Draft Environmental Assessment

Nevada Lake WMA Forest Habitat Enhancement Project

Region 2
3201 Spurgin Road
Missoula, MT 59804

Montana Fish, Wildlife & Parks

Draft Environmental Assessment
MEPA, NEPA, 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 465 acres of its approximately 1,523-acre Nevada Lake WMA (NLWMA) located SE of Helmville in Powell County. The objective of the proposed forest habitat restoration would be to improve elk winter forage, restore historically open stand conditions dominated by large-diameter ponderosa pine, restore a stand structure that allows fire to burn at the low-severity appropriate for the historic fire regime, recruit ponderosa pine regeneration, and reduce fuel loading. The treatments would enhance aspen habitats, thin understory ingrowth, and improve forest resiliency by reducing fire and beetle infestation risks. Treatments would include salvage logging of mountain pine beetle and spruce budworm infected trees, commercial thinning, fuels reduction (thinning, piling, and burning), prescribed burning, and removal of encroaching conifers within aspen clones. To facilitate timber harvesting and log hauling, an estimated 0.7 miles of new road construction and 3.3 miles of reconstruction would be needed. (Section 8, below, details the proposed action.)

2. Agency authority for the proposed action:

FWP is authorized by State law to own and manage lands as wildlife habitat. The land subject to this proposal is included in the Nevada Lake Wildlife Management Area. 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 NLWMA and other properties. The Montana Fish and Wildlife Commission endorsed this proposal in October 2017, allowing FWP to proceed with further development and analysis of this proposed action, including completion of this Environmental Assessment.

NLWMA Management Plan

FWP manages this property primarily to provide important winter range for elk and deer, as outlined and described in the Interim Management Plan for the NLWMA (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; and
- 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 NLWMA 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 conditions to promote forage quality and quantity, while maintaining components of thermal cover along the drainages' upper slopes. This proposed Project would maintain and enhance forest understory grasses, woody browse and aspen stands that historically provided winter forage for mule deer and elk but have been severely degraded by conifer expansion and fire suppression over the last 90 years.

87-1-201(9)(iv) and 87-1-621, MCA (Montana Code Annotated)
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 stand treatments proposed and described in this Environmental Assessment were specifically identified as habitat improvement priorities. The Montana Legislature has provided FWP the means to accrue revenue from forest management activities and spend that revenue to fund further management projects on its forested lands.

The Montana Statewide Elk Management Plan[1] (2004)
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 conifers encroaching on historically open and fire-adapted ponderosa pine forest, increasing recruitment of grass and woody browse understory in treated stands, removing mountain pine beetle-infected ponderosa pine and spruce budworm-damaged Douglas-fir, and reducing the probability of intense stand replacement fire events on the WMA.

The Montana State Wildlife Action Plan[2] (2015)
The Montana State Wildlife Action Plan identifies community types, Focal Areas, and species in Montana with significant issues that warrant conservation attention. The plan is not meant to be an FWP plan, but a plan to guide conservation throughout Montana based on a Tiered prioritization of community types and threats to those community types.

3. Name of project: Nevada Lake WMA Forest Habitat Improvement Project

4. Anticipated Schedule (contingent on MEPA Decision Notice and Fish & Wildlife Commission Approval):
Estimated Commencement Date: 08/01/2018
Estimated Completion Date: 09/01/2020
Current Status of Project Design (% complete): 70%

5. Location affected by proposed action (county; township, range, section):
Powell County;
T12N R10W Sec 1, 11, 12, 13
Project is located within the Nevada Lake Wildlife Management Area (Figure 1).

