DRAFT

ENVIRONMENTAL ASSESSMENT CHECKLIST

Doney Lake Forest Habitat Improvement Project

December 5, 2022

MONTANA FISH, WILDLIFE & PARKS

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I. Compliance with the Montana Environmental Policy Act

Before a proposed *project* may be approved, environmental review must be conducted to identify and consider potential impacts of the proposed project on the human and physical environment affected by the project. The Montana Environmental Policy Act (MEPA) and its implementing rules and regulations require different levels of environmental review, depending on the proposed project, significance of potential impacts, and the review timeline. § 75-1-201, Montana Code Annotated ("MCA"), and the Administrative Rules of Montana ("ARM") 12.2.430, General Requirements of the Environmental Review Process.

FWP must prepare an EA when:

- It is considering a "state-proposed project," which is defined in § 75-1-220(8)(a) as:
  (i) a project, program, or activity initiated and directly undertaken by a state agency;
  (ii) … a project or activity supported through a contract, grant, subsidy, loan, or other form of funding assistance from a state agency, either singly or in combination with one or more other state agencies; or
  (iii) … a project or activity authorized by a state agency acting in a land management capacity for a lease, easement, license, or other authorization to act.
- It is not clear without preparation of an EA whether the proposed project is a major one significantly affecting the quality of the human environment. ARM 12.2.430(3)(a));
- FWP has not otherwise implemented the interdisciplinary analysis and public review purposes listed in ARM 12.2.430(2) (a) and (d) through a similar planning and decision-making process (ARM 12.2.430(3)(b));
- Statutory requirements do not allow sufficient time for the FWP to prepare an EIS (ARM 12.2.430(3)(c));
- The project is not specifically excluded from MEPA review according to § 75-1-220(8)(b) or ARM 12.2.430(5); or
- As an alternative to preparing an EIS, prepare an EA whenever the project is one that might normally require an EIS, but effects which might otherwise be deemed significant appear to be mitigable below the level of significance through design, or enforceable controls or stipulations or both imposed by the agency or other government agencies. For an EA to suffice in this instance, the agency must determine that all the impacts of the proposed project have been accurately identified, that they will be mitigated below the level of significance, and that no significant impact is likely to occur. The agency may not consider compensation for purposes of determining that impacts have been mitigated below the level of significance (ARM 12.2.430(4)).

MEPA is procedural; its intent is to ensure that impacts to the environment associated with a proposed project are fully considered and the public is informed of potential impacts resulting from the project.

II. Background and Description of Proposed Project

Name of Project: Doney Lake Forest Habitat Improvement Project

Ecological Setting

The Douglas-fir/blue huckleberry habitat type (Pfister et al. 1977) is the most common habitat type represented in the project area. This habitat type is characterized as being dominated by Douglas-fir with lodgepole pine, western larch, and ponderosa pine as varying components of seral communities. This habitat type falls within fire group 6 (Fischer and Bradley 1987). A theoretical climax condition for fire group six is a multi-storied Douglas-fir stand; however, historically, fire maintained an open forest condition prior to the era of fire suppression. Fire history studies in fire group 6 indicate a mean fire interval of 42 years for pre-settlement stands (Arno and Gruell 1983). This relatively frequent fire regime maintained open stands of larch and pine,

allowing ample sunlight to reach the understory, as well as rejuvenating sprouting plants through top kill which produced an increase in the availability of palatable browse and forage for wildlife (Fischer and Bradley 1987). The last known large fire event occurred in 1919; wildfire has been actively suppressed since that time. The Rice Ridge Fire of 2017 burned to within 3 air-miles north of the Ovando Mountain Unit of the Blackfoot Clearwater WMA (BCWMA). A comparison of 1939 and 2019 aerial photos, as well as the results of FWP's 50-year direct monitoring of established vegetation plots on the WMA, indicates that the plant communities have shifted dramatically since fire suppression began over 100 years ago.

A variety of palatable shrub species, including native bittercherry, pin cherry, mountain ash, chokecherry, Rocky Mountain maple, snowbrush ceanothus (buckbrush), serviceberry, snowberry, and other browse species, still occur on or adjacent to subject stands. Idaho fescue, rough fescue, and bluebunch wheatgrass are the dominant grass species and still occur where adequate sunlight penetrates the conifer overstory. In his study of browse condition trend on the Ovando Mountain Unit (Browse Condition and Trend on Montana Ungulate Ranges, Montana State University, 2002), S. K. Thompson found that forest succession has significantly decreased the extent and productivity of browse species within the Ovando Mountain Unit over the last 60 years. He noted that while the area had historically been productive elk and mule deer winter range, in more recent years it functions as only moderate winter range for elk, mule deer, and white-tailed deer.

The project area, and surrounding portions of the BCWMA, serve as important seasonal winter range for the Blackfoot-Clearwater (BC) elk population. Based upon the last 10 years (2013-2022) of aerial survey data the population is between 650-950 animals. FWP studies of radio-monitored elk have documented a yearlong home-range of approximately 120,000 acres for the BC population, with habitually occupied summer ranges extending from lower Monture Creek and the lower North Fork of the Blackfoot River near Ovando to Canyon Creek and Dwight Creek in the Scapegoat Wilderness. Land management authority for this annual range is 13% private property, 10% state-owned land (including the BCWMA), and 75% federal land including portions of the Lolo National Forest, Flathead National Forest, and the Bob Marshall Wilderness Complex.

The importance of the BC elk population to local sportspersons and the local economy cannot be overstated and is expressed in elk hunter days for hunting district (HD) 285 and the BCWMA (HD 282) that have averaged over 12,000 hunter days over the past 10 years (Montana FWP harvest survey data, 2022). The Ovando Mountain Unit forms the core of one of the most heavily used Block Management Areas in FWP's Region 2. When considering other surrounding hunt districts including portions of HD 292 and HD 281, hunter days increase to over 20,000 per season. Backcountry opportunities include outfitting for resident and non-resident hunters on those portions of the Blackfoot-Clearwater elk herd that migrate into hunt districts 150 and 280 within the Bob Marshall Wilderness Complex, and the economic benefit to the local economy is substantial.

There is strong local interest in the management of this elk herd as changes in elk distribution indicate a reduction of elk use of public lands and a subsequent increase in use, and crop depredation, of private agricultural lands. The causes for this shift in elk distribution are unknown but may be a result of multiple factors related to improved agricultural crop production, lack of widespread hunting access on private lands, and a reduction of forage quality on public lands. Forest management practices, including timber management, modify ecological processes and manipulate vegetation, and have the potential to positively affect the availability and distribution of ungulate nutritional resources (Keane et al. 2002, Wondzell and King 2003, Fisher and Wilkinson 2005, Noss et al. 2006, Long et al. 2008, Allred et al. 2011). Thus, project treatments designed to improve the quality and quantity of elk nutritional resources within the project area may affect the distribution of elk beyond the proposed treatments and throughout the year. User-end project benefits will include impacts to the publics' opportunities to hunt and view elk across the landscape, including portions of the Lolo National Forest and accessible state and private lands.

The BCWMA Management Plan directs FWP to manage for the maximum sustainable utilization of the winter range by elk, mule deer, and white-tailed deer. In addition to improving elk habitat, the portions of the BCWMA in this proposed project also provide important winter range for migratory and resident populations of mule deer and white-tailed deer. Although the BCWMA management plan is focused on elk and deer winter range, habitat improvements will have far-reaching benefits for other game and non-game species within the BCWMA. Other game species with regulated seasons common on the property include moose, black bear, mountain lion, gray wolf, mountain grouse, and numerous furbearing species. Trapping, hunting, and wildlife viewing opportunities for these species are an important aspect of the local community and are responsible for thousands of user-days on the BCWMA.

Several streams on the BCWMA support westslope cutthroat trout populations. Nonnative brook trout are also present. The headwater portions of these drainages contain intact riparian areas with high quality, complex instream habitat. Warren Creek, Dick Creek, and Spring Creek are ranked as high priority tributaries because of native species values, sport fishery values, and their potential to improve downstream water quality (Pierce et al. 2005). Significant habitat restoration actions have occurred in these streams over the last few decades. Dick Creek is a tributary to Monture Creek, which is critical bull trout habitat and supports one of the few migratory populations of bull trout in the Blackfoot watershed. Spring Creek supports juvenile bull trout rearing and flows into the North Fork of the Blackfoot River, which harbors the most robust migratory bull trout population in the watershed. An unnamed, perennial stream that connects to the Doney Lake outlet channel contains westslope cutthroat trout and brook trout. Westslope cutthroat trout and brook trout are also present in both forks of the unnamed stream.

