Draft Environmental Assessment Robb-Ledford Wildlife Management Area Aspen Enhancement Project March 2019





Project Overview

Proposal

The Robb-Ledford Wildlife Management Area (RLWMA) (Figure 1) provides year-round habitat for elk (Cervus canedensis), mule deer (Odocoileus hemionus), shiras moose (Alces alces), pronghorn (Antilocapra Americana), greater sage grouse (Centrocercus urophasianus), and ruffed grouse (Bonasa umbellus). White-tailed deer (Odocoileus virginianus) occupy portions of the RLWMA seasonally. Black (Ursus americanus) and grizzly bears (Ursus arctos ssp.), mountain lions (Puma concolor), grey wolves (Canis lupus), bobcats (Lynx rufus), and coyotes (Canis latrans) are known to frequent the RLWMA. Bighorn sheep (Ovis canadensis) occupy portions of the RLWMA in proximity to proposed treatment area. Fish, Wildlife & Parks (FWP) is proposing to enhance approximately 40 acres of aspen-dominated forest within the RLWMA (Figure 2) through contracted mechanical removal of competing conifer trees with commercial value and lop-and-scatter of conifer trees with no commercial value. The objectives are

- maintain remaining intact aspen-dominated forest;
- restore productivity to decadent portions of the aspen-dominated forest; and
- expand remaining intact aspen-dominated forest.

Aspen-dominated forest was identified as a Tier 1 Community Type of Greatest Conservation Need in the 2015 FWP State Wildlife Action Plan. Conservation need was identified because of relatively limited abundance and the high plant and animal diversity the forest type supports. The greatest conservation threats to aspen-dominated forests are considered to be fragmentation and reduction due to human-related development and conifer forest succession. Without wildfire or human-facilitated disturbance, conifer forest succession is expected to functionally eliminate aspen-dominated forest within the proposed treatment area within 40 years. Continued succession to a conifer-dominated forest type would reduce plant diversity and abundance followed by reduced wildlife diversity and abundance.

The proposed project is adjacent to an ongoing FWP sagebrush grassland enhancement project aimed at maintaining sagebrush grassland through mechanical removal of expanding conifer trees making the proposed aspen enhancement project an extension of ongoing efforts to maintain and enhance diverse habitat types across the RLWMA. The goals of the project also align with aspen-dominated forest management efforts occurring on neighboring lands administered by the United States Forest Service (USFS) and Bureau of Land Management BLM).

Area Description

The RLWMA was purchased in 1987 using Habitat Montana funds. It contains 17,302 deeded and 10,787 acres of leased Montana Department of Natural Resources and Conservation (DNRC) lands in Madison and Beaverhead counties in southwestern Montana (Figure 1). The RLWMA borders USFS, BLM, DNRC, the Blacktail Wildlife Management Area, and private lands.

The elevation ranges from approximately 6,000–9,200 feet. Land type is dominated by open rolling rangelands bisected by perennial streams. Isolated and relatively small but expanding patches of conifer-dominated forest dot higher elevations. Rangelands are a grass and grass-shrub mix. Dominant grass species include Idaho fescue (Festuca idahoensis) and blue bunch wheatgrass (Pseudoroegneria spicata). Dominant shrubs include mountain big sagebrush (Artemisia tridentata ssp.), rubber (Ericameria nauseosa) and green (Chrysothamnus viscidiflorus) rabbitbrush, gray horsebrush (Tetradymia canescens), Canada buffaloberry (Shepherdia canadensis), snowberry species (Caprifoliaceae spp.), and curl-leaf mountain mahogany (Cercocarpus ledifolius). Dominant conifer species include Douglas-fir (Pseudotsuga menziesii), Rocky Mountain Juniper (Juniperus scopulorum), and limber pine (Pinus flexilis). In addition to aspen, dominant deciduous shrubs include, Rocky Mountain maple (Acer glabrum), birch species (Betula spp.), and chokecherry (Prunus virginiana).

Average annual precipitation is 15–20 inches, much of which occurs in the form of snow. The soil type is Underwood-Babb. Some rock outcrops exist, but soil is generally free of gravel to depths of 6–12 inches.

Ecological Setting

Primarily in response to wildfire suppression, aspen-dominated forests and rangelands are being converted to conifer forest types across southwest Montana (Figure 3). Without wildfire or human-facilitated-disturbance, plant succession within the proposed treatment area will progress to a climax conifer forest as illustrated in Figure 4. Plant succession reaching the conifer climax state will diminish or replace existing aspen reducing plant diversity and abundance, and subsequently reducing wildlife diversity and abundance.

