

CHECKLIST ENVIRONMENTAL ASSESSMENT

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| Project Name: | SURE ENOUGH TIMBER SALE |
| Proposed Implementation Date: | December 1, 2011 – December 31, 2013 |
| Proponent: | DNRC, Northeastern Land Office |
| Location: | Section 16, Township 13North, Range 21 East |
| County: | Fergus |

I. TYPE AND PURPOSE OF ACTION

The Montana DNRC, Northeastern Land Office, proposes to harvest up to 1000 MBF (thousand board feet) or approximately 7000 tons of timber from approximately 235 acres. Harvesting would be done with ground-based equipment during dry times of the year. It would require 0.4 miles of new road reconstruct and minor reconstruction on the existing roads that were constructed for past timber sales. The purpose of the action would be to generate income for the Public Common School Trust Fund, increase tree growth rates, and reduce the likelihood of loss due to insects, disease and stand replacement wildfire.

II. PROJECT DEVELOPMENT

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

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

This State section has had several timber harvest entries in the past dating back to 1970, including one in 1975, and the 1998 Potter Creek Timber Sale. All of these past sales have been approved by DNRC Forest Management and the Land Board.

On April 1, 2011, letters describing the proposed project and requesting comments were sent to the following:

Adjacent Landowners: Bureau of Land Management (BLM) Lewistown and the 3-Butte Ranch LLC.

Montana State Agencies: Montana DNRC, Forest Management Bureau, Montana DNRC, Agriculture and Grazing Management Bureau, Montana DNRC Centralized Services Division, Montana Department of Fish Wildlife and Parks and the Montana Natural Heritage Program.

Others: Friends of the Wild Swan, F. H. Stoltze Land and Lumber, Plum Creek Timber Co., Alliance for the Wild Rockies, Wild West Institute, Stuart Lewin, Confederated Salish and Kootenai Tribes, Montana Wood Products Association and the Fergus County Conservation District.

Individuals Consulted: Patrick Rennie, DNRC, Archaeologist and Jeff Schmalenberg, DNRC Soil Scientist who compiled the Soils/Watershed portions of this document.

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

Montana Idaho State Airshed Group and Fergus County Sheriff's office for hazard reduction and slash burning.

3. ALTERNATIVES CONSIDERED:

No Action Alternative: This alternative would postpone any timber harvest at this time, but would continue current grazing lease agreement. Potential effects of the "No Action Alternative" include reduced tree growth rates, declining forage and grazing potential and increased risk of stand replacement wildfire. Additionally, revenue opportunity may be lost as dead and dying timber is lost to decay, insects, windthrow and wildfire.

Action Alternative: The proposed action would commercially harvest up to 1000 MBF (thousand board feet) or approximately 7000 tons of timber from approximately 235 acres. It would be necessary to construct 0.4 miles of new roads. The sale of forest products would produce revenue for the Public School Trust Fund, while ensuring the long-term productivity and revenue generating capacity. The sale would utilize selective harvest practices of over story removal to reduce competition and improve stand and forage productivity. A reduction in fuel loads would reduce the Wildland-Rural Intermix Fire Hazard that currently exists.

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 following are some general BMPs and mitigations that would be incorporated into the proposed action to ensure adequate soil protection and long-term productivity of the site is maintained.

- Limit equipment operations to periods when soils are relatively dry, (less than 20% soil moisture), frozen or snow covered ground, to minimize soil compaction and rutting, and maintain drainage features.
- The Forest Officer shall approve a plan for felling, yarding and landing location in each harvest unit prior to the start of operations in the unit. The locations and spacing of skid trails and landings shall be designated and approved by the Forest Officer prior to operations and skid trails will not be spaced less than 60 feet, except to reach centralized landing areas. Existing skid trails will be reused if properly located and complies with BMP's.
- Levels of coarse and fine woody material will be retained on site as prescribed by the forest officer and recommended by the project soil scientist using guidance from the best available science (Graham et al. 1994). 10-15 tons/acre of material >3" is recommended for the Sure Enough Timber Sale project area with as many needles and fine material retained as possible.

