Draft Environmental Assessment Threemile Wildlife Management Area Forest Habitat Restoration Project: Phase Two

February 2019



Project Overview

Proposal

Montana Fish, Wildlife & Parks (FWP) proposes to conduct forested habitat restoration treatments on 1,492 acres of forest on the Threemile Wildlife Management Area (TWMA), in Ravalli County (Figures 1 and 2). The objectives of the proposed forest habitat restoration treatments are: 1) improve elk and deer winter forage, 2) restore open stand conditions dominated by large-diameter ponderosa pine, 3) restore a stand structure that would allow fire to burn at low-severity appropriate for the habitat type, 4) reduce fuel loading, 5) reduce susceptibility to bark beetle infestation, and 6) promote aspen growth and regeneration. The treatments would involve the removal of conifer trees (both merchantable and submerchantable) through a combination of thinning the overstory (thin-from-above or canopy thinning), understory thinning (thin-from-below), and removal of excess dead and downed trees (where exceeding desirable amounts for wildlife). Please see #8 (Narrative Summary) below, for a detailed description of the proposed action. If approved by the Montana Fish and Wildlife Commission, the work would begin as early as June 2019. Forest management activities would not occur during the general rifle season, with efforts to minimize impacts during archery season (such as no logging on weekends). The purpose of this project is to improve wildlife habitat; this project would not be proposed if not for a need to conserve and improve wildlife habitat on the WMA.

Area Description

The Threemile WMA is located in the Bitterroot Valley of west-central Montana, in Ravalli County, lying on the west slope of the Sapphire Mountains between Eightmile Creek to the north and Ambrose Creek to the south. The nearest communities are Florence and Stevensville. The farming, ranching and recreation/tourism industries support the local economy. Missoula is the nearest major population center, located about 25 miles northwest of the TWMA.

Threemile Point, at 5,964-feet in elevation, is the main topographic feature, and Threemile Creek is the principal watershed of the WMA.

FWP acquired the Threemile WMA in 1967 to provide winter range for elk that were restored to the Sapphire Mountains earlier in the twentieth century. The 1992 TWMA Management Plan (on file at FWP, Region 2) sets wildlife and wildlife habitat as its top priority, and public access compatible with wildlife needs is second. Most of the 6,384-acre WMA is forested, and the forest is residual or regenerated after logging that occurred 40 years ago by the private owner of now-expired timber rights. Forest management has not occurred on the stands proposed for treatment since that time.

A migratory elk herd uses the TWMA for winter range. Marcum (1975) documented that this elk herd habitually occupies summer ranges extending into the Welcome Creek Wilderness in the Rock Creek drainage. The North Sapphires Elk Research Project (NSERP), which took place from 2014-2016 with a Phase 2 study commencing in winter 2018, documented heavy use by both bull and cow elk during all seasons including archery and rifle seasons (FWP, unpublished GPS collar data). Thus, changes in elk habitat on the TWMA may directly affect opportunities for the public to hunt and view elk across a much larger area including portions of the Lolo and Bitterroot National Forests and accessible state and private lands. The WMA itself is one of the most heavily-used hunting areas in FWP's Region 2 and FWP has invested considerable effort over the years in providing a satisfactory experience for hunters on the WMA (Thompson et al. 1991).

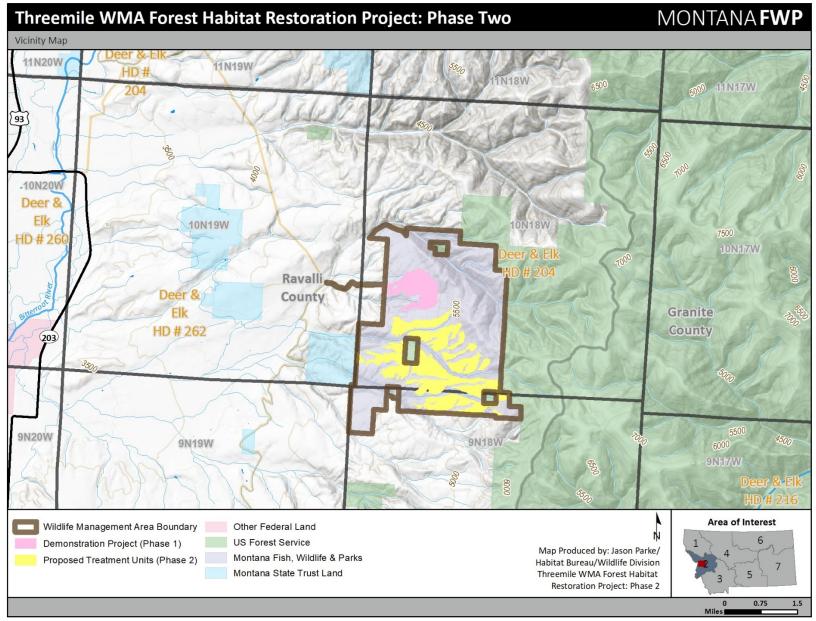


Figure 1. Threemile Wildlife Management Area and vicinity.