The greater project area also provides important habitat for several Species of Greatest Conservation Need (SGCN; Montana Statewide Wildlife Action Plan, 2015, Montana Natural Heritage Program. Environmental Summary Report, 2022), including westslope cutthroat trout, bull trout, grizzly bear, wolverine, Canada lynx, fisher, great blue heron, common loon, bald eagle, golden eagle, pileated woodpecker, brown creeper, western toad, and Howell's Gumweed. Portions of the project area also serve as important non-cave natural roost sites (e.g., rock outcrops, snags, and injured live trees) for various bat species. Nearly 200 wildlife species were documented on the BCWMA in the 1990s (checklist is available from the FWP's Region 2 headquarters).

The current stand conditions are primarily a result of past fires, timber harvest, fire suppression, climate, and succession. Two distinct conditions occur within the project area due to past ownership and management. Stand Type 1 occurs on the original parcels acquired from 1957 to 1965 (Sections 2 & 12 – Township 15 North – Range 12 West and Sections 7 & 8 – Township 15 North – Range 11 West). Stand type 1 is characterized by having <90-year-old Douglas-fir and lodgepole pine dominating the lower and middle canopy layers of historically park-like ponderosa pine and larch stands. Shade tolerant conifers have encroached on shrub fields and aspen stands and have slowly degraded the stands' value as ungulate winter range. Shade tolerant conifers have also made the remnant, old (>150 years) ponderosa pine and western larch vulnerable to crown fire by creating extensive ladder fuels, which could carry surface fire into the overstory tree crowns in the event of a wildfire (Figure 1).

Stand Type 2 occurs on the lands acquired in 2009, previously managed for timber production by the former owner, Plum Creek Timber Company. Based on historic aerial imagery, a significant timber harvest entry took place in Sections 17 & 18 – Township 15 North – Range 11 West in the early to mid-1980's. Stands in these parcels are composed of primarily 30-year-old lodgepole pine and Douglas-fir that regenerated as a result of that harvest. Almost no large, old remnant trees remain on these parcels. The density of stands in these parcels varies but, in general, is very high and similarly to the older acquisition parcels, the forage productivity has declined over time as the canopy has continually closed in (Figure 2). The stand densities in these parcels also

make the forest more susceptible to crown fire, which could displace conifers for a long period since most of the trees, with the exception of lodgepole pine, are too young to produce seed that could regenerate after a fire.

Insects and diseases have also played an important role in altering forest structure and succession patterns within the project area. Armillaria root disease occurs throughout the project area and pockets of heavy infection are present in many of the subject stands. Where persistent armillaria root disease has been active for a prolonged period of time, nearly all of the most susceptible species (Douglas-fir and lodgepole pine) have died and blown over. These pockets are dominated by an undergrowth of shrubs, forbs, and grasses with a sparse overstory of scattered, more disease-resistant species (western larch and ponderosa pine) and a heavy accumulation of downed wood. In some areas, the heavy downed wood accumulation is precluding use by deer and elk. A Douglas-fir bark beetle outbreak is currently occurring throughout the Blackfoot and Clearwater Valleys, sparked by tree damage and subsequent bark beetle infestation within and around the perimeter of the 2017 Rice Ridge Fire. Douglas-fir bark beetle populations have since exploded and are progressively expanding into susceptible stands. Douglas-fir bark beetle prefers larger, older Douglas-fir trees growing in dense stands and seldom attacks trees less than 12 inches diameter-at-breast-height (DBH). Active Douglas-fir bark beetle infestation was noted in many of the stands proposed for treatment in the summer of 2021 and winter of 2021-22. Western spruce budworm outbreaks have occurred over the past few decades, resulting in varying levels of growth reduction and mortality. Where subalpine fir is present, it has been top-killed or has died from successive years of defoliation by western spruce budworm. Occasional dead and top-killed Douglas-fir and spruce are also present throughout the project area to a lesser degree. The stands in the project area remain highly susceptible to future western spruce budworm infestation due to the density and layering of host species (i.e., Douglas-fir). Mountain pine beetle is not currently active in the project area but during the outbreak from 2009 to 2013, much of the mature lodgepole pine on the Ovando Mountain unit of the BCWMA was infested and has since died and blown over.

Figure 1. Stand type 1 is characterized by having dense, young (<90-year-old) Douglas-fir and lodgepole pine beneath old (>150 years) ponderosa pine and western larch, creating extensive ladder fuels that increase the risk of crown fire.

Figure 2. Stand type 2 is characterized as having dense, advanced regeneration (~30 years old) which regenerated from timber harvesting by the previous landowner, Plum Creek Timber Company.

Agency Authority for Proposed Project:

FWP is authorized by law to own and manage lands as wildlife habitat. The land subject to this proposal is included in the BCWMA, which was originally purchased with Federal Aid in Wildlife Restoration monies (Project W-30-L) 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 BCWMA. 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 BCWMA and other properties. The Montana Fish and Wildlife Commission endorsed this proposal in October 2021, allowing FWP to proceed with further development and analysis of this proposed action, including completion of this Environmental Assessment.

BCWMA Management Plan

FWP manages this property primarily to provide important winter range for elk and deer, as outlined and described in the Application for Federal Assistance (Project W-30-L) and Management Plan for the BCWMA (on file at FWP, Region 2). The Management Plan directs FWP to manage for the maximum sustainable utilization of the winter range by elk, mule deer and white-tailed deer following these standards:

- Soil condition and development will be maintained or enhanced;
- Adverse impacts to adjacent landowners will be reduced or mitigated;
- The condition of elk and deer populations will be maintained or enhanced;
- Elk and deer populations will be supported by natural winter forage;
- Adverse impacts on other resources such as fisheries, riparian habitats, water quality, native plant communities, and other animal populations will be avoided or mitigated.

The BCWMA Management Plan directs the Department to pursue opportunities to enhance these resources when compatible with elk and deer management. This project would meet these standards by maintaining and enhancing forested forage at the base of Ovando Mountain to address a habitat limitation in periods of harsh winter weather for migratory populations of ~500 elk and ~200 mule deer. This proposed project would maintain and enhance woody browse understories and aspen stands that historically provided winter forage for mule deer and elk on lower Ovando Mountain but have been severely degraded by conifer expansion and fire suppression over the last 100 years.

Forest Habitat Improvement Plan for the Ovando Mountain Unit of the Blackfoot-Clearwater Wildlife Management Area[1] (2009)

The stand treatments proposed and described in this Environmental Assessment were identified in the Habitat Improvement Plan as habitat improvement priorities following extensive field work, literature review, and community involvement.

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. 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 Plan[2] (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 Plan[3] (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 shade tolerant conifer expansion on historically open and fire-adapted ponderosa pine and larch stands, increasing recruitment of grass and woody browse understories in treated stands, and reducing the probability of intense stand replacement fire events on the WMA.

Montana's State Wildlife Action Plan[4] (2015)

The portion of the Blackfoot-Clearwater WMA identified in this proposal is included within the North Fork Blackfoot Tier II Aquatic Focal Area and the Ovando-Helmville Grasslands Tier II Terrestrial Focal Area. Focal species for the habitat types and landscape in this area include woodpecker species like pileated and Lewis's woodpeckers, a wide variety of bat species, nesting raptors like great gray owls and golden eagles, and songbirds like brown creepers and varied thrushes.

Approximately 41% of the project area is represented by the Tier I conifer-dominated forest and woodland (xeric-mesic) Community Type of Greatest Conservation Need under the SWAP. Important threats to these community types include replacement of ponderosa pine and larch by Douglas-fir, loss of large-diameter live trees and snags, encroachment of conifers into riparian areas, invasive plants, and uncharacteristically high tree densities in forested habitats due to fire suppression.

Approximately 40% of the project area is classified as floodplain and riparian, another Tier I Community Type of Greatest Conservation Need under the SWAP. This designation is surprising given the dominance of conifer forest in the area. However, the relatively flat terrain and presence of multiple streams leads to large areas with riparian vegetation, even though much of that vegetation has been or is being crowded out by conifer encroachment and natural succession.

Approximately 19% of the project area is represented by montane grassland, deciduous shrubland, and deciduous dominated forest and woodland, with the latter being the dominant habitat type. These are all Tier I Community Types of Greatest Conservation Need under the SWAP. These habitats include riparian areas, shrubby draws, aspen stands, and other areas where the conifer overstory has either been disturbed or has not reached a density that excludes deciduous vegetation. Important threats to these community types include conifer encroachment, fire suppression, overgrazing by livestock, and invasive weeds.

Anticipated Schedule:

Estimated Commencement Date: July 2023

Estimated Completion Date: Fall 2028

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[1] C. Paulu, 2009. Available upon request from R2 FWP (Missoula)
[2] Available upon request from R2 FWP (Missoula) or FWP Wildlife (Helena) office.
[3] Available on FWP's website at http://fwp.mt.gov/fishAndWildlife/management/elk/managementPlan.htm, accessed 12 Feb 2019.
[4] Available on FWP's website at http://fwp.mt.gov/fishAndWildlife/conservationInAction/actionPlan.html, accessed 12 Feb 2019.