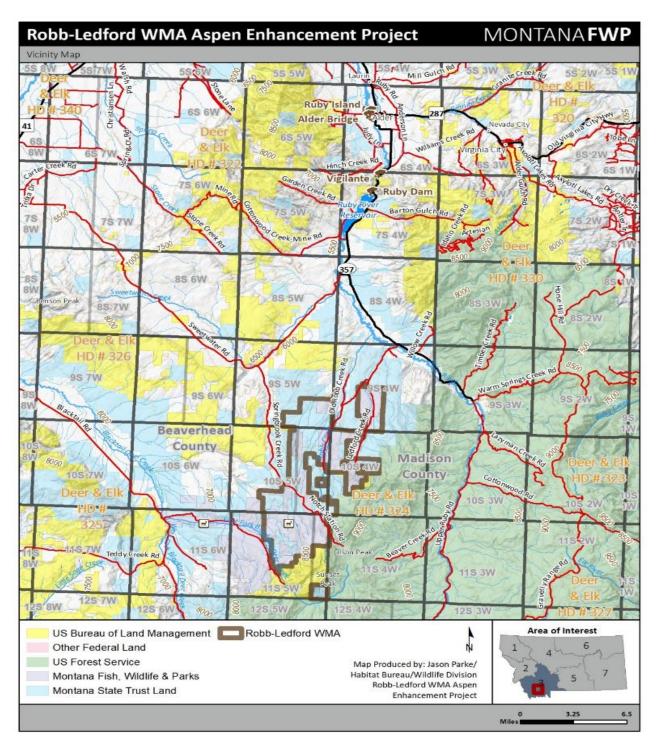


Figure 1. Robb-Ledford Wildlife Management Area vicinity map.

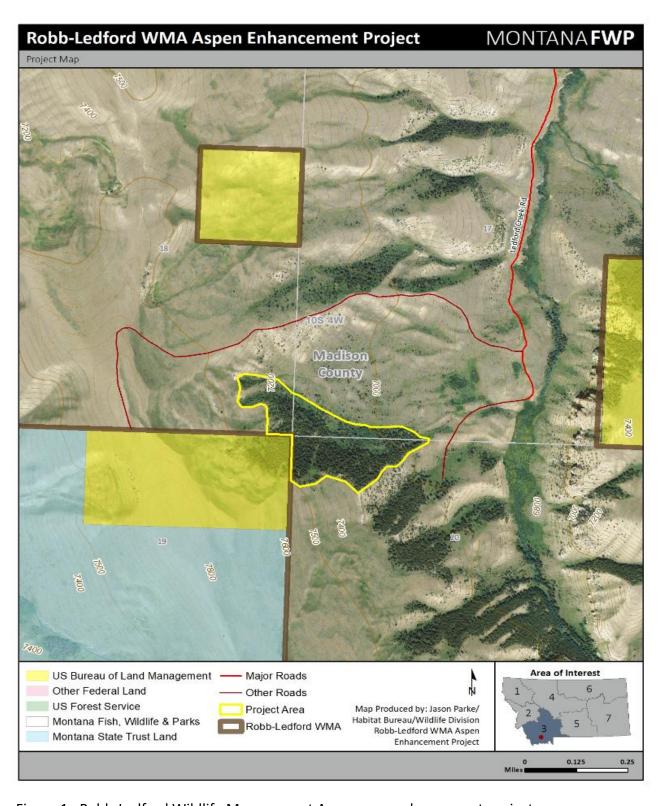


Figure 1. Robb-Ledford Wildlife Management Area aspen enhancement project map.