Threemile WMA Forest Habitat Restoration Project: Phase Two

MONTANA FWP

Project Map

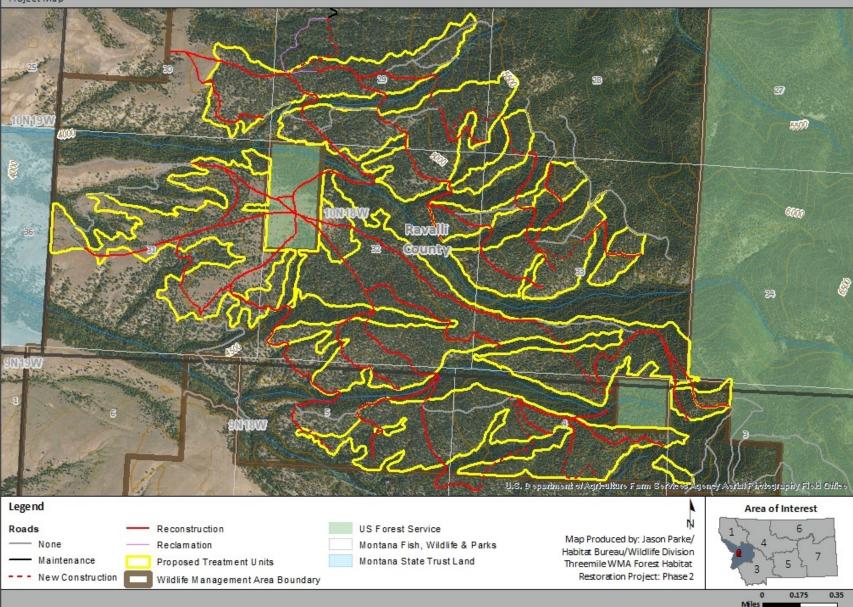


Figure 2. Threemile WMA project map for proposed forest habitat restoration project.

Portions of the WMA also provide important winter range for migratory and resident populations of mule deer and white-tailed deer. Black bear, mountain lion, wolves, moose, mountain grouse and furbearing species are common on the property. A wide variety of nongame wildlife species use the TWMA, including many bird, small mammal, and reptile species that are considered Montana Species of Concern¹ (SOC).

In 2015, the Fish and Wildlife Commission approved a pilot project (Phase 1), which commenced the following winter, to treat 372 acres to the north of the current proposed project (Figure 3).



Figure 3. A portion of a treated stand in the demonstration area in the summer of 2016.

Ecological Setting

Robert M. Rich conducted his master's research on Threemile WMA and found quantifiable evidence in General Land Office survey notes from 1902 that the stand structure and ecology of the current forest has changed dramatically from the historic conditions that shaped the evolution of native wildlife species (Rich 2011; Figures 4 and 5).

¹ A Species of Concern is a native animal (or plant) breeding in Montana that is considered to be "at risk" due to declining population trends, threats to its habitats, and/or restricted distribution. The purpose of Montana's SOC listing is to highlight species in decline and encourage conservation efforts to reverse population declines and prevent the need for future listing as Threatened or Endangered Species under the Federal Endangered Species Act. More information is available at http://fwp.mt.gov/fishAndWildlife/species/speciesOfConcern/

Historic timber harvest practices, fire exclusion and the lack of forest management in recent decades have set the stage for a potential long-term loss of productive wildlife habitat on the TWMA. Of foremost concern is the increased likelihood of a stand replacement event when a wildfire occurs in the future. The forest types on the TWMA evolved with a natural cycle of frequent, low intensity ground fires that minimized stand replacement events and promoted the retention and recruitment of large trees in open stands (Rich 2011; Figure 4). Decades of fire prevention and suppression, coupled with historic, highgrade harvesting and a lack

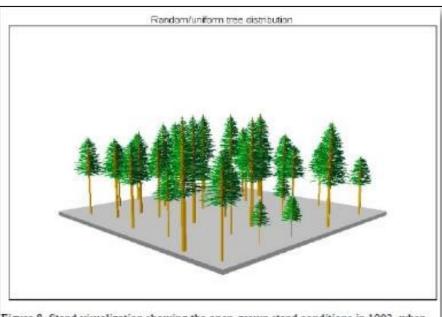
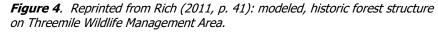
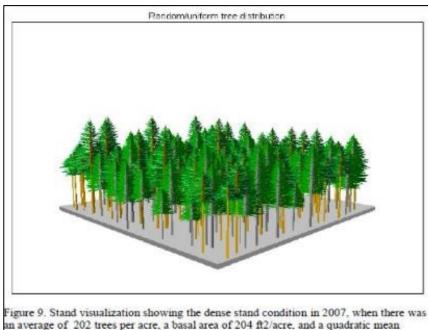


Figure 8. Stand visualization showing the open-grown stand conditions in 1902, when there was an average of 37 trees per acre, a basal area of 82 ft2/acre, and a quadratic mean diameter of 20" (at 1-ft above ground level)





diameter of 13" (at 1-ft above ground level)

Figure 5. Reprinted from Rich (2011, p. 42): modeled, current forest structure on Threemile Wildlife Management Area.

of subsequent management to restore a natural stand structure, have increased the vulnerability of the forest to fires that once burned beneficially (Rich 2011; Figure 5). FWP proposes to thin some forest stands to increase the probability of larger trees surviving the inevitable lightning or human-caused fire in the future. Otherwise, a wildfire is likely to burn much hotter than would have naturally occurred, reaching the forest canopy and more deeply into the mineral soil, thus removing much of the existing forest structure to the detriment of many wildlife species on the WMA.

Dense Cover

Equally important as the treated stands are the stands within the project area that would not be treated (Figure 6). Forests in the riparian bottoms and on steep, north-facing slopes along the draws would be left standing, including a mix of larger Douglas-fir, spruce, and subalpine fir, and thickets of shrubs and shade-tolerant conifer regeneration. These important features of wildlife habitat would remain irregularly interspersed with treated stands to maintain a functional mosaic of forest



Figure 6. Example of a riparian draw bottom that would not be treated.

structures and vegetation communities for a diversity of wildlife. The untreated stands are expected to be used by elk for winter thermal cover and would be interspersed with large ponderosa pine and Douglas-fir boles on nearby south-facing slopes. This mosaic of habitat types is expected to provide wintering elk with a mix of habitat features in close proximity that allow them to minimize their exposure to wind or maximize their exposure to sun and reflected solar radiation without traveling great distances (Beall 1974).