[1] Available at http://fwp.mt.gov/fishAndWildlife/management/elk/managementPlan.html (accessed 9 April 2018).
[2] Available at http://fwp.mt.gov/fishAndWildlife/conservationInAction/swap2015Plan.html (accessed 9 April 2018)

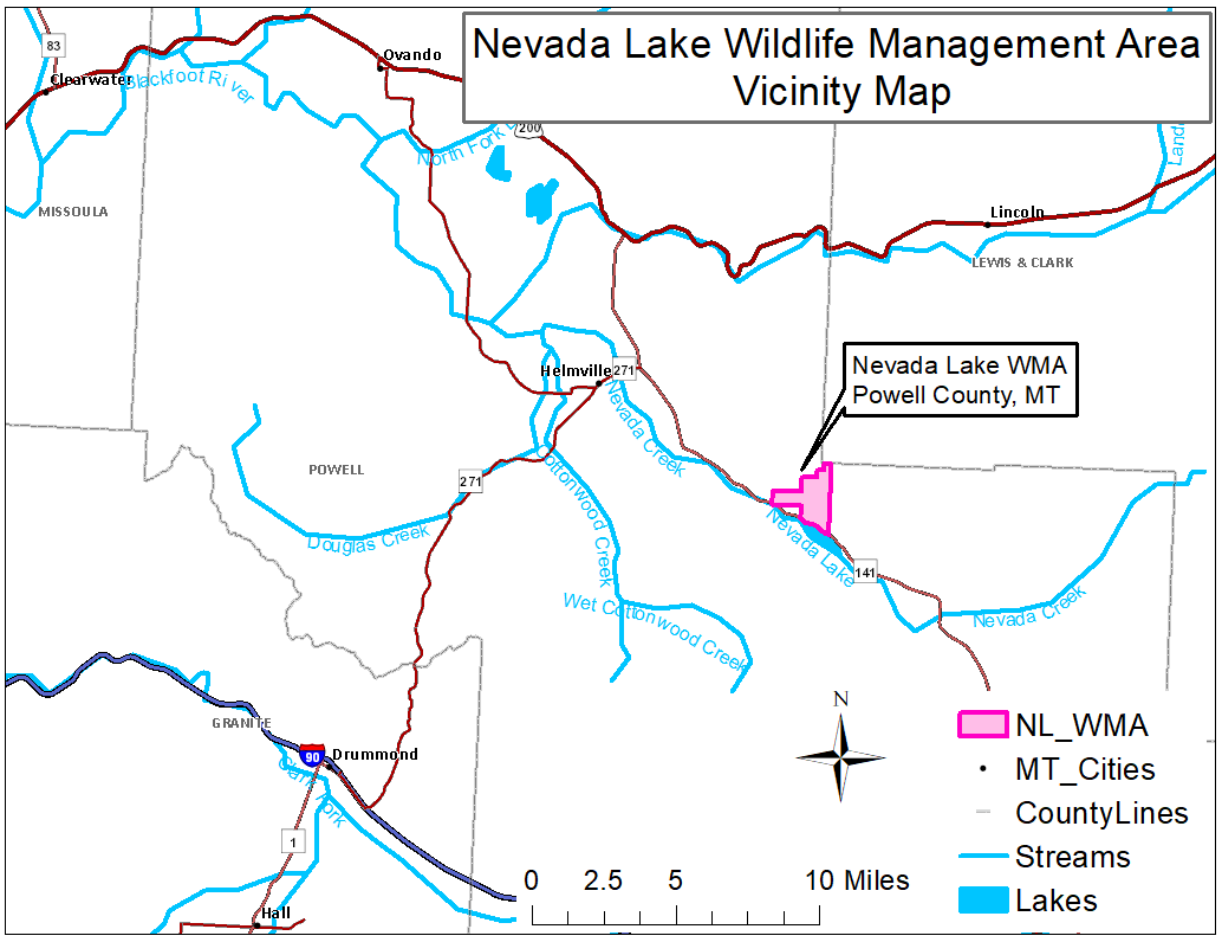

Figure 1. The Nevada Lake WMA located in Montana's Blackfoot River watershed.

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

	Acres		Acres
(a) Developed:		(d) Floodplain	0
Residential	0		
Industrial	0	(e) Productive:	
(existing shop area)		Irrigated cropland	0
(b) Open Space/	0	Dry cropland	0
Woodlands/Recreation		Forestry	329
(c) Wetlands/Riparian	0	Rangeland	136
Areas		Other	0

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

(a) Permits:

Agency Name	Permits
MT FWP	Montana Stream Protection Act (SPA 124) Permit (may be needed for culvert replacements)[3]

(b) Funding:

Agency Name Montana FWP
Funding Amount 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:

Agency Name	Permits
MT DNRC	Fire Protection
Powell County Weed District	Noxious Weed Control

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

The Nevada Lake WMA is located in the Nevada Creek drainage of the upper-Blackfoot Watershed of west-central Montana, in Powell County (Figure 1). The nearest community is Helmville approximately 10 miles to northwest of the NLWMA. Ranching and agricultural production are the main economic drivers, with forestry and recreation providing a limited stimulus to the local economy. Missoula is the nearest major population center, located about 70 miles west of the NLWMA.