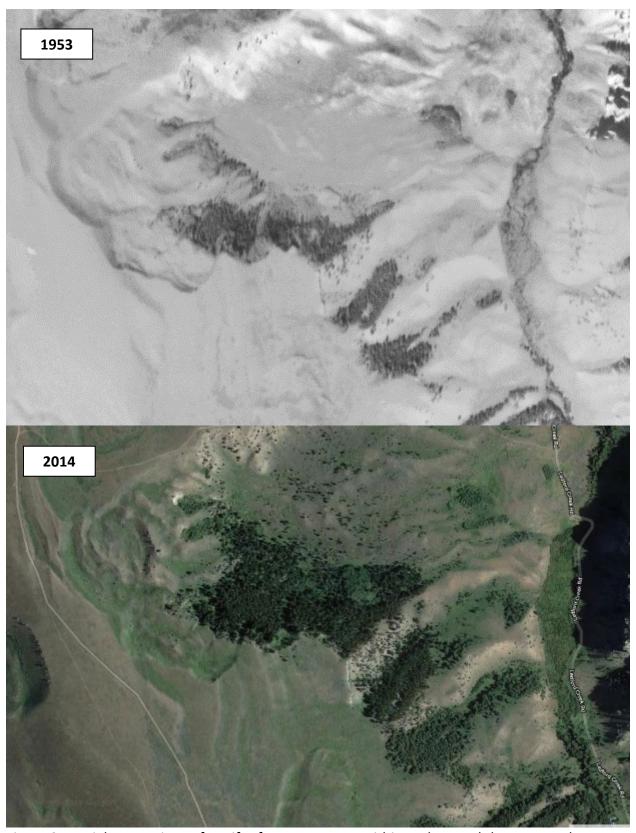


Figure 2. Aerial comparison of conifer forest coverage within and around the proposed aspen enhancement project area between years 1953 and 2014.



Figure 4. Typical fine-scale state of aspen-dominated forest prior to (top photo) and following (bottom photo) plant succession to conifer forest in southwest Montana.

Draft Environmental Assessment

MEPA, MCA 23-1-110 CHECKLIST

PART I. PROPOSED ACTION DESCRIPTION

1. Type of proposed state action:

Montana Fish, Wildlife & Parks proposes to conduct forested habitat restoration treatments on 40 acres of forest on the Robb-Ledford Wildlife Management Area (RLWMA) in Madison County (Figures 1 and 2). The objectives of the proposed treatment are to

- maintain remaining intact aspen-dominated forest;
- restore productivity to decadent portions of aspen-dominated forest; and
- expand remaining intact aspen-dominated forest.

The treatments would involve the removal of conifer trees (both merchantable and sub-merchantable) through a combination of mechanized and nonmechanized methods. Please see #8 (Narrative Summary) below for a detailed description of the proposed action.

2. Agency authority for the proposed action:

Fish, Wildlife & Parks is authorized by law to own and manage lands as wildlife habitat. The land subject to this proposal is included in the RLWMA, which was originally purchased in 1987 with Habitat Montana funds. FWP is authorized to use supplemental funds from various public and private sources which may be awarded under specific conditions for individual maintenance and enhancement projects on the RLWMA and other properties. The Montana Fish and Wildlife Commission endorsed this proposal in August 2018 allowing FWP to proceed with further development and analysis of this proposed action through completion of this Environmental Assessment.

87-1-201(9)(a)(iv) and 87-1-621 MCA

Fish, Wildlife & Parks is required to implement programs that address fire mitigation, pine beetle infestation, and wildlife habitat enhancement giving priority to forested lands in excess of 50 contiguous acres in any state park, fishing access site, or wildlife management area under the department's jurisdiction. The treatments proposed in this Environmental Assessment were specifically identified as habitat improvement priorities. The Montana Legislature has provided FWP the means to accrue revenue from forest management activities and spend that revenue to fund further management projects on its forested lands.

87-1-201 MCA

Section 87-1-201, MCA, gives FWP the authority to protect, enhance, and regulate the use of Montana's fish and wildlife resources for public benefit now and in the future. Habitat improvements as proposed in this assessment would enhance native plant communities so that they continue to support game and nongame wildlife species for the public to enjoy.

Montana Fish, Wildlife & Parks Forest Management Plan (2018)

The FWP Forest Management Plan directs FWP to manage for desired habitat conditions and public use opportunities while maintaining the ecological integrity of forests. The plan provides a framework for developing desired future conditions (DFCs), identifies mechanical and non-mechanical treatments as management tools to achieve DFCs, and establishes guidelines for implementing forestry treatments on FWP forested lands.

The Montana Statewide Elk Management Plan (2005)

Fish, Wildlife & Park's 2005 Elk Management Plan promotes improvement of elk habitat by maintaining vegetative diversity. The proposed project would work toward this through retention and expansion of desired browse species such as aspen, maple, and chokecherry.

Montana's State Wildlife Action Plan (2015)

Under this conservation strategy, wildlife habitats and species have been assigned levels of conservation need. Tier 1 indicates species in greatest conservation need. FWP has identified these species as top priorities for conservation actions. The habitats within the proposed treatment area have been designated as being Tier 1, or those in greatest conservation need.

