

## CHECKLIST ENVIRONMENTAL ASSESSMENT

<b>Project Name:</b>	LaMarche Creek Timber Sale FIF Grant Project
<b>Proposed Implementation Date:</b>	June 2015
<b>Proponent:</b>	Montana Correctional Enterprises in cooperation with Sun Mountain Lumber and DNRC Anaconda Unit
<b>Location:</b>	Five miles west of Deer Lodge, MT
<b>County:</b>	Powell

### I. TYPE AND PURPOSE OF ACTION

MT DNRC, through the Forests in Focus Grant Project, is granting Sun Mountain Lumber funds to conduct forest stewardship and forest fuels reduction work on State of MT lands managed by Montana Correctional Enterprises. The MCE Prison Ranch would harvest approximately 1,400 MBF of Douglas-fir from approximately 462 acres of State of MT Prison and DNRC managed lands within T8N, R10W, Sections 20 & 29; T7N, R10W, Sections 7 & 17.

### 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:

MT FWP – 124 Permit

MT DEQ – Open Burning Permit

DNRC – Temporary Road Use Permit

All of these permits have/will be either granted or applied for by the landowner prior to the start of operations. No work pursuant to these permits will occur until the permit is granted and mitigation measures, if any, are understood.

#### 3. ALTERNATIVES CONSIDERED:

**Action – Grant is awarded.** The action alternative would harvest Douglas-fir from approximately 462 acres to promote overall stand health. Existing roads with drainage issues would be maintained and improved through culvert replacement and installation of drainage features.

**No Action – Grant is not awarded.** The No Action alternative would not harvest Douglas-fir. No road maintenance would occur. The existing crossing site would remain in place.

**NOTE:** This document was prepared using information developed for the Environmental analysis that was written by MT Correctional Enterprises and Sean Steinebach, DNRC Forester. Please see the original document for additional information.

### 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.*

The LaMarche Creek project area is located on moderate to steep slopes on soils that are poorly to well suited for timber harvest according to the Web Soil Survey. Portions that are poorly suited according to the Web Soil Survey are generally due to steeper slopes. Areas with prolonged slopes over 45% would be avoided or harvested with appropriate harvest methods.

Soils are susceptible to rutting and compaction if operated on when wet. Erosion potential is moderate and erosion can be controlled by standard drainage practices. No wetlands were identified in the harvest units, and where there is surface water, Streamside Management Zone Law (SMZ) requirements would be adhered to.

**No-Action Alternative** - The No Action Alternative would be similar to existing conditions and have little effect on soil resources. There would be no ground disturbing impacts from timber harvest operations or road construction and no additive direct, indirect or cumulative effects.

**Action Alternative** - Implementation of the Action alternative would harvest timber on approximately 462 acres. The analysis and levels of effects to soil resources are based on implementation of the following practices, rules and mitigation measures to minimize soil impacts.

- Harvest would implement all applicable Forestry Best Management Practices (BMP), SMZ requirements, and reasonable mitigation and erosion control practices during timber harvest, road maintenance, and road construction and road use activities.

- Limit harvest equipment and hauling operations to periods when soils are relatively dry, (less than 20%), frozen or snow covered to minimize soil compaction and rutting, and maintain drainage features. Check soil moisture conditions prior to equipment start-up. Portions of the access roads have clayey segments that tend to remain wet later into the spring and requires strict adherence to dry or frozen season of use to limit impacts in harvest units or damage to roads.

- On tractor harvest units the logger and sale administrator would agree to a general skidding plan prior to equipment operations to limit trails to 15% or less of the harvest unit. No equipment would operate on sensitive sites in the SMZ or on steep slopes over 45%. Limit ground skidding equipment to slopes less than 45% on the short steep slopes. Feller-bunchers may work on slopes up to 45% as long as displacement and turning is minimized to prevent excessive disturbance.

- Target fine slash and woody debris levels are to retain 5-10 tons/acre well distributed on site while meeting the requirements of the slash law. Slash may be placed on main skid trails to protect soils and reduce erosion potential unauthorized ATV use as needed.