Demonstration Project

FWP conducted a 372-acre demonstration project in winter 2015-2016 (Phase 1) to evaluate and learn from, and for the public to react to, before proposing any further forest management projects on TWMA (Figure 3). The demonstration project area was in the north half of the WMA, adjacent to the northern edge of the current proposed project. The demonstration project received widespread approval from a variety of user groups, including during a field tour for legislators and county officials in summer 2017 and an informal survey of hunters the subsequent fall. FWP learned that there was broad support for expanding the treatment to other areas of the WMA.

Partnership with Bitterroot National Forest and Montana Department of Natural Resources and Conservation (DNRC)

The Bitterroot National Forest and DNRC are developing a similar habitat treatment plan on 238 acres of lands adjacent to and on two U.S. Forest Service inholdings (40 and 80 acres) within the Threemile WMA boundary. These treatments would occur simultaneous to or shortly after FWP's treatments with similar goals of maintaining stands of mature ponderosa pine and improving forest health and resilience to natural disturbances (fire, insects, and disease). Federal land managers and DNRC would be working closely with FWP staff to streamline operations and maximize benefits under the auspices of Good Neighbor Authority.

Draft Environmental Assessment

MEPA, MCA 23-1-110 CHECKLIST

PART I. PROPOSED ACTION DESCRIPTION

1. Type of proposed state action:

Montana Fish, Wildlife & Parks (FWP) proposes to conduct forested habitat restoration treatments on 1,492 acres of forest on the Threemile Wildlife Management Area (WMA), in Ravalli County (Figure 1). The objectives of the proposed forest habitat restoration treatments are to improve elk and deer winter forage, restore open stand conditions dominated by large-diameter ponderosa pine, restore a stand structure that would allow fire to burn at low-severity appropriate for the habitat type, reduce fuel loading, reduce susceptibility bark beetle infestation, and promote aspen growth and regeneration. The treatments would involve the removal of conifer trees (both merchantable and submerchantable) through a combination of thinning the overstory (thin-from-above or canopy thinning), understory thinning (thin-from-below), and removal of excess dead and downed trees (where exceeding desirable amounts for wildlife). Please see #8 (Narrative Summary) below, for a detailed description of the proposed action.

2. Agency authority for the proposed action:

FWP is authorized by law to own and manage lands as wildlife habitat. The land subject to this proposal is included in the Threemile WMA, which was originally purchased in 1967 with Federal Aid in Wildlife Restoration monies administered by the U. S. Fish and Wildlife Service under the authority of the Pittman-Robertson Act (P-R). FWP uses budgeted license revenues and P-R matching funds, within spending authority granted each biennium by the Montana legislature, for maintenance of the TWMA. 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 TWMA and other properties. The Montana Fish and Wildlife Commission endorsed this proposal in June 2018, allowing FWP to proceed with further development and analysis of this proposed action, including completion of this Environmental Assessment.

Threemile WMA Management Plan (1992)

FWP initially established the TWMA by purchasing and exchanging lands from 1967 through 2009 for the purpose of protecting wildlife habitat and carrying on wildlife restoration projects in accordance with P-R. More specifically, FWP manages this property primarily to provide important winter range for elk and deer, as outlined and described in the Application for Federal Assistance and the Management Plan for the TWMA (on file at FWP, Region 2). The Management Plan directs FWP to "restore and sustain the natural productivity of the ponderosa pine/bunchgrass/riparian ecotone extending from Threemile Creek to Ambrose Creek, including TWMA and adjacent ownerships, to retain a wide variety of potential management alternatives for future generations. For the expected 10-year life of this plan, as in the past under FWP ownership, the goal of the WMA will be to provide high-quality winter range for elk and mule deer, as well as compatible public recreational opportunities."

The TWMA Management Plan directs the Department to pursue opportunities to enhance these resources when compatible with elk and deer management. The proposed project would meet these standards by promoting understory forage production while retaining areas of thermal cover to address a habitat limitation in periods of harsh winter weather for migratory populations of up to 300 elk. The proposed project would maintain and enhance woody browse understories and aspen stands that historically provided winter forage for mule deer and elk on the lower slopes of the Sapphire Mountains, but have been severely degraded by conifer expansion and fire suppression over the last 40 years.

The proposed forest management project addresses, in part, the "Forest Management Problem" that was outlined in the TWMA Management Plan:

Nearly 20 years after logging last occurred on Threemile WMA, forests are at varying stages of recovery and maturity. Prescribed burning and selective logging may be used to improve the availability and palatability of herbaceous vegetation, control conifer expansion into grasslands, and restore a more desirable species composition or successional stage in forests. Commercially valuable timber is present on the WMA. FWP desires to develop objectives regarding the type of forest structure(s) that best meet WMA goals for wildlife and to subsequently develop appropriate management strategies that might include prescribed timber harvest. To clarify, wildlife management objectives, rather than the commercial value of the timber, should be the primary consideration in evaluating any future timber harvest options on the WMA.

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

FWP 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. FWP has identified habitat improvement priorities following extensive field work, literature review, and conversations with WMA users and neighbors over the past decade. The Montana Legislature has provided FWP the means to accrue revenue from forest management activities and spend them to fund further management projects on its forested lands.

Montana Fish, Wildlife & Parks Forest Management Plan² (2018)

The Montana Fish, Wildlife & Parks 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 Plan³ (2005)

The Montana Statewide Elk Plan directs FWP to improve elk habitat through projects designed to improve vegetative diversity and to maintain or increase carrying capacity on winter range. This proposed project would work toward meeting this goal by restoring aspen stands, removing conifers encroaching on historically open and fire adapted ponderosa pine stands, increasing recruitment of grass and woody browse understories in treated stands, removing late seral and diseased pine and Douglas-fir, and reducing the probability of intense stand replacement fire events on the WMA.

Montana's State Wildlife Action Plan⁴ (2015)

The Threemile WMA is included within the Lolo-Clark Fork Connectivity, Tier One Focal Area. Priority species for that Focal Area, which would be relevant to the management of TWMA, include the black-backed woodpecker, Lewis's woodpecker, brown creeper, Cassin's finch, Clark's nutcracker, flammulated owl, great gray owl, northern goshawk, pileated woodpecker, varied thrush, long-billed curlew, fringed myotis, hoary bat, little brown myotis, northern alligator lizard, and western skink.