Detrimental soil impacts resulting from compaction, displacement and erosion would be expected on approximately 15% or less of each harvest unit and would be localized to primary skid trails and log landing sites. Soil monitoring conducted on soils similar to those in the project area have found that the above listed mitigation measures are effective in meeting soil protection guidelines in the SFLMP (DNRC 2009). If recommended soil mitigation measures are implemented, moderate levels of long-term impacts to soil productivity from compaction and displacement are expected due 30-40% slopes planned for harvest and high clay content soils within the project area.

Assuming 15% of all harvest units (235 acres) would be detrimentally impacted, this would result in approximately 35.3 acres of harvest related impacts within the project area. Within these impacted areas soil productivity would be expected to be reduced for a period of 5-20 years depending on the extent and magnitude of the impacts as well as the natural amelioration rate for the specific location. Approximately 0.7 acreage of grassland would be temporarily impacts through the construction of a low standard road. This area would be grass seeded upon completion of the project and hydrologically stabilized.

10-15 tons/acre of woody material would facilitate retention and accumulation of soil organic matter capital, micro growing sites creation and moisture retention until canopy closure is achieved from future stands. The proposed actions regarding timber harvest will have low level effects on soil productivity and nutrient cycling due to the existing low productivity within the project area.

Approximately 70% of the harvest area is proposed for reentry that currently has approximately 10% detrimental soil disturbance largely isolated to primary skid trails used during previous harvest. Due to the proper initial location of these trails they can be reused during the proposed entry with minimal cumulative effects. Due to the mitigations and BMP's that will be applied during harvest, moderate amounts of additional impacts are expected. The cumulative sum of soil impacts after the harvest is completed is expected to be between 15-20% and site productivity will be maintained. There is a moderate risk of

moderate cumulative effects to soil resources within the project are, but soil productivity is expected to be maintained.

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.

All timber harvest and log hauling activities will be conducted exclusively within the Potter Creek watershed (5,351 acres). The project area contains spatial discontinuous class III stream segments tributary to Potter Creek. However, all class III segments with discernable stream channels are discontinuous with no direct channel connectivity to the lower watershed or the main stem of Potter Creek. Potter Creek, at its outlet, is a Class II intermittent stream tributary to the North Fork of Flat Willow Creek.

Water Quality

This portion of the Flatwillow Creek watershed including Potter Creek and the project area is classified B-2 in the Montana Surface Water Quality Standards. Waters classified B-2 are to be maintained suitable for drinking, culinary, and food processing purposes, after conventional treatment; bathing, swimming, and recreation; growth and marginal propagation of salmonid fishes and associated aquatic life, waterfowl and furbearers; and agricultural and industrial water supply.

The North Fork of Flatwillow Creek is listed as impaired on the 2010 303(b) list by Montana DEQ for partially supporting aquatic life and cold water fisheries due to sediment/siltation resulting from agricultural and grazing practices. A TMDL is required and is currently in a watershed monitoring and planning phase.

One temporary dry draw crossing will be used to gain access to a harvest unit on the north end of the project area. This crossing will not require a culvert but rather dry hauling conditions so excessive rutting will be avoided. Multiple existing 18" culverts along the haul route draining temporarily saturated draw bottoms as well as road surface drainage features will require various degrees of maintenance to meet BMP's. No active sediment sources were noted during field review and all maintenance actions will be implemented prior to timber harvesting and log hauling.

There is a low risk of direct or indirect impacts to water quality or downstream beneficial uses resulting from the proposed actions for the follow reasons:

1. Application of BMPs and mitigations during harvest activities will minimize upland soil disturbance and erosion.
2. Lack of spatially continuous and connected stream channels within the project area to lower watershed.
3. The existing access and haul routes largely meet minimum BMPs standards and are considered low risks to water quality.
4. The proposed actions include maintenance of existing culverts and road drainage features, and installation of additional road surface drainage features.
5. No timber harvest or operation of ground based equipment is planned within SMZs.

