

CHECKLIST ENVIRONMENTAL ASSESSMENT

FOR THE

***DURPHY HILLS TIMBER SALE***

Prepared by Ron Buck  
Northeastern Land office- DNRC/Lewistown  
May, 2009

# TABLE OF CONTENTS

- I     Checklist Environmental Assessment  
          (DNRC-NELO Area Forester)-----Ron Buck
  
- II    Attachment A  
        Vicinity and Sale Maps
  
- III   Attachment A-1  
        Vegetation Stand Description
  
- IV    Attachment A-2  
        Silviculture Prescription
  
- V     Attachment B- Specialist Reports  
        Watershed and Fisheries Report  
                &  
        Soils and Noxious Weed Report ----- -Jeff Schmalenberg  
                (DNRC Soils Scientist)  
        Forest Health and Pest Mgt. Report -----Amy Gannon  
                (DNRC Entomologist)



## CHECKLIST ENVIRONMENTAL ASSESSMENT

<b>Project Name:</b>	<b>DURPHY HILLS TIMBER SALE</b>
<b>Proposed Implementation Date:</b>	August, 2009 – December, 2011
<b>Proponent:</b>	DNRC, Northeastern Land Office
<b>Location:</b>	Section 16, Township 12North, Range 22 East
<b>County:</b>	Fergus

### I. TYPE AND PURPOSE OF ACTION

The Montana DNRC, Northeastern Land Office, proposes to harvest up to 1200 MBF (thousand board feet) or approximately 8400 tons of timber and 1500 tons of pulp material from approximately 235 acres. Harvesting would be done with ground-based equipment during dry times of the year, periods of adequate snow cover or frozen conditions. It would be necessary to construct approximately 2.80 miles of new roads and do some minor reconstruction on the existing road. 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.*

On April 6, 2007, letters describing the proposed project and requesting comments were sent to the following, and no issues of concern were identified. David J. Murnion and Jacqueline S. Mercenier requested and received information on several occasions, and requested a copy of the EA before it went to the Land Board.

Adjacent Landowners: Bureau of Land Management (BLM) Lewistown, N-Bar Ranch, Sinclair Oil Corporation, Gregory Eiselein, David J. Murnion, Mark Murion, Michael Fackrell, Steve & Debbie Pascal, James T. Best, Harold Maki, Robert Gearhart, Curlew Land & Cattle Co. and State Lease # 7622- Sunlight Ranch Co.

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.

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, Fergus County Conservation District and the Rocky Mountain Elk Foundation.

Individuals Consulted: Patrick Rennie, DNRC, Archaeologist; Gary Frank, DNRC Resource Management Supervisor; Jeff Schmalenberg, DNRC Soil Scientist compiled Attachment -B, Amy Gannon, DNRC Entomologist conducted an on sight field inspection and Brian Long, DNRC Supervisor Forest Inventories completed a timber cruise analysis.

#### 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. See Attachment –B, Amy (Kearny) Gannon, DNRC Entomologist.

**Action Alternative:** The proposed action would commercially harvest 1200 MBF (thousand board feet) or approximately 8400 tons of timber and 1500 tons of pulp material from approximately 235 acres. It would be necessary to construct approximately 2.80 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 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
<ul style="list-style-type: none"><li>• <i>RESOURCES</i> potentially impacted are listed on the form, followed by common issues that would be considered.</li><li>• Explain <i>POTENTIAL IMPACTS AND MITIGATIONS</i> following each resource heading.</li><li>• Enter “NONE” if no impacts are identified or the resource is not present.</li></ul>

---

### 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.*

Some compactable and unstable soils are present. The majority of the 235 harvest acres are on flat ground with some 10 to 35 % slopes that are suitable for mechanical felling and skidding. No unusual geological features are present. There are no special reclamation considerations. All specialists recommendations and mitigations as well as Best Management Practices (BMP’s) will be implemented to protect soil resources. See attachment B for existing soil conditions, and direct, indirect and cumulative environmental effects.

---

### 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.*

There are two short Class 3 stream segment (approximately 500 feet each) which would be buffered and left out of the cutting units. See Attachment B for watershed existing conditions, and direct, indirect and cumulative environmental effects.

---

### 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. There would be less slash due to pulp removal. 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 some Douglas Fir and do not meet DNRC's definition of old growth. Approximately 50% of the merchantable (>10" DBH) trees and 1500 tons of pulp from smaller diameter trees and tops would be removed. Prescribed silvicultural 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. The Montana Department of Fish, Wildlife and Parks has an Elk Management Plan in place and this proposed project is consistent with their goals. Mitigations include compliance with Montana Administrative Rules for Forest Management, Streamside Management Zones Rules and Best Management Practices. In addition, the N-Bar ranch would close access from September 3<sup>rd</sup> through November 22<sup>nd</sup> for big game hunting season. See Attachment B.

---

**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. The Montana Natural Heritage Program listed several sensitive species of grass land birds that could possibly exist in a one mile buffer that extends into the northeast quarter of section 16. There are no proposed timber harvest units in this area, and no species of special concern have been observed 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. Other activities nearby such as the future BLM fuel management project to the west in section 17 would not be affected by this project. 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, the US BLM 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 # 7622, Sunlight Ranch Co.). No adverse effects are anticipated to occur in conjunction with activities proposed under the action alternative. No cumulative impacts are likely to occur.

<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>



---

**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.*

No wilderness or recreational areas are nearby or accessed through this tract. There is no legal public access to this tract. No cumulative impacts to recreational or wilderness activities would occur as a result of this proposal.

---

**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 \$42,750.00 for 8400 tons of saw logs at \$5.00/ton and 1500 tons of pulp wood at \$0.50/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.

<b>EA Checklist Prepared By:</b>	<b>Name:</b> Ron Buck	<b>Date:</b> May, 2009
	<b>Title:</b> 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.

**27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:**

EIS

More Detailed EA

No Further Analysis

<b>EA Checklist Approved By:</b>	<b>Name:</b> Clive Rooney
	<b>Title:</b> NELO Area Manager
<b>Signature:</b>	<b>Date:</b>