Approximately 33% of the project area is represented by the Tier I Montane Grassland Community Type of Greatest Conservation Need. Important threats to this community type include conifer encroachment and invasive weeds. Approximately 50% of the project area is represented by the Tier I Conifer-dominated Forest and Woodland (xeric-mesic) Community Type of Greatest Conservation Need. Important threats to this community type include replacement of ponderosa pine by Douglas-fir, as well as uncharacteristically high tree densities in forested habitats due to fire suppression.

² Available upon request from R2 FWP (Missoula) or FWP Wildlife (Helena) office.

³ Available on FWP's website at <u>http://fwp.mt.gov/fishAndWildlife/management/elk/managementPlan.htm</u>, accessed 12 Feb 2019.

⁴ Available on FWP's website at <u>http://fwp.mt.gov/fishAndWildlife/conservationInAction/actionPlan.html</u>, accessed 12 Feb 2019.

3. Name of project: Threemile Wildlife Management Area Forest Habitat Restoration Project: Phase Two

4. Anticipated Schedule:

Estimated Commencement Date: 6/01/2019 for road development; 07/01/19 for logging Estimated Completion Date: 3/1/2020, possibly extending to 12/1/2023 for prescribed fire treatments

Current Status of Project Design (% complete): 95%

5. Location affected by proposed action (county, range and township): Ravalli County

Township 9 North, Range 18 West, Sections 3, 4, & 5 Township 10 North, Range 18 West, Sections 28, 29, 30, 31, 32, & 33 Project is located within the Threemile Wildlife Management Area (Figures 1 and 2)

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

Land Type	Affected Area (estimated in acres)	Total (acres)
(a) Developed:	(,	
Residential	0	
Industrial	0	0
(b) Open Space/ Woodlands/ Recreation		0
(c) Wetlands/ Riparian Areas		0
(d) Floodplain		0
(e) Productive:		
Irrigated Cropland	0	
Dry Cropland	0	
Forestry	1,265	
Rangeland	227	
Other	0	1,542
Total		1,542

7. Listing of any other Local, State or Federal agency that has overlapping or additional jurisdiction.

(a) Permits:

Agency Name	Permits
none required	

(b) Funding:

Agency Name: Montana Fish, Wildlife & Parks

<u>Funding Amount</u>: Costs to FWP for these forest habitat restoration treatments are expected to be covered by the sale of merchantable timber byproduct. Any revenue in excess of project costs would be deposited into the legislatively established FWP Forest Management Account to implement further forest management projects pursuant to the provisions of 87-1-201(9)(a)(iv), MCA.

(c) Other Overlapping or Additional Jurisdictional Responsibilities:

<u>Bitterroot National Forest</u>: Inholdings, wildland fire protection <u>Ravalli County Weed District</u>: Noxious weed control

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

Proposed Action

FWP is proposing to conduct forested habitat restoration treatments on approximately 1,492 acres on the TWMA for the purpose of:

- improving elk and deer winter forage,
- restoring open stand conditions dominated by large-diameter ponderosa pine,
- restoring a stand structure that would allow fire to burn at low-severity appropriate for the habitat type,
- reducing fuel loading,
- reducing susceptibility to bark beetle infestation,
- promoting aspen growth and regeneration, and
- selling any merchantable byproduct resulting from the proposed treatments in order to offset the cost of the treatments and deposit any revenue in excess of project costs into the legislativelyestablished FWP forest management account to implement further forest management project pursuant to § 87-1-201 (9)(a)(iv), MCA.

Forest habitat restoration treatments are expected to benefit:

- elk and deer winter range, thermal cover, and foraging opportunities,
- a variety of nongame wildlife including Species of Concern (SWAP 2015) that are dependent on oldgrowth ponderosa pine stands as well as riparian areas and aspen stands, and
- compatible public use opportunities.

Forest habitat restoration treatments include 1,295 acres of variable density thinning (a combination of overstory and understory thinning) and 227 acres of removing conifers that have expanded into grassland habitats. The treatments would include:

- mechanized removal (logging, log hauling, mastication/grinding, and hand cutting with chainsaws) of merchantable and submerchantable trees;
- construction, reconstruction, site improvements, maintenance, and reclamation of roads in order to facilitate logging and log-hauling, reduce erosion and sediment transport, and provide access for future maintenance and fire suppression;
- prescribed burning (pile, jackpot, and broadcast burning);
- rehabilitation of disturbed areas; and
- noxious weed control (i.e. chemical, biological, hand pulling, digging, and/or cutting treatments).

Historic Reference Condition

The subject stands were historically more open and dominated by large ponderosa pine with approximately 10% Douglas-fir. Dominant trees were several hundred years old and commonly numbered 10 to 30 trees per acre. Tree size was commonly over 24 inches diameter at breast height (DBH). Structure was uneven-aged in groups. The open character of the stands and dominance of ponderosa pine was maintained by frequent, low-intensity fire occurring every 5 to 10 years. A reconstruction of a typical historic stand condition on the site was completed using Government Land Office (GLO) original survey notes from 1905 (Rich 2011). These notes described distances from

surveyed corners and DBH of 48 bearing trees. These notes allow for a reconstruction of the typical stand condition as it existed in 1905. A modeled reconstruction is, of course, only one snapshot in time and stand conditions change over time. Based on the GLO notes the following estimate of a typical 1905 forest stand is as follows:

Range of DBH: 6" to 42" Average DBH: 21" Species composition: ponderosa pine-91%, Douglas-fir-9% Trees per acre (Greater than 6" DBH): 20 Basal area: 62 sq. ft/acre Average spacing between trees: 47 feet

