

**Biological Evaluation for
Special Status Plants on BLM Lands in the Upper Big Hole Watershed
(Upper Big Hole Watershed Environmental Assessment)
DOI-BLM-MT-B050-2010-10-EA**

Prepared by
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May 2010

None of the plants currently listed as endangered or threatened under the Endangered Species Act are known from BLM lands in the Dillon Field Office. However, Ute ladies' tresses, which is listed as threatened in Montana, is known from private and state lands in Beaverhead, Madison, Gallatin, and Jefferson counties. Hooded ladies' tresses isn't on BLM's sensitive species list, but all orchids are listed under the Convention on International Trade in Endangered Species (CITES) as protected species. Fifty-three sensitive plant species inhabit BLM-administered lands within the Dillon Field Office. Four of those species as well as a population of hooded ladies' tresses are known to occur within the Cumulative Impact Area of the Upper Big Hole Watershed Environmental Assessment. The potential effects that the various alternatives may have on these species are summarized in the following table. A detailed discussion of predicted effects and potential impacts to special status plant species and their habitat is provided in the attached "Supplemental Information on Special Status Plants on BLM Lands in the Upper Big Hole Watershed".

Definitions of Abbreviations used in the Table.

NI - No Impact

BI - Beneficial impact to populations or habitat

MIH - May impact individuals or habitat, but will not likely contribute to a trend towards federal listing or cause a loss of viability to the population or species.

* **WIFV** - Will impact individuals or habitat with a consequence that the action may contribute to a trend toward federal listing or cause a loss of viability to the population or species.

* Consultation with the U.S. Fish and Wildlife Service will be initiated if an alternative is selected that may contribute to a loss of viability to a population of species reviewed in this evaluation.

Biological Evaluation Summary for Special Status Plants for the Upper Big Hole Watershed Environmental Assessment (DOI-BLM-MT-B050-2010-10-EA)

Common Name <i>Genus species</i>	Does the species occur on Public Lands within the Upper Big Hole Watershed?	Is the species or its habitat found in the Cumulative Impact Area?	Are irreversible or irretrievable resources involved?	What effect could this proposal have? *		
				Alt. A	Alt. B	Alt. C
Ute Ladies' Tresses <i>Spiranthes diluvialis</i>	NO	NO	--	--	--	--
Hooded Ladies' Tresses <i>Spiranthes romanzoffiana</i>	YES	YES	NO	NI	BI	BI
Cusick's Horse-mint <i>Agastache cusickii</i>	NO	NO	--	--	--	--
Western snakeroot <i>Ageratina occidentalis</i>	NO	NO	--	--	--	--
Tapertip onion <i>Allium acuminatum</i>	NO	NO	--	--	--	--
Sitka Columbine <i>Aquilegia formosa</i>	NO	NO	--	--	--	--
Sapphire Rockcress <i>Arabis fecunda</i>	NO	NO	--	--	--	--
Painted Milkvetch <i>Astragalus ceramicus var. apus</i>	NO	NO	--	--	--	--
Lesser Rushy Milkvetch <i>Astragalus convallarius var. convallarius = A. junciformis</i>	NO	NO	--	--	--	--
Bitterroot Milkvetch <i>Astragalus scaphoides</i>	NO	NO	--	--	--	--
Railhead Milkvetch <i>Astragalus terminalis</i>	NO	NO	--	--	--	--
Large-leafed Balsamroot <i>Balsamorhiza macrophylla</i>	NO	NO	--	--	--	--
Red Sage <i>Bassia americana</i>	NO	NO	--	--	--	--
Mojave brickellbush <i>Brickellia oblongifolia</i>	NO	NO	--	--	--	--
Idaho Sedge <i>Carex idaho</i>	NO	YES	NO	NI	NI	NI
Lesser Indian paintbrush <i>Castilleja minor ssp. minor</i>	NO	NO	--	--	--	--
Fendler Cat's-eye <i>Cryptantha fendleri</i>	NO	NO	--	--	--	--
Beavertip Draba <i>Draba globosa</i>	NO	NO	--	--	--	--
Wind River Draba <i>Draba ventosa</i>	NO	NO	--	--	--	--
Beaked spikerush <i>Eleocharis rostellata</i>	NO	NO	--	--	--	--
Long-sheath waterweed <i>Elodea bifoliata</i>	NO	NO	--	--	--	--
Idaho Fleabane <i>Erigeron asperugineus</i>	NO	NO	--	--	--	--