The NLWMA is an important component of the winter range for a partially migratory elk herd with an annual average of approximately 250 elk. Previous FWP studies of radio-collared elk have documented seasonal elk movements into the adjacent Helena-Lewis & Clark National Forest (HLCNF) land surrounding Odgen and Dalton mountains to the north. Thus, changes in elk habitat on the NLWMA may directly affect opportunities for the public to hunt and view elk across a much larger area including portions of the HLCNF and accessible state and private lands.

Portions of the NLWMA also provide important winter range for migratory and resident populations of mule deer and white-tailed deer. Moose, black bear, mountain lion, gray wolf, mountain grouse, and furbearing species also use the property. Subject lands provide habitat for the recovering Northern Continental Divide Ecosystem (NCDE) grizzly bear population. In total, 67 wildlife species occur on or near the NLWMA with 6 listed as species of concern[4] (SOC) according to a search of the Montana Natural Heritage Program website http://mtnhp.org .

[3] Needed by any agency or subdivision of state, county or city government, for any project--including the construction of new facilities or the modification, operation, and maintenance of an existing facility--that may affect the natural existing shape and form of any stream or its banks or tributaries.

[4] A native animal 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.

The NLWMA comprises approximately 1,523 acres in fee-title ownership. The stands subject to this proposal lie along the southern and lower elevation portion of the WMA (Figure 2). The subject stands were historically composed of an overstory of shade-intolerant ponderosa pine with a more shade tolerant Douglas-fir understory that was periodically thinned by high-frequency low-intensity fire. An understory complex of shrub and grass plant communities was maintained by the high frequency (fire return interval of 0-35 years), low intensity fires.

Today, <50-year-old Douglas-fir and second-growth ponderosa pine dominate what was historically a ponderosa pine overstory with a low-density Douglas-fir understory. Recently, the shade-tolerant conifer understory has degraded the stands' values as ungulate winter range and now makes the remnant ponderosa pine vulnerable to intense stand-replacement crown fires. Such an intense wildfire would likely damage the stands' thin organic soils and retard shrub and grassland recovery. High-intensity crown fire would also threaten the large and older age ponderosa pine as shade tolerant understory trees are now large enough to serve as ladder fuels, potentially carrying ground fires to the crowns of large remnant trees.

Several of the ponderosa pine stands proposed for treatment have been negatively affected by a mountain pine beetle outbreak that occurred between 2006 and 2013. Overstocked Douglas-fir in the understory have also created a condition that benefits the spruce budworm life cycle, negatively affecting the health of the understory and exacerbating the risk of catastrophic fire. These heavily stocked stands of dead and dying trees further increase the risk of intense stand-replacement fire on the WMA and could potentially damage winter range conditions for elk and deer.

A variety of palatable shrub species (including native Redosier dogwood, Rocky Mountain maple, chokecherry, serviceberry, snowberry, and other browse species) still occur on or adjacent to subject stands and are expected to be recruited following treatment. Idaho fescue, rough fescue, and bluebunch wheatgrass are the dominant grass species and still occur where adequate sunlight penetrates the conifer over- and mid-stories. Another important stand type includes smaller aspen groves and individual patches within the Project area that are declining due to succession over the last 90 years.

FWP proposes to mechanically thin the shade-tolerant understory species (primarily Douglas-fir) from below while favoring retention of dominant and co-dominant ponderosa pine and older age-class Douglas-fir. In ponderosa pine stands, second-growth and beetle-killed pine would be removed from the understory while favoring dominant and co-dominant ponderosa pine. Patches of younger trees and snags would be retained within thinning units to provide cover for wildlife and to more closely mimic vegetative mosaics typical of stands maintained by high-frequency, low-intensity fire regimes. In some stands, slash would be left on site but pulled away from the boles of retained trees to allow for the possibility of prescribed fire in the future.