3. Name of project: Robb-Ledford Wildlife Management Area Aspen Enhancement Project

4. Anticipated Schedule:

Sections 17, 18, & 20

5.

Estimated Commencement Date: 05/15/2020

Estimated Completion Date: By 12/12/2023. The project is expected to take one year to complete. A multiple year project window is being requested to allow for completion of the project during optimal conditions and to coordinate project completion within established livestock grazing rotations. Work would be completed during periods of dry soils, and efforts would be made to avoid work during the general hunting season. Current Status of Project Design (% complete): 0%

Location affected by proposed action (county, range and township):

Madison County Township 10 South Range 4 West

Project is located within the Robb-Ledford Wildlife Management Area (See Figures 1-2)

6. Project size -- estimate the number of acres that would be directly affected that are currently:

	<u>Acres</u>		Acres
(a) Developed:		(d) Floodplain	0
Residential	0		
Industrial	0	(e) Productive:	
(existing shop area)		Irrigated cropland	0

	Woodla	en Space/0 ands/Recreation tlands/Riparian0 Areas	Dry croplan Forestry Rangeland Other	0 0 0
7.	Listing (of any other Local, State or Federal ation.	agency that has overlap	ping or additional
	(a)	Permits:		
	Agency	Name	Permits -	None required
	(b)	Funding:		
	Funding funded in exces	Name: Montana FWP RAMOUNT: Costs to FWP for these fo by the legislatively-established FWP ss of project costs would be deposite nanagement projects pursuant to the	Forest Management Acod into the account to im	count. Any revenue nplement further
	(c)	Other Overlapping or Additional Ju	risdictional Responsibili	ities:

8. Narrative summary of the proposed action or project including the benefits and purpose of the proposed action:

Montana State Historic Preservation Office

Montana Dept. of Natural Resources and Conservation

Madison County Weed District

The proposed action would remove Douglas fir less than 24 inches diameter at breast height (DBH) and all Rocky Mountain juniper from within aspen-dominated forests and from a 100-foot buffer around the stand. Tree removal would be completed using ground-based logging systems and mechanized methods. Trees designated for cutting that are greater than eight inches DBH would be felled, skidded or yarded, processed (bucked and delimbed), sorted by product and decked on roadside log landings, and hauled to forest product manufacturing facilities. Trees designated for cutting that are less than eight inches DBH would be felled or masticated, and the material would be lopped and scattered or piled and burned. Live and dead conifers with signs of nesting activity would be retained as standing snags for wildlife. Roadside landings and slash piles would be reseeded after burning. Jackpot burning may also be used to reduce slash concentrations. Broadcast burning in areas where piling slash is not practical due to the volume of material may be considered in cooperation with Montana DNRC or BLM fire management specialists. Broadcast burning may also be necessary to stimulate suckering in aspen stands.

Cultural and Historic Resources

Noxious weed control

Fire Protection

Access to the project is provided by the Ledford Creek Road, a county road, and two existing spur roads. Roads would be upgraded to the extent necessary to facilitate logging and log hauling while meeting

Montana Forestry Best Management Practices¹ (BMPs). The Ledford Creek Road is an open road for public use. The road surface would be improved through blading and drainage improvements. After use, the two spur roads would be revegetated and closed to motor-vehicle use. Temporary skid trails would be used to access the proposed treatment unit and would be reclaimed after use by reseeding to prevent weed establishment. Waterbars and/or debris may be used to minimize the potential for soil erosion.

Proposed treatments may occur from June 1 through December 2. Work would be completed under relatively dry ground conditions, and efforts would be made to minimize work during the general hunting season. Roads and timber harvest would comply with Montana Forestry BMPs and the Montana Streamside Management Zone law. To minimize the spread of noxious weeds, all equipment would be cleaned and inspected by FWP before moving onto the RLWMA. Exposed bare mineral soils would be reseeded immediately, and any weed infestations would be treated with herbicides indefinitely through annual RLWMA weed management efforts.

9. Description and analysis of reasonable alternatives (including the no action alternative) to the proposed action whenever alternatives are reasonably available and prudent to consider and a discussion of how the alternatives would be implemented:

Alternative A: No Action

Fish, Wildlife & Parks would not conduct any aspen enhancement within the identified enhancement area on the RLWMA under this alternative. FWP would continue noxious weed management activities within the RLWMA.

