

MILLER MARTIN CAMP TIMBER PERMIT

CHECKLIST ENVIRONMENTAL ASSESSMENT

Montana Department of Natural Resources & Conservation
Northwestern Land Office -- Stillwater Unit
December 2012



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CHECKLIST ENVIRONMENTAL ASSESSMENT

| | |
|--------------------------------------|--|
| Project Name: | Miller Martin Camp Timber Permit |
| Proposed Implementation Date: | Winter 2013 |
| Proponent: | Montana Department of Natural Resources (DNRC), Northwestern Land Office, Stillwater Unit, & Enos Miller of E.M. Logging, Inc. |
| Location: | Sections 29 & 30 of Township 32 North, Range 23 West |
| County: | Flathead |

I. TYPE AND PURPOSE OF ACTION

Montana Department of Natural Resources and Conservation (DNRC), Stillwater Unit, proposes to harvest 50,000 board feet of timber, and an additional 520 tons of post and pole material near Olney, Montana from the Stillwater State Forest (see Attachment A -- Project Map). The proposed project would regenerate new stands of healthy trees while improving the vigor and growth of the remaining trees in the forest, for the purpose of benefiting future timber stand development. Furthermore, the proposed project would reduce the amount of forest fuels and the density of trees to mitigate the potential effects of wildland fire. No road work is required. This project would produce an estimated \$6,200 in revenue for the State Normal School Trust and the School of Mines Trust.

The lands in this project area are held in trust by the State of Montana for the support of specific beneficiary institutions (Enabling Act of February 22, 1889; 1972 Montana Constitution, Article X, Section 11). The Board of Land Commissioners (Land Board) and DNRC are legally required to administer these trust lands to produce the largest measure of reasonable and legitimate long-term return for the trust beneficiaries (Montana Code Annotated 77-1-202).

This project was developed in compliance with the State Forest Land Management Plan (SFLMP), the Administrative Rules for Forest Management (Forest Management Rules; ARM 36.11.401 through 471), and conservation commitments contained in the Selected Alternative in the Final EIS of the Montana DNRC Forested State Trust Lands Habitat Conservation Plan (HCP), as well as other applicable state and federal laws.

II. PROJECT DEVELOPMENT

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

Provide a brief chronology of the scoping and ongoing involvement for this project. List number of individuals contacted, number of responses received, and newspapers in which notices were placed and for how long. Briefly summarize issues received from the public.

This project was proposed by E.M. Logging, Inc. under DNRC's 612 Permit Program (MCA 77-5-212). Issues were identified by a DNRC Interdisciplinary Team (ID Team) made up of a DNRC wildlife biologist, hydrologist, and forester. Public scoping was not implemented based on the combination of several factors including: 1) limited potential effects to resources as identified by the ID Team, 2) the current cover types present, and 3) the size of the treatment area. The total harvest area is 46 acres, has a high density of low vigor, pole-sized lodgepole pine occurring in the general area, is not visible from any open roads, and all hauling would be occurring on a seasonally maintained road which is usually closed in winter due to snow levels.

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

Examples: cost-share agreement with U.S. Forest Service, 124 Permit, 3A Authorization, Air Quality Major Open Burning Permit.

Montana Department of Environmental Quality (DEQ)

The DNRC, classified as a major open-burner by the DEQ, is issued a permit from the DEQ to conduct burning activities on state lands managed by the DNRC. As a major open-burning permit holder, the DNRC agrees to operate within the confines of the permit at all times.

Montana/Idaho Airshed Group

The DNRC is a member of the Montana/Idaho Airshed Group which regulates prescribed burning, including both slash and broadcast burning, resulting from forest-management activities performed by the DNRC. As a member of the Airshed Group, the DNRC agrees to only burn on days that meet acceptable smoke dispersion levels determined by the Smoke Management Unit in Missoula, Montana.

United States Fish and Wildlife Service (USFWS)

The DNRC is managing for the habitats of threatened and endangered species on this project by implementing the Montana DNRC Forested Trust Lands Habitat Conservation Plan (HCP), with the associated Incidental Take Permit that was issued by the United States Fish & Wildlife Service (USFWS) in February of 2012 under Section 10 of the Endangered Species Act. The HCP identifies specific conservation strategies for managing the habitats of grizzly bear, Canada lynx, and three fish species: bull trout, westslope cutthroat trout, and Columbia redband trout. This project complies with the HCP which can be found at www.dnrc.mt.gov/HCP.