The main access point for the project is expected to be from the south, entering the WMA from Montana Highway 141. Past logging established several miles of roads and skid trails within the project area. Approximately 5.8 miles of existing road would be upgraded to meet current Montana Forestry Best Management Practices (BMP) standards, including an estimated 3.3 miles of reconstruction and 2.5 miles of road maintenance. Two culverts are expected to be reinstalled on a tributary to Chicken Creek to access the northwest corner of Section 12 (T12N R10W). To avoid using old roads in poor locations, 5 short sections of new road (totaling approximately 0.7 miles along 3 separate roads) are expected to be constructed in more suitable locations. NLWMA is open only to nonmotorized public use; all roads are behind gates that are closed year-round to public motorized use. Roads would be rehabilitated post-harvest, including grass seeding and noxious weed treatment.

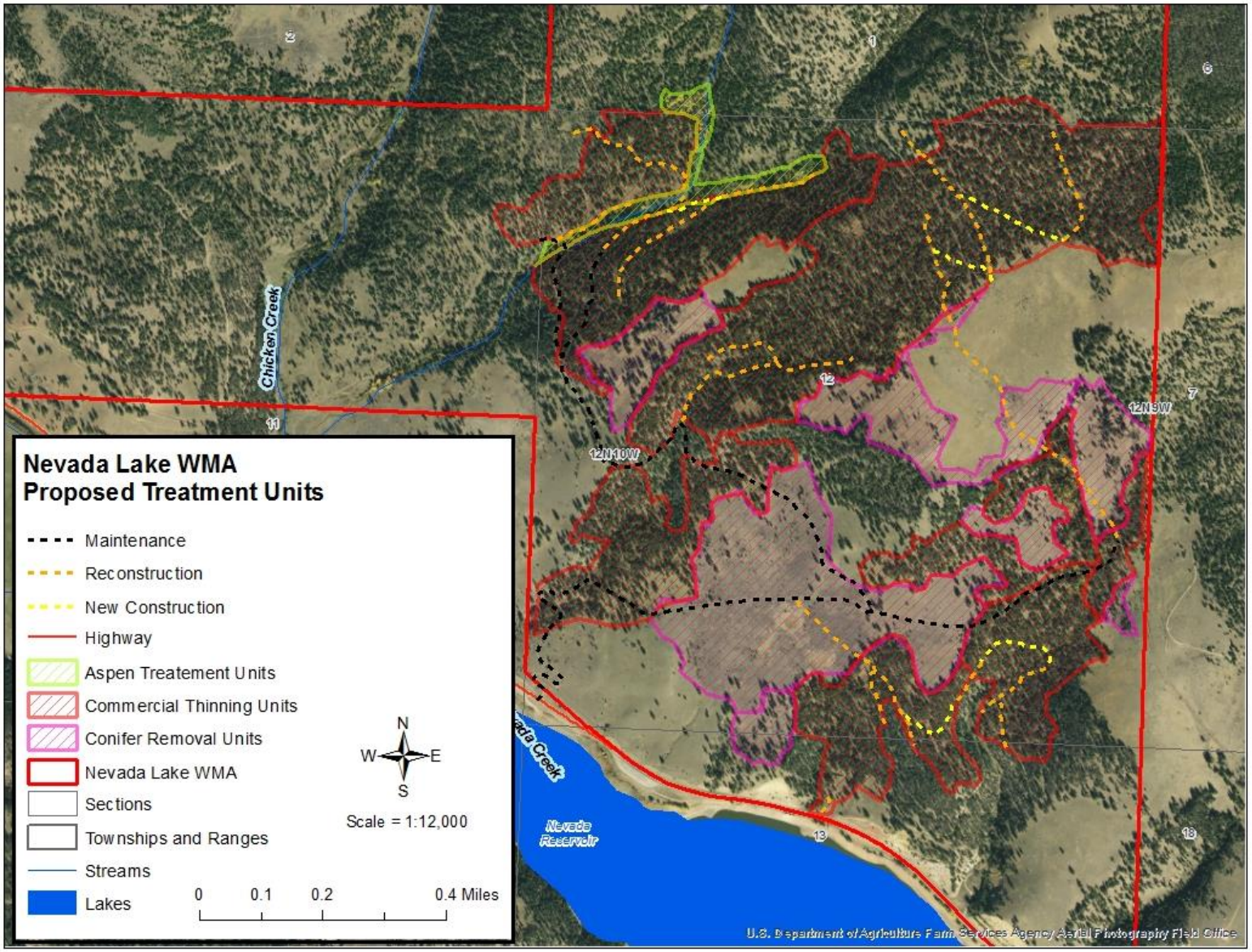

Figure 2. The Nevada Lake WMA with stands proposed for forest habitat improvement treatments.

The proposed treatments were developed by the FWP forester with assistance from the FWP area biologist and the FWP/TNC (The Nature Conservancy) shared forester position with the Blackfoot Challenge.

A description of current stand conditions and prescriptions is in Appendix A.

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, the targeted stands on the NLWMA would not be treated. FWP expects that valuable wildlife habitat, including ungulate winter range would continue to deteriorate and the risk of high-intensity catastrophic wildfire would continue to increase.

Alternative B: Proposed Action
Conduct forested habitat improvement treatments on approximately 465 acres of the NLWMA as described in Section 8 (above) and Appendix A. Following this action, FWP anticipates that important ungulate winter-range condition would be maintained and improved due to increased grass and woody-browse understory recruitment. Treatment would also reduce the risk of high-intensity, stand-replacement fire events that could remove the remnant large overstory trees, damage thin organic soils, slow grass and woody browse recruitment, and/or pose a risk to neighboring landowners.

PART II. ENVIRONMENTAL REVIEW CHECKLIST

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

A. PHYSICAL ENVIRONMENT

1. LAND RESOURCES Will the proposed action result in:	IMPACT *					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. **Soil instability or changes in geologic substructure?		X				
b. Disruption, displacement, erosion, compaction, moisture loss, or over-covering of soil, which would reduce productivity or fertility?			X			1.b
c. **Destruction, covering or modification of any unique geologic or physical features?		X				
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?		X				
e. Exposure of people or property to earthquakes, landslides, ground failure, or other natural hazard?		X				
f. Other:		x				

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