Current Status of Project Design (% complete): 60%. Some unit boundaries have been flagged out and GPS'd. Some units have been marked. Existing roads have been GPS'd and FWP is working with the Blackfoot Community Conservation Area (BCCA) to acquire a temporary road use permit to access some portions of the project area.

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	1,500	
Rangeland	0	
Other	0	**1,500**
Total		**1,500**

Proposed Action

Forest habitat improvement treatments include 1,500 acres of variable density thinning (a combination of overstory and understory thinning). The treatments would include:

- mechanized removal (logging, log hauling, mastication/grinding, and hand cutting with chainsaws) of merchantable and non-merchantable 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).

Under the proposed alternative, FWP would designate trees for removal based on the stand prescription either by marking with tree paint or by contract specifications and hire contractors to perform the tree removal (see "Unit Prescriptions" at the bottom of this section for detailed treatment descriptions). Tree removal would be accomplished through a combination of mechanized and nonmechanized methods. Merchantable trees would be treated with ground-based logging equipment, such as feller-bunchers and skidders, that would cut and skid trees to designated roadside locations (called "landings"). Tree stems would be delimbed and processed into logs. Logs would be loaded onto log trucks and hauled to local forest product manufacturing facilities. Nonmerchantable trees (trees too small to be manufactured into forest products) would be treated by either cut, skid, pile and burn; mastication; girdling; and/or felling with chainsaws.

Slash (the nonmerchantable limbs and tree tops) and cull material generated from this process would be treated either by piling and burning, grinding or chipping, lop and scatter, and/or removing the material from the site.

Ground disturbance is expected on skid trails and at landing areas. Some exposure of bare mineral soil (equating to approximately 10-15% of the treatment unit) is desired to promote regeneration of western larch and ponderosa pine. Where soil disturbance (exposed, displaced, or compacted soils) is not desired for that purpose, those areas would be rehabbed and seeded with a native grass seed mix. Contractors hired to do this work would be required to adhere to Montana Forestry Best Management Practices (BMPs). FWP would develop a site-specific treatment plan for each site with contractors hired to do this work. This plan would identify resource protection measures to minimize impacts to the site. FWP would oversee the activities while they are on-going to ensure compliance with the plan and to minimize resource impacts.

Access to the project areas would be mostly from existing roads; 0.3 miles of new road construction, 20.1 miles of reconstruction, and 14.0 miles of road maintenance would be required to facilitate access. Roads would be upgraded to the minimum extent necessary to facilitate logging and log hauling while meeting BMPs. This would involve clearing trees and brush along roads (approximately 10 feet each side from the center of the road), blading the road surface, constructing drainage features (such as drain dips, waterbars, or lead-out ditches) to prevent erosion, and widening of curves. Several stream crossings would be assessed for replacement. Short, temporary spurs (< 500 feet) may be needed to access some units. These would be located on flat ground and where excavation could be avoided. Ground impacts, such as more severe soil compaction or soil exposure, may be greater on these spur roads. These would be reclaimed and blocked to prevent unauthorized motorized use. Road work would be expected to take approximately 8 to 12 weeks and would occur during periods when the soil moisture is suitable to allow for adequate shaping and compaction. Following completion of the logging operation, roads would be seeded with a native grass seed mix and stabilized to prevent erosion.

The operating period for the mechanized treatments would be from either December 1 through April 1 or July 15 through mid-October (mechanized treatment would be avoided during the general rifle hunting season). Ground-based logging equipment would be required to operate under relatively dry, frozen, or snow-covered conditions in order to minimize impacts to soil and vegetation. Hand-felling and other clean-up/rehab activities, such as prescribed burning, grass seeding, and noxious weed treatment could potentially occur throughout the year. If slash is piled and burned, burn piles would be located in openings away from residual trees. Burning would be conducted in accordance with Airshed 3b smoke management restrictions, open burning seasons, and applicable state and county regulations. Slash pile burning would likely occur in the late-fall (possibly during big-game archery and/or general rifle hunting season) when the adjacent fuels are adequately wet to prevent fire spread.

Road work and logging activities would comply with Montana Forestry BMPs, the Montana Streamside Management Zone law, and the Montana Stream Protection Act. To minimize the spread of noxious weeds, all equipment would be cleaned and inspected by FWP before moving onto the FWP lands. Undesirable exposed bare mineral soils would be reseeded immediately, and any weed infestations would be treated with herbicides indefinitely through annual WMA weed management efforts.

Broadcast burning may 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 Montana Department of Natural Resources and Conservation and/or with qualified contractors prior to implementing burns.

Unit Prescriptions

Stand Type 1 – Commercial thinning:

- Suppressed overstory trees (greater than 5 inches DBH) would be removed around dominant/co-dominant overstory trees. Crown health would be the primary consideration for removal. Trees with thinning crowns and low crown ratios (less than 30% live crown) would be removed to favor trees with dense crowns and higher crown ratios. Western larch and ponderosa pine would be favored to leave over Douglas-fir, lodgepole pine, and subalpine fir. Overstory trees would be retained in a clumpy, variable pattern to maintain the natural character of the stand. The average density would be approximately 70 basal area per acre (BA) but would vary from 40 BA/ac to 120 BA/ac. Higher retention (80 to 120 BA/ac) would be prescribed in draws, benches, and north-east aspects. Lower retention (40 to 60 BA/ac) would be prescribed on south-west aspects and convex slopes. Openings would be created within and up to 100 feet around aspen clones. Old, large diameter western larch and ponderosa pine would be left around aspen clones. Some large diameter trees may be girdled and left to die, creating snags and, when they eventually fall down, could become grouse drumming logs. Recent bark beetle infested Douglas-fir, up to 25 inches DBH, would be removed. Otherwise, snags greater than 16 inches DBH; trees with visible nesting cavities; and trees with dead, deformed, or multiple tops would be retained for their value as wildlife trees. Heavier retention may be applied around snags and dead-top trees with high value for cavity nesting to buffer trees from wind and maintain ladders for fledgling birds to move from the ground up into surrounding trees. Approximately 5 to 10 tons per acre of large, downed woody debris would be retained in a variable pattern throughout the treatment units. Logs larger than 18 inches diameter at the large end would be retained, as well as logs that are rotten and/or partially embedded in the ground.

- Understory trees (less than 5 inches DBH) would be removed below the dripline of overstory trees and would be thinned to a variable spacing in canopy gaps. Western larch and ponderosa pine would be favored over Douglas-fir, lodgepole pine, and subalpine fir. In general, the largest trees (greatest DBH, tallest) with the highest crown ratio would be retained and relatively smaller trees with lower crown ratios would be cut. The average density would be approximately 50 TPA with higher retention in draws, benches, and north-east aspects and lower retention on south-west aspects and convex slopes.

Stand Type 2 – Commercial/pre-commercial thinning:

- Overstory trees (greater than 8 inches DBH) with fading crowns would be removed in favor of vigorously growing understory trees. The residual overstory left from past timber harvesting is clumpy, scattered, and typically of poor timber quality (also known as cull trees). Douglas-fir is the primary overstory species, however occasionally healthy western larch and ponderosa pine seed trees were left but the density varies across stand type 2 from 0 trees per acre up to 10 trees per acre. Where healthy western larch and ponderosa pine occur in the overstory, they would be retained. Openings would be created within and up to 100 feet around aspen clones. Recent bark beetle infested Douglas-fir, up to 25 inches DBH, would be removed. Otherwise, snags greater than 16 inches DBH; trees with visible nesting cavities; and trees with dead, deformed, or multiple tops would be retained for their value as wildlife trees. Heavier retention may be applied around snags and dead-top trees with high value for cavity nesting to buffer trees from wind and maintain ladders for fledgling birds to move from the ground up into surrounding trees. Approximately 5 to 10 tons per acre of large, downed woody debris would be retained in a variable pattern throughout the treatment units. Logs larger than 18 inches diameter at the large end would be retained, as well as logs that are rotten and/or partially embedded in the ground.

- Understory trees (less than 8 inches DBH) would be thinned to a variable spacing, averaging 10 to 20 feet between tree stems. Crown health would be the primary consideration for removal. Trees with thinning crowns and low crown ratios (less than 50% live crown) would be removed to favor trees with dense crowns and higher crown ratios. Where crown health is equal, species preference would be the

second consideration. Species preference would be: hardwoods (i.e. cottonwood, quaking aspen) > western larch > ponderosa pine > Douglas-fir > Engelmann spruce > lodgepole pine > subalpine fir.