3. ALTERNATIVE DEVELOPMENT:

Describe alternatives considered and, if applicable, provide brief description of how the alternatives were developed. List alternatives that were considered but eliminated from further analysis and why.

The No-Action and Action Alternatives are described in this section. The decisionmaker may select a modification or combination of these alternatives.

Alternatives Considered

- **No-Action Alternative**

Under this alternative no timber would be harvested and, therefore, no revenue would be generated for either the State Normal School or the School of Mines trusts. Salvage logging, firewood gathering, recreational use, fire suppression, noxious-weed control, additional requests for permits and easements, and ongoing management requests may still occur. Natural events such as plant succession, tree mortality from insects and disease, windthrow, downed fuel accumulation, in-growth of ladder fuels, and wildfires would continue to occur.

- **Action Alternative**

Development of the Action Alternative is based on availability of special forest products (post and poles) identified by the proponent. The analyses of current forest and resource conditions within the project area and cumulative effects areas by the ID Team further refined the proposed action to meet the current Forest Management Rules that govern the state of Montana's forest management program. As a result, mitigation measures were developed for the Action Alternative which would:

- Restrict heavy machinery from operating behind gated or bermed roads during the spring period (April 1 through June 15) in the project area to mitigate for spring bear habitat.
- Provide for hiding cover, potential nesting and perch trees, as well as other important habitat components for wildlife by leaving some patches of small trees and retaining all larger diameter western larch and Douglas-fir.

The following are the main issues related to forest and resource conditions:

- Current species composition of the understory would move current cover types away from desired future conditions if harvesting and forest improvement actions do not occur.
- Much of the surrounding area has very dense pole-sized trees that regenerated following a fire in 1926. These stands currently average between 2,000 and 3,000 trees per acre, and this density has reduced the growth potential of trees in these stands. A fully stocked stand of this size and age class would typically have 150 to 250 trees per acre.

Details

Under this alternative the silvicultural and harvest treatments would be to:

- Harvest approximately 50,000 board feet of timber from 46 acres;
- Regenerate new stands of healthy trees on 29 acres using a clearcut with reserves treatment with the follow-up work of slashing and piling of excess slash; and
- Improve the vigor and growth of residual overstory trees on 17 acres using a combination of intermediate treatments including commercial thinning (thinning from below) and improvement cuts.

The road work associated with this project would include:

- Plowing of approximately 1.8 miles on Martin Camp Road and;
- Plowing of approximately 1.0 miles on restricted roads off of Martin Camp Road.

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 direct, indirect, and cumulative effects to soils.

The following issue statements were compiled from internal discussions regarding the effects of the proposed timber harvest:

- *Ground-based harvesting techniques can displace and compact soils which can adversely affect the hydrologic function, soil structure, and long-term productivity of the site.*
- *Removal of both coarse and fine woody material off-site during timber harvesting can reduce nutrient pools required for future forest stands, and can affect the long-term productivity of the site.*

This analysis will qualitatively assess the risk of negative effects to soils from erosion, compaction, and displacement from each alternative as well as address long-term productivity by ensuring adequate levels of coarse woody debris are left on site.

Existing Conditions

The analysis area where the proposed timber harvesting would occur contains two landtypes—LT27-7 and LT28-7 (*Martinson and Basko, 1998*). These landtypes are rated as moderate for annual timber production and are well suited to tractor operations during dry, frozen and snow-covered conditions to reduce the risk of compaction.

Past harvesting operations in the analysis area include harvests in the 1920's through the 2005 with the majority of management activity occurring in the 1920's and 1940's. Cumulative effects from past forest management in the proposed harvest units are the result of skid trails, dozer trails, and landings. Current soil disturbance levels from past management activities in the proposed cutting units are estimated to be approximately 10% of the treatment area. The amount of coarse woody debris found within the proposed harvest area currently is estimated to exceed 10 tons per acre.