Current Condition

Logging in the early 1900s gave rise to the current stands on the site by removing most of the larger trees at the time. This extensive harvesting allowed for germination of new seedlings and release of advanced regeneration that was already established beneath the larger trees. Logging and subsequent fire exclusion allowed dense even-aged stands to develop. Additional harvesting in the 60s and 70s removed the remaining trees that were not harvested earlier in the century. These removals allowed for additional pockets of new regeneration to become established and further release of advanced regeneration. It also eliminated nearly all trees over 20 inches DBH from the site. FWP conducted a timber cruise (survey) of the stands proposed for treatment in the fall of 2018. Based on the cruise, the current average stand conditions are as follows:

Range of DBH: 0" to 40" Average DBH: 6.9" Average DBH of trees >5" DBH: 15.3" Species Composition: ponderosa pine-40%, Douglas-fir-60% Trees per acre: 423 (range 76 to 564) Trees per acre (greater than 6" DBH): 125 Basal area: 110 sq. ft/acre (range 88 to 262 sq. ft/acre) Average spacing between trees: 10 feet

Douglas-fir dwarf mistletoe is found in isolated patches, nearly always in the Douglas-fir/Ninebark (PSME/PHMA-PHMA) habitat type. Mountain pine beetle mortality is common throughout the area. In some portions of the stands ponderosa pine has been nearly eliminated as a result of bark beetle-caused mortality. The potential for further mountain pine beetle mortality is high. An understory of sapling-sized Douglas-fir has become established in much of the area, especially where the canopy has been opened up by mountain pine beetle mortality. The risk of stand-replacing wildfire is high as a result of high canopy density, fuel continuity, dead and downed fuels, and developing ladder fuels. Quaking aspen is found in several locations and is most common in and along draw bottoms. In draws, aspen stands form long stringers or occur as groves of up to an acre in size. Aspen is also found on several dry south slopes and ridge lines throughout the project area. In the draw bottoms, stem diameter of aspen is up to 14 inches DBH. On the drier sites where it occurs, aspen are much smaller and often decadent or dead. Conifers frequently overtop the aspen except where the aspen grows in a pure grove. The dense conifer overstory is causing decline in the aspen component of the stand.

Desired Condition

The desired condition of the 1,295 acres proposed for variable thinning is an open stand condition dominated by large-diameter ponderosa pine, a stand structure that would allow fire to burn at low-severity, reduced fuel loading, reduced susceptibility bark beetle infestation, and enhanced aspen growth and regeneration. In the cutting specifications, FWP would apply an ICO (individuals, clumps, and openings) leave-tree guideline that is based on reference conditions from old growth stands in western Montana (Arno et. al 1995, Clyatt et. al 2015), to move the subject stands toward the desired condition.

Instead of an average spacing, leave trees would be left in a pattern of individual trees, clumps of varying size, and openings. Variable sized openings (0.1 to 0.5 acres) of long and irregular shape would be created every 1 to 2 acres and skips (unthinned areas) of 0.5 to 1.5 acres would be left across 5 to 10% of the acres. Group selection would be used to create these openings and would focus on areas where there are concentrations of dead ponderosa pine or trees of low vigor and poor crown form. Ideally openings would be in aspen stands where most conifers would be removed or be near dominant and codominant ponderosa pine which would benefit from removal of the neighboring Douglas-fir. Small openings would contain some dominant and codominant ponderosa pine with a spacing of approximately 30 to 45 feet. Trees of the highest vigor with large live crowns would be retained. Skips would be located on ridges or benches that would have the potential to be used as bedding areas or around highvalue snags. Dead trees larger than 18 inches DBH, with broken tops, or snags and defective trees with signs of cavity nesting wildlife activity would be retained. Approximately 5 to 10 tons per acre (equating to roughly 4 to 8 pieces that are 18" diameter at the large end and 16 feet long) of large woody debris would be retained, favoring the largest available pieces of older, decaying and weathered logs, and/or logs partially embedded in the ground. The target residual stand condition (short-term) post treatment would be as follows:

Range of DBH: 0" to 40" Average DBH of trees >5" DBH: 18" Species Composition: ponderosa pine-75%, Douglas-fir-25% Trees per acre (greater than 6" DBH): 40 (range 20 to 60) Basal area: 70 sq. ft/acre (range 40 to 110 sq. ft/acre) Average spacing between trees: highly variable and clumpy with an average of 33 feet between trees

In the 227 acres proposed for conifer removal from grassland habitats, the desired condition is to restore a grassland-dominated condition. Treatments would remove expanding conifers, varying in age from 5 to 60 years old, and leave older individuals and patches in draws and scattered micro-sites previously inhabited by trees.

Transportation System

Access to the treatment units would be along the Threemile Creek Road, existing FWP entrance road, and portions of the road system created approximately 40 years ago for the last timber harvest on Threemile WMA. Approximately 0.6 miles of seasonally open road would be relocated, requiring construction of 0.5 miles of new road and 0.6 miles of road reclamation; resulting in a net reduction of approximately 0.1 miles of seasonally open road. FWP attempted to plan the transportation system to use the existing road system to the extent possible. However, some road segments were too steep for modern logging systems, resulting in the need to construct 3.1 miles of new road, with 0.1 miles to be reclaimed posttreatment. The 3.0 miles of new road would be constructed to the minimum standard necessary to facilitate logging and log hauling while meeting Montana Forestry Best Management Practices (BMPs). After use, the roads would be revegetated and stabilized, remaining accessible for administrative purposes, fire suppression, and non-motorized recreational access. Approximately 3.9 miles of seasonally open roads and 15.2 miles of roads closed year-round to public motorized access would be reconstructed. Approximately 3.0 miles of existing year-round and seasonally open road would be improved and maintained. A steel bridge would be installed over the existing wooden bridge on Spring Gulch. Twelve ditch relief culverts would be installed. Road development work would occur in the summer of 2019 concurrent with forest management activities. Final road maintenance and rehabilitation would occur concurrent with the proposed project or the next season following use. Bare mineral soils exposed as a result of road work would be reseeded. Noxious weed control along roads and disturbed areas would be implemented for at least 3 years following treatment and as part of FWP's on-going weed management program. Road work would not occur during the general big game season.

