

## CHECKLIST ENVIRONMENTAL ASSESSMENT

<b>Project Name:</b>	Forest In Focus Dennison Logging/Beebe Forest Consulting LLC Project.
<b>Proposed Implementation Date:</b>	March 1, 2014-October 31, 2015
<b>Proponent:</b>	Greg Dennison, Logging Contractor
<b>Location:</b>	Sections 10, 15, 24 T25N R22W adjacent to Lake Mary Ronan
<b>County:</b>	Lake

### I. TYPE AND PURPOSE OF ACTION

Dennison Logging and Beebe Forest Consulting, LLC have proposed a project that was chosen for funding through the State of Montana DNRC Forests In Focus Grant, for treatment of approximately 333 acres of Non-Industrial Private Forestland (NIPF) in the Lake Mary Ronan area, in parts of sections 10, 15, and 24 in T25N R22W. The project objectives include reducing both the potential intensity and risk of fire by reducing forest fuel loading, and improving forest health, by a combination of thinning of understory and intermediate trees, and overstory harvest.

### II. PROJECT DEVELOPMENT

#### 1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED:

*Provide a brief chronology of the scoping and ongoing involvement for this project.*

The Montana DNRC conducted public scoping for the Forests in Focus Grant Project as a whole by soliciting comments at four public meetings, (held in Forsythe, Billings, Missoula, and Kalispell), and by publishing requests for comments in the legal advertisement sections of the following newspapers; The Miles City Star, the Billings Gazette, the Missoula Missoulian, and the Kalispell Daily Interlake. No comments on the project as a whole were received either written or at the meetings.

#### 2. OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:

No other permits or agencies involved.

#### 3. ALTERNATIVES CONSIDERED:

**A:** No action. No harvest, which would forego the landowner's objective of reducing fuel loading/risk of fire, improving forest health, and generating revenue to offset project costs.

**B:** Under the Action Alternative, harvest would remove sub-merchantable and merchantable trees from the properties for improving forest health and fire hazard reduction. Dennison Logging would harvest approximately 600 thousand board feet of merchantable timber and 2500 tons of pulp from approximately 333 acres. Timber would be harvested using tractor logging with conventional, mechanical or cut-to-length operations. Individual harvest prescriptions will vary based on existing conditions. Where there is a well-stocked understory, overstory trees (12" DBH and greater) will be harvested. Where overstory tree retention is needed, such as in non-stocked or riparian areas, diseased and insect infected trees and those with less than 30% Live Crown to height ratio will be removed first, leaving a well-established stand with 50'-75" crown spacing. Harvesting in the intermediate stands (6" DBH to 11.5" DBH) will target Disease and Insect hit trees first, then a cross-section of merchantable volume favoring Ponderosa Pine and Western Larch as leave trees, resulting in a stand with 25'-35' spacing between tree crowns. Understory/regeneration stands (trees averaging 1 foot tall to 5.5 inches at DBH) will be thinned to an average of 15 feet between tree crowns.

Potential issues surrounding this proposed action have either been resolved or mitigated through project design. The Landowner and the Applicant designed their proposal to minimize potential direct, indirect and cumulative effects and incorporated the mitigations into the project design (see Dennison/Beebe Request for Proposal).

### III. IMPACTS ON THE PHYSICAL ENVIRONMENT

- *RESOURCES* potentially impacted are listed on the form, followed by common issues that would be considered.
- Explain *POTENTIAL IMPACTS AND MITIGATIONS* following each resource heading.
- Enter "NONE" if no impacts are identified or the resource is not present.