Environmental Effects

- **Direct, Indirect, and Cumulative Effects of the No-Action Alternative**

Because no additional activities would occur under this alternative, past disturbances from management activities (e.g. skid trials, ruts, compaction, etc.) would continue to recover to pre-disturbance conditions. Coarse woody debris would gradually increase over time and no additional cumulative effects would occur.

- **Direct, Indirect, and Cumulative Effects of the Action Alternative**

Under this alternative, the operator would be required to only operate during frozen and/or snow-covered conditions. With the application of BMP's and proper resource mitigations, the risk of adverse impacts would be low. Winter logging conditions would reduce the potential for erosion and displacement. Additionally, the operator would be required to leave 10 to 15 tons per acre of coarse woody debris on site to meet the recommended amounts outlined by Graham et.al. (1994). Fine debris would be maintained, preventing adverse impacts to nutrient cycling. Overall, implementing the Action Alternative would result in a low risk of unacceptable impacts.

Additional information can be found in the Project File: Soils, which is located at the Stillwater Unit office.

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 direct, indirect, and cumulative effects to water resources.

The nearest surface water to the project area is approximately 1,500 feet away across relatively flat terrain (less than 10 percent slope). Additionally, the proposed haul route does not cross any perennial streams. Because this project does not propose road construction and all harvesting would be conducted under winter conditions (frozen or snow-covered soils), the risk of displacing soil that could be transported to water bodies is very low. Therefore, the risk of measurable direct, indirect or cumulative impacts to water bodies would be very low.

Due to the low risk of measurable impacts, no further analysis is appropriate for this proposal.

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.

- **Direct, Indirect, and Cumulative Effects of the No-Action Alternative**

Under this alternative no timber harvest or related activities would occur, and no slash piles would be burned resulting in the introduction of increased particulate matter.

- **Direct, Indirect, and Cumulative Effects of the Action Alternative**

This project is located in Airshed 2. Some particulate matter may be introduced into the airshed during slash burning activities associated with this timber sale. As a result, slash burning would only be conducted when conditions favor good to excellent smoke dispersion, thereby minimizing the potential impacts and length of exposure. Thus, direct, indirect, and cumulative effects to air quality are expected to be minimal.

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.

Existing Condition

The Forest Management Rules direct the DNRC to promote biodiversity by taking a coarse-filter approach that favors an appropriate mix of stand structures and composition on State Lands (ARM 36.11.404). The two cover types present within the proposed harvest units are lodgepole pine (29 acres) and western larch/Douglas-fir (17 acres). The desired future cover type for these stands based on Stand Level Inventory (SLI) data, is the same.

Species regeneration response to a major fire that occurred in 1926 has resulted in a uniform canopy and mid-canopy in the western larch/Douglas-fir stands dominated by lodgepole pine individuals in the 40-99 year old age class throughout the entire project area.

There is a minor presence of mountain pine beetle in the lodgepole pine and *Phellinus pini* in the western larch.

Following the 1926 fire, regeneration of lodgepole pine, with a small minority of western larch individuals, was very dense. Areas that were not precommercially thinned (dozer or handthinning) in 1980 retained an extremely high density of sapling to small sawlog-sized trees. Although these stands currently do not contain a significant amount of large diameter downed woody material, they do contain a continuous fuel load of small diameter standing trees, and a substantial amount of small-diameter downed woody material from snow damage and wind events (blowdown).

Noxious weeds are present along the roads within the project area; these include oxeye daisy, spotted knapweed, and St. Johnswort.

This project area does not have any old-growth stands within it which meet the criteria established by Green et.al.

Using the Natural Heritage Program (NHP) database, no sensitive, threatened, or endangered plant species have been documented within the project area.

Environmental Effects

- **Direct, Indirect and Cumulative Effects of the No-Action Alternative**

Under the No-Action Alternative, neither cover types nor age class distributions would be directly or indirectly affected.

Stocking levels of shade-tolerant species and downed woody debris would increase within these stands over time. Various factors such as insects, diseases, snow, and weather events would eventually cause more standing dead trees to occupy portions of these stands. Increases in ladder fuels, downed woody material, and standing dead trees would increase the potential and severity of wildfire on the landscape, and larger, more severe wildfires are harder to suppress.

