

Appendix C

East Pioneer Watershed Biological Evaluations

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

Project: East Pioneer Watershed Environmental Assessment DOI-BLM-MT-050-2009-0001-EA

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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 Irrecoverable Resources involved?	Alt A level of effect	Alt B level of effect	Alt C level of effect
Mammals								
Canada Lynx (<i>Lynx canadensis</i>)	Threatened	N	Y	N				
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	N	Y	N				
Grizzly Bear (<i>Ursus arctos horribilus</i>)	Sensitive	N	N	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	N	Y	Y	N	NI	BI	NI
Townsend's Big-eared Bat (<i>Plecotus townsendii</i>)	Sensitive	N	Y	N				

Step 1a.	Step 1b.	Step 1c.	Step 2	Step 3.	Step 4.	Step 5.	Step 5.	Step 5.
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Birds								
Bald Eagle (<i>Haliaeetus leucocephalus</i>)	Sensitive	Y	Y	N				
Black Tern (<i>Chlidonias niger</i>)	Sensitive	N	N					
Black-backed Woodpecker (<i>Picoides arcticus</i>)	Sensitive	N	Y	Y	N	NI	BI	NI
Black-crowned Night Heron (<i>Nycticorax nycticorax</i>)	Sensitive	N	N					
Bobolink (<i>Dolichonyx orysivorus</i>)	Sensitive	N	Y	N				
Brewer's Sparrow (<i>Spizella breweri</i>)	Sensitive	Y	Y	Y	N	NI	BI	NI
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	N	Y	N				
Franklin's Gull (<i>Larus pipixcan</i>)	Sensitive	N	N					
Golden Eagle (<i>Aquila chrysaetos</i>)	Sensitive	Y	Y	N				
Great Gray Owl (<i>Strix nebulosa</i>)	Sensitive	N	Y	N				
Greater Sage Grouse (<i>Centrocercus urophasianus</i>)	Sensitive	Y	Y	Y	N	MIH	BI	BI
Harlequin Duck (<i>Histrionicus histrionicus</i>)	Sensitive	N	N					

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
Loggerhead Shrike (<i>Lanius ludovicianus</i>)	Sensitive	Y	Y	Y	N	NI	BI	NI
Long-billed Curlew (<i>Numenius americanus</i>)	Sensitive	Y	Y	N				
Marbled Godwit (<i>Limosa fedoa</i>)	Sensitive	N	N					
McCown's Longspur (<i>Calcarius mccownii</i>)	Sensitive	Y	Y	N				
Northern Goshawk (<i>Accipiter gentilis</i>)	Sensitive	N	Y	N				
Peregrine Falcon (<i>Falco peregrinus anatum</i>)	Sensitive	Y	Y	N				
Sage Sparrow (<i>Amphispiza belli</i>)	Sensitive	Y	Y	Y	N	NI	BI	NI
Sage Thrasher (<i>Oreoscoptes montanus</i>)	Sensitive	Y	Y	Y	N	NI	BI	NI
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	N	Y	Y	N	NI	BI	NI
Trumpeter Swan (<i>Cygnus buccinator</i>)	Sensitive	N	N					
White-faced Ibis (<i>Plegadis chihi</i>)	Sensitive	N	N					
Amphibians/Reptiles								
Boreal/Western Toad (<i>Bufo boreas</i>)	Sensitive	Y	Y	N				
Plains Spadefoot (<i>Spea bombifrons</i>)	Sensitive	N	Y	N				

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
Northern Leopard Frog (Rana pipiens)	Sensitive	N	Y	N				
Fish								
Westslope Cutthroat Trout (Onchorhynchus clarkii lewisi)	Sensitive	Y	Y	Y	N	MIIH	BI	MIIH
Fluvial Arctic Grayling (Thymallus arcticus)	Sensitive	Y	Y	N				

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: Katie Benzel, Wildlife Biologist Paul Hutchinson, Fisheries Biologist

Definitions of Abbreviations for the Short Form BE

CS

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

MIIH - 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

Gray Wolf:

No resident packs have been documented in the EPW, but wolves have been sighted moving through the area. All grazing permits in the EPW will be modified to state that livestock depredations may occur from gray wolves. Since the de-listing of the gray wolf, MT FWP is proposing a hunting season which also has the potential to reduce livestock depredation in the future. Actions proposed under any alternatives would not result in the destruction or adverse modification of existing habitat.

