Additions).

Areas with wilderness characteristics can be identified by BLM as a part of managing the public lands or through external nominations by the public. In 1994, the Colorado Conservationists presented to BLM the *Conservationists' Wilderness Proposal for BLM Lands* that identify the Teepee Draw area (approximately 5,490 acres), along with Ant Hills, Chew Winter Camp, Petersen Draw, and Vale of Tears as having wilderness characteristics. In 2005, BLM specialists conducted a preliminary assessment of areas likely to have wilderness characteristics in the Little Snake Field Office and along with public comments from local and State agencies, conservation groups, and private interests determined that Teepee Draw met the criteria for wilderness characteristics.

Impacts to lands with wilderness characteristics outside existing WSAs would be considered significant if there was any degradation of the individual wilderness characteristics (naturalness and outstanding opportunities for solitude or primitive recreation) to the degree the value would

no longer be present within the specific area. This analysis is based on the assumption that lands identified as having, or as likely to have wilderness characteristics contain wilderness values (e.g., naturalness, outstanding opportunities for solitude or primitive recreation).

The presence of nonnative species degrades the quality, character, and integrity of wilderness characteristics. Weeds can become established through wildlife, pack stock, or wild horses and burros that migrate in and out of WSAs carrying seed on fur or feces, or through hikers and wildlife bringing in weed seeds on their clothing or equipment. Increases in noxious weeds can increase hazardous fuels that could result in a catastrophic wildfire, degrading unique qualities associated with WSAs.

Environmental Consequences, Proposed Action: Implementing biological control agents to control leafy spurge in the Teepee Draw area would have no negative effects and long-term positive effects. The long-term effects would be reduction of noxious weed infestations and improvement in wilderness characteristics. Preventive treatment would eliminate or reduce the need for more aggressive methods in the future. In addition, the reduction of hazardous fuels and noxious weeds on lands adjacent to or near WSAs would provide long-term benefits by reducing the likelihood that noxious weeds would spread into the surrounding WSAs that make up the Dinosaur Adjacent.

The Teepee Draw area is bounded by well-established, mechanically constructed roads and other ways. A few mechanically constructed and maintained routes extend into the area as cherry stemmed roads including into the proposed release site, which is within the Teepee Draw grazing allotment (#04309). The area and roads are used regularly by local residents and ranchers and by the primary recreation users in the area, hunters. Release of biocontrol agents is minor, compatible with other uses, both historic and present, and would not add any new or detrimental impacts to those that are already present.

Environmental Consequences, No Action: If the release does not occur, infestation of leafy spurge would continue to expand over time with the potential to spread into the surrounding WSAs.

Mitigative Measures: None

Name of specialist and date: Gina Robison, 5/3/10

NON-CRITICAL ELEMENTS

SOILS

Affected Environment: The infestation appears to be confined to the Emlin loam soil type, a well-drained, deep loam soil with a typical profile of up to 60 inches. Emlin soils have moderately slow permeability, high available water capacity, and a high potential for runoff. The main hazard for this soil type is erosion unless close-growing plant cover is maintained.

The surface soil characteristics are relatively stable with a good vegetation canopy density and production to help protect from accelerated erosion. There is evidence of slight erosion in the form of pedestal and rills. Cryptograms are present and intact where appropriate.

Environmental Consequences, Proposed Action: The intended environmental impact of the proposed action is a reduction in the severity of leafy spurge infestations over the long term with consequent improvement in range conditions and the return of a mixed community of native vegetation. Healthy, vigorous, and diverse native vegetation communities are the best protection against degraded soil conditions, as the potential for soil erosion and loss is reduced or eliminated. The release of biocontrol insects would not degrade soil stability, but rather would contribute to the overall improvement and maintenance of upland soils health and stability over the long term.

Environmental Consequences, No Action: If the release does not occur, range degradation would continue over time as leafy spurge infestations expand and the potential for soil loss increases.

Mitigative Measures: None

Name of specialist and date: Emily Spencer, 4/22/10

UPLAND VEGETATION

Affected Environment: Overall, vegetation composition, diversity, and production are appropriate for this site. The leafy spurge is extensive and dense but has remained contained within the primary infestation area with limited spread relative to the aggressiveness of this noxious weed. This indicates surrounding plant communities are healthy and vigorous in competing with the leafy spurge. Other species present at the site include Wyoming big sagebrush, green rabbitbrush, rubber rabbitbrush, sego lily, lupine, phlox, scarlet globemallow, stemless goldenweed, Sandberg bluegrass, western wheatgrass, needle and thread, bottlebrush squirreltail, and Utah juniper.