The current density of the tree canopy in these stands would continue to prevent the establishment and subsequent expansion of invasive species into these stands. Weed seed is primarily introduced via motor vehicle use, therefore open roads would continue to be a pathway for new weed populations to become established in stands adjacent to the road following a natural disturbance event. In this Martin Camp area, established infestations of noxious weeds are being addressed through herbicide spraying along the open roads but not behind road closures.

- **Direct, Indirect, and Cumulative Effects of the Action Alternative**

Under the proposed action:

- 29 acres of lodgepole pine would be harvested with a clearcut with reserves prescription and regenerated into a younger, more vigorous lodgepole pine stand;
- 17 acres would be thinned from below to promote the growth rates of the desired western larch/Douglas-fir cover type.

In both cases, the current cover types meet the DNRC’s Desired Future Conditions (DFCs), however 29 acres would result in an age-class shift from 80+ years to the ‘0-39 year’ age class. Collectively, across the Stillwater Unit the trend has been to apply silvicultural prescriptions to move cover types toward DFCs and age classes into the ‘0-39 year’ age class. This project would maintain the desired conditions present while regenerating and promoting more vigorous, productive stands.

Post-harvest stand conditions would not have the current connectivity of dense fuel loads and ladder fuels present to elevate fire into the tree crowns promoting the chance of stand replacement wildfire. Thus, the success of aerial and ground attacks on wildfires would likely improve.

The spread of noxious weeds from the use of mechanized equipment would be minimized by washing the equipment before entering the project area, and by logging under winter conditions. Washing the equipment prior to use would help limit the spread of noxious weeds, and winter logging would eliminate displacement of the forest floor preventing the germination of seeds already present in the seed bed.

Additional information can be found in the Project File: Vegetation, located at the Stillwater Unit office.

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.

A. Terrestrial and Avian Life and Habitats

The following analysis summarizes the anticipated effects of the proposed activities on wildlife habitat.

| COARSE-FILTER RESOURCE TOPIC | COARSE-FILTER ANALYSIS |
|---------------------------------------|--|
| Old-Growth Forest | Old-growth forest does not occur in the project area, thus no direct, indirect or cumulative effects would be anticipated. |
| Connectivity of Mature Forest Habitat | The proposed activities would focus on removing small diameter lodgepole pine and are not anticipated to affect the availability of mature forested habitat. Thus, no adverse direct, indirect or cumulative effects on species sensitive to removal of mature forest cover would be anticipated. |
| Snags and Coarse Woody Debris | Some individual snags could be removed due to operational activities and human safety considerations on the 46 acres proposed for treatment. However, existing snags and snag recruits would be retained where possible and coarse woody debris is not anticipated to be affected. Thus, negligible adverse direct, indirect or cumulative effects on species that depend on these resources would be anticipated. |
| Big Game Habitat | The proposed units do not occur in big game winter range as identified by Dept. of Fish Wildlife and Parks (DFWP 2008). Thus, no adverse direct, indirect or cumulative effects to big game are anticipated. |

B. Aquatic Life and Habitats

Presently there are no streams (intermittent or perennial), lakes, wetlands, or riparian areas found within the proposed project area. Therefore no direct, indirect, or cumulative effects can be identified to aquatic life or associated habitats.

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.

The following analysis summarizes the anticipated effects for fine-filter species on the DNRC Miller Martin Camp Timber Project.