General Guidance

1. Wildlife habitat comes first.
2. 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 on north aspects or in the steeper draws.
3. Thinning patterns would result in an irregular mosaic with relatively short sight distances.
4. Designated cut-trees would be marked or 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 to minimize impacts to native rangeland.
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 grass/shrublands is encouraged in winter, when the ground is frozen and snow-covered and less likely to be damaged by logging activities.
7. Timber harvest would not occur during the general big game hunting season or on weekends during archery season.
8. FWP would require contractors to post signage while activities are ongoing to minimize impacts to trail users and recreationists.
9. In-woods operations would be avoided during periods of high bird-nesting activity (March 15 through July 15).
10. Timber harvest and road work would comply with Montana Forestry Best Management Practices (BMPs), the Montana Streamside Management Zone law, and the Montana Stream Protection Act.
11. Control of noxious weeds would be included as part of the treatments.
12. No increase in road density would occur over the long-term.

Affected Area / Location of Proposed Project

The BCWMA is located in the Blackfoot Valley of west-central Montana, in Powell County, lying on the southern end of the Crown of the Continent Ecosystem. The Ovando Mountain Unit of the BCWMA is comprised of two distinct parcels; approximately 5,600-acres on the south facing slopes of Ovando and Elk Mountains and approximately 1,100 acres on the valley floor south of Doney Lake. The nearest communities are Ovando, Lincoln, and Seeley Lake. The farming, ranching and recreation/tourism industries support the local economy. Missoula is the nearest major population center, located about 50 air-miles west of the Ovando Mountain Unit of the BCWMA.

Ovando Mountain, at 7,799-feet in elevation, is the main topographic feature within the Ovando Mountain Unit of the BCWMA. Dick Creek, Warren Creek, Spring Creek, and several unnamed perennial streams flow through the property. The Blackfoot River is the principal watershed of the Ovando Mountain Unit of the BCWMA.

FWP acquired the majority of the Ovando Mountain Unit of the BCWMA through a series of purchases and land exchanges occurring between 1957 and 1965. An additional 2,600-acre parcel was added in 2009. The Management Plan for the BCWMA (on file at FWP, Region 2) states that FWP will manage this property primarily to provide important winter range for elk and deer.

The subject property also lies within the 41,000-acre Blackfoot-Community Conservation Area (BCCA). The BCCA is a collaborative partnership of State and federal agencies, user groups, and local landowners whose 15-member Council meets monthly to guide collaborative management of the 41,000-acre area; FWP, DNRC, the U.S. Forest Service, the U.S. Fish and Wildlife Service, and the Blackfoot Challenge signed a Memorandum of Understanding (MOU) formalizing their commitment to collaboratively manage the BCCA consistent with the following mission:

> *Develop a working landscape that balances ecological diversity with local economic sustainability for the future benefit of the Blackfoot Watershed Community. Management will entail activities that seek to conserve, enhance and maintain a balance of wildlife habitat, wetlands, water, grasslands and timber resources with traditional uses including hunting, recreation, agriculture, and forestry. These shared values for the land will be complimented through working cooperatively with the surrounding agency and private landowners.*

This project has been presented to the BCCA Forestry Working Group and FWP worked closely with Blackfoot-Challenge land steward, Brad Weltzien, in developing the project and coordinating access to the project area.

- Legal Description
    - Latitude/Longitude: 47.05662, -113.02825
    - Section, Township, and Range: Township 15 North, Range 12 West, Sections 1, 2 & 12 Township 15 North, Range 11 West, Sections 7, 8, 9, 17 & 18. Project is located within the Ovando Mountain Unit of the Blackfoot- Clearwater Wildlife Management Area (Figures 3 and 4)
    - Town/City, County, Montana: Ovando, Powell, MONTANA
- Location Map

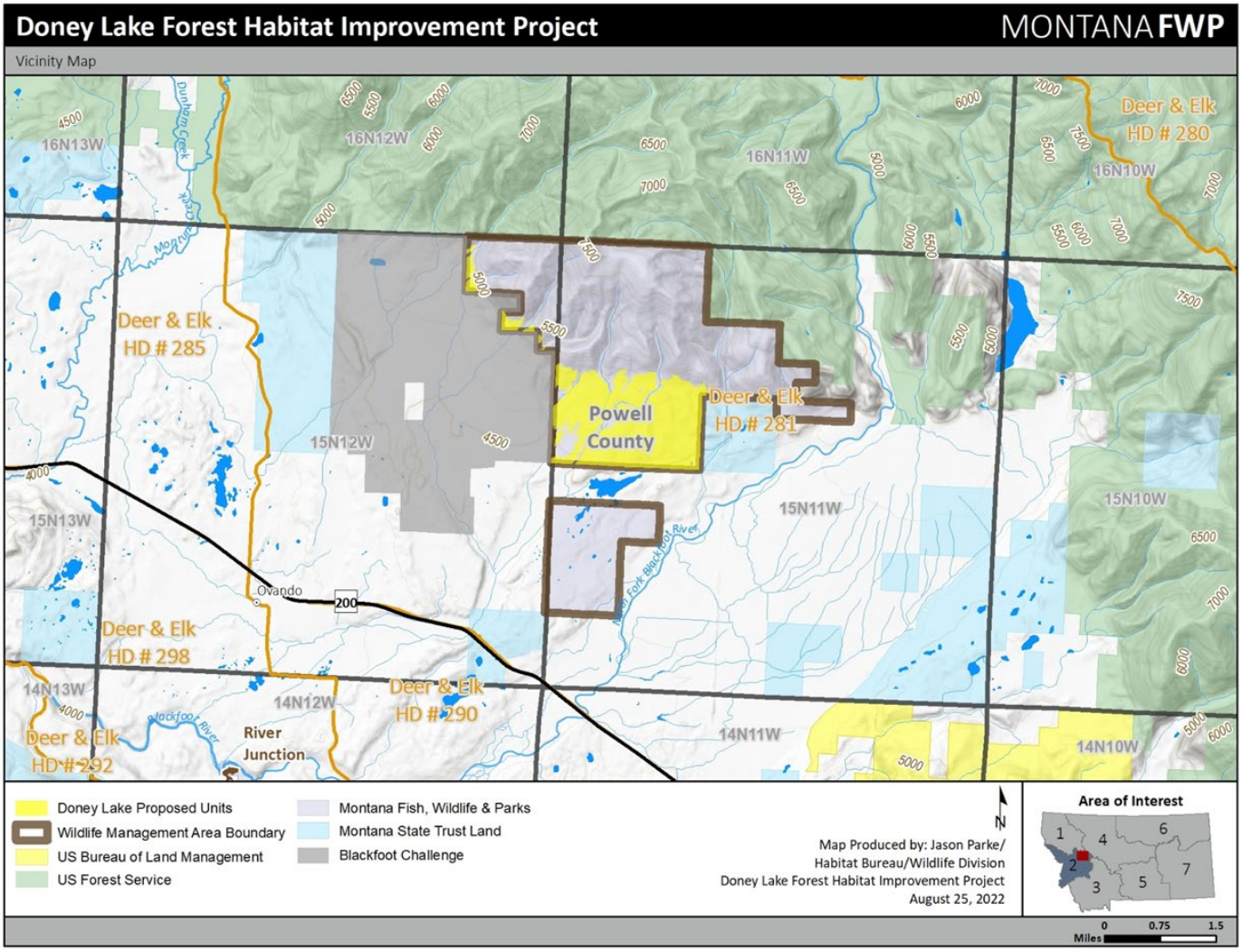

Figure 3. Ovando Mountain Unit of the Blackfoot-Clearwater Wildlife Management Area and vicinity