#### 4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:

*Consider the presence of fragile, compactable or unstable soils. Identify unusual geologic features. Specify any special reclamation considerations. Identify any cumulative impacts to soils.*

Soils on the majority of the harvest areas are gravelly to very gravelly loam, with moderate slopes, and are at least moderately suited for Harvest Equipment Operability. Some areas of the project have steep slopes and/or soils with a risk of soil compaction or rutting hazard. To mitigate risk, harvest activities will comply with Forestry Best Management Practices (BMP's), and will use existing roads and segments of existing skid trails established during previous entries whenever feasible. Other mitigations include: limiting equipment operations to minimize soil compaction and rutting, planning appropriate skid trail locations, limiting skidding to slopes less than 45%, operating in a manner that limits disturbance and scarification, and retaining adequate amounts of large woody debris and fine litter following harvest. Thus, direct, indirect, and cumulative effects to the soil resource would be minimal.

#### 5. WATER QUALITY, QUANTITY AND DISTRIBUTION:

*Identify important surface or groundwater resources. Consider the potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality. Identify cumulative effects to water resources.*

Project area is located adjacent to Lake Mary Ronan. To ensure protection of water quality, Best Management Practices for SMZ's will be adhered to. The Streamside Management Zone (SMZ) law will be followed; no equipment is expected within the SMZ and only minor harvesting is expected in the SMZ. Any disturbance within the SMZ will be grass seeded. Increases in water yield are not expected to be large enough to create scoured stream channels, produce measurable increases in the water level of the lake, or create surface flow to any other body of water beyond that occurring under the existing conditions. No cumulative impacts are likely to occur as a result of the proposed action.

#### 6. AIR QUALITY:

*What pollutants or particulate would be produced? Identify air quality regulations or zones (e.g. Class I air shed) the project would influence. Identify cumulative effects to air quality.*

Project will not produce any significant pollutants or particles. Slash from the project will be burned during legal burning times. No cumulative affects to air quality are likely to occur from this proposed action.

#### 7. VEGETATION COVER, QUANTITY AND QUALITY:

*What changes would the action cause to vegetative communities? Consider rare plants or cover types that would be affected. Identify cumulative effects to vegetation.*

Logging activities have occurred within all of the project units. The predominant appropriate cover type varies depending on location, but most areas Douglas-fir/Ponderosa Pine, with scattered Western Larch. In addition, Engelmann Spruce and Grand Fir are present in cooler draws and wetter areas. Noxious weeds, primarily spotted knapweed, are present along existing roads. There is one plant species of concern, Greenleaf Manzanita, as listed by the MT Natural Heritage Program within the Township and Range of the project area. This plant is found in rocky soil in open Coniferous Forests, and the project will not reduce the available habitat in the area, and impact to the species is expected to be minimal or non-existent.

Under the Action Alternative, timber harvest would occur on approximately 333 acres and would focus first on the removal of those infected or susceptible to insect and disease mortality. Harvest will vary based on existing conditions, but all are designed to improve forest health and reduce forest fuels to lessen the risk and severity of fire on the landscape. These changes would move stands in the project area toward the landowner's desired future conditions. Occurrence of noxious weeds may increase.

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## 8. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:

*Consider substantial habitat values and use of the area by wildlife, birds or fish. Identify cumulative effects to fish and wildlife.*

Harvest activities will take place within the SMZ. All applicable BMP's and the SMZ law will be followed. Thus direct, indirect, and cumulative effects to aquatic life and habitats would be minimal.

The selective nature of the harvesting, set-backs from surface water bodies, and the use of existing landings, roads, and skid trails when possible and minimizing of disturbance on steep slopes and areas of possible unstable soils will create impacts to the watershed, soils and fisheries but they are expected to be minimal and would have a negligible effect on resources.

The MT Natural Heritage Program lists 13 species of concern and 1 species of special concern status that may use the areas during some part of the season. The potential for impacts on any of the species from harvesting will be minimal since the logging and associated activities will be short-term and any displacement is expected to be intermittent and short lived. The project will not significantly affect Mixed Conifer, Wetland, or Riparian habitats. No long-term and/or cumulative effects to fish and wildlife are expected.