| SPECIES/HABITAT | FINE FILTER ANALYSIS |
|---|---|
| THREATENED & ENDANGERED SPECIES | |
| <p>Canada lynx (<i>Felis lynx</i>)</p> <p>Habitat: Subalpine fir habitat types, dense sapling, old forest, deep snow zones</p> | <p>The proposed activities would affect 30 acres of suitable lynx habitat. Of these acres, approximately 10 acres are considered summer foraging habitat and 20 acres are considered winter foraging habitat. Post-harvest these acres would not contain adequate stem-density or understory canopy cover to continue providing suitable lynx habitat. To ensure that forest structural attributes preferred by snowshoe hares remain following harvest, shade-tolerant conifer saplings would be retained where possible within lynx winter foraging habitat. Additionally, coarse woody debris would be retained in accordance with DNRC Forest Management Rules (<i>ARM 36.11.414</i>) and retention of downed logs ≥ 15 inch diameter would be emphasized. The proposed activities are not anticipated to affect connectivity of lynx habitat due to the location of the affected acres, which are adjacent to permanent non-lynx habitat. Timber sales within 2 miles of the project area that may contribute to cumulative effects include the DNRC Good Long Boyle Timber Sale (2002), Highway 93 Corridor, and the DNRC Olney Urban Interface timber sales (ongoing). However, considering that a small amount of lynx habitat would be affected by the proposed activities, cumulative effects associated with this sale would be minimal. Thus, considering the small amount of lynx habitat that would be affected by the activities, the short 4-6 week duration of the activities, and that mitigations will be applied to retain habitat characteristics preferred by snowshoe hares; negligible direct, indirect, or cumulative effects to Canada lynx would be anticipated.</p> |
| <p>Grizzly bear (<i>Ursus arctos</i>)</p> <p>Habitat: Recovery areas, security from human activity</p> | <p>The project area is located in grizzly bear non-recovery occupied habitat associated with the Northern Continental Divide Ecosystem (NCDE) (<i>USFWS 1993, Wittinger 2002</i>) and use of the project area by grizzly bears is possible. Commercial forest management activities would occur primarily outside of the spring period (April 1- June 15) over a 4-6 week time period primarily during the denning season. Additionally, the proposed activities would focus on removing small lodgepole trees in an area that is not adjacent to open roads, thus visual screening along open roads would not be affected. Considering the short duration of the activities, winter operating period, and lack of open roads in the vicinity of the units, negligible adverse direct, indirect, or cumulative effects affects to grizzly bears would be anticipated.</p> |

| SENSITIVE SPECIES | |
|---|---|
| <p>Bald eagle (<i>Haliaeetus leucocephalus</i>)</p> <p>Habitat: Late-successional forest less than 1 mile from open water</p> | <p>The proposed activities would occur near Upper Stillwater Lake within the home range of a nesting pair of eagles, but outside of the nest site and primary use bald eagle management zones, which are typically used for the majority of breeding activities. The proposed activities would focus on removing small diameter lodgepole and would have little effect on important structural components of bald eagle habitat including large trees and snags. Additionally, the proposed activities would occur for a short 4-6 week time period and would occur in a small 46-acre area more than 0.5 miles away from the nest. Thus, negligible direct, indirect, or cumulative effects to bald eagles would be anticipated.</p> |
| <p>Common loon (<i>Gavia immer</i>)</p> <p>Habitat: Cold mountain lakes, nest in emergent vegetation</p> | <p>The proposed activities would occur approximately 0.3 miles from Upper Stillwater Lake, which has been occupied by common loons in the past. However, the proposed activities would occur for a short 4-6 week time period during the winter, primarily outside of the time period when loons are breeding. Due to the distance between the proposed harvest units and Upper Stillwater Lake and the short duration and timing of the proposed activities, no direct, indirect, or cumulative effects to common loons would be expected to occur as a result of either alternative.</p> |
| <p>Fisher (<i>Martes pennanti</i>)</p> <p>Habitat: Dense mature to old forest less than 6,000 feet in elevation and riparian</p> | <p>The proposed activities would occur in 2 acres of suitable fisher habitat. However, the proposed activities would focus on removing small diameter lodgepole pine and would have minimal effects to important structural components of fisher habitat such as large trees and snags. Additionally, the proposed activities would occur for a short time period and would have a low risk of displacing fishers. Thus, negligible adverse direct, indirect, or cumulative effects to fishers would be anticipated.</p> |
| <p>Flammulated owl (<i>Otus flammeolus</i>)</p> <p>Habitat: Late-successional ponderosa pine and Douglas-fir forest</p> | <p>The project area contains 14 acres of preferred flammulated owl cover types; however the stocking density of these stands is too high to provide suitable habitat. The proposed activities would remove small diameter trees in the stand and would not affect the suitability of the area for flammulated owls. Thus, no direct, indirect or cumulative effects to flammulated owls would be anticipated.</p> |
| <p>Gray wolf (<i>Canis lupus</i>)</p> <p>Habitat: Ample big game populations, security from human activities</p> | <p>The proposed activities would occur within 2 miles of the 2011 home range of the Lazy Creek Pack (<i>DFWP wolf pack data, 2011</i>). The proposed activities are not anticipated to adversely affect big game and would occur for approximately 4-6 weeks in the winter primarily outside of the denning season. Thus, negligible direct, indirect or cumulative effects to gray wolves would be anticipated.</p> |
| <p>Pileated woodpecker (<i>Dryocopus pileatus</i>)</p> <p>Habitat: Late-successional ponderosa pine and larch-fir forest</p> | <p>The project area does not contain suitable pileated woodpecker habitat. Thus, no direct, indirect, or cumulative effects to pileated woodpeckers would be anticipated as a result of either alternative.</p> |
| BIG GAME | |
| <p>Elk (<i>Cervus canadensis</i>)</p> | <p>The proposed units do not occur in big game winter range as identified by DFWP (2008). Thus, no adverse direct, indirect or cumulative effects to big game are anticipated.</p> |
| <p>Mule deer (<i>Odocoileus hemionus</i>)</p> | |
| <p>White-tailed deer (<i>Odocoileus virginianus</i>)</p> | |