Common Name <i>Genus species</i>	Does the species occur on Public Lands within the Upper Big Hole Watershed?	Is the species or its habitat found in the Cumulative Impact Area?	Are irreversible or irretrievable resources involved?	What effect could this proposal have? *		
				Alt. A	Alt. B	Alt. C
Linearleaf Fleabane <i>Erigeron linearis</i>	NO	NO	--	--	--	--
Buff Fleabane <i>Erigeron parryi</i>	NO	NO	--	--	--	--
Mat Buckwheat <i>Eriogonum caespitosum</i>	NO	NO	--	--	--	--
Railroad Canyon Wild Buckwheat <i>Eriogonum soliceps</i>	NO	NO	--	--	--	--
Hiker's gentian <i>Gentianopsis simplex</i>	YES	YES	NO	NI	BI	BI
Many-flowered Viguirea <i>Heliomeris multiflora var. multiflora</i>	NO	NO	--	--	--	--
Prostrate Hutchensia <i>Hornungia procumbens</i>	NO	NO	--	--	--	--
Ballhead Ipomopsis <i>Ipomopsis congesta ssp. crebrifolia</i>	NO	NO	--	--	--	--
Simple Bog Sedge <i>Kobresia simpliciuscula</i>	NO	NO	--	--	--	--
Beautiful Bladderpod <i>Lesquerella pulchella</i>	NO	NO	--	--	--	--
Sand Wildrye <i>Leymus flavescens</i>	NO	NO	--	--	--	--
Taper-tip Desert-parsley <i>Lomatium attenuatum</i>	NO	NO	--	--	--	--
Marsh Felwort <i>Lomatogonium rotatum</i>	NO	NO	--	--	--	--
Dwarf purple monkeyflower <i>Mimulus nanus</i>	NO	NO	--	--	--	--
Primrose monkeyflower <i>Mimulus primuloides</i>	YES	YES	NO	NI	BI	BI
Low northern – rockcress <i>Neotorularia humilis</i>	NO	NO	--	--	--	--
Meadow pennycress <i>Noccaea parviflora</i>	NO	NO	--	--	--	--
Meadow Lousewort <i>Pedicularis crenulata</i>	NO	NO	--	--	--	--
Lemhi Beardtongue <i>Penstemon lemhiensis</i>	YES	YES	NO	MIH	BI	BI
Whipple's Beardtongue <i>Penstemon whippleanus</i>	NO	NO	--	--	--	--
Hoary Phacelia <i>Phacelia incana</i>	NO	NO	--	--	--	--
Slender-branched Popcorn Flower <i>Plagiobothrys leptocladus</i>	NO	NO	--	--	--	--

Common Name <i>Genus species</i>	Does the species occur on Public Lands within the Upper Big Hole Watershed?	Is the species or its habitat found in the Cumulative Impact Area?	Are irreversible or irretrievable resources involved?	What effect could this proposal have? *		
				Alt. A	Alt. B	Alt. C
Spiny skeletonweed <i>Pleiacanthus spinosus</i>	NO	NO	--	--	--	--
Alkali Primrose <i>Primula alcalina</i>	NO	NO	--	--	--	--
Mealy Primrose <i>Primula incana</i>	NO	NO	--	--	--	--
James Stitchwort <i>Pseudostellaria jamesiana</i>	NO	NO	--	--	--	--
Lemmon's Alkaligrass <i>Puccinellia lemmonii</i>	NO	NO	--	--	--	--
White-stemmed Globe-mallow <i>Sphaeralcea munroana</i>	NO	NO	--	--	--	--
Silver Chicken Sage <i>Sphaeromeria argentea</i>	NO	NO	--	--	--	--
Rocky Mountain Dandelion <i>Taraxacum eriophorum</i>	NO	NO	--	--	--	--
Alpine Meadowrue <i>Thalictrum alpinum</i>	NO	NO	--	--	--	--
Slender Thelypody <i>Thelypodium sagittatum</i>	NO	NO	--	--	--	--
Showy Townsendia <i>Townsendia florifera</i>	NO	NO	--	--	--	--

* The livestock management and project proposals are not consistent across alternatives. For example, the season of use for one allotment under Alternative B may not be the same as the season of use for another allotment under the same alternative. For the purposes of this biological evaluation if a proposed grazing treatment (numbers, duration, time of year, frequency of rest), project or vegetative treatment within a given alternative is likely to adversely affect a sensitive plant or its habitat, then that effect is reflected in the table.