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## 9. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:

*Consider any federally listed threatened or endangered species or habitat identified in the project area. Determine effects to wetlands. Consider Sensitive Species or Species of special concern. Identify cumulative effects to these species and their habitat.*

### General Wildlife:

The proposed harvesting would alter existing habitats. Species using reasonably closed canopy stands of Douglas-fir and western larch would see a slight reduction in habitats, while species relying on more open stands would see a slight increase in available habitats. Snags would be retained, where safe and practical, across the project. Overall, given the size of the area, and the expected changes to habitats, negligible direct, indirect, or cumulative effects would be anticipated.

### Mitigations to include:

1. Cease all operations if a threatened or endangered species is encountered. Develop additional mitigations that are consistent with the administrative rules for managing Threatened and Endangered Species on private non-industrial lands. At the completion of harvest activities, close skid trails opened during harvest activities to reduce the potential for unauthorized motor vehicle use.
2. Manage for snags, snag recruits, and coarse woody debris, particularly favoring ponderosa pine and western larch.

### Conclusion:

In general, with the identified mitigations, the potential for effects to threatened and endangered species is relatively low to negligible and overall minor effects to wildlife, both positive and negative, would be anticipated. None of the extraordinary circumstances listed under ARM 36.11.447 (2) (b) and (i) affecting the wildlife resources would preclude the use of a categorical exclusion for this proposal.

The Montana Natural Heritage Program lists 1 plant species of concern for the project area, Greenleaf Manzanita. As this species habitat is rocky soil in open coniferous forests in the montane zone, the project will not result in long-term loss of habitat. However, some minimal, short-term impacts from timber harvesting and invasive weeds are possible.

Scale of project is such that impacts will be minimal or non-existent. No cumulative effects on Lake Mary Ronan are likely to result from these proposed actions.

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**10. HISTORICAL AND ARCHAEOLOGICAL SITES:**

*Identify and determine effects to historical, archaeological or paleontological resources.*

No known historical, archeological or paleontological resources are present within the project area.

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**11. AESTHETICS:**

*Determine if the project is located on a prominent topographic feature, or may be visible from populated or scenic areas. What level of noise, light or visual change would be produced? Identify cumulative effects to aesthetics.*

The project is located adjacent to Lake Mary Ronan, and is visible from the access road and the lake itself. It is a portion of a roughly 1,400 acre treatment area that was recently purchased and has not had any silvicultural treatments for at least 18 years. The project will result in reducing the overstory basal area to an average of 50 to 75 square feet per acre, and thinning of understory trees to an average of 15 feet crown spacing. This should result in improved forest health and reduced fire danger and provide for enhanced aesthetics.

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**12. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY:**

*Determine the amount of limited resources the project would require. Identify other activities nearby that the project would affect. Identify cumulative effects to environmental resources.*

This project would not use any resources that are limited in the area, nor are there other activities nearby that will affect the project. No cumulative impacts are likely to occur as a result of this proposed action

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**13. OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA:**

*List other studies, plans or projects on this tract. Determine cumulative impacts likely to occur as a result of current private, state or federal actions in the analysis area, and from future proposed state actions in the analysis area that are under MEPA review (scoped) or permitting review by any state agency.*

No studies, plans, or projects on this tract. No cumulative impacts are likely to occur as a result of private, state or federal actions within the analysis area, or from future proposed state actions that are under MEPA review or permitting review by any state agency.

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<b>IV. IMPACTS ON THE HUMAN POPULATION</b>
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| <ul style="list-style-type: none"><li>• <i>RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.</i></li><li>• <i>Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.</i></li><li>• <i>Enter "NONE" if no impacts are identified or the resource is not present.</i></li></ul> |
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**14. HUMAN HEALTH AND SAFETY:**

*Identify any health and safety risks posed by the project.*

There are no identified health and safety risks posed by this project.

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**15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:**

*Identify how the project would add to or alter these activities.*

This project will reduce fuel loading near a private camping facility for all age groups, and it will improve existing and future forest health. It is providing the landowner with income to offset costs of the project.

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**16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:**

*Estimate the number of jobs the project would create, move or eliminate. Identify cumulative effects to the employment market.*

The project will provide three people with seasonal employment for nearly a year. The logs produced will add to the employment and production of various local mills. The project will not eliminate any jobs. No long term or cumulative impacts on employment are likely to occur because of the proposed actions.