Based on implementation of BMP's and the planned mitigations and comparison to harvest monitoring of similar projects, there is moderate risk of direct impacts and low risk of in-direct or cumulative effects to soils.

#### 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.*

The No-Action Alternative would mimic existing conditions for both short-term and cumulative effects and have little effect on water resources.

**Action Alternative -** LaMarche Creek is the only live stream in the project area. The creek disappears before connecting to the Clark Fork River. Harvest may occur within the SMZ boundary of LaMarche Creek, and, haul roads cross the creek at two different locations. Any harvest that would take place inside the SMZ would adhere to *Montana's Streamside Management Zone Laws and Rules* and *Montana's Best Management Practices*. Additionally, a culvert would be replaced at one crossing and ditches would be maintained along Elk Ridge Road.

Based on implementation of BMP's, SMZ laws and requirements of the 124 Permit, there is a low level (short term sediment to LaMarche Creek) risk of direct, in-direct or cumulative effects to water quality or quantity. The analysis and levels of effects to water quality and water resources is based on implementation of the following practices, rules and mitigation measures.

- \* Operations would implement all applicable BMP's, and reasonable mitigation and erosion control practices during timber harvest, road maintenance, and road construction and road use activities.
- \* Forest Officer would locate, clearly mark and maintain suitable water resource protection boundaries including Streamside Management Zones (SMZ's), and Wetland Management Zones (WMZ's) adjacent to streams and wetlands.
- \* Road use would be limited to dry or frozen ground conditions to reduce rutting and erosion. The Forest Officer would check snow/frozen ground conditions prior to operations. Minimal effects are expected with snow road construction.
- \* An existing crossing that does not meet current Forestry BMP's would be replaced.
- \* The removal of the existing culvert and installation of new culvert would meet BMP's and the requirements of the FWP 124 permit issued for this project for erosion control and stream protection.

There would be low risk of adverse cumulative impacts from the proposed action, to water quality and beneficial uses based on implementation of BMPs, the SMZ law and mitigation measures required during timber harvest and road reconstruction operations. Selective harvest of trees in the 462 acres of harvest units would not have a measurable effect on water yield or stream channel stability compared to no action. One road crossing would be replaced and ditch relief would be maintained which would have a beneficial reduction in sedimentation.

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## 6. AIR QUALITY:

*What pollutants or particulate would be produced (i.e. particulate matter from road use or harvesting, slash pile burning, prescribed burning, etc.)? Identify the Airshed and Impact Zone (if any) according to the Montana/Idaho Airshed Group. Identify direct, indirect, and cumulative effects to air quality.*

A minor amount of particulate would be created when the slash piles are burned. All burning would be done in accordance with DEQ regulations.

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## 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 direct, indirect, and cumulative effects to vegetation.*

No rare plants or cover types were found, however, Idaho Sedge and Giant Helleborine are Species of Concern in the project area. The over story of the proposed treatment area is dominated by Douglas-fir.

No Action Alternative – No harvest. Conditions would remain similar to current conditions.

Action Alternative – The proposed project area was historically under a low intensity high frequency fire regime which created a more open stand than what is present today. The action alternative would thin

the Douglas-fir, leaving nearly all of the mature, large Douglas-fir found on the site. This type of treatment would retain characteristics which are indicative of historic and desired future conditions. No adverse direct, indirect, or cumulative impacts are anticipated from implementation.

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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 direct, indirect, and cumulative effects to fish and wildlife.*

**Terrestrial Wildlife:** The project area provides habitat for a variety of wildlife species. Deer and elk likely use the project area during much of the non-winter period; elk winter range exists in the project area. Under the action alternative Douglas-fir would be harvested leading to more open areas in portions of the project area. This would alter habitats for wildlife species requiring mature forested conditions, while creating habitats for species needing more open stands. Additionally, habitats for species that utilize snags could be reduced. Thus, a low risk of adverse direct, indirect, or cumulative effects to species requiring mature forested stands, big game, or snags would be anticipated with the proposed activities.