Supplemental Information on Special Status Plants on BLM Lands in the Upper Big Hole Watershed

The Dillon Resource Management Plan provides guidance that requires project sites in high probability habitats to be surveyed for sensitive plants prior to any ground disturbing activities. This reduces the possibility that sensitive plant species would be accidentally or inadvertently impacted by BLM activities.

Hooded ladies' tresses, hiker's gentian, and primrose monkeyflower won't be negatively impacted under any of the proposed alternatives. These populations are being maintained under currently authorized livestock management. Plugging and filling the ditch and removing the culvert at wetland 1994, as proposed in Alternatives B and C, would create connected wetland habitat and allow for potential population expansion of both primrose monkeyflower and hiker's gentian. Implementing standard forestry BMP's in and near wetland habitats will ensure that these facultative wetland species won't be affected by the forest treatments proposed under

Alternatives B and C. Harvesting the timber when the ground is frozen, as proposed for the Foxtail Allotment in Alternative B, may provide the best approach to reduce impacts.

Lemhi beardtongue is palatable to both deer and cattle. Continuing the currently authorized livestock management on the Steel Creek Allotment may impact individual Lemhi beardtongue plants. Under Alternative A the expected increase in canopy of mountain big sagebrush and/or Douglas-fir in the Steel Creek allotment would eventually reduce habitat suitability for Lemhi beardtongue which may result in a local population decline.

The prescribed fires proposed under Alternatives B and C would improve habitat conditions for Lemhi beardtongue by removing accumulated litter and reducing competition with conifers and sagebrush. The deferred grazing proposed under these two action alternatives would allow for seed production and seedling establishment on an annual basis. The local Lemhi beardtongue population would be expected to increase in both size and number under both Alternatives B and C.

Cumulative Considerations:

High probability habitats will be surveyed for sensitive plants prior to any ground disturbing activities on federal land but botanical surveys aren't required on private and state lands even on cooperative projects (e.g. a pipeline that crosses multiple ownerships). It's possible that sensitive plant species could be accidentally or inadvertently impacted by construction or placement of range improvement projects on non-federal lands.

The invasion of introduced species and noxious weeds near and into special plant species habitat across all ownerships poses a direct threat to these plants through competition, habitat degradation and the potential impact of herbicides. The use of insecticides on private lands within the UBHW to control grasshoppers or other insects may affect pollinators that visit sensitive plant species on BLM lands.

Signature

Date

References:

- Elzinga, C. 1997. Habitat Conservation Assessment and Conservation Strategy the Lemhi Penstemon. Unpublished report to the Bureau of Land Management. Alderspring Ecological Consulting, Tendoy, ID.
- Heidel, B.L. 1998. Conservation status of *Spiranthes diluvialis* Sheviak in Montana. Unpublished report to U.S. Fish and Wildlife Service. Montana Natural Heritage Program, Helena. 55 pp. + app.
- Heidel, B.L., and J. Vanderhorst. 1996. Sensitive plant surveys in Beaverhead and Madison counties, MT. Unpublished report to the Bureau of Land Management. Montana Natural Heritage Program, Helena, MT.
- Lesica, P. 1998. Conservation status of *Carex parryana* ssp. *idahoensis* in Montana. Unpublished report to the Beaverhead National Forest. Montana Natural Heritage Program. Helena, MT.
- Lesica, P. 2003. Conserving Globally Rare Plants on Lands Administered by the Dillon Office of the Bureau of Land Management. Report to the Bureau of Land Management, Dillon Office. Montana Natural Heritage Program, Helena, MT.
- Montana Natural Heritage Program (MNHP). 2009. Montana Rare Plant Field Guide. (Available online @ <http://mtnhp.org/SpeciesOfConcern/Default.aspx>)
- United States Department of the Interior, Bureau of Land Management, Dillon Field Office. 2009. Montana BLM Sensitive Plant Species Found on or Near BLM Lands Administered by the Dillon Field Office. List prepared for the Dillon Field Office based on Instruction Memorandum No. MT-2009-039
- Utah State University Extension. 2009. Range Plants of Utah. (Available online @ <http://extension.usu.edu/rangeplants/>)