Environmental Consequences, Proposed Action: The proposed action would contribute to an improvement in the upland vegetation in the project area. Establishment of biocontrol insects to control leafy spurge would reduce the infestation size and provide desirable conditions for native vegetation to reclaim the infestation area.

Environmental Consequences, No Action: Under this alternative the leafy spurge infestation monoculture would continue precluding native desirable vegetation from inhabiting the area. The site would continue to degrade as leafy spurge infestations spread.

Mitigative Measures: None

Name of specialist and date: Christina Rhyne, 4/30/2010

WILDLIFE, AQUATIC

Affected Environment: No aquatic wildlife habitat is present within project area.

Environmental Consequences: Not Applicable

Mitigative Measures: None

Name of specialist and date: Gail Martinez, 04/27/10

WILDLIFE, TERRESTRIAL

Affected Environment: The project area provides year round habitat for a variety of wildlife species including elk, Merriam's turkey, mountain lion, black bear and mule deer. A variety of small mammals, song birds and reptiles may also be found within the project area at various times of the year.

Environmental Consequences, Proposed Action: Introducing biological control insects to reduce leafy spurge could have unintentional effects on the wildlife community by establishing a new food source. If generalists respond positively to the new food source it may increase their populations. This could in turn increase competition for specialist species food sources. Biological treatment impacts to wildlife would be indirectly beneficial, long-term and minor.

Environmental Consequences, No Action: Long-term positive impacts on wildlife communities (i.e., improvements in habitat and ecosystem function) would be reduced under this alternative compared to the proposed action. Invasive plant populations would likely continue to expand at the current rate or greater, increasing damage to native plant communities and wildlife habitat and inhibiting associated ecosystem functions.

Mitigative Measures: None

Name of specialist and date: Gail E. Martinez, 4/27/10

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

Non-Critical Element	NA or Not Present	Applicable or Present, No Impact	Applicable & Present and Brought Forward for Analysis
Fluid Minerals		EMO 4/26/10	
Forest Management		CR 4/29/10	
Hydrology/Ground		EMO 4/26/10	
Hydrology/Surface		ELS 4/22/10	
Paleontology		EMO 4/26/10	
Range Management		CR 4/29/10	
Realty Authorizations		BSB 04/22/10	
Recreation/Travel Mgmt		GMR 5/3/10	
Socio-Economics		BSB 04/22/10	
Solid Minerals		JAM 5/5/10	
Visual Resources		GMR 5/3/10	
Wild Horse & Burro Mgmt	CR 4/29/10		

CUMULATIVE IMPACTS SUMMARY:

This allotment and surrounding areas have historically been grazed by both sheep and cattle. Maintained and unmaintained roads exist throughout the area. The area is used regularly by local residents and ranchers and by the primary recreation users in the area, hunters. Wildlife populations in the area are high. The primary impacts from all of these activities are most immediately seen in the presence of roads, cultivation on private lands, and weed presence. The proposed action to release biocontrol agents is minor, compatible with other uses, both historic and present, and would not add any new or detrimental impacts to those that are already present.

STANDARDS

PLANT AND ANIMAL COMMUNITY (animal) STANDARD:

The standard is currently not being met due to the leafy spurge present in Teepee Draw. The infestation is also contributing to a decreased abundance of native plants and heavy browsing on what remains. The leafy spurge must be treated in order for this site to be capable of meeting this standard and to prevent the infestation from spreading to other parts of the landscape. The proposed action would contribute to meeting this standard once a native plant community is established and leafy spurge populations are decreased. The Teepee Draw area would continue to fail to meet the standard under the No Action alternative.

Name of specialist and date: Gail E. Martinez, 04/27/10

SPECIAL STATUS, THREATENED AND ENDANGERED SPECIES (animal)

STANDARD: There are no known threatened or endangered animals or suitable habitat for such in or near the affected environment. The standard does not apply.

Name of specialist and date: Gail E. Martinez, 04/27/10

PLANT AND ANIMAL COMMUNITY (plant) STANDARD:

The standard is not currently being met due to the leafy spurge present in Teepee Draw. Vegetative components in the areas surrounding the infestation include native plant species expected to occur on this allotment. Outside the infestation vegetation composition, diversity, and production is what would be expected for this area. The proposed action would help meet this standard in the future. The No Action Alternative would not contribute to improvement of this standard.