10. HISTORICAL AND ARCHAEOLOGICAL SITES:

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

The DNRC has no record of cultural resources within the project's area of potential effect. Harvest activities would be completed on a minimum of 18 inches of snow causing minimal ground disturbance. However, if previously unknown cultural or paleontological materials are identified during project related activities, all work will cease until a professional assessment of such resources can be made.

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.

- **Direct, Indirect, and Cumulative Effects of the No-Action Alternative**

Under this alternative no timber harvesting would occur. Therefore, no short-term changes to aesthetics would occur.

- **Direct, Indirect, and Cumulative Effects of the Action Alternative**

The proposed project area is not located on any prominent topographic area or visible from any densely populated areas; furthermore, the project is located off of a restricted road behind a closure. However, this area is a popular walk-in site for hunters, so all forest improvement work and burning of slash piles would be planned within a year of harvest in order to speed up the recovery of the vegetation in order to mitigate the impacts of logging.

Overall, timber sale design would minimize the visual impacts to foreground and background views by randomly spacing leave trees, and by keeping a textured, uneven look to the boundary/new seed wall.

Thus, direct, indirect, and cumulative impacts to aesthetics are expected to be minimal.

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.

There is no demand for limited environmental resources in this project area or from any other nearby activities. Therefore no direct, indirect, or cumulative effects would occur under either alternative.

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.

- Highway 93 Corridor Checklist Environmental Assessment (CEA) (November 2011)
- Final HCP/EIS (USFWS/DNRC) (September 2010)

| IV. IMPACTS ON THE HUMAN POPULATION |
|--|
| <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> |

14. HUMAN HEALTH AND SAFETY:

Identify any health and safety risks posed by the project.

No unusual safety considerations are associated with the proposed timber sale. Warning signs would be located along Martin Camp Road and Good Creek Road cautioning recreational and residential traffic of logging activities.

15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:

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

The proposed timber sale would continue to provide industrial production in the region.

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.

Due to the relatively small size of the proposed timber permit, there would be no measurable direct, indirect, or cumulative effects to the employment market. However, according to a report issued by the *Bureau of Business and Economic Research (2008)*, an average of 10.0 jobs per million board feet of timber harvested is maintained in the timber industry.

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.

Due to the relatively small size of the proposed timber sale, no measurable direct, indirect, or cumulative impacts to the tax base or tax revenue would be likely from either alternative.

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.

A temporary increase in traffic would occur on U.S. Highway 93 resulting from log trucks hauling to and from the purchasing mill. This temporary increase on Highway 93 is a regular occurrence on public roads in Northwest Montana and no additional government service would be required.

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.

There are no locally adopted environmental plans for this area.

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.

Existing Condition

Martin Camp Road, situated off of Highway 93, is a seasonally maintained (Spring/Summer/Fall) forest access road that travels through the sections of the Stillwater State Forest located to the west of Lower Stillwater Lake. Martin Camp Road is used primarily to access hunting and firewood cutting locations on the Stillwater State Forest, and is not plowed during the winter months.

Environmental Effects

- **Direct, Indirect, and Cumulative Effects of the No-Action Alternative**

Under the No-Action Alternative, no direct, indirect or cumulative effects would occur.