BLM DILLON FIELD OFFICE
Biological Evaluation for Special Status Fish and Wildlife Species.
 Form Revised May 2009 - Updated May 2010

Project: UPPER BIG HOLE WATERSHED ASSESMENT

Step 1a.	Step 1b.	Step 1c.	Step 2	Step 3.	Step 4.	Step 5.	Step 5.	Step 5.
List of all Special Status Species that are known or suspected to occur on the DFO.	Current Management Status of the Species.	Does the species occur on this portion of the Field Office?	Is the species or its habitat found in the surrounding area?	Could this proposal have any effect?	Are Irreversible or Irretrievable Resources involved?	Alt A level of effect	Alt B level of effect	Alt C level of effect
Canada Lynx (<i>Lynx canadensis</i>)	Threatened	N	Y	N				
Grizzly Bear (<i>Ursus arctos horribilus</i>)	Threatened	N	Y	N				
Greater Sage Grouse (<i>Centrocercus urophasianus</i>)	Canidate	Y	Y	Y	N	MIIH	MIIH	MIIH
Mammals								
Fisher (<i>Martes pennanti</i>)	Sensitive	N	Y	N				
Fringed myotis (<i>Myotis thysanodes</i>)	Sensitive	N	Y	N				
Gray Wolf (<i>Canis lupus</i>)	Sensitive	Y	Y	N				
Great Basin pocket mouse (<i>Perognathus parvus</i>)	Sensitive	Y	Y	N				
Long-eared Myotis (<i>Myotis evotis</i>)	Sensitive	Y	Y	N				
Long-legged Myotis (<i>Myotis volans</i>)	Sensitive	Y	Y	N				
North American Wolverine (<i>Gulo gulo luscus</i>)	Sensitive	N	Y	N				
Pygmy Rabbit (<i>Brachylagus idahoensis</i>)	Sensitive	Y	Y	N				
Townsend's Big-eared Bat (<i>Plecotus townsendii</i>)	Sensitive	Y	Y	N				

(cont.) List of all Special Status Species that are known or suspected to occur on the DFO.	Current Management Status of the Species.	Does the species occur on this portion of the Field Office?	Is the species or its habitat found in the surrounding area?	Could this proposal have any effect?	Are Irreversible or Irretrievable Resources involved?	Alt A level of effect	Alt B level of effect	Alt C level of effect
Birds								
Bald Eagle (<i>Haliaeetus leucocephalus</i>)	Sensitive	Y	Y	N				
Black Tern (<i>Chlidonias niger</i>)	Sensitive	Y	Y	Y	N	MIIH	BI	BI
Black-backed Woodpecker (<i>Picoides arcticus</i>)	Sensitive	Y	Y	Y	N	NI	MIIH	MIIH
Black-crowned Night Heron (<i>Nycticorax nycticorax</i>)	Sensitive	N	N					
Bobolink (<i>Dolichonyx orysivorus</i>)	Sensitive	Y	Y	N				
Brewer's sparrow (<i>Spizella breweri</i>)	Sensitive	Y	Y	Y	N	NI	MIIH	MIIH
Burrowing Owl (<i>Athene cunicularia</i>)	Sensitive	N	Y	N				
Common Loon (<i>Gavia immer</i>)	Sensitive	N	N					
Ferruginous Hawk (<i>Buteo regalis</i>)	Sensitive	Y	Y	N				
Flammulated Owl (<i>Otus flammeolus</i>)	Sensitive	Y	Y	N				
Franklin's Gull (<i>Larus pipixcan</i>)	Sensitive	N	Y	N				
Golden Eagle (<i>Aquila chrysaetos</i>)	Sensitive	Y	Y	N				
Great Gray Owl (<i>Strix nebulosa</i>)	Sensitive	Y	Y	Y	N	NI	MIIH	MIIH
Harlequin Duck (<i>Histrionicus histrionicus</i>)	Sensitive	N	N					
Loggerhead Shrike (<i>Lanius ludovicianus</i>)	Sensitive	N	N					
Long-billed Curlew (<i>Numenius americanus</i>)	Sensitive	Y	Y	Y	N	NI	MIIH	MIIH
Marbled Godwit (<i>Limosa fedoa</i>)	Sensitive	N	N					
McCown's longspur (<i>Calcarius mccownii</i>)	Sensitive	N	N					