Logging System

Ground-based logging systems would be restricted to slopes less than 40% (approximately 1,386 acres) and cable-yarding would be employed on slopes greater than 40% (approximately 106 acres). Trees designated for cutting that are greater than 5 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 5 inches DBH would be felled or masticated and the material would be lopped and scattered or piled and burned. The majority of slash (limbs, tops, and defective portions of the bole of trees) would be piled and burned at roadside landings or in-woods. Jackpot burning may also be used to reduce slash concentrations.

Prescribed Fire

Broadcast burning would be used to reduce surface fuel loading, promote aspen regeneration, and benefit fire-adapted grasses, forbs, and shrubs. Further evaluations of the proposed treatment units for suitability, feasibility, and risk of broadcast burning would be conducted following mechanical treatments and burn plans would be developed in conjunction with the U.S. Forest Service (agency responsible for fire protection on the WMA), Montana Department of Natural Resources and Conservation, and/or with qualified contractors prior to implementing burns.

General Guidance

- 1. Wildlife habitat comes first.
- Components of wildlife habitat to be left untreated (if existing) or recruited (if not existing) are: coverage of aspen and upland willow, big trees (living and snag recruits), and dense forest cover in the steeper draws.
- 3. Thinning patterns would result in an irregular mosaic with relatively short sight distances.
- 4. Ten percent of cut trees would be marked with the remaining 90% cut by description, under careful monitoring by the FWP Forester and other staff.
- 5. To the extent possible, burn piles would be located in openings within treated stands where little ground cover currently exists. Openings supporting native rangeland would be avoided.
- 6. Ground-based timber harvest would be restricted to slopes less than 40%. Cable-yarding would be required on slopes greater than 40%. Timber harvest in areas with vulnerable soils or in grasslands is encouraged in winter, when the ground is frozen and snow-covered and less likely to be damaged by logging activities. Harvest on gentler sites may be conducted during the summer with little to no risk to soils.
- 7. Timber harvest would not occur during the general big game hunting season or on weekends during archery season.
- 8. Treatments would occur either the summer/fall (July 1 through October 11) after bird nesting activity has been completed or winter before bird nesting activity starts (December 1 through March 15). Any observed active nests would be left undisturbed until nesting is completed.
- 9. Road improvement and construction would occur in summer.
- 10. A new steel bridge would be installed over the existing wooden bridge across Spring Creek in order to accommodate the passage of logging trucks.
- 11. Roads and timber harvest would comply with Montana Forestry Best Management Practices (BMPs) and the Montana Streamside Management Zone law.
- 12. Control of noxious weeds would be included as part of the treatments.

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

If FWP decides not to proceed with the proposed action, no stands on the Threemile WMA would be treated at this time. Elk and deer winter range would continue to experience conifer expansion, and the forest stands on the WMA would remain dense, stressing water resources and shading out important deciduous vegetation. Old-growth ponderosa pine forest types as well as aspen stands and riparian areas would remain stressed by dense conifer stands, with subsequent impacts to nongame wildlife use of the WMA. FWP expects that the risk of high-severity wildfire would continue to increase.

Alternative B: Proposed Action

Conduct forested habitat improvement treatments on approximately 1,492 acres of the Threemile WMA as described in #8 (Narrative Summary), above. Following this action, FWP anticipates that important ungulate winter range condition would improve due to increased grass and woody browse understory recruitment. Habitat diversity would be expected to increase at the scale of individual forest stands, as well as across the larger landscape, providing habitat niches for a wide range of game and nongame wildlife. Treatment would also reduce the susceptibility of the subject stands to high-intensity, stand replacement fire events that would remove the remnant large overstory trees, damage thin organic soils, slow grass and woody browse recruitment, and pose a significant risk to neighboring landowners.

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		IMF	PACT		Can	
Will the proposed action result in:	Unknown	None	Minor	Potentially Significant	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?		x				
f. Other (list)		Х				

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

1.b. Approximately 3.1 miles of new road would be constructed and 22.1 miles 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, potentially temporarily impacting vegetation. The relocation of a 0.6-mile segment of steep road would greatly reduce a chronic source of erosion.

2. AIR		IMF	АСТ		-	
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?		x				
d. Adverse effects on vegetation, including crops, due to increased emissions of pollutants?		x				
e. <u>For P-R/D-J projects</u> , will the project result in any discharge which will conflict with federal or state air quality regs? (Also see 2a)		x				
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 Ravalli County open burning timing restrictions and comply with inter-agency slash treatment regulations.

3. WATER		IMP	ACT		Can	
Will the proposed action result in:	Unknown	None	Minor	Potentially Significant	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?		x				
b. Changes in drainage patterns or the rate and amount of surface runoff?			х			3.b
c. Alteration of the course or magnitude of flood water 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				
 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?		x				
k. Effects on other users as a result of any alteration in surface or groundwater quantity?		x				
 For P-R/D-J, will the project affect a designated floodplain? (Also see 3c) 		х				
m. <u>For P-R/D-J</u> , 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		IMF				
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:		Х				

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 and reduce the susceptibility of the subject stand to high-severity wildfire. The proposed action would thin forest stands on dry west, southwest, and south-facing slopes, reducing moisture stress for deciduous vegetation and young trees on and below the treatment units. The thinning would also support growth of shrubs and other deciduous vegetation by opening the canopy and allowing more sunlight to get to the forest floor. Please see #8 above for a more detailed description of proposed treatments. Noxious weed spread would be mitigated by requiring equipment to be washed before entering the WMA, minimizing ground disturbance, immediately reseeding disturbed areas, and treating affected areas or areas at risk with herbicide for at least 3 years following the treatment.