Douglas fir succession would continue. The identified aspen-dominated forest would be continually reduced resulting in reduced carrying capacity for wintering moose, reduced fawn-rearing habitat and late-fall browse resources for mule deer, reduced winter browse for elk, loss of existing ruffed-grouse habitat, and reduced surface water flowing from existing springs.

<u>Alternative B:</u> Proposed Action

Conduct forested habitat treatments on approximately 40 acres of the RLWMA as described in #8 (Narrative Summary) above. Following this action, FWP anticipates that a variety of game and nongame wildlife habitat conditions will be maintained or improved. Existing aspen would experience increased resource availability, and areas up to 100 feet around the existing aspen stand would experience a favorable environment for reproduction. Habitat diversity would increase by temporarily reversing conifer forest succession.

1 Available on Montana Department of Natural Resources and Conservation website at http://dnrc.mt.gov/divisions/forestry/docs/assistance/practices/finalbmp-versionforweb10-1-15. http://dnrc.mt.gov/divisions/forestry/docs/assistance/practices/finalbmp-versionforweb10-1-15. http://dnrc.mt.gov/divisions/forestry/docs/assistance/practices/finalbmp-versionforweb10-1-15. http://dnrc.mt.gov/divisions/forestry/docs/assistance/practices/finalbmp-versionforweb10-1-15. http://dnrc.mt.gov/divisions/forestry/docs/assistance/practices/finalbmp-versionforweb10-1-15.

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PART II. ENVIRONMENTAL REVIEW CHECKLIST

1. Evaluation of the impacts of the <u>Proposed Action</u> including secondary and cumulative impacts on the Physical and Human Environment.

A. PHYSICAL ENVIRONMENT

1. LAND RESOURCES				IMPACT *		
Will the proposed action result in:	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. **Soil instability or changes in geologic substructure?		х				
b. Disruption, displacement, erosion, compaction, moisture loss, or over-covering of soil, which would reduce productivity or fertility?			Х			1.b
c. **Destruction, covering or modification of any unique geologic or physical features?		х				
d. Changes in siltation, deposition or erosion patterns that may modify the channel of a river or stream or the bed or shore of a lake?		х				
e. Exposure of people or property to earthquakes, landslides, ground failure, or other natural hazard?		х				
f. Other:						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (attach additional pages of narrative if needed):

1.b Approximately 1 mile of existing roads would need to be improved to facilitate removal of timber and timber byproduct. These roads would be brought up to BMP specifications, and all road work would comply with current BMP standards and applicable laws to minimize impacts to riparian areas and prevent sediment delivery to (or siltation of) perennial water bodies. Summer logging activity may disturb and compact soil and temporarily impact vegetation. Timber harvesting would comply with Forestry BMPs to minimize and restore soil impacts.

2. AIR				IMPACT *		
Will the proposed action result in:	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. **Emission of air pollutants or deterioration of ambient air quality? (Also see 13 (c).)			х			2.a
b. Creation of objectionable odors?			Х			2.b
c. Alteration of air movement, moisture, or temperature patterns or any change in climate, either locally or regionally?		х				
d. Adverse effects on vegetation, including crops, due to increased emissions of pollutants?		х				
e. ***For P-R/D-J projects, will the project result in any discharge, which will conflict with federal or state air quality regs? (Also see 2a.) f. Other:		х				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Air Resources (attach additional pages of narrative if needed):

2.a,b Much of the slash and residual byproduct generated during the course of the proposed treatments would be burned on-site. The contractor would comply with state and county open burning timing restrictions and comply with inter-agency slash treatment regulations.

3. WATER			I	IMPACT *		
Will the proposed action result in:	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. *Discharge into surface water or any alteration of surface water quality including but not limited to temperature, dissolved oxygen or turbidity?		х				
b. Changes in drainage patterns or the rate and amount of surface runoff?			Х			3.b
c. Alteration of the course or magnitude of floodwater or other flows?		Х				
d. Changes in the amount of surface water in any water body or creation of a new water body?			Х			3.d
e. Exposure of people or property to water related hazards such as flooding?		Х				
f. Changes in the quality of groundwater?		Х				
g. Changes in the quantity of groundwater?		Х				
h. Increase in risk of contamination of surface or groundwater?		Х				
i. Effects on any existing water right or reservation?		Х				
j. Effects on other water users as a result of any alteration in surface or groundwater quality?		Х				
k. Effects on other users as a result of any alteration in surface or groundwater quantity?		Х				
I. ****For P-R/D-J, will the project affect a designated floodplain? (Also see 3c.)		х				
m. ***For P-R/D-J, will the project result in any discharge that will affect federal or state water quality regulations? (Also see 3a.)		х				
n. Other:						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Water Resources (attach additional pages of narrative if needed):

3.b,d Treating the subject stands may slightly alter the rate and volume of spring runoff and retained snowpack. Given the limited scale of the project and condition of adjacent stands, this effect is expected to be minor.