- **Direct, Indirect, and Cumulative Effects of the Action Alternative**

Under the proposed Action Alternative, there may be a minimal increase in winter recreational activity on the haul route proposed for this permit.

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.

No measurable direct, indirect, or cumulative impacts related to population and housing would be expected due to the relatively small size of the proposed timber sale project.

22. SOCIAL STRUCTURES AND MORES:

Identify potential disruption of native or traditional lifestyles or communities.

No direct, indirect, or cumulative impacts related to social structures and mores would be expected under either alternative.

23. CULTURAL UNIQUENESS AND DIVERSITY:

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

No direct, indirect, or cumulative impacts related to cultural uniqueness or diversity would be expected under either alternative.

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.

- **Direct, Indirect and Cumulative Effects of the No-Action Alternative**

No revenue would be generated for the School of Mines or the State Normal Schools trusts at this time.

- **Direct, Indirect and Cumulative Effects of the Action Alternative**

The timber harvest would generate approximately \$6,200 for the School of Mines Trust and the State Normal Schools Trust. This is based on a stumpage rate of \$6.40 per ton, multiplied by the estimated volume of tons. This stumpage rate was derived by comparing attributes of the proposed timber sale with the attributes and results of other DNRC timber sales recently advertised for bid. Costs related to the administration of the timber sale program are only tracked at the Northwestern Land Office (NWLO) and Statewide level. DNRC does not track project-level costs for individual timber sales. An annual cash flow analysis is conducted on the DNRC forest product sales program. Revenue and costs are calculated Statewide and by the NWLO. From 2006 through 2010, revenue-to-cost ratio of the Northwestern Land Office was 2.51. This means that, on average, for every \$1.00 spent in costs, \$2.51 in revenue was generated. 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.

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|--------------------------------------|---------------|--|--------------------------------|
| EA Checklist Prepared By: | Name: | Scott Robinson Leah Breidinger Marc Vessar | Date: December 21, 2012 |
| | Title: | Management Forester Wildlife Biologist Hydrologist | |

V. FINDING

25. ALTERNATIVE SELECTED:

An Interdisciplinary team (ID Team) has completed the Checklist Environmental Assessment (CEA) for the proposed Miller Martin Camp Timber Sale Project. Following a thorough review of the CEA, project file, and Department policies and rules, the decision has been made to select the Action Alternative.

The Action Alternative meets the intent of the project objectives as stated in Section I – *Type and Purpose of Action*. Specifically the project would:

- Harvest approximately 50,000 board feet of timber and 520 tons of post and pole material from the Stillwater State Forest to regenerate new stands of healthy trees, improve the vigor and growth of the remaining trees in the forest, and reduce the amount of forest fuels and density of trees to mitigate potential effects of wildland fire.
- Generate approximately \$6,200 for the School of Mines and State Normal Schools trusts. DNRC is required by law to administer these trust lands to produce the largest measure of reasonable and legitimate return over the long run (*Enabling Act of February 22, 1889; 1972 Montana Constitution, Article X Section 11; and, MCA 77-1-212*). The Action Alternative was designed to be in full compliance of State Forest Land Management Plan (SFLMP), the Administrative Rules for Forest Management (Forest Management Rules; ARM 36.11.401 through 471), and conservation commitments contained in the Selected Alternative in the Final EIS of the Montana DNRC Forested State Trust Lands Habitat Conservation Plan (HCP) and associated Record of Decision (ROD), as well as other applicable state and federal laws.

26. SIGNIFICANCE OF POTENTIAL IMPACTS:

The identified resource management concerns have been fully addressed in the environmental analysis that was conducted. Specific project design features and various recommendations of the resource management specialists have been implemented to ensure that this project will fall within the limits of acceptable environmental change. Taken individually and cumulatively, the proposed activities are common practices, and no project activities will be conducted on important fragile or unique sites. I find there will be no significant impacts to the human environment as a result of implementing the Action Alternative. In summary, I find that the identified adverse impacts will be controlled, mitigated, or avoided by the design of the project to the extent that the impacts are not significant.

27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

EIS

More Detailed EA

No Further Analysis

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| EA Checklist Approved By: | Name: Michael McMahon |
| | Title: Forest Management Specialist, DNRC Stillwater Unit |
| Signature: | Date: |

Miller Martin Camp Timber Permit