Name of specialist and date: Christina Rhyne, 4/29/10

SPECIAL STATUS, THREATENED AND ENDANGERED SPECIES (plant)

STANDARD: There are no federally listed threatened or endangered or BLM sensitive plant species present within or in the vicinity of the proposed treatment area. This standard does not apply.

Name of specialist and date: Hunter Seim, 4/22/10

RIPARIAN SYSTEMS STANDARD: There are no riparian or wetland areas within the project area. This standard does not apply.

Name of specialist and date: Emily Spencer, 4/22/10

WATER QUALITY STANDARD: There are no perennial surface water bodies in the vicinity of the proposed project. Any surface runoff from the site would flow down Teepee Draw and into the Yampa River over five miles downstream. This reach of the Yampa River is on the State of Colorado's Section 303(d) list of Water Quality Limited Segments because of a high priority iron impairment is also on State's Monitoring and Evaluation List for a suspected water quality problem regarding sediment load. The release of biocontrol insects would not influence or exacerbate existing water quality issues or impairments and is expected to contribute to the overall improvement and maintenance of water quality over the long term. This standard would continue to be met under the Proposed Action and the No Action Alternative.

Name of specialist and date: Emily Spencer, 4/22/10

UPLAND SOILS STANDARD: The area surrounding the proposed project site has moderate to good vegetative communities that are expected to gradually re-colonize areas where leafy spurge is weakened by biological controls. There is minimal sign of erosion and soils are well protected with vegetation and litter cover. This standard would continue to be met under the Proposed Action and the No Action Alternative.

Name of specialist and date: Emily Spencer, 4/22/10

PERSONS/AGENCIES CONSULTED: Uintah and Ouray Tribal Council, Colorado Native American Commission, Colorado State Historic Preservation Office, NPS Dinosaur National Monument, Dewey Sheridan, Teepee Ranch Inc., Moffat County Pest Management, Moffat County Natural Resources, Colorado Division of Wildlife, Western Watersheds Project and the Colorado Environmental Coalition.

MITIGATION MEASURES: None

ATTACHMENTS: Attachment #1 Proposed Release Site Map

SIGNATURE OF PREPARER:

DATE SIGNED:

SIGNATURE OF ENVIRONMENTAL REVIEWER:

DATE SIGNED:

Finding of No Significant Impact

The environmental assessment, analyzing the environmental effects of the proposed action, has been reviewed. With the implementation of the attached mitigation measures there is a finding of no significant impact on the human environment. Therefore, an environmental impact statement is not necessary to further analyze the environmental effects of the proposed action.

1. Beneficial, adverse, direct, indirect, and cumulative environmental impacts have been disclosed in the EA. Analysis indicated no significant impacts on society as a whole, the affected region, the affected interests or the locality. The physical and biological effects are limited to the Little Snake Resource Area and adjacent land.
2. Public health and safety would not be adversely impacted. There are no known or anticipated concerns with project waste or hazardous materials.
3. There would be no adverse impacts to regional or local air quality, prime or unique farmlands, known paleontological resources on public land within the area, wetlands, floodplain, areas with unique characteristics, ecologically critical areas or designated Areas of Critical Environmental Concern.
4. There are no highly controversial effects on the environment.
5. There are no effects that are highly uncertain or involve unique or unknown risk. Sufficient information on risk is available based on information in the EA and other past actions of a similar nature.
6. This alternative does not set a precedent for other actions that may be implemented in the future to meet the goals and objectives of adopted Federal, State or local natural resource related plans, policies or programs.
7. No cumulative impacts related to other actions that would have a significant adverse impact were identified or are anticipated.
8. Based on previous and ongoing cultural surveys, and through mitigation by avoidance, no adverse impacts to cultural resources were identified or anticipated. There are no known American Indian religious concerns or persons or groups who might be disproportionately and adversely affected as anticipated by the Environmental Justice Policy.
9. No adverse impacts to any threatened or endangered species or their habitat that was determined to be critical under the Endangered Species Act were identified. If, at a future time, there could be the potential for adverse impacts, treatments would be modified or mitigated not to have an adverse effect or new analysis would be conducted.
10. This alternative is in compliance with relevant Federal, State, and local laws, regulations, and requirements for the protection of the environment.