4. VEGETATION				IMPACT *		
Will the proposed action result in?	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Changes in the diversity, productivity or abundance of plant species (including trees, shrubs, grass, crops, and aquatic plants)?			х			4.a
b. Alteration of a plant community?			Х			4.b
c. Adverse effects on any unique, rare, threatened, or endangered species?		Х				
d. Reduction in acreage or productivity of any agricultural land?		х				
e. Establishment or spread of noxious weeds?			Х			4.e
f. **** <u>For P-R/D-J</u> , will the project affect wetlands, or prime and unique farmland?		х				
g. Other:						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Vegetation (attach additional pages of narrative if needed):

4.a,b,e The project intent is to restore and diversify vegetation to benefit wildlife habitat condition. The proposed action would remove conifers from aspen-dominated forest reducing competition for sunlight and moisture for this species in the treatment units. Conifer removal would also support growth of shrubs and other deciduous vegetation. Noxious weed spread would be mitigated by requiring equipment to be washed before entering the RLWMA, minimizing ground disturbance, immediately reseeding disturbed areas, and treating affected areas or areas at risk with herbicide indefinitely. The proposed project area is within the scope of annual noxious weed management across the RLWMA.

** 5. FISH/WILDLIFE				IMPACT *		
Will the proposed action result in:	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Deterioration of critical fish or wildlife habitat?		Х				
b. Changes in the diversity or abundance of game animals or bird species?			Х			5.b
c. Changes in the diversity or abundance of nongame species?			х			5.c
d. Introduction of new species into an area?		Х				
e. Creation of a barrier to the migration or movement of animals?		х				
f. Adverse effects on any unique, rare, threatened, or endangered species?		х				
g. Increase in conditions that stress wildlife populations or limit abundance (including harassment, legal or illegal harvest or other human activity)?		х				
h. **** <u>For P-R/D-J</u> , will the project be performed in any area in which T&E species are present, and will the project affect any T&E species or their habitat? (Also see 5f.)			Х			5.h
i. ***For P-R/D-J, will the project introduce or export any species not presently or historically occurring in the receiving location? (Also see 5d.)		х				
j. Other:						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Fish and Wildlife:

5. b,c,h The objective of the proposed project is to increase vegetation diversity and the abundance of early succession plant species that provide forage and browse for dozens of game and nongame wildlife species. Enhanced habitat diversity is expected to increase wildlife species diversity within the proposed project area. Increased forage and browse is expected to increase nutritional fitness of wildlife species utilizing the proposed project area. The proposed project area is within general range of grizzly bears and Canada Lynx. The proposed project is not expected to negatively impact either species.

B. HUMAN ENVIRONMENT

6. NOISE/ELECTRICAL EFFECTS				IMPACT *		
Will the proposed action result in:	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Increases in existing noise levels?			Х			6.a
b. Exposure of people to severe or nuisance noise levels?			Х			6.b
c. Creation of electrostatic or electromagnetic effects that could be detrimental to human health or property?		х				
d. Interference with radio or television reception and operation?		Х				
e. Other:						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Noise/Electrical Effects (attach additional pages of narrative if needed):

6.a,b Logging and trucking equipment would increase noise levels on the project area while activities are ongoing, but these activities would be temporary and occur outside of high-use seasons for the RLWMA (e.g. hunting season). Merchantable timber byproducts would be transported out of the RLWMA via the Ledford Creek and Upper Ruby roads.