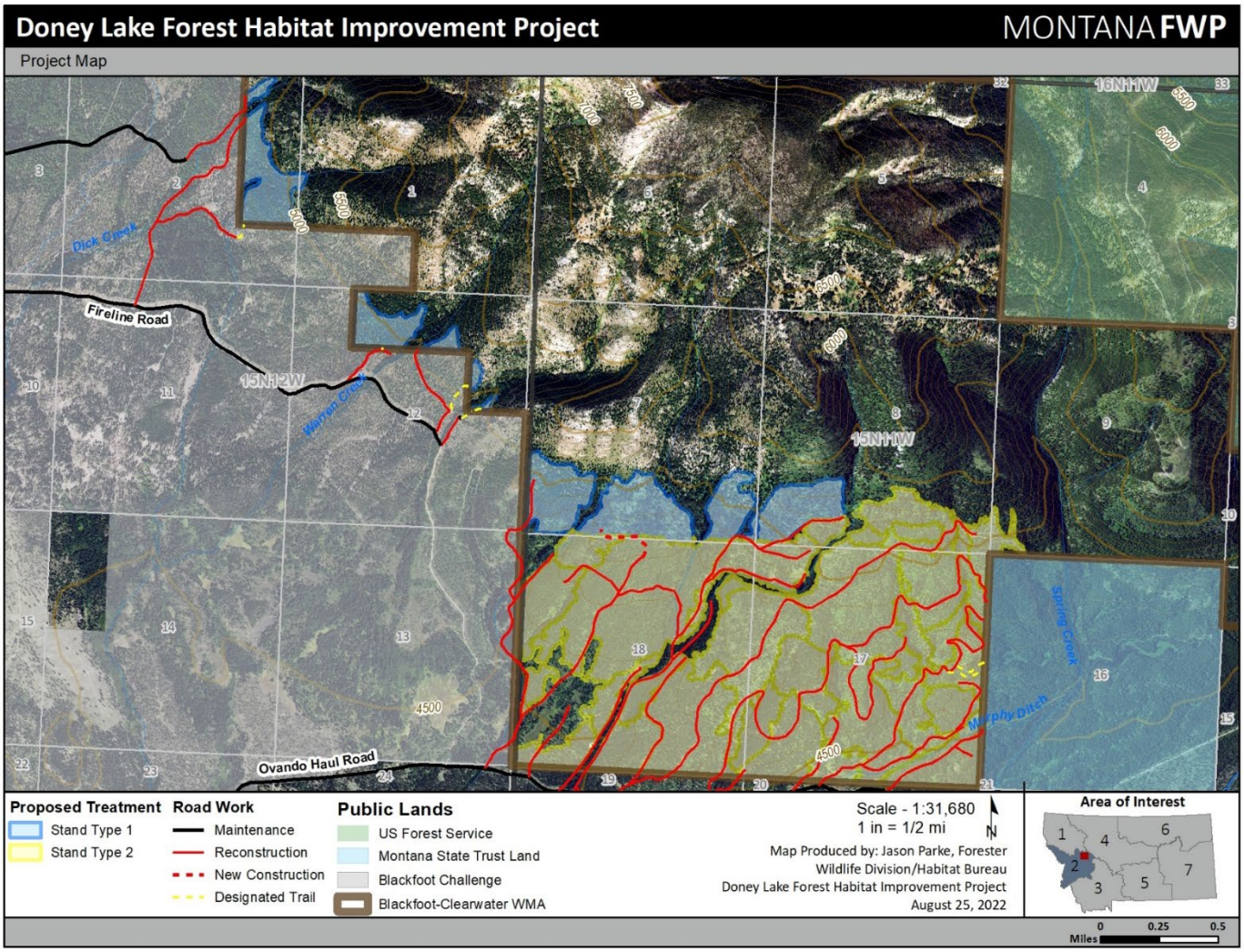

Figure 4. Doney Lake Forest Habitat Improvement project map.

III. Purpose and Need

The EA must include a description of the benefits and purpose of the proposed project. ARM 12.2.432(3)(b). Benefits of the proposed project refer to benefits to the resource, public, department, state, and/or other.

Project Purpose and Benefits:

FWP is proposing to conduct forested habitat improvement treatments on approximately 1,500 acres on the Ovando Mountain Unit of the BCWMA for the purpose of:

- improving forage production for big game;
- promoting a stand structure that would allow fire to burn at low-severity appropriate for the habitat type;
- promoting aspen growth and regeneration;
- reducing susceptibility to bark beetle infestation and armillaria root disease; 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 legislatively established FWP forest management account to implement further forest management project pursuant to § 87-1-201 (9)(a)(iv), MCA.

Forest habitat improvement treatments are expected to benefit:

- big game winter range and foraging opportunities;
- a variety of nongame wildlife including Species of Concern (SWAP 2015) that are dependent on old-growth ponderosa pine and western larch stands as well as riparian areas and aspen stands;
- local communities, adjacent landowners, and state and local fire agencies involved in fire suppression that may be affected in the event of a wildfire;
- forestry contractors and the local timber industry; and
- compatible public use opportunities.

If approved by the Montana Fish and Wildlife Commission, the work would begin as early as July 2023. Forest management activities would be avoided during the general rifle season, with efforts to minimize impacts during archery season (such as no logging on weekends

If FWP prepared a cost/benefit analysis before completion of the EA, the EA must contain the cost/benefit analysis or a reference to it. ARM 12.2.432(3)(b).

	Yes*	No
Was a cost/benefit analysis prepared for the proposed project?	☐	☒

* If yes, a copy of the cost/benefit analysis prepared for the proposed project is included in Attachment A to this Draft EA

IV. Other Agency Regulatory Responsibilities

FWP must list any federal, state, and/or local agencies that have overlapping or additional jurisdiction, or environmental review responsibility for the proposed project, as well as permits, licenses, and other required authorizations. ARM 12.2.432(3)(c).

A list of other required local, state, and federal approvals, such as permits, certificates, and/or licenses from affected agencies is included in **Table 2** below. **Table 2** provides a summary of state requirements but does not necessarily represent a complete and comprehensive list of all permits, certificates, or approvals needed. Rather, **Table 2** lists the primary state agencies with regulatory responsibilities, the applicable regulation(s) and the purpose of the regulation(s). Agency decision-making is governed by state and federal laws, including statutes, rules, and regulations, that form the legal basis for the conditions the proposed project must meet to obtain necessary permits, certificates, licenses, or other approvals. Further, these laws set forth the conditions under which each agency could deny the necessary approvals.

Table 2: Federal, State, and/or Local Regulatory Responsibilities

Agency	Type of Authorization (permit, license, stipulation, other)	Purpose
Montana Fish, Wildlife & Parks	SPA 124 Permit	Protect and preserve fish and wildlife resources and maintain streams and rivers in their natural or existing state.
Montana Department of Environmental Quality	DEQ 318 Permit	Provides a short-term water quality turbidity standard to protect water quality by minimizing sedimentation
Powell County	Burn Permit	Protect the affected airshed from impacts associated with prescribed burning activities

Funding:

Agency Name: Montana Fish, Wildlife & Parks

Funding Amount: Costs to FWP for these forest habitat improvement treatments are expected to be partially offset by the sale of merchantable timber byproduct. FWP's appraisal of timber values, logging costs, and follow-up treatment are estimated to be approximately $500,000. The actual cost will depend on the value of logs at the time of contract advertisement and other factors that vary over time. FWP would also pursue grant funding through various sources.

V. List of Mitigations, Stipulations

Mitigations, stipulations, and other *enforceable* controls required by FWP, or another agency, may be relied upon to limit potential impacts associated with a proposed Project. The table below lists and evaluates enforceable conditions FWP may rely on to limit potential impacts associated with the proposed Project. ARM 12.2.432(3)(g).

Table 3: Listing and Evaluation of Enforceable Mitigations Limiting Impacts

Are enforceable controls limiting potential impacts of the proposed action? If not, no further evaluation is needed.			**Yes ☒**	**No ☐**
If yes, are these controls being relied upon to limit impacts below the level of significance? If yes, list the enforceable control(s) below			**Yes ☒**	**No ☐**
Enforceable Control	**Responsible Agency**	**Authority (Rule, Permit, Stipulation, Other)**	**Effect of Enforceable Control on Proposed Project**	
Stream Protection	FWP	Stream Protection Act	Prevent effects to fish and wildlife resources, particularly fishing waters of the state.	
Streamside Management Zone	DNRC	Streamside Management Zone Law	Protect and maintain function of streamside management zones.	
Cultural resource protection	SHPO	Antiquities Law	Avoid actions that substantially alter heritage properties or paleontological remains on lands owned by the state.	
Noxious weed control	Powell County, FWP	Noxious Weed Law	Establishes noxious weed management agreements and programs.	
Smoke management	DEQ/Powell County	Air Quality Law	Achieve and maintain levels of air quality that will protect human health and safety; prevent injury to plant and animal life and property; foster comfort and convenience of the people; promote	

			economic and social development; and facilitate the enjoyment of the natural attractions of the state.
Forest Management Mandate	FWP	Forest Management Statutes - 87-1-201(9)(a)(iv), 87-1-621, & 87-1-622	Requires FWP to manage its forested lands for wildlife habitat enhancement, hazardous fuels mitigation, and bark beetle infestation--based on a forest management plan and sustained yield--and to deposit any revenue generated from timber sales into the legislatively-created forest management account for use towards future forestry projects.

VI. Alternatives Considered

In addition to the proposed Project, and as required by MEPA, FWP analyzes the "no-action" alternative in this EA. Under the "no-action" alternative, FWP would not do the proposed project.

Under the “No Action” alternative, the proposed project would not occur. Therefore, no additional impacts to the physical environment or human population in the analysis area would occur. The “No Action” alternative forms the baseline from which the potential impacts of the proposed Project can be measured.