**Aquatic life and fisheries:** A fisheries survey has been completed for LaMarche Creek and it has been determined that it provides habitat for a genetically pure strain of Westslope Cutthroat Trout. Any harvest that may occur inside the SMZ boundary of LaMarche Creek would be done in accordance with the SMZ Law and BMP Guidelines. A substandard crossing of the stream would be replaced and roads would be brought to State of Montana BMP standards. Based on implementation of BMP's and required mitigations there is low risk of direct, in-direct or cumulative effects to aquatic life or fisheries or wetlands.

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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 direct, indirect, and cumulative effects to these species and their habitat.*

**Terrestrial Wildlife:** According to the Montana Natural Heritage Program, the project area may contain potential habitats for wolverine, hoary bat, fisher, northern goshawk, great blue heron, pileated woodpecker, long billed curlew and western toad. The proposed activities could cause slight shifts in use by these species where present, however, no key habitat components are known to exist in the project area and long-term use by any of these species is not expected to appreciably change. Limited potential for use of the project area by wolverine, fisher great blue heron and long billed curlew exists. No changes to use would be anticipated with the proposed activities. Thus, a low risk of adverse direct, indirect, or cumulative effects would be expected to occur with the proposed activities.

**Fisheries:** A fisheries survey has been completed for LaMarche Creek and it has been determined that it provides habitat for a genetically pure strain of Westslope Cutthroat Trout. Any harvest that may occur inside the SMZ boundary of Lamarche Creek would be done in accordance with the SMZ Law and BMP Guidelines. A substandard crossing of the stream would be replaced and roads would be brought to Montana's BMP standards. Based on implementation of BMP's and planned mitigations there is low risk of direct, in-direct or cumulative effects to aquatic life or fisheries or wetlands.

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#### **10. HISTORICAL AND ARCHAEOLOGICAL SITES:**

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

**DNRC Archaeologist, Patrick Rennie was contacted. There are no known archaeological sites in the project area. As such, no cultural resource concerns associated with implementation of the project are anticipated.**

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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 direct, indirect, and cumulative effects to aesthetics.*

**The area is approximately 12 road miles from the city of Deer Lodge. Spacing of leave trees would create negligible impacts to aesthetics from the city. Primary use of the area is during hunting season. No un-acceptable impacts are anticipated with either alternative.**

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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 direct, indirect, and cumulative effects to environmental resources.*

**N/A**

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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.*

**N/A**

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<b>IV. IMPACTS ON THE HUMAN POPULATION</b>
<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.*

**None identified.**

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

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

**The project area is currently utilized for grazing and would continue regardless of either alternative. Reduction in crown densities would likely increase grass production.**

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

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

**The proposed project would create employment for one logging company for approximately 2 months.**

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

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

**No measurable impact has been identified with either alternative.**

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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 direct, indirect, and cumulative effects of this and other projects on government services*

None identified.

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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.*

The proposed project is in accordance with the Management Plan created for the Prisons timber resources.

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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 direct, indirect, and cumulative effects to recreational and wilderness activities.*

The road system through the harvest area can be used to access National Forest lands. Primary use is during the general hunting season. The proposed action would not be allowed after September 1 to minimize potential impacts with general hunting season activities.

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

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

N/A

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**22. SOCIAL STRUCTURES AND MORES:**

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

N/A

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**23. CULTURAL UNIQUENESS AND DIVERSITY:**

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

N/A

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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 direct, indirect, and cumulative economic and social effects likely to occur as a result of the proposed action.*

N/A

<b>EA Checklist Prepared By:</b>	<b>Name:</b> Roger Ziesak	<b>Date:</b> 1/7/15
	<b>Title:</b> Forest Practices Program Manager	

**V. FINDING**

25. ALTERNATIVE SELECTED:

26. SIGNIFICANCE OF POTENTIAL IMPACTS:

27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

EIS

More Detailed EA

No Further Analysis

<b>EA Checklist Approved By:</b>	<b>Name:</b> Paula Short
	<b>Title:</b> Forestry Assistance Bureau Chief
<b>Signature:</b> <i>Paula Short</i>	<b>Date:</b> <i>4/13/15</i>