7. LAND USE				IMPACT *		
Will the proposed action result in:	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
Alteration of or interference with the productivity or profitability of the existing land use of an area?		х				
b. Conflicted with a designated natural area or area of unusual scientific or educational importance?		Х				
c. Conflict with any existing land use whose presence would constrain or potentially prohibit the proposed action?		Х				
d. Adverse effects on or relocation of residences?		Х				
e. Other:						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Use (attach additional pages of narrative if needed):

8. RISK/HEALTH HAZARDS				IMPACT *		
Will the proposed action result in:	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Risk of an explosion or release of hazardous substances (including, but not limited to oil, pesticides, chemicals, or radiation) in the event of an accident or other forms of disruption?			х			8.a
 Affect an existing emergency response or emergency evacuation plan, or create a need for a new plan? 		Х				
c. Creation of any human health hazard or potential hazard?			Х			8.c
d. *** <u>For P-R/D-J</u> , will any chemical toxicants be used? (Also see 8a)		Х				
e. Other:						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Risk/Health Hazards (attach additional pages of narrative if needed):

8.a,c Timber management activities are inherently dangerous. All contractors would be required to comply with federal and state safety standards for logging operations as established by the United States Department of Labor, Occupational Safety and Health Administration (OSHA; 29 Code of Federal Regulations 1910 and any other such applicable regulations promulgated by OSHA) and as required by Title 50, Chapter 71 of the Montana Code Annotated, and any regulations promulgated to implement the statutes found in that Title and Chapter of the Montana Code Annotated.

9. COMMUNITY IMPACT				IMPACT *		
Will the proposed action result in:	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Alteration of the location, distribution, density, or growth rate of the human population of an area?		х				
b. Alteration of the social structure of a community?		Х				
c. Alteration of the level or distribution of employment or community or personal income?			Х			9.c
d. Changes in industrial or commercial activity?			Х			9.d
e. Increased traffic hazards or effects on existing transportation facilities or patterns of movement of people and goods?			Х			9.e
f. Other:						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Community Impact (attach additional pages of narrative if needed):

9.c,d,e Jobs would be temporarily created or sustained by project work while the project is ongoing. Log hauling and contractor traffic would increase during the project. Roads and other infrastructure that would be used by contractors would be maintained to support commercial logging and log transport activities. Signage would be placed near the entrance of the WMA and where log trucks would enter public roads to alert traffic of log truck activity.

10. PUBLIC SERVICES/TAXES/UTILITIES				IMPACT *		
Will the proposed action result in:	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Will the proposed action have an effect upon or result in a need for new or altered governmental services in any of the following areas: fire or police protection, schools, parks/recreational facilities, roads or other public maintenance, water supply, sewer or septic systems, solid waste disposal, health, or other governmental services? If any, specify:		х				
b. Will the proposed action have an effect upon the local or state tax base and revenues?			Х			10.b
c. Will the proposed action result in a need for new facilities or substantial alterations of any of the following utilities: electric power, natural gas, other fuel supply or distribution systems, or communications?		Х				
d. Will the proposed action result in increased use of any energy source?			х			10.d
e. **Define projected revenue sources			Х			10.e
f. **Define projected maintenance costs.			Х			10.f
g. Other:						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Public Services/Taxes/Utilities (attach additional pages of narrative if needed):

10.b,d The project would be expected to increase state and local tax revenues from the sale of fuel, supplies or equipment, and from contractor employees' income. Fuel and electricity would be required to treat stands and process the timber byproduct.

10.e Depending on the market conditions of logging and hauling costs, and delivered log prices for the timber byproduct removed, the project might generate revenue for FWP's Forest Management Account (authorized by § 87-1-621, MCA) to be used for future forest management projects.

10.f Post-treatment maintenance costs may be incurred for slash disposal and noxious weed treatments. FWP would provide funding for maintenance costs from its Forest Management Account.

** 11. AESTHETICS/RECREATION Will the proposed action result in:	IMPACT *							
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index		
a. Alteration of any scenic vista or creation of an aesthetically offensive site or effect that is open to public view?			х			11.a		
b. Alteration of the aesthetic character of a community or neighborhood?		Х						
c. **Alteration of the quality or quantity of recreational/tourism opportunities and settings? (Attach Tourism Report.)		х						
d. ***For P-R/D-J, will any designated or proposed wild or scenic rivers, trails or wilderness areas be impacted? (Also see 11a, 11c.)		х						
e. Other:								

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Aesthetics/Recreation (attach additional pages of narrative if needed):

11.a Some treated stands would be visible from the existing roads. The scenic vista may be temporarily affected once conifer trees are removed and prior to slash disposal and vegetative recovery.