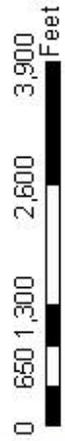
SIGNATURE OF AUTHORIZED OFFICIAL:

DATE SIGNED:

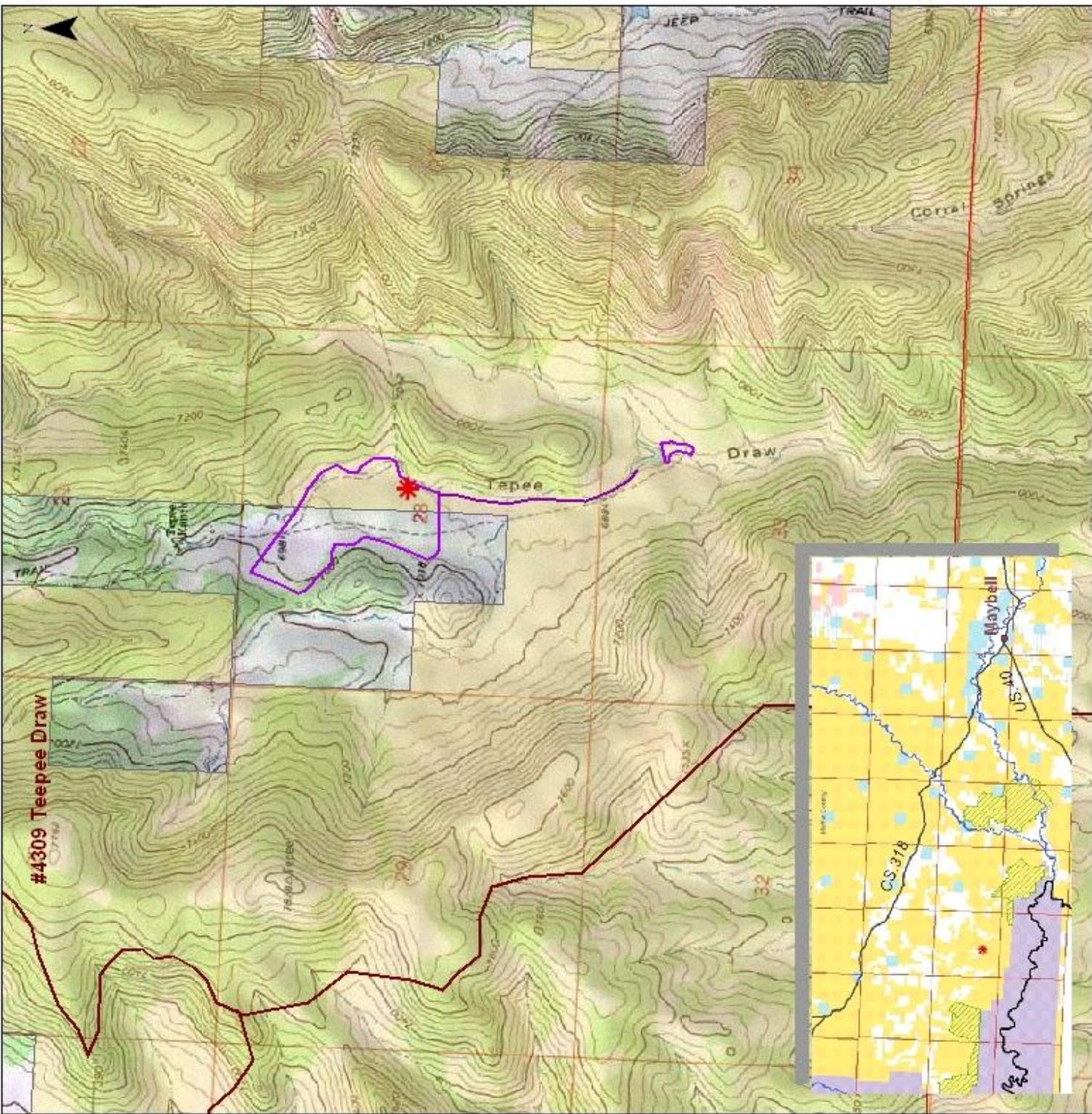
Teepee Draw Leafy Spurge Biocontrol Proposal

T7N R100W

	Proposed Release Site
	Master Weed Inventory Lines
	Master Weed Inventory Polygons
	Allotment Boundaries
	Township/Range
Surface Management Status	
	Private
	State Land Board
	US BLM
	US FWS
	US NPS




Greystone
Limtstone Hill
Haystack Rock
Indian Water Canyon
CR 4/15/10



#4309 Teepee Draw