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Pygmy rabbit, loggerhead shrike, sage thrasher, sage sparrow, Brewer’s sparrow:

Pygmy rabbits or pygmy rabbit sign, has not been documented in the EPW. However, if the prescribed burn in Louie Lowe Basin does occur, we would survey for pygmy rabbits beforehand and avoid burning the area where they are found. Site specific sagebrush losses from the Louie Lowe prescribed burn could displace loggerhead shrike, sage thrasher, sage sparrow and Brewer’s sparrow but adjacent suitable habitat is available. While sagebrush cover would be lost in the treatment area in the short-term, sagebrush habitat would be restored to the area with the elimination of conifer encroachment. The treated area would be converted to early seral sagebrush habitat and progress to mid-late seral in about 20 years. This would provide for seral and structural diversity within sagebrush steppe habitat on a landscape level. This project would have a beneficial impact (BI) for these species in the long-term.

Greater sage grouse:

Under alternative A, continuation of current grazing practices on allotments that aren’t meeting the Upland Standard and resulting in a reduction of forbs and grasses may limit cover and forage for nesting sage grouse, which 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. If the prescribed burn in Louie Lowe Basin occurred as proposed under alternative B, it MIIH, but will not likely contribute to a trend towards federal

listing or cause a loss of viability to the population or species. The burn would cause a short-term loss of sagebrush cover in the treated area, but sagebrush cover is available adjacent to the treated area and in the long-term sagebrush habitat would be enhanced once conifer encroachment is eliminated. After the burn, sage grouse brood-rearing habitat would be enhanced with the increase in forbs in the treated area. Improved riparian condition, juniper removal, and increased availability of succulent forage with improved riparian/wetland conditions would enhance brood-rearing habitat for sage grouse. Improving sagebrush steppe habitat throughout the watershed would benefit nesting sage grouse. These actions proposed under alternative B and C would have a beneficial impact (BI) to sage grouse.

West Slope cutthroat trout (WCT):

Coordinating the placement of a fish barrier followed by a non-native removal in Cherry Creek would greatly reduce the risk of extirpation to the WCT population. These actions proposed under alternative B would have a beneficial impact (BI) to westslope cutthroat trout. Under alternatives A and C these actions would not be carried out which MIIH if non-natives continue to threaten the WCT population.

Fluvial Arctic Grayling:

The Big Hole River supports the last self-sustaining population of strictly fluvial Arctic grayling in the lower 48 states. Most of the Arctic grayling occupy the upper Big Hole River, and rarely are found in the Big Hole River reaches within the EPW.

Black-backed woodpecker and three-toed woodpecker:

Under alternative B, if the prescribed burn in Louie Lowe Basin occurred, it would have a beneficial impact (BI) for these two woodpecker species. The increase in wood-boring beetles in burned areas attracts black-backed and three-toed woodpeckers.

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Biological Evaluation
For
Special Status Plants on BLM Lands in the East Pioneer Watershed
(East Pioneer Watershed Environmental Assessment)
DOI-BLM-MT-050-2009-0001-EA

Prepared by
Brian Hockett, Rangeland Management Specialist
April - May 2009

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. Fifty-three sensitive plant species inhabit BLM lands administered by the Dillon Field Office. Sixteen of those species as well as a small population of Ute ladies' tresses are known to occur within the greater affected area for which cumulative effects will be considered for the East Pioneers 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 East Pioneers 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
East Pioneers Watershed Environmental Assessment (DOI-BLM-MT-050-2009-0001-EA)

Common Name <i>Genus species</i>	Does the species occur within the East Pioneers Watershed?	Is the species or its habitat found in the greater affected area?	Are irreversible or irretrievable resources involved?	What effect could this proposal have? *		
				Alt. A	Alt. B	Alt. C
Ute Ladies' Tresses <i>Spiranthes dilivialis</i>	NO	YES	NO	NI		
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>	YES	YES	NO	NI		
Painted Milkvetch <i>Astragalus ceramicus</i> var. <i>apus</i>	NO	NO	--	--	--	--
Lesser Rushy Milkvetch <i>Astragalus convallarius</i> var. <i>convallarius</i> = <i>A.</i> <i>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>	YES	YES	NO	NI	NI	BI
Mojave brickellbush <i>Brickellia oblongifolia</i>	NO	YES	NO	NI		
Idaho Sedge <i>Carex idahoa</i>	NO	YES	NO	NI		
Lesser Indian paintbrush <i>Castilleja minor</i> ssp. <i>minor</i>	NO	YES	NO	NI		
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>	YES	YES	NO	NI		
Beaked spikerush <i>Eleocharis rostellata</i>	YES	YES	NO	NI		
Long-sheath waterweed <i>Elodea bifoliata</i>	NO	YES	NO	NI		
Idaho Fleabane <i>Erigeron asperugineus</i>	NO	YES	NO	NI		
Linearleaf Fleabane <i>Erigeron linearis</i>	NO	NO	--	--	--	--
Buff Fleabane <i>Erigeron parryi</i>	NO	NO	--	--	--	--
Mat Buckwheat <i>Eriogonum caespitosum</i>	NO	NO	--	--	--	--