	Yes*	No
Were any additional alternatives considered and dismissed?	☐	☒

* If yes, a list and description of the other alternatives considered, but not carried forward for detailed review is included below

VII. Summary of Potential Impacts of the Proposed Project on the Physical Environment and Human Population

The impacts analysis identifies and evaluates **direct**, **secondary**, and **cumulative impacts**.

- **Direct impacts** are those that occur at the same time and place as the action that triggers the effect.
- **Secondary impacts** “are further impacts to the human environment that may be stimulated or induced by or otherwise result from a direct impact of the action.” ARM 12.2.429(18).
- **Cumulative impacts** “means the collective impacts on the human environment of the proposed action when considered in conjunction with other past and present actions related to the proposed action by location or generic type. Related future actions must also be considered when these actions are under concurrent consideration by any state agency through pre-impact statement studies, separate impact statement evaluation, or permit processing procedures.” ARM 12.2.429(7).

Where impacts are expected to occur, the impact analysis estimates the **extent, duration, frequency,** and **severity** of the impact. The duration of an impact is quantified as follows:

- **Short-Term**: impacts that would not last longer than the proposed project.
- **Long-Term**: impacts that would remain or occur following the proposed project.

The severity of an impact is measured using the following:

- **No Impact**: there would be no change from current conditions.
- **Negligible**: an adverse or beneficial effect would occur but would be at the lowest levels of detection.
- **Minor**: the effect would be noticeable but would be relatively small and would not affect the function or integrity of the resource.
- **Moderate**: the effect would be easily identifiable and would change the function or integrity of the resource.
- **Major**: the effect would irretrievably alter the resource.

Some impacts may require mitigation. As defined in ARM 12.2.429, mitigation means:

- Avoiding an impact by not taking a certain action or parts of a project;
- Minimizing impacts by limiting the degree or magnitude of a project and its implementation;
- Rectifying an impact by repairing, rehabilitating, or restoring the affected environment; or
- Reducing or eliminating an impact over time by preservation and maintenance operations during the life of a project or the time period thereafter that an impact continues.

A list of any mitigation strategies including, but not limited to, design, enforceable controls or stipulations, or both, as applicable to the proposed project is included in **Section VI** above.

FWP must analyze impacts to the physical and human environment for each alternative considered. The proposed project considered the following alternatives:

Alternative 1: No Action

Under the "No Action" alternative, the proposed project would not occur. Therefore, no additional impacts to the physical environment or human population in the analysis area would occur. The "No Action" alternative forms the baseline from which the potential impacts of the proposed Project can be measured.

Alternative 2: Proposed Action

See Table 4 and Table 5, below.

Table 4: Impacts to the Physical Environment – Alternative 2: Proposed Project

PHYSICAL ENVIRONMENT	Duration of Impact			Severity of Impact					
Resource	None	Short-Term	Long-Term	None	Negligible	Minor	Moderate	Major	Summary of Potential Direct, Secondary, and Cumulative Impacts and Mitigation Measures
Terrestrial, avian, and aquatic life and habitats	☐	☒	☒	☐	☐	☒	☐	☐	Short-term: 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 15 through October 15) 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. Any potential short-term impacts would be minor. 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 and deer survival over the long term. Habitat for songbirds, woodpeckers, raptors, small mammals, and amphibians would be enhanced with the improvement of riparian communities and a return to more historic stand conditions. 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 alteration due to uncharacteristic stand replacement would be

									lessened. Any potential long-term impacts would be minor and generally beneficial to the affected area. Three federally Threatened species occur in the vicinity of the project area: *Canada lynx* – Stands proposed for treatment are located on low-elevation dry sites with moderate to low winter-snow depths. There are no records of lynx on or immediately adjacent to the project area and forest composition is not typical for lynx occupancy. Therefore, FWP does not expect any impact to the Canada Lynx associated with the proposed action. *Grizzly bear* – Grizzlies do occupy the Ovando Mountain Unit of the Blackfoot-Clearwater WMA and the project area. They are most sensitive to disturbance during the spring post-emergence period, whereas treatments would primarily take place during late summer, fall, and winter. The project area is already managed for low open-road densities and seasonal road use restrictions. There would be an additional 0.3 mile increase in closed-to-public-motorized-use road densities as a result of this project. Contractors would not reside on-site and would comply with existing Food Storage Orders. Following stand treatments, FWP expects greater serviceberry, chokecherry, hawthorn, huckleberry and forb production; these are all important summer/fall forage species for both black and grizzly bears. Therefore, FWP expects any impacts associated with the proposed action would be both short and long-term, minor, and generally beneficial to the grizzly bear population in the affected area. *Bull Trout* – Bull trout are present in waterbodies adjacent to and downstream of the project area. Treatments are proposed in the upper Dick Creek drainage, which is a tributary to Monture Creek. Monture Creek supports migratory bull trout spawning and rearing. A Stand Type 2

									treatment is proposed within a small portion of the Spring Creek drainage in Section 9. Bull trout reproduction has not been documented within the Spring Creek system, but it provides downstream rearing opportunities for juvenile bull trout produced in the North Fork of the Blackfoot River. Therefore, FWP does not expect any impact to bull trout populations or bull trout habitat associated with the proposed action.
Water quality, quantity, and distribution	☐	☒	☐	☐	☐	☒	☐	☐	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.
Geology	☒	☐	☐	☒	☐	☐	☐	☐	The proposed action would not impact any significant geological formations in the affected area; therefore, no impacts to geology would be expected as a result of the proposed action.
Soil quality, stability, and moisture	☐	☒	☐	☐	☐	☒	☐	☐	Approximately 0.3 miles of new road would be constructed, 20.1 miles of existing roads would be reconstructed, and 14.0 miles of road would be maintained 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. Minor soil impacts are expected where mechanized equipment operates off roads and where slash accumulations are burned. These impacts would be concentrated on skid trails and slash pile burn scars which is expected to be a small proportion of the area treated. To minimize these impacts, FWP would require mechanized equipment operating off-roads to comply with Montana Forestry BMPs and only operate under relatively dry, frozen or snow-covered conditions. Slash, waterbars, and/or grass seed may be applied to disturbed areas, if needed, to reduce the potential for soil erosion. Any impacts from the proposed action to soil quality, stability, and moisture would be short-term and minor.

Vegetation cover, quantity, and quality	☐	☒	☒	☐	☐	☒	☐	☐	The project intent is to restore and diversify vegetation to benefit wildlife habitat conditions and reduce the susceptibility of the subject stand to high-severity wildfire. The proposed action would thin forest stands, 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. A more detailed description of proposed treatments is included in Section II, Background and Description of Proposed Project. 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. Any impacts to vegetation cover, quantity, and quality would be short and long-term, minor, intentional, and generally beneficial.
Aesthetics	☐	☒	☒	☐	☐	☒	☐	☐	Some treated stands would be visible from the open road system. The project's intent is to restore stands to more closely approximate historic conditions. The risk of catastrophic wildfire and beetle damage, which would also modify the scenic vista, would be reduced. Any impacts to the aesthetic nature of the area would be short and long-term, minor, and generally beneficial.
Air quality	☐	☒	☐	☐	☐	☒	☐	☐	Much of the slash and residual byproduct generated during the course of the proposed treatments would be burned on-site. Broadcast burning would also generate smoke and have the potential to affect air quality. FWP would comply with Airshed 3b smoke management restrictions, Powell County open burning timing restrictions, and comply with inter-agency slash treatment regulations. Any impacts to air quality in the area would be short-term, limited by applicable regulations, and minor.
Unique, endangered, fragile, or limited	☐	☒	☒	☐	☐	☒	☐	☐	Three federally Threatened species occur in the vicinity of the project area:

environmental resources									*Canada lynx* – Stands proposed for treatment are located on low-elevation dry sites with moderate to low winter-snow depths. There are no records of lynx on or immediately adjacent to the project area and forest composition is not typical for lynx occupancy. Therefore, FWP does not expect any impact to the Canada Lynx associated with the proposed action. *Grizzly bear* – Grizzlies do occupy the Ovando Mountain Unit of the Blackfoot-Clearwater WMA and the project area. They are most sensitive to disturbance during the spring post-emergence period, whereas treatments would primarily take place during late summer, fall, and winter. The project area is already managed for low open-road densities and seasonal road use restrictions. There would be an additional 0.3 mile increase in closed-to-public-motorized-use road densities as a result of this project. Contractors would not reside on-site and would comply with existing Food Storage Orders. Following stand treatments, FWP expects greater serviceberry, chokecherry, hawthorn, huckleberry and forb production; these are all important summer/fall forage species for both black and grizzly bears. Therefore, FWP expects any impacts associated with the proposed action would be both short and long-term, minor, and generally beneficial to the grizzly bear population in the affected area. *Bull Trout* – Bull trout are present in waterbodies adjacent to and downstream of the project area. Treatments are proposed in the upper Dick Creek drainage, which is a tributary to Monture Creek. Monture Creek supports migratory bull trout spawning and rearing. A Stand Type 2 treatment is proposed within a small portion of the Spring Creek drainage in Section 9. Bull trout reproduction has not been documented within the Spring Creek system, but it provides downstream rearing opportunities for juvenile bull trout produced in the North Fork of the Blackfoot