12. CULTURAL/HISTORICAL RESOURCES Will the proposed action result in:	IMPACT *							
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index		
 a. **Destruction or alteration of any site, structure or object of prehistoric historic, or paleontological importance? 		Х						
b. Physical change that would affect unique cultural values?		Х						
c. Effects on existing religious or sacred uses of a site or area?		Х						
d. ****For P-R/D-J, will the project affect historic or cultural resources? Attach SHPO letter of clearance. (Also see 12.a.)								
e. Other:								

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Cultural/Historical Resources (attach additional pages of narrative if needed):

12d,.e. No known cultural artifacts exist in the project area. If cultural artifacts were to be discovered during the project, FWP would cease activities and contact the State Historic Preservation Office, and potentially adjust the project design to avoid impacting these resources.

SIGNIFICANCE CRITERIA

13. <u>SUMMARY EVALUATION OF SIGNIFICANCE</u> Will the proposed action, considered as a whole:	IMPACT *							
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index		
a. Have impacts that are individually limited, but cumulatively considerable? (A project or program may result in impacts on two or more separate resources that create a significant effect when considered together or in total.)			Х			13.a		
b. Involve potential risks or adverse effects, which are uncertain but extremely hazardous if they were to occur?		х						
c. Potentially conflict with the substantive requirements of any local, state, or federal law, regulation, standard or formal plan?		х						
d. Establish a precedent or likelihood that future actions with significant environmental impacts will be proposed?		Х						
e. Generate substantial debate or controversy about the nature of the impacts that would be created?		Х						
f. ***For P-R/D-J, is the project expected to have organized opposition or generate substantial public controversy? (Also see 13e.)		Х						
g. **** <u>For P-R/D-J</u> , list any federal or state permits required.								

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Significance Criteria (attach additional pages of narrative if needed):

13.a. This project would improve game and nongame wildlife habitat conditions and restore aspen productivity on the RLWMA. Work proposed in this EA would compliment similar conifer expansion treatment work on-going on the RLWMA and adjacent lands. FWP does not anticipate any cumulative negative impacts to result if this project were completed.

PART III. NARRATIVE EVALUATION AND COMMENT

The RLWMA aspen enhancement project would restore productivity to decadent aspen-dominated forest by removing competing conifers and improve habitat conditions for a variety of game and nongame wildlife. No action would result in perpetuating the current condition and, barring the occurrence of a natural disturbance event, conifers would continue to outcompete aspen and decrease its abundance within the proposed project area. Through time, the aspen-dominated forest patch would be continually reduced resulting in reduced carrying capacity for wintering moose, reduced fawn-rearing habitat and late-fall browse for mule deer, reduced winter browse for elk, loss of existing ruffed-grouse habitat, and reduced surface water flowing from existing springs.

PART IV. PUBLIC PARTICIPATION

Describe the level of public involvement for this project if any, and, given the complexity and the seriousness of the environmental issues associated with the proposed action, is the level of public involvement appropriate under the circumstances?

The public will be notified in the following manners to comment on this current EA, the proposed action and alternatives:

- One legal notice in each of these newspapers:
 The Madisonian
 Dillon Tribune
- This EA may be obtained by mail from Region 3 FWP, 1400 South 19th, Bozeman, MT 59718; by phoning 406-994-4042 or by viewing FWP's Internet website http://fwp.mt.gov ("Recent Public Notices").

Comments should be directed by mail to Dean Waltee, PO Box 758, Sheridan, MT 59749; phone to 406-842-7407; or email to dwaltee@mt.gov. Comments must be received by FWP no later than 5:00 p.m. on May 13, 2019.

Copies of this environmental assessment will be distributed to the neighboring landowners and interested parties to ensure their knowledge of the proposed project.

This level of public notice and participation is appropriate for a project of this scope having limited impacts, many of which can be mitigated.

PART V. EA PREPARATION

Based on the significance criteria evaluated in this EA, is an EIS required? (YES/NO)?
 If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action.

No. Based upon the above assessment which has identified a limited number of minor impacts to the physical and human environment that would be either for a short duration or can be mitigated below the level of significance, an EIS in not required and an environmental assessment is the appropriate level of review.

2. Name, title, address and phone number of the person(s) responsible for preparing the EA:

Dean Waltee Madison Area Wildlife Biologist, Montana Fish, Wildlife & Parks, Region 3 PO Box 758, Sheridan, MT 59749 (406) 842-7407

R. Jason Parke Forester, Montana Fish, Wildlife & Parks P.O. Box 200701, Helena, MT 59620 (406) 444-7329

3. List of entities consulted during preparation of the EA:

None