1.b. Approximately 0.7-miles total of new road are expected to be constructed, and 5.8 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.

2. AIR **Will the proposed action result in:**	**IMPACT ***					
	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).)			X			2.a
b. Creation of objectionable odors?			X			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. ***For P-R/D-I projects, will the project result in any discharge, which will conflict with federal or state air quality regs? (Also see 2a.)		X				
f. Other:		x				

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 proposed treatments would be burned on-site. The contractor would comply with any Powell County open-burning timing restrictions and comply with inter-agency slash treatment regulations.

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

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

3.b. 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 minimal.

4. VEGETATION **Will the proposed action result in?**	**IMPACT ***					
	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)?			X			4.a
b. Alteration of a plant community?			X			4.b
c. Adverse effects on any unique, rare, threatened, or endangered species?		X				
d. Reduction in acreage or productivity of any agricultural land?		X				
e. Establishment or spread of noxious weeds?			X			4.e
f. ****For P-R/D-I, will the project affect wetlands, or prime and unique farmland?		X				
g. Other:		x				

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 protect stands from high-intensity wildfire. (See Section8 (Narrative Summary) and Appendix A for a more detailed description of proposed treatments.) Noxious weed spread would be mitigated by requiring equipment to be washed before entering the WMA, immediately reseeding disturbed areas, and treating affected areas or areas at risk with herbicide before and after timber harvest.

** 5. FISH/WILDLIFE Will the proposed action result in:	IMPACT *					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Deterioration of critical fish or wildlife habitat?		X				
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?			X			5.c
d. Introduction of new species into an area?		X				
e. Creation of a barrier to the migration or movement of animals?		X				
f. Adverse effects on any unique, rare, threatened, or endangered species?			x			5.f
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. ****For P-R/D-J, 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			5.h
i. ***For P-R/D-J, will the project introduce or export any species not presently or historically occurring in the receiving location? (Also see 5d.)		X				
j. Other:		x				

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

5.b,c. Many of the ungulates that occur in the treatment area would not be present during the summer months when most of the treatments are planned. Other 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 after most bird species have nested and their clutches have fledged. Generally, young-of-the-year wildlife would be expected to be sufficiently mobile by late August and able to safely move away from treatment areas until work is complete.