Common Name <i>Genus species</i>	Does the species occur within the East Pioneers Watershed?	Is the species or its habitat found in the greater affected area?	Are irreversible or irretrievable resources involved?	What effect could this proposal have? *		
				Alt. A	Alt. B	Alt. C
Railroad Canyon Wild Buckwheat <i>Eriogonum soliceps</i>	NO	NO	--	--	--	--
Hiker's gentian <i>Gentianopsis simplex</i>	NO	YES	NO	NI		
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>	YES	YES	NO	NI		
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>	NO	YES	NO	NI		
Low northern – rockcress <i>Neotorularia humilis</i>	YES	YES	NO	NI		
Meadow pennycress <i>Noccaea parviflora</i>	NO	YES	NO	NI		
Meadow Lousewort <i>Pedicularis crenulata</i>	NO	NO	NO	--	--	--
Lemhi Beardtongue <i>Penstemon lemhiensis</i>	YES	YES	NO	NI	BI	NI
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	--	--	--	--
Spiny skeletonweed <i>Pleiacanthus spinosus</i>	NO	NO	--	--	--	--
Alkali Primrose <i>Primula alcalina</i>	NO	NO	--	--	--	--
Mealy Primrose <i>Primula incana</i>	NO	YES	NO	NI		
James Stitchwort <i>Pseudostellaria jamesiana</i>	NO	NO	--	--	--	--
Lemmon's Alkaligrass <i>Puccinellia lemmonii</i>	NO	NO	--	--	--	--

Common Name <i>Genus species</i>	Does the species occur within the East Pioneers Watershed?	Is the species or its habitat found in the greater affected area?	Are irreversible or irretrievable resources involved?	What effect could this proposal have? *		
				Alt. A	Alt. B	Alt. C
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	YES	NO	NI		
Showy Townsendia <i>Townsendia florifera</i>	NO	NO	--	--	--	--

* The livestock management and project proposals aren't consistent across alternatives. For example the grazing management proposed for the South Seven Springs allotment under Alternative B provides rest or deferment 2 years out of 3 while the grazing management proposed for the Seven Springs allotment prescribes annual grazing in May and June. 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 East Pioneers 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.

No impacts from any of the three alternatives considered in the EA are anticipated on the eleven plant species that are known only from the greater affected area. They either occupy habitats not normally frequented by cattle or are located far enough away from the project area that the livestock management, range improvement projects or vegetation treatments proposed on allotments in the East Pioneers will be of little or no consequence.

Of the six special status plant species found in the watershed, four (Beautiful bladderpod, Low northern-rockcress, Sapphire rockcress, Wind River draba) aren't likely to be impacted by any of the alternatives. Most of these species aren't considered palatable and their habitats typically receive light to moderate grazing use. Generally these plants occupy dissimilar habitats than those proposed for fuels and healthy forest treatments. The risk of any management proposals impacting these four species is relatively low; however indiscriminate or random placement of livestock supplements could cause trampling of individual plants or populations.

Season long grazing strategies would be compatible with maintaining the four species discussed above, but would provide no protection for palatable rare plants. Red sage and Lemhi beardtongue are palatable to both deer and cattle. Alternatives that limit livestock grazing during

the spring and early summer would minimize soil compaction and damage to reproductive plants. Rest rotation grazing strategies would provide cyclic opportunities for seed production and seedling establishment of Red sage and Lemhi beardtongue which should allow enough recruitment to maintain stable populations.

The rest-rotation grazing proposed for the Vipond-Glendale and Skeeters allotments under Alternatives A and B would be compatible with maintaining the Lemhi beardtongue population on the Forest and may allow for expansion into suitable habitat on adjacent BLM lands. The prescribed fire proposed in Louie Lowe Basin under alternatives B may further enhance habitat conditions for Lemhi beardtongue.

The rest-rotation grazing proposed for the South Seven Springs allotment under all alternatives would be compatible with maintaining the local Red sage population. Expansion of this population into unoccupied habitat in adjacent allotments isn't likely under the repeated spring use proposed for those allotments under alternative A and B. Postponing all livestock grazing until after the growing season on the Seven Springs allotments under Alternative C may allow Red sage to expand into suitable unoccupied habitat within this allotment.

Cumulative Considerations:

Existing and new stock water developments on all ownerships within the EPW will influence livestock distribution. In some cases secondary range will be converted to primary range which could increase grazing pressure on palatable sensitive plant species such as Lemhi beardtongue and Red sage. In areas where grazing management provides periodic deferment and/or rest that allow for seed production and seedling establishment the potential for increased herbivory may not be an issue. However populations of these species may be reduced in areas that are grazed season-long or where these plants may be grazed repeatedly while flowering.

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 EPW to control grasshoppers or other insects may affect pollinators that visit sensitive plant species on BLM lands.

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