Privately held lands within the watershed have conducted forest management activities on their lands from as recent at 2009 and spanning a period to the early 1990's. However, these harvested areas were located in upland areas and at significant distances from any stream channel features and no other projects have been planned or proposed within the analysis area at this time. There is a low risk of cumulative impacts to water quality resulting from the proposed actions due to the above mentioned criteria as well as the low risk of direct and indirect impacts from the proposed actions as listed above.

Water Quantity

The Potter Creek watershed is approximately 35% forested (1,880 acres) with Ponderosa pine and Douglas fir with average annual precipitation of 24 inches. Current forest conditions were observed to be overstocked and encroaching historical range sites. These conditions are assumed to be a result of fire exclusion within this fire

dependant forest types. Approximately 44% of forest stands within the watershed have had timber harvest activities. Harvest treatments in these areas are typically group selection and shelterwood silviculture prescriptions. These treatments typically remove approximately 40-60% of the forest canopy. The cumulative effect of the proposed actions when considering past harvest activities will increase the amount of harvest within the watershed from 44% to 56% of the forested area.

This level of harvest is high and typically within a range where increases to water yield and changes to the duration and magnitude of peak flow events can be expected in watersheds with moderate to high levels of precipitation. But in contrast, both the proposed and completed harvest has targeted trees which are dead, dying, overstocked or susceptible to insect and disease infestations. Therefore, this level of forest canopy removal is not expected to be substantially different than what would occur with natural mortality if no management activities were implemented or that of historical conditions.

It is expected that the extent of saturated soils within draw bottoms and near surface ground water levels may increase for short periods of time during spring months after implementation of the proposed actions within the project area. However, these increases will have no detrimental, and potentially beneficial, direct or indirect effects. This localized saturation and potential increase in near surface ground water levels will not produce overland flow due to the lack of stream channels in these areas of saturation and the lack of surface water connectivity to Potter Creek from the project area is expected to continue.

Furthermore, the Potter Creek watershed receives very low levels of annual precipitation and exhibits very low levels of runoff. These watershed attributes typically do not warrant water yield scrutiny regardless of the level of forest management. However, due to the existing and proposed levels of harvest within this watershed a moderate risk of cumulative effects from the proposed actions to water yield is presented. This effect to water yield would most likely be observed in sustained base flows during late summer months. No effects to channel form or stability is expected. Regardless of the timber harvest within the watershed, water yield increases would be expected due to the high levels of natural tree mortality. This cumulative effects is expected to result in a hydrologic regime more closely mimicking the watershed prior to fire exclusion and range encroachment.

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.

The project area is located within Airshed 9. State Hazard Reduction Standards will be mitigated by initiating slash disposal (by DNRC personnel) during seasonal burning periods and completed by following procedures established by the Montana Idaho Airshed Coordination Group. These measures will ensure that all direct and indirect effects of smoke to air quality will be minimal. No cumulative impacts to air quality are likely to occur as a result of this proposal.

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.

The timber stands in the project area are composed of Ponderosa Pine and Douglas Fir and do not meet DNRC's definition of old growth. Approximately 75% of the merchantable (>16" DBH) trees would be included in the over story removal. Prescribed treatments are intended to increase forest health, tree growth, and forage productivity while addressing potential adverse impacts. Primary effects would be decreased canopy cover and reduced stems per acre. No cumulative impacts to vegetation are likely to occur as a result of this proposal and no rare plants or cover types have been identified by the Montana Heritage Program. (See attachment A-1 for vegetation stand description, A-2 for the silvicultural prescription.

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.

The project area is frequented by game animals. Displacement of certain species during harvest operations and some reduction of hiding cover will be direct impacts of the project. Secondary impacts include increased

forage availability for some species through increased grass and forbs production. Streamside Management Zones Rules and Best Management Practices would be utilized.

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.

No federally listed threatened or endangered species or identified habitats are known to exist within the project area. No cumulative impacts to sensitive species or species of special concern or their habitat are likely to occur as a result of this proposal.