5.f,g,h. Two federally Threatened and one federally Endangered 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.

Grizzly bear – Grizzlies do occupy the 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 NLWMA Project area is already managed with no open-to-public motorized road use, and there would be potentially only 0.7 mile of additional 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.

B. HUMAN ENVIRONMENT

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

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. The Project area is relatively remote; the nearest occupied residence is approximately 1/4 mile away. Merchantable timber byproducts would be transported out of the WMA to Montana Highway 141, which is a road system designed for heavy truck traffic and periodically has experienced higher levels of truck traffic during the last 40+ years.

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

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

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

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

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

9.c,d,e. This Project is expected to create or sustain local jobs and would also benefit the successful logging-bid applicant. 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. Appropriate signs would be placed along the Montana Highway 141 to alert traffic of log truck activity. Signage would be used on-site to alert NLWMA users of ongoing logging activities and any areas temporarily closed to public use.

10. PUBLIC SERVICES/TAXES/UTILITIES Will the proposed action result in:	IMPACT *					
	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:		X				
b. Will the proposed action have an effect upon the local or state tax base and revenues?			X			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?		X				
d. Will the proposed action result in increased use of any energy source?			X			10.d
e. **Define projected revenue sources		X				10.e
f. **Define projected maintenance costs.		X				10.f
g. Other:		X				

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.

X

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

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 may be visible from nearby public roads. The Project's intent is to restore stands to more closely approximate historic conditions. The risk of catastrophic wildfire, which would also modify the scenic vista, would be reduced.

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

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

12d,.e. FWP will contact SHPO to conduct a cultural resource file search to see if there are any records of historic or cultural resources on the project lands. SHPO's response will guide FWP as to whether there is a need to hire a qualified contractor to conduct a field review for cultural resources prior to any road work being started. If cultural materials were to be discovered during the project, FWP would cease activities and contact SHPO, and potentially adjust the project design to avoid impacting these resources.

SIGNIFICANCE CRITERIA

13. SUMMARY EVALUATION OF SIGNIFICANCE **Will the proposed action, considered as a whole:**	**IMPACT ***					
	Unknown	**None**	**Minor**	**Potentially Significant**	**Can Impact Be Mitigated**	**Comment Index**
a. Have impacts that are individually limited, but cumulatively considerable? (A project or program may result in impacts on two or more separate resources that create a significant effect when considered together or in total.)			X			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. ***For P-R/D-J, is the project expected to have organized opposition or generate substantial public controversy? (Also see 13e.)		X				
g. ****For P-R/D-J, list any federal or state permits required.		X				

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 the risk of high-intensity wildfire on and adjacent to the NLWMA. Work proposed in this EA may complement 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

The NLWMA Forest Habitat Enhancement Project would begin to implement the intent of the NLWMA Interim Management Plan and FWP land-management statute. Specifically, it would improve elk and deer winter range on the NLWMA, restore fire-adapted stands closer to historic condition, and reduce the risk of catastrophic wildfire on Project lands.

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 in the following manners to comment on this current EA, the proposed action and alternatives:

- One legal notice in each of these newspapers: *Independent Record* (Helena), *Missoulian, Seeley Swan Pathfinder, and Silver State Post* (Deer Lodge).
- Public notice on the Fish, Wildlife & Parks web page: http://fwp.mt.gov ("News," then "Recent Public Notices"). The Draft EA will also be available on this website, along with the opportunity to submit comments online.
- Copies of the Draft EA will be available at the Region 2 headquarters in Missoula and the State Headquarters in Helena.
- A news release will be prepared and distributed to a standard list of media outlets interested in FWP Region 2 issues. This news release will also be posted on Region 2 FWP's website http://fwp.mt.gov/regions/r2/.
- Copies of this environmental assessment will 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.
- This EA may be obtained by mail from Region 2 FWP, 3201 Spurgin Rd., Missoula 59804; by phoning 406-542-5500; by emailing shrose@mt.gov; or by viewing FWP's Internet website http://fwp.mt.gov ("Recent Public Notices").