									River. Therefore, FWP does not expect any impact to bull trout populations or bull trout habitat associated with the proposed action.
Historical and archaeological sites	☒	☐	☐	☒	☐	☐	☐	☐	See attached letter from the Montana State Historic Preservation Office (SHPO). Prior to implementation, FWP would hire a cultural resource consultant to perform an inventory. If cultural resources warranted for protection are discovered, FWP would apply protections to avoid disturbing these sites. If cultural artifacts were to be discovered during implementation of the project, FWP would cease activities and contact the State Historic Preservation Office, and potentially adjust the project design to avoid impacting these resources. At this time, no impacts to historical and archaeological sites in the affected area would be expected because of the proposed action.
Demands on environmental resources of land, water, air, and energy	☐	☒	☐	☐	☒	☐	☐	☐	Fuel and electricity would be required to treat stands and process the timber byproduct. Roads and other infrastructure that would be used by contractors were designed (and would be maintained) to support commercial logging and log transport activities. Any impacts to demands on environmental resources of land, water, air, and energy would be short-term and minor.

Table 5: Impacts to the Human Population

HUMAN POPULATION	Duration of Impact			Severity of Impact					
Resource	None	Short-Term	Long-Term	None	Negligible	Minor	Moderate	Major	Summary of Potential Direct, Secondary, and Cumulative Impacts and Mitigation Measures
Social structures and mores	☒	☐	☐	☒	☐	☐	☐	☐	The purpose of the proposed project is to improve wildlife habitat to more natural conditions supportive of local elk and deer populations. In addition, the majority of land impacted by the proposed project is public, including national forests, a wilderness area, and a WMA. The proposed project would not impact current land use; therefore, the proposed project would not impact any pre-project social structures, customs, values, and conventions.
Cultural uniqueness and diversity	☐	☐	☒	☐	☐	☒	☐	☐	Minor, long-term and beneficial impacts to the cultural uniqueness or diversity of the area affected by the proposed project would be expected because the proposed project constitutes forest management and restoration activities to support local elk and deer populations through habitat improvement. Deer and elk are culturally important to most Montana residents as well as individuals from across the country and world. When completed, the proposed project would restore the natural features of the affected forest thereby improving habitat for deer, elk, and other animals utilizing the affected area. Proposed forest management activities would restore habitat and improve conditions for these culturally important animals to exist and thrive for present and future generations. Any impacts to cultural uniqueness and diversity would be long-term, minor, and beneficial.
Access to and quality of recreational and wilderness activities	☐	☒	☐	☐	☒	☐	☐	☐	No closures would occur as a result of the project. Signage would be placed near trailheads and the entrance of the WMA to alert recreationists of logging activity in the affected area during the proposed project. Logging and related forest management activities could impact the quality of the recreational experience for some

									individuals. Once the proposed project is completed no additional impacts would occur. Therefore, any adverse impact to access and the quality of recreational and wilderness activities in the affected area would be short-term and negligible.
Local and state tax base and tax revenues	☐	☒	☐	☐	☐	☒	☐	☐	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. Any impacts to the local and state tax base and tax revenue would be short-term and minor, lasting only as long as the proposed project.
Agricultural or Industrial production	☐	☒	☐	☐	☐	☒	☐	☐	It is estimated that the project will generate 2.2 million board feet of sawlogs and 5,000 tons of non-sawlog material that will be sold to local mills in western Montana. Any impacts to agricultural or industrial production associated with timber sales would be short-term and minor.
Human health and safety	☐	☒	☐	☐	☐	☒	☐	☐	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 (MCA), and any regulations promulgated to implement the affected statutes. Any impacts to human health and safety would be short-term and minor.
Quantity and distribution of employment	☐	☒	☐	☐	☐	☒	☐	☐	Jobs would be created or sustained by project work while the project is ongoing. According to the Montana Bureau of Business and Economic Research (Sorenson et al. 2016), the harvest of a million board-feet of timber equates to roughly 10 direct jobs (in forestry, logging, wood and paper product manufacturing, and forestry support activities) annually. Any impact to the quantity and distribution of employment in the affected area would be

									beneficial, short-term and minor, lasting only as long as the proposed project.
Distribution and density of population and housing	☐	☒	☐	☐	☒	☐	☐	☐	The proposed project constitutes forest management and restoration activities to promote habitat improvement for elk and deer in the affected area. During forest management activities, FWP would use contractors for certain aspects of forest management, such as tree marking and removal activities, and, while local contractors are considered for such practices the proposed project could bring additional, non-local contractors to the affected area. Any impact to the local distribution and density of population and housing would be short-term and negligible, lasting only as long as the proposed project.
Demands for government services	☐	☒	☐	☐	☒	☒	☐	☐	The proposed project constitutes forest management and restoration activities to promote habitat improvement for elk and deer in the affected area. FWP and other public land managers, along with private contractors, would conduct forest management activities under the proposed project. FWP and other government staff would perform the necessary work and manage contracts to allow private contractors to do the work. These types of activities are typical in the affected area. Therefore, any impact to demands for government services would be short-term, negligible or minor, and consistent with current impacts in the affected area.
Industrial, agricultural, and commercial activity	☐	☒	☐	☐	☐	☒	☐	☐	It is estimated that the project will generate 2.2 million board feet of sawlogs and 5,000 tons of non-sawlog material that will be sold to local mills in western Montana. Any impacts to industrial, agricultural, and commercial activity associated with timber sales would be short-term and minor.
Locally adopted environmental plans and goals	☐	☒	☐	☐	☐	☒	☐	☐	See Section II, Background and Description of Proposed Project, above, for a detailed list of affected local environmental plans and goals. Local plans and goals affected by the proposed project include: BCWMA Management Plan; Montana Fish, Wildlife & Parks Forest

									Management Plan[2] (2018); Montana Statewide Elk Management Plan[3] (2005); and the Montana State Wildlife Action Plan[4] (2015). Any impacts to locally adopted environmental plans and goals would be short-term and minor.
Other appropriate social and economic circumstances	☒	☐	☐	☒	☐	☐	☐	☐	At this time, FWP is not aware of any other appropriate social and economic circumstances that would be impacted by the proposed project. Any impacts from the proposed project would be consistent with current practices in the affected area.

Table 6: Determining the Significance of Impacts on the Quality of the Human Environment

If the EA identifies impacts associated with the proposed project FWP must determine the significance of the impacts. ARM 12.2.431. This determination forms the basis for FWP's decision as to whether it is necessary to prepare an environmental impact statement. According to the applicable requirements of ARM 12.2.431, FWP must consider the criteria identified in this table to determine the significance of each impact on the quality of the human environment. The significance determination is made by giving weight to these criteria in their totality. For example, impacts identified as moderate or major in severity may not be significant if the duration is short-term. However, moderate or major impacts of short-term duration may be significant if the quantity and quality of the resource is limited and/or the resource is unique or fragile. Further, moderate or major impacts to a resource may not be significant if the quantity of that resource is high or the quality of the resource is not unique or fragile.	
Criteria Used to Determine Significance	
1	The **severity, duration, geographic extent,** and **frequency** of the occurrence of the impact **"Severity"** describes the density of the potential impact, while **"extent"** describes the area where the impact will likely occur, e.g., a project may propagate ten noxious weeds on a surface area of 1 square foot. Here, the impact may be high in severity, but over a low extent. In contrast, if ten noxious weeds were distributed over ten acres, there may be low severity over a larger extent. **"Duration"** describes the time period during which an impact may occur, while **"frequency"** describes how often the impact may occur, e.g., an operation that uses lights to mine at night may have frequent lighting impacts during one season (duration).
2	The probability that the impact will occur if the proposed project occurs; or conversely, reasonable assurance in keeping with the potential severity of an impact that the impact will not occur
3	Growth-inducing or growth-inhibiting aspects of the impact, including the relationship or contribution of the impact to cumulative impacts
4	The quantity and quality of each environmental resource or value that would be affected, including the uniqueness and fragility of those resources and values
5	The importance to the state and to society of each environmental resource or value that would be affected
6	Any precedent that would be set as a result of an impact of the proposed project that would commit FWP to future actions with significant impacts or a decision in principle about such future actions
7	Potential conflict with local, state, or federal laws, requirements, or formal plans

VIII. Private Property Impact Analysis (Takings)

The 54th Montana Legislature enacted the Private Property Assessment Act, now found at § 2-10-101. The intent was to establish an orderly and consistent process by which state agencies evaluate their proposed projects under the "Takings Clauses" of the United States and Montana Constitutions. The Takings Clause of the Fifth Amendment of the United States Constitution provides: "nor shall private property be taken for public use, without just compensation." Similarly, Article II, Section 29 of the Montana Constitution provides: "Private property shall not be taken or damaged for public use without just compensation..."