(cont.) List of all Special Status Species that are known or suspected to occur on the DFO.	Current Management Status of the Species.	Does the species occur on this portion of the Field Office?	Is the species or its habitat found in the surrounding area?	Could this proposal have any effect?	Are Irreversible or Irretrievable Resources involved?	Alt A level of effect	Alt B level of effect	Alt C level of effect
Northern Goshawk (<i>Accipiter gentilis</i>)	Sensitive	Y	Y	Y	N	NI	MIIH	MIIH
Peregrine Falcon (<i>Falco peregrinus anatum</i>)	Sensitive	N	Y	N				
Sage Sparrow (<i>Amphispiza belli</i>)	Sensitive	Y	Y	Y	N	NI	MIIH	MIIH
Sage thrasher (<i>Oreoscoptes montanus</i>)	Sensitive	Y	Y	Y	N	NI	MIIH	MIIH
Sedge Wren (<i>Cistothorus platensis</i>)	Sensitive	N	N					
Swainson's Hawk (<i>Buteo swainsoni</i>)	Sensitive	Y	Y	N				
Three-toed Woodpecker (<i>Picoides tridactylus</i>)	Sensitive	Y	Y	Y	N	NI	MIIH	MIIH
Trumpeter Swan (<i>Cygnus buccinator</i>)	Sensitive	N	N					
White-faced Ibis (<i>Plegadis chihi</i>)	Sensitive	N	N					
Amphibian/reptiles								
Boreal/Western toad (<i>Bufo boreas</i>)	Sensitive	Y	Y	Y	N	MIIH	BI	BI
Plains Spadefoot (<i>Spea bombifrons</i>)	Sensitive	N	N					
Northern leopard frog (<i>Rana pipiens</i>)	Sensitive	Y	Y	Y	N	MIIH	BI	BI
Fish								
Westslope cutthroat trout (<i>Onchorhynchus clarkii lewisi</i>)	Sensitive	Y	Y	Y	N	MIIH	BI	BI
Fluvial arctic grayling (<i>Thymallus arcticus</i>)	Sensitive	Y	Y	Y	N	NI	NI	NI

Step 6. Are there any specific recommendations to avoid significant effects (if any)? These are mitigation measures needed to avoid determinations of: LAA, LJ, WIFV. If so, state the location of the narrative describing these recommendations:

Step 7. Documentation: This short form is intended to follow a seven-step process to provide basic biological evaluations. Judgments must not be arbitrary but should be reasoned. This form provides a “road map” of that reasoning and assumes the judgments are drawn from numerous sources. Any species-specific impacts should be discussed in the NEPA document.

The signature below certifies that:

1. The wildlife biologist has reviewed the proposed action and its alternatives, but may or may not have provided input to alternative design, depending on the issues.
2. The wildlife biologist has an understanding of the specific conditions found in the affected area. Column 1a lists all possible Special Status Species in the Dillon Field Office. Column 1b identifies the species’ current management status. Column 1c indicates whether there are no records (N/A), or whether the species is considered a Transient (T) or Resident (R) {for our purposes, resident includes migratory species that fulfill a portion of their life history here}. Step 2 is satisfied by field visits (or enough knowledge of local conditions from previous visits) resulting in enough information to determine if the area is potential habitat for species listed in Step 1. Extensive surveys are not necessary if the conservative approach is taken that: “suitable habitat” means the potential for occupancy.
3. The wildlife biologist has an understanding of the species habitat needs and other attributes important to the determination. This can be a combination of literature review, professional experience, and consultation with others.
4. The wildlife biologist has assimilated the above information in making the “determinations” (i.e. final judgments about the scientific significance of the effects).

Signed _____ Date _____ Signed _____ Date _____

Printed Name and Title: Kelly Bockting, Wildlife Biologist Paul Hutchinson, Fisheries Biologist

N/A – “Not Applicable.” Indicates this species does not occur in the project area or that the project would have no bearing on its potential habitat. These species were removed from detailed analysis after field review of existing and potential habitats and consideration of distribution records.