This level of public notice and participation is appropriate for a project of this scope having limited impacts (none significant), which can be mitigated.

2. Comment period

The public comment period will extend for 30 days. Written and verbal comments will be accepted until May 24, 2018. Comments should be addressed to Sharon Rose using the mail or email addresses below.

Mailing Address: Region 2 FWP
Attn: Sharon Rose
3201 Spurgin Road
Missoula, MT 59804

Email Address: 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 why the EA is the appropriate level of analysis for this proposed action.

No. Based upon the above assessment, which has identified a limited number of minor impacts to the physical and human environment, such impacts would be either of a short duration or their effects would be mitigated below the level of significance. Therefore, 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:

Scott Eggeman
Wildlife Biologist
FWP, Region 2
PO Box 15 Seeley Lake, MT 59868
(406) 542-5542

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

US Forest Service
US Fish and Wildlife Service

Appendix A:

Nevada Lakes WMA Proposed Forestry Treatments

Approximate treatment area – 465 acres

Forest Thinning Units (approximately 318 acres; Figures A1, A2): Objectives- To improve elk winter forage, restore historically open stand conditions dominated by large diameter ponderosa pine, restore a stand structure which allows fire to burn at the low-severity appropriate for the historic fire regime, recruit ponderosa pine regeneration, and reduce fuel loading.

- Uneven-aged management: Thin dense stands of ponderosa pine and Douglas-fir that have been heavily impacted by mountain pine beetle and spruce budworm. Favor leaving dominant and codominant ponderosa pine and large diameter Douglas-fir with healthy crowns, if available. Create a "clumpy-gappy" pattern of leave trees composed of large individual trees, clumps of 2-16 trees with interlocking crowns, and small openings (< 0.5 acres). Lop and scatter most of the Douglas-fir understory, particularly under large, old ponderosa pine and Douglas-fir. Retain healthy, young ponderosa pine in canopy gaps to encourage structural complexity. Machine pile and burn heavy concentrations of slash and insect mortality; some concentrations of large woody debris will be retained for structure. Within thinning units, thin from below to retain a range of basal areas (roughly 50-120 sq. ft./acre). Remove all conifers above or below the drip line of aspen clones within the thinning units, however large, old ponderosa pines in aspen clones would be retained. In the future, prescribed burning may be necessary to decrease fuel loads, recruit ponderosa pine regeneration, and stimulate aspen regeneration.

Conifer Removal Units (approximately 136 acres; Figure A3): Objectives- To maintain and enhance elk winter forage in open bunchgrass/sagebrush grasslands. Lop and scatter conifer encroachment.

- Forage enhancement: Lop and scatter all conifers <8" DBH by chainsaw thinning to maintain bunchgrass/sagebrush communities (rough fescue, bluebunch wheatgrass, Idaho fescue, sagebrush, etc.) The largest and oldest ponderosa pine can be left on the edges of the units. All large old ponderosa pine (yellow pine) within the units would be left.

Aspen Enhancement Units (approximately 11 acres; Figure A4): Objectives- To improve and maintain the vigor and size of aspen stands and maintain the valuable habitat that they provide to a wide suite of species. Remove conifers in and around aspen to maintain and enhance aspen stands.

- Aspen treatment: Remove conifers within and up to 1.5 tree lengths adjacent to aspen stands, consistent with historical conifer/aspen composition. Large, old ponderosa pine trees would be left. Large Douglas-fir may be girdled to provide snags and downed wood for grouse drumming logs. To protect regeneration from excessive browse when needed, penning aspen stands by hinging conifer trees around the outside the stand is preferred. In the future, prescribed burning may be necessary to stimulate aspen regeneration.

Photos of Stands Proposed for Forestry Treatments

Figure A1. Stand of old pine selected for a low thinning.

Figure A2. Stand with heavy spruce budworm damage, to be thinned.

Figure A3. Grassland selected for conifer expansion removal.

Figure A4. Aspen stand selected for small conifer removal.