The Private Property Assessment Act applies to proposed agency projects pertaining to land or water management or to some other environmental matter that, if adopted and enforced without due process of law and just compensation, would constitute a deprivation of private property in violation of the United States or Montana Constitutions.

The Montana State Attorney General's Office has developed guidelines for use by state agencies to assess the impact of a proposed agency project on private property. The assessment process includes a careful review of all issues identified in the Attorney General's guidance document (Montana Department of Justice 1997). If the use of the guidelines and checklist indicates that a proposed agency project has taking or damaging implications, the agency must prepare an impact assessment in accordance with Section 5 of the Private Property Assessment Act.

Table 7: Private Property Assessment (Takings)

		Yes	No
Is FWP regulating the use of private property under a regulatory statute adopted pursuant to the police power of the state? (Property management, grants of financial assistance, and the exercise of the power of eminent domain are not within this category.) If not, no further analysis is required		☐	☒
Does the proposed regulatory action restrict the use of the regulated person's private property? If not, no further analysis is required.		☐	☒
Does FWP have legal discretion to impose or not impose the proposed restriction or discretion as to how the restriction will be imposed? If not, no further analysis is required		☐	☒
If so, FWP must determine if there are alternatives that would reduce, minimize, or eliminate the restriction on the use of private property, and analyze such alternatives. Have alternatives been considered and/or analyzed? If so, describe below:		☐	☐
PRIVATE PROPERTY ASSESMENT ACT (PPAA)			
Does the Proposed Action Have Takings Implications under the PPAA?	**Question #**	**Yes**	**No**
Does the project pertain to land or water management or environmental regulations affecting private property or water rights?	1	☐	☒
Does the action result in either a permanent or an indefinite physical occupation of private property?	2	☐	☒
Does the action deprive the owner of all economically viable uses of the property?	3	☐	☒
Does the action require a property owner to dedicate a portion of property or to grant an easement? (If answer is NO, skip questions 4a and 4b and continue with question 5.)	4	☐	☒
Is there a reasonable, specific connection between the government requirement and legitimate state interest?	4a	☐	☐
Is the government requirement roughly proportional to the impact of the proposed use of the property?	4b	☐	☐
Does the action deny a fundamental attribute of ownership?	5	☐	☒
Does the action have a severe impact of the value of the property?	6	☐	☒
Does the action damage the property by causing some physical disturbance with respect to the property in excess of that sustained by the public general? (If the answer is NO, skip questions 7a-7c.)	7	☐	☒
Is the impact of government action direct, peculiar, and significant?	7a	☐	☐
Has the government action resulted in the property becoming practically inaccessible, waterlogged, or flooded?	7b	☐	☐
Has the government action diminished property values by more than 30% and necessitated the physical taking of adjacent property or property across a public way from the property in question?	7c	☐	☐
Does the proposed action result in taking or damaging implications?		☐	☒
Taking or damaging implications exist if **YES** is checked in response to Question 1 and also to any one or more of the following questions: 2, 3, 4, 6, 7a, 7b, 7c; or if **NO** is checked in response to question 4a or 4b.			

If taking or damaging implications exist, the agency must comply with MCA § 2-10-105 of the PPAA, to include the preparation of a taking or damaging impact assessment. Normally, the preparation of an impact assessment will require consultation with agency legal staff.
Alternatives: The analysis under the Private Property Assessment Act, §§ 2-10-101 through -112, MCA, indicates no impact. FWP does not plan to impose conditions that would restrict the regulated person's use of private property to constitute a taking.

IX. Public Participation

The level of analysis in an EA will vary with the complexity and seriousness of environmental issues associated with a proposed action. The level of public interest will also vary. FWP is responsible for adjusting public review to match these factors (ARM 12.2.433(1)). Because FWP determines the proposed action will result in limited environmental impact, and little public interest has been expressed, FWP determines the following public notice strategy will provide an appropriate level of public review:

- An EA is a public document and may be inspected upon request. Any person may obtain a copy of an EA by making a request to FWP. If the document is out-of-print, a copying charge may be levied (ARM 12.2.433(2)).
- Public notice will be served on the Montana Fish, Wildlife and Parks website at: *https://fwp.mt.gov/aboutfwp/public-comment-opportunities*
- Copies will be distributed to neighboring landowners to ensure their knowledge of the proposed project and opportunity for review and comment on the proposed action.
- FWP maintains a mailing list of persons interested in a particular action or type of action. FWP will notify all interested persons and distribute copies of the EA to those persons for review and comment (ARM 12.2.433(3)).
- FWP will issue public notice in the following newspaper periodical(s) on the date(s) indicated.

Newspaper / Periodical	Date(s) Public Notice Issued
Seeley Swan Pathfinder (Seeley Lake)	January 5th, January 12th, 2023
Silver State Post (Deer Lodge)	January 4th, January 11th, 2023
Independent Record (Helena)	January 5th, January 12th, 2023
Missoulian (Missoula)	January 5th, January 12th, 2023

- Public notice will announce the availability of the EA, summarize its content, and solicit public comment.

    - **Duration of Public Comment Period:** The public comment period begins on the date of publication of legal notice in area newspapers (see above). Written or e-mailed comments will be accepted until 5:00 p.m., MST, on the last day of public comment, as listed below:

      Length of Public Comment Period: 30 days
      Public Comment Period Begins: January 4, 2023
      Public Comment Period Ends: February 4, 2023

      Comments must be addressed to the FWP contact, as listed below.

    - **Where to Mail or Email Comments on the Draft EA:**
      Name: MICHAEL EBINGER
      Email: fwprg22@mt.gov

Mailing Address:
Region 2 FWP
Attn: Doney Lake Forest EA
3201 Spurgin Rd
Missoula, MT 59804

X. Recommendation for Further Environmental Analysis

NO further analysis is needed for the proposed action	☒
FWP must conduct **EIS** level review for the proposed action	☐

XI. EA Preparation and Review

	Name	**Title**
EA prepared by:	Jason Parke	Forester
	Mike Ebinger	Blackfoot Area Wildlife Biologist
	Torrey Ritter	Region 2 Non-game Biologist
	Patrick Uthe	Blackfoot Area Fisheries Biologist
EA reviewed by:	Liz Bradley	Region 2 Wildlife Program Manager

Entities consulted during preparation of the EA:

Montana State Historic Preservation Office
The Blackfoot Challenge

Appendix A

REFERENCES CITED

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Appendix B

DONEY LAKE PROJECT – BLACKFOOT CLEARWATER WMA. SHPO Project #: 2022060202

Big Sky. Big Land. Big History.
Montana
Historical Society

June 3, 2022

Jon Staldine
FWP
1522 9th Ave
Helena MT 59601

RE: DONEY LAKE PROJECT – BLACKFOOT CLEARWATER WMA. SHPO Project #: 2022060202

Dear Mr. Staldine:

I have conducted a file search for the above-cited project located in Sections 2, 12, T15N R12W, and Sections 7, 8, 9, 17, 18, T15N R11W. According to our records there have been no previously recorded sites within the designated search locales. The absence of cultural properties in the area does not mean that they do not exist but rather may reflect the absence of any previous cultural resource inventory in the area, as our records indicated only two. I've attached a list of these reports. If you would like any further information regarding these reports, you may contact me at the number listed below.

It is SHPO's position that any structure over fifty years of age is considered historic and is potentially eligible for listing on the National Register of Historic Places. If any structures are to be altered and are over fifty years old, we would recommend that they be recorded, and a determination of their eligibility be made prior to any disturbance taking place.

Based on the lack of previous inventory and the ground disturbance required by these undertakings we feel that the road work and gravel pit projects have the potential to impact cultural properties. We, therefore, recommend that a cultural resource inventory be conducted in any area where the slope is less than 20%, in order to determine whether or not sites exist and if they will be impacted.

If you have any further questions or comments, you may contact me at (406) 444-7767 or by e-mail at dmurdo@mt.gov. I have attached an invoice for the file search. Thank you for consulting with us.

Sincerely,

Damon Murdo
Cultural Records Manager
State Historic Preservation Office

File: FWP/WILDLIFE/2022