5. FISH / WILDLIFE		IMP	Can			
Will the proposed action result in:	Unknown	None	Minor	Potentially Significant	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?			x			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)?			x			5.g
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)		x				
I. □ <u>For P-R/D-J</u> , will the project introduce or export any species not presently or historically occurring in the receiving location? (Also see 5d)		х				
j. Other:		X				

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

5.b,c,g:

<u>Near-term</u>: Some wildlife would be temporarily displaced from the project area while treatments are ongoing. Large and mobile species would likely move to secure, adjacent habitat. Treatments would occur either the summer/fall (July 1 through October 11) after bird nesting activity has been completed or winter before bird nesting activity starts (December 1 through March 15). Any observed active nests would be left undisturbed until nesting is completed. Winter treatments may attract deer and elk to feed on the felled tops.

Long-term: The combination of thinning and clump retention would result in a redistribution of thermal/security cover for big game, which may result in temporary increases to hunter harvest mortality in various areas of the WMA. However, the overall effect would be to retain stands for security while improving understory forage quality, thus mitigating negative effects to elk survival over the long term. Habitat for songbirds, small mammals, and amphibians would be enhanced with the improvement of aspen and riparian communities. More large trees would be recruited over time and would grow larger to provide thermal cover, nesting sites and roosting sites for wildlife, and would eventually develop a greater snag component. Within two years following treatment (after slash treatment activities) the forest would be more resistant to stand replacement fire, would be more likely to benefit from burns, and the existing potential threat of decades-long habitat loss due to uncharacteristic stand replacement would be lessened.

B. HUMAN ENVIRONMENT

6. NOISE & ELECTRICAL EFFECTS		IM	Can			
Will the proposed action result in:	Unknown	None	Minor	Potentially Significant	Impact Be Mitigated	Comment Index
a. Increases in existing noise levels?			х			6.a
b. Exposure of people to serve 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:		Х				

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 occur outside of high-use seasons for the WMA (e.g., hunting season). Merchantable timber byproducts would be transported out of the WMA via the Threemile Creek Road and East Side Highway.

7. LAND USE		IMP	ACT		Can	
Will the proposed action result in:	Unknown	None	Minor	Potentially Significant	Impact Be Mitigated	Comment Index
a. 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:		Х				

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

The proposed project implements the TWMA's Management Plan. The project area lies in a matrix of state, federal, and private ownerships that also actively manage their forested lands.

8. RISK / HEALTH HAZARDS		IMP	Can			
Will the proposed action result in:	Unknown	None	Minor	Potentially Significant	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
 b. 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:		Х				

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 be certified as Accredited Logging Professionals with the Montana Logging Association.

9. COMMUNITY IMPACT		IMP	Can			
Will the proposed action result in:	Unknown	None	Minor	Potentially Significant	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?			x			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:		Х				

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 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 were designed (and 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. According to the Montana Bureau of Business and Economic Research, the harvest of a million board-feet of timber equates to roughly 10 jobs annually.

10. PUBLIC		IMF	PACT			
SERVICES/TAXES/UTILITIES 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 used 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:		Х				

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 and/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. The abandonment of the 0.6-mile-segment of steep road would reduce the existing road maintenance burden.

11. AESTHETICS / RECREATION	IMPACT		Can			
Will the proposed action result in:	Unknown	None	Minor	Potentially Significant	Impact Be Mitigated	Comment Index
 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. <u>For P-R/D-J</u> , will any designated or proposed wild or scenic rivers, trails or wilderness areas be impacted? (Also see 11a, 11c)		х				
e. Other:		Х				

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 FWP open road system. The project's intent is to restore stands to more closely approximate historic conditions. A steep stretch of the existing open road system would be closed and re-seeded, which would reduce runoff and erosion. The risk of catastrophic wildfire and beetle damage, which would also modify the scenic vista, would be reduced.

12. <u>CULTURAL / HISTORICAL</u> <u>RESOURCES</u> 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. <u>For P-R/D-J</u> , will the project affect historic or cultural resources? Attach SHPO letter of clearance. (Also see 12.a)						12.d
e. Other:						12.e

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

12.d,e. A cultural resource file search in 2015 did not result in any records of historic or cultural resources within or adjacent to the project area. FWP's Design and Construction Section Supervisor would determine if conducting a field review for cultural resources prior to starting any road work or logging is warranted. 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. SUMMARY EVALUATION OF	IMPACT					
SIGNIFICANCE Will the proposed action, considered as a whole:	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 which 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?		x				
c. Potentially conflict with the substantive requirements of any local, state, or federal law, regulation, standard or formal plan?		x				
d. Establish a precedent or likelihood that future actions with significant environmental impacts will be proposed?		x				
e. Generate substantial debate or controversy about the nature of the impacts that would be created?		x				
f. <u>For P-R/D-J</u> , 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.		х				

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 ungulate habitat conditions, restore historic forest characteristics, and reduce susceptibility of the subject stands to high-severity wildfire on and adjacent to the TWMA. Work proposed in this EA may compliment similar forestry work on adjacent lands, but FWP does not anticipate any cumulative negative impacts to result if this project were completed.

PART III. NARRATIVE EVALUATION AND COMMENT

Montana Fish, Wildlife & Parks (FWP) proposes to thin approximately 1,492 acres of forest on the Threemile WMA, in Ravalli County. If approved by the Montana Fish and Wildlife Commission, the work would begin as early as June 2019. The purpose is to improve wildlife habitat; this project would not be proposed if not for a need to conserve and improve wildlife habitat on the WMA.