FEDERALLY LISTED SPECIES

NE - No Effect

***LAA** - May Effect - Likely to Adversely Affect (formal consultation required)

NLAA - May Effect, Not Likely to Adversely Affect (informal consultation - concurrence with determination - required)

BE - Beneficial Effect (informal consultation - concurrence with determination - required)

SPECIES PROPOSED FOR LISTING

NE - No Effect

NLJ - Not likely to Jeopardize the continued existence of the species or result in the destruction or adverse modification of proposed critical habitat

***LJ** - Likely to Jeopardize the continued existence of the species or result in the destruction or adverse modification of proposed critical habitat

SENSITIVE SPECIES

NI - No Impact

MIH - May Impact Individuals or Habitat, but will not likely contribute to a trend towards federal listing or cause a loss of viability to the population or species.

***WIFV** - Will Impact Individuals or habitat with a consequence that the action may contribute to the need for federal listing or cause a loss of viability to the population or species.

BI - Beneficial Impact

* triggers formal consultation process

NARRATIVE of POTENTIAL IMPACTS

LISTED SPECIES:Canada Lynx:

The Big Hole Valley is identified as a linkage zone for Canada Lynx between the Beaverhead Mountain Range and the Pioneers Mountains; however USFWS has not identified Beaverhead County as a county where lynx is reasonably expected to occur. Canada lynx habitat is characterized by cool moist subalpine fir, Engelmann spruce and moist lodgepole pine and Douglas fir forests with deep winter snow. Aspen contribute to lynx habitat where it is intermingled with Engelmann spruce or lodgepole pine. The forested habitat in the UBHW is characterized as dry lodgepole pine habitat with a component of subalpine fir establishing in the understory of previously treated lodgepole pine stands. Snowshoe hare are the primary winter prey for lynx and winter snowshoe hare habitat is a limiting factor for lynx persistence. Winter snowshoe hare habitat consists of early succession, dense, young regenerating forests or multistory forests that have trees whose limbs come down to snow level and have an abundance of trees in the understory (2500-5000 stems/acre). In contrast, late succession mature stands are required for lynx denning habitat.

The surrounding bitterroot National forest and the Beaverhead Deerlodge is currently considered unoccupied by the USFWS (Pers. Com. Vandehey, 2010.) Dry lodgepole pine is not typically considered as Canada lynx habitat. Removing insect infested trees to improve the forest health would allow for more rapidly re-forestation of these stands therefore, potentially providing additional snowshoe hare habitat. Removal of the conifer overstory in aspen clones to promote aspen regeneration would also increase foraging habitat. Since Canada lynx are currently not documented within the project area, no alternatives are expected to have an impact.

Grizzly Bear:

No occupied grizzly bear habitat occurs in the UBHW and is outside of the Greater Yellowstone Primary Conservation Area (PCA). The Beaverhead Mountains serve a linkage corridor for grizzly bears between the Greater Yellowstone PCA and the Bitterroot, Cabinet Yaak and Northern Continental Divide (NCDE) Ecosystems. The greater Yellowstone DPS was de-listed in March 2007 and re-listed as threatened on September 21, 2009 under a Federal District Court order. The NCDE is believed to have the largest population of grizzly bears in the lower 48 states and is currently growing at a rate of 3% a year for the last 5 years. The Cabinet Yaak Ecosystem is currently under a five year review process for de-listing and grizzly bears do not currently occupy the Bitterroot Ecosystem. The intent of the recovery team is to manage these linkage corridors outside of the recovery areas for conservation of grizzly bears by providing dispersal habitat to allow gene flow between these ecosystems and not as occupied habitat. According to USFWS (Pers. Com. Vandehey, 2010) the NCDE is currently expanding more to the east and south while the GYE is currently expanding more to the south.

CANDIDATE SPECIES:Greater Sage Grouse:

Existing sage grouse habitat in the watershed on BLM lands is limited to nesting and brood rearing. No leks occur on BLM within UBHW and no MFWP sage grouse core habitat is identified in the UBHW. However, due to proximity of leks adjacent to BLM lands, sagebrush and riparian habitats provide for nesting and brood rearing. Nesting and summer habitat is provided on Steel Creek allotment and Fox Gulch unleased, and to a lesser extent, Moosehorn and Foxtail allotments. Most of the habitat on the west side of the UBHW is forested and does not provide sage grouse nesting habitat, but does provide for summer use and some brood rearing habitat.