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**17. LOCAL AND STATE TAX BASE AND TAX REVENUES:**

*Estimate tax revenue the project would create or eliminate. Identify cumulative effects to taxes and revenue.*

The project will contribute some local and state taxes, as a result of profits made by the contractor, landowners, and local mills. There will be no long term effects to taxes and revenue as a result of the proposed actions.

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**18. DEMAND FOR GOVERNMENT SERVICES:**

*Estimate increases in traffic and changes to traffic patterns. What changes would be needed to fire protection, police, schools, etc.? Identify cumulative effects of this and other projects on government services*

The additional traffic to existing roads will not be substantial. No additional services, such as fire protection, police, etc. will be needed. No cumulative impacts are likely to occur as a result of the proposed actions.

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**19. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:**

*List State, County, City, USFS, BLM, Tribal, and other zoning or management plans, and identify how they would affect this project.*

No local or state or federal zoning or other management plans will be affected by this project.

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**20. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES:**

*Identify any wilderness or recreational areas nearby or access routes through this tract. Determine the effects of the project on recreational potential within the tract. Identify cumulative effects to recreational and wilderness activities.*

The 333 acres of the project are part of a roughly 1,400 acre tract that has been placed in State of MT Block Management by the landowner. Access routes through this tract will not be affected long-term. Recreation, such as fishing, hunting, etc. will not have any long-term or cumulative impacts due to this project. No cumulative effects to recreational and wilderness activities are likely to occur as a result of the proposed actions.

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**21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:**

*Estimate population changes and additional housing the project would require. Identify cumulative effects to population and housing.*

None. No cumulative effects.

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**22. SOCIAL STRUCTURES AND MORES:**

*Identify potential disruption of native or traditional lifestyles or communities.*

No potential for disruption of native or traditional lifestyles or communities likely as a result of the proposed actions.

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**23. CULTURAL UNIQUENESS AND DIVERSITY:**

*How would the action affect any unique quality of the area?*

There are no unique qualities of the area.

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**24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:**

*Estimate the return to the trust. Include appropriate economic analysis. Identify potential future uses for the analysis area other than existing management. Identify cumulative economic and social effects likely to occur as a result of the proposed action.*

The landowner wishes to reduce the risk and intensity of fires on his property, and to improve the health of his forest land. This project will not negatively affect potential future uses for the property. No cumulative economic or social effects are likely to occur as a result of this project.

<b>EA Checklist Prepared By:</b>	<b>Name:</b> Les Thomas	<b>Date:</b> December 3, 2014
	<b>Title:</b> Service Forester	

## V. FINDING

### 25. ALTERNATIVE SELECTED:

After careful review of the Environmental Analysis I find that the Action Alternative B with the associated mitigations provides adequate protection of soil and water quality, and meets the landowner's objectives. For these reasons I have selected the Action Alternative B with the understanding that all mitigation measures described in the Alternative Practice Application (DS-97) will be implemented as part of the project.

### 26. SIGNIFICANCE OF POTENTIAL IMPACTS:

Upon review of the project and the analysis herein, I find that none of the project impacts are regarded as severe, enduring, geographically widespread, or frequent. Further, I find that the quantity and quality of the natural resources, including any that may be considered unique or fragile, will not be adversely affected to a significant degree. I find no precedent for the future actions that would cause significant impacts, and I find no conflict with local, State, or federal laws, requirements, or formal plans. In summary, I find that adverse impacts would be avoided, controlled, or mitigated by the design of the project to an extent that they are not significant.

### 27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

EIS

More Detailed EA

No Further Analysis

<b>EA Checklist Approved By:</b>	<b>Name:</b> Roger Ziesak
	<b>Title:</b> Forest Practices Program Manager, Forests in Focus Grants Manager
<b>Signature:</b> 	<b>Date:</b> DEC 9, 2014