10. HISTORICAL AND ARCHAEOLOGICAL SITES:

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

The DNRC staff archeologist, Patrick Rennie, conducted a Class III inventory of potential effect with negative results. No recorded historical, archeological or paleontological resources are present. There would be no direct, indirect or cumulative effects to these resources as a result of this proposal.

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 area is located on and within common topographical features typical of the area and would not be visible from populated areas. A reduction of canopy may be noticeable from the county road. No excessive noise, light or cumulative impacts are likely to occur as a result of this proposal.

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.

The project area will not use resources that are limited in the area. No cumulative impacts to environmental resources of land, water, air or energy are likely to occur as a result of this proposal.

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.

The project is a part of the joint effort of DNRC and private ownerships, to reduce the Wildland-Rural Intermix Fire Hazard that currently exists in the area. The project area is classified grazing land (State Lease # 5549, 3-Butte Ranch, LLC.). No adverse effects are anticipated to occur in conjunction with activities proposed under the action alternative. No cumulative impacts are likely to occur.

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

Identify any health and safety risks posed by the project.

Human safety risks may vary with the workers actively involved in “on site” harvest operations. Safety rules and regulations applied through Occupational Health and Safety Act (OHSA) and are administered by workers dealing with that program.

15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:

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

This project is expected to increase forestland and rangeland productivity.

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.

People are currently employed in the wood products industry in the region. Due to the relatively small size of the timber sale program, there will be no measurable cumulative impact from this proposed action on employment. No cumulative impacts are likely to occur as a result of this proposal.

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.

People are currently paying taxes from the wood products industry in the region. Due to the relatively small size of the timber sale program, there will be no measurable cumulative impact from this proposed action on tax revenues. No cumulative impacts are likely to occur as a result of this proposal.

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

There will be no measurable cumulative impacts related to demand for government services due to the relatively small size of the timber sale program, the short-term impacts to traffic, the small possibility of a few people temporarily relocating to the area, and the lack of other timber sales in the adjacent area. No cumulative impacts are likely to occur as a result of this proposal.

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.

In March 2003, DNRC adopted new Forest Management Rules and began a phased-in implementation of them. The full intent and content of the Rules have been incorporated into the design of the proposed action. No cumulative impacts are likely to occur as a result of this proposal.

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.

There is legal public access to this tract, and it frequented often during the hunting season. Hunting activities will be restricted to the southern one half of section 16 during the 2012 and 2013 big game seasons. For safety reasons, no hunting will be allowed on the north half during timber harvest activities.

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.

There would no measurable cumulative impacts related to population and housing due to relatively small size of the timber sale program, and the fact that people are already employed in this occupation in the region. No cumulative impacts are likely to occur as a result of this proposal.

22. SOCIAL STRUCTURES AND MORES:

Identify potential disruption of native or traditional lifestyles or communities. None

23. CULTURAL UNIQUENESS AND DIVERSITY:

How would the action affect any unique quality of the area? None

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 estimated return to the trust under the action alternative would be approximately \$35,000.00 for 7000 tons of saw logs at \$5.00/ton. Costs, revenues and estimates of return are estimates intended for relative comparison of alternatives. They are not intended to be used as absolute estimates of return. The estimated stumpage is based on comparable sales analysis. No cumulative impacts are likely to occur as a result of this proposal.

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| EA Checklist Prepared By: | Name: Ron Buck | Date: August, 2011 |
| | Title: DNRC-NELO Area Forester | |

V. FINDING

25. ALTERNATIVE SELECTED:

Action Alternative

26. SIGNIFICANCE OF POTENTIAL IMPACTS:

There will be no significant environmental impacts from the action alternative.

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| EA Checklist Approved By: | Name: Clive Rooney | |
| | Title: NELO Area Manager | |
| Signature: /s/ Clive Rooney | | Date: 8/17/2011 |

27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

EIS

More Detailed EA

No Further Analysis