Historic timber harvest practices, fire exclusion and the lack of forest management in recent decades have set the stage for a potential long-term loss of wildlife and wildlife habitat on TWMA. Of foremost concern, when a wildfire occurs in the future there is an increased likelihood of a stand replacement event. The forests on TWMA evolved with a natural cycle of frequent, low intensity fires that minimized stand replacement events and promoted the retention and recruitment of large trees in open stands (Rich 2011). Decades of fire prevention and suppression, coupled with historic, high-grade harvesting and a lack of subsequent management to restore a natural stand structure have increased the vulnerability of the forest to destructive fires that once burned beneficially (Rich 2011). FWP proposes to thin some forest stands to increase the probability of larger trees surviving the inevitable lightning or human-caused fire in the future. With the current forest structure, a wildfire is likely to burn much hotter than would have naturally occurred, reaching the forest canopy and more deeply into the mineral soil, thus removing most or all of the existing forest structure to the detriment of many wildlife species on the WMA. The recommended forest management project is not intended to significantly reduce or eliminate fire risk—wildfire is natural and inevitable—but is intended and would be designed to improve tree survival in the event of a fire.

Increased stand density on the dry west, southwest and south-facing slopes of the WMA inhibits the growth and recruitment of old, large ponderosa pine and Douglas-fir trees—those features of importance as elk thermal cover in winter and as living or future-dead wildlife trees. Aspen, upland willow and other deciduous trees and shrubs, which add habitat and wildlife species diversity, are being shaded out by the increasing conifer densities on some sites. FWP would prescribe thinning in a pattern that would promote growth and survival potential of the remaining trees. Aspen and other deciduous plants would benefit from thinning the forest canopy and disturbing the plants themselves would promote sprouting.

Equally important as the treated stands are the stands within the project area that would not be treated (Figure 6). Forests in the riparian bottoms and on steep, north-facing slopes along the draws would be left standing, including a mix of larger Douglas-fir, spruce, and subalpine fir, and thickets of shrubs and shade-tolerant conifer regeneration. These important features of wildlife habitat would remain irregularly interspersed with treated stands to maintain a functional mosaic of forest structures and vegetation communities for a diversity of wildlife. The untreated stands are expected to be used by elk for winter thermal cover and would be interspersed with large ponderosa pine and Douglas-fir boles on nearby south-facing slopes. This mosaic of habitat types is expected to provide wintering elk with a mix of habitat features in close proximity that allow them to minimize their exposure to wind or maximize their exposure to sun and reflected solar radiation without traveling great distances (Beall 1974).

As the habitat manager, FWP would decide which trees would be removed, and which would be left standing, along with all other aspects of the forest management prescription.

PART IV. PUBLIC PARTICIPATION

1. 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 would be notified as follows, to comment on the proposed TWMA Forest Habitat Restoration Project, including its draft EA and alternatives:

- A news release would be prepared and distributed to a standard list of media outlets interested in FWP Region 2 issues. This news release would also be posted on FWP Region 2's website <u>http://fwp.mt.gov/regions/r2/.</u>
- One legal notice would be published in each of these newspapers: *Bitterroot Star* (Stevensville), *Independent Record* (Helena), *Missoulian*, and *Ravalli Republic* (Hamilton).
- Copies would be available at the FWP Region 2 Headquarters in Missoula and the FWP State Headquarters in Helena.
- Copies of this environmental assessment would be mailed (or notification of its availability emailed) to neighboring landowners and other interested parties (individuals, groups, agencies) to assure their knowledge of the Proposed Action.
- Public notice on FWP's webpage: http://fwp.mt.gov ("News," then "Recent Public Notices"). The Draft EA would also be available on this website, along with the opportunity to submit comments online.

Copies of this EA may be obtained by mail from Region 2 FWP, 3201 Spurgin Rd., Missoula MT, 5980; by phoning 406-542-5540; by emailing <u>shrose@mt.gov</u>; or by viewing FWP's website http://fwp.mt.gov under Public Notices.

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

2. Public Comment Period

The public comment period will extend for thirty (30) days beginning February 15, 2019. <u>Comments</u> will be accepted until 5:00 p.m. on March 18, 2019 and can be mailed to the address below:

Region 2 FWP Attn: Threemile Forest EA 3201 Spurgin Rd Missoula, MT 59804

or emailed to Sharon Rose at shrose@mt.gov

PART V. EA PREPARATION

1. Based on the significance criteria evaluated in this EA, is an EIS required? (YES/NO)? If an EIS is not required, explain <u>why</u> 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:

Rebecca Mowry Bitterroot Area Wildlife Biologist, Montana Fish, Wildlife & Parks, Region 2 1801 N. 1st Street, Hamilton, MT 59840 (406) 363-7161

Torrey Ritter Region 2 Nongame Biologist, Montana Fish, Wildlife & Parks 3201 Spurgin Rd, Missoula, MT 59804 (406) 542-5551

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.

REFERENCES CITED

- Arno, S. F., J. H. Scott, and M. G. Hartwell. 1995. Age-class structure of old growth ponderosa pine/Douglas fir stands and its relationship to fire history. Research paper INT-RP-481. Intermountain Research Station, U.S. Forest Service, Ogden, Utah.
- Beall, R. C. 1974. Winter habitat selection and use by a western Montana elk herd. PhD dissertation, University of Montana, Missoula. 197pp.
- Clyatt, Kate A., J. Crotteau, M. Schaedel, H. Wiggins, H. Kelley, D. Churchill, and A. Larson. Historical spatial patterns and contemporary tree mortality in dry mixed conifer forests. 2015. Forest Ecology and Management 361: 23-27.
- Marcum, C. L. 1975. Summer-fall habitat selection and use by a western Montana elk herd. PhD dissertation, University of Montana, Missoula. 188pp.

Rich, R. M. 2011. A century of change in forest structure and fire regime condition class in a western Montana ponderosa pine / Douglas-fir forest. MS Thesis, University of Montana, Missoula. 68 pp.

Thompson, M. J., R. E. Henderson, and R. Ortegon. 1991. Do hunters support road closures to address elk security problems? Pages 275-279 in A. G. Christensen, L. J. Lyon, and T. N. Lonner, compilers. Proceedings of elk vulnerability—a symposium. Montana State University, Bozeman.