Riparian habitat that is not meeting the standards would limit the brood-rearing habitat that is available under Alternative A. Under Alternative B and C, increased availability of succulent forage with improved riparian conditions would enhance brood-rearing habitat for sage grouse. Improving sagebrush steppe habitat throughout the watershed would benefit nesting sage grouse. Burning 74 acres within the Steel Creek allotment would create a localized disturbance but the intent is to create a mosaic within the sagebrush and maintain this habitat by removing the conifer encroachment. Summer habitat use is expected to continue or increase after the treatment as an increase in forb production is expected to enhance foraging. Actions proposed under any alternative may impact individuals or habitat (MIIH), but will not likely contribute to a trend towards federal listing or cause a loss of viability to the population or species.

BLM SENSITIVE SPECIES:Gray Wolf:

The Northern Rocky Mountains (NRM) distinct population segment (DPS) of the gray wolf was de-listed on May 4, 2009. Since the de-listing of the gray wolf; MT FWP, the lead agency for wolf management activities in Montana, permitted a hunting season in fall 2009 and a hunting season is proposed for 2010. The entire UBHW provides habitat for gray wolf and is sustaining a healthy population that will support a hunting season. Targeting hunting where wolf packs are increasing or causing depredation has the potential to reduce livestock depredation in the future and create a negative association with humans. This would also reduce the number of wolves that are removed by APHIS due to depredations. Requiring carcass removal off BLM lands by permittees would not likely reduce depredations since wolves do not regularly scavenge carrion and with the mixed ownership and limited BLM lands in the UBHW, carcasses would likely still be in the vicinity BLM lands. Creating a carcass dump in the UBHW creates its own problem by attracting other predators/scavengers to a local centralized area. All grazing permits in the UBHW will be modified to state that livestock depredations may occur from gray wolves. Actions proposed under any alternative would not result in the destruction or adverse modification of existing habitat or prey base for wolves that would lead to re-listing.

Pygmy Rabbit:

Inabnit Butte is the only place pygmy rabbits were documented on BLM lands in the UBHW. Surveys in 2009 on the remaining BLM allotments in the watershed yielded negative results. Pygmy rabbit populations that were documented by Rauscher (1997) on state and private lands within the UBHW are still occupied. It is widely known and accepted that not every acre of suitable habitat is always occupied by every species that uses that habitat. The nature of rabbit populations is boom and bust as predator populations increase, rabbit populations decrease.

Inabnit Butte is unleased and no changes are proposed. Current management is maintaining the mid-late seral plant communities in sagebrush habitats and currently providing for persistence of pygmy rabbit populations in the UBHW.

Black Backed Woodpecker, Three Toed Woodpecker:

These two species rely mainly on wood boring beetle larvae as a food supply, along with other insects such as ants, weevils and spiders. Removing insect infested trees would have some impact on local populations. Typically these woodpeckers will move into an area after a wildfire or insect outbreak and create a temporary spike in population density and then populations will decline after a few years. Thousands of acres have burned in the watershed on adjacent Forest Service lands in the past 5 years and adjacent timber stands that are also infested by beetles. Removal of 500 to 1000 acres of the beetle killed trees within the watershed would not have a measurable impact on these species. Removal of the overstory will allow for more rapid re-forestation of these infested stands following the harvest operations. Actions proposed under alternative B or C may impact individuals or habitat (MIIH) on a localized basis, but will not likely contribute to a trend towards federal listing or cause a loss of viability to the population or species.

Brewers Sparrow, Sage Thrasher, Sage Sparrow:

The localized short term loss of sagebrush cover in Steel Creek allotment from prescribed fire would reduce available nesting habitat and displace species individuals until sagebrush canopy recovers. These species primarily nest in big sage brush and forage primarily on insects in upland shrub grasslands. Site specific sagebrush losses would displace sage sparrow, sage thrasher and Brewer's sparrow, but adjacent suitable habitat is available for nesting and the habitat would be improved for foraging by these species following the prescribed fire. Brewer's sparrow is usually the most abundant bird species in big sagebrush habitats and overlaps extensively with sage sparrow. Sage Sparrows in southwest Montana are found on the northern most extent of their habitat, therefore they are generally not found in great numbers. Sage sparrows prefer semi-open habitat but is closely associated with big sagebrush throughout most of its range. Sage Thrasher abundance generally has a positive correlation with the amount of sage cover and is negatively correlated with grass cover and is rarely found in areas of human habitation. Sage thrashers are territorial and have been observed displacing Brewer's and sage sparrows from perches. Grazing is a compatible land use when properly authorized. Loss of breeding habitat due to agriculture conversion is not threat in the UBHW, therefore conversion or loss of winter habitat appears to be the largest threat facing these migratory species. Alternative A would have no impact on these species. Actions proposed under alternative B or C may impact individuals or habitat (MIIH), but will not likely contribute to a trend towards federal listing or cause a loss of viability to the population or species.

Black Tern:

Black terns populations are hard to monitor since they do not have a high fidelity to breeding grounds; this is primarily related to ephemeral suitability of habitat year to year due to changes in water level, vegetation density, and availability of nest substrates. Nesting habitat is located in emergent vegetation in shallow wetlands, marshes or river banks. Improving and maintaining the riparian wetland habitat within the UBHW would benefit foraging and enhance nesting opportunities for black terns. Alternative A may impact individuals or habitat (MIIH), but will not likely contribute to a trend towards federal listing or cause a loss of viability to the population or species. Actions proposed under alternatives B and C are expected to benefit the black tern.

Long Billed Curlew:

Grazing generally has a positive effect on long billed curlew breeding densities because grazing produces the short grass and open ground favored for predator detection and chick mobility. Habitat with trees or a high density of shrubs or dense grass is generally avoided during nesting. Denser taller grass may be more important for chicks than adults, presumably to hide and camouflage chicks. Chosen nest sites are relatively dry, exposed sites generally not associated with wetlands, with some variability. Alternative A is not expected to impact this species. Leaving more residual herbaceous cover may not be as desirable for nesting, but would facilitate brood rearing. Actions proposed under alternative B or C may impact individuals or habitat (MIIH), but will not likely contribute to a trend towards federal listing or cause a loss of viability to the population or species.

Northern Goshawk and Great Gray Owl:

Northern goshawk nor great gray owls have not been documented nesting on BLM lands within the UBHW but are known to nest on adjacent Forest Service lands and most likely forage on BLM lands. Both species and have been documented to use the same nests on alternating years elsewhere in the DFO. Loss of denser forested canopy would reduce availability of potential nesting sites. However, opening these canopies could enhance foraging opportunities. Inventory of the timber treatment units would occur prior to harvest and nest stands would be identified and maintained. If nests are found, yearly monitoring would take place to determine occupancy prior to harvest activities and timing limitations would be applied to reduce disturbance during the nesting season. Actions proposed under alternatives B and C may impact individuals or habitat (MIIH), but will not likely contribute to a trend towards federal listing or cause a loss of viability to the population or species

Western Toad, Northern Leopard Frog:

Habitats used by Northern Leopard Frogs and Western toads in Montana are similar to those reported for other regions, and include low elevation and valley bottom ponds, beaver ponds, stock reservoirs, lakes, creeks, pools in intermittent streams, and marshes. The breeding period for both species can be highly variable depending on location and snow melt. Reduced access by livestock to breeding sites in grazing allotments will prevent undue trampling mortality. Shortened grazing seasons in riparian habitat and improved riparian and stream corridors will benefit both species.

West Slope cutthroat trout (WCT):

Improvements to riparian areas on Woody Creek resulting in improved stream bank stability and riparian vegetation would reduce sediment input in the stream and improve WCT habitat. Placement of a fish barrier followed by a non native removal in Woody Creek would greatly reduce the risk of extirpation to this population.

Grayling:

The fluvial form of arctic grayling is currently restricted to the mainstem of the Big Hole River primarily downstream of the assessment area. One 0.25 mile reach of occupied habitat is found on public land, excepting this habitat, there are no grayling found on BLM administered land or adjacent streams. Improvements to riparian conditions on public land on several stream reaches could one day provide habitat for grayling if

the conditions throughout the drainage improve to the point that grayling can access this habitat and the habitat can sustain long term grayling use. Until then, any actions taken by the BLM to improve riparian habitat will essentially result in a NI call.