

CHECKLIST ENVIRONMENTAL ASSESSMENT

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MAR 31 2004  
D.N.R.C.

Project Name: Stillwater State Forest 2004 Precommercial Thinning  
Proposed Implementation Date: Spring/Summer/Fall of 2004  
Proponent: Department of Natural Resources and Conservation (DNRC), Stillwater Unit  
Location: Section 19, T31N, R22W; Section 2, T31N, R22W;  
Sections 6, 17, 20, 21, 32, T32N, R23W; Section 30, T33N, R23W; and  
Section 16, T36N, R22W (See Vicinity Maps)  
County: Flathead

I. TYPE AND PURPOSE OF ACTION

DNRC is proposing to precommercially thin, by hand felling with chainsaw, up to 500 acres of overstocked stands of sapling-sized trees. The thinning would occur on classified forestlands that are administered by Stillwater State Forest for the school trust beneficiaries. Approximately 350 acres, identified in 10 separate stands, would be prepared for thinning. The treatment would reduce stand-stocking density for the purpose of increasing stand vigor and growth. Improved stand productivity would increase trust revenue potential, reduce harvest rotation, and produce a higher quality/value of forest products in the future. Individual thinning would be designed to maintain stand diversity to complement the landscape and enhance biodiversity.

II. PROJECT DEVELOPMENT

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

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

Past precommercial thinning proposals on Stillwater State Forest were scoped for public comment by posting proposal notices at public locations, such as post offices and mercantiles in Trego, Olney, and Polebridge. No comments were received. A decision was made that additional scoping was not needed because of past public participation.

A DNRC wildlife biologist reviewed the proposed thinning and provided input on the project design and mitigation measures. DNRC biologists interact with other wildlife professionals and incorporate the latest scientific information they receive into their recommendations. See Attachment A

Related timber sale documents, environmental analyses, and silvicultural prescriptions were reviewed for pertinent information.

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

United States Fish and Wildlife Service (FWS): Threatened and Endangered Species  
No permits are needed.

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3. ALTERNATIVES CONSIDERED:

APR 12 2004

Action Alternative:

LEGISLATIVE ENVIRONMENTAL  
POLICY OFFICE

The proposed thinning units were selected because they are currently overstocked with between 500 to 7,000 excess trees per acre. Thinning would increase the growth and vigor of the remaining leave trees by providing room to grow and

reducing competition for water, minerals, and sunlight. Healthy, dominant preferred species would be selected as leave trees. Preferred species include western larch, ponderosa pine, blister-rust-free western white pine, Douglas-fir, lodgepole pine, and western red cedar. The smaller seedling-sized trees and larger residual trees of any species in these stands would be retained.

No-action Alternative:

Thinning would not occur in these stands. As stand vigor decreases due to increased competition, risk of mortality and damage due to insect infestations and disease infections would increase. Also, these dense stands would become susceptible to snow and wind damage because of the small tree-bole diameter to height ratio. Income potential for the school trust beneficiaries would be compromised by no action.

### 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.*

No direct or cumulative impacts to soils are expected because of the hand-felling method to be used. Some nutrient leaching into the soil from decaying foliage of the cut trees can be expected.

#### 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.*

Streams or other bodies of water are not near or within the selected precommercial thinning units. No direct or cumulative impacts to water quality are expected. No fishery streams are associated with the proposed thinning.

If cut trees were felled in ephemeral or intermittent stream channels or other wet areas, they would be removed.

#### 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.*

None

#### 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.*

- Trees to be thinned range from between 15 to 35 years old and are mixed species. Trees selected to leave are between 10 to 35 feet tall.
- Species composition in selected stands would change by decreasing the number of nonpreferred species and leaving preferred species that are healthy and

dominant. The present species diversity would be maintained; only the presence of overstocking would be addressed.

- Increasing stand health and vigor would help protect stands from insect and disease problems.
- Seedling trees less than 18 inches in height and trees greater than 6 inches in diameter at breast height would be retained.
- The first year after thinning, the fire hazard would increase; thereafter, fire hazard would decrease due to the deterioration of slash. To comply with Hazard Reduction Law, thinned trees within 33 feet of the unit boundary would be slashed down to at least 18 inches of the ground. Thinning slash within 33 feet of open roads would be pulled into the interior of the thinned unit.
- No known rare or endangered plant communities are within or near the proposed thinning units.
- More sunlight would be available on the forest floor to favor sun-tolerant species of grasses, shrubs, and forbs.
- The number of acres of thinned sapling stands would be increased; these would be recorded in the Stillwater Forest's inventory.

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

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

- These areas provide late spring, summer, and fall habitat and browsing opportunities for ungulates.
- Vegetation encroaching on crowns of leave trees would be pruned to reduce leave-tree competition and provide palatable browse when resprouting.
- Identified game trails would be kept open to provide for traditional movement.
- Hiding cover would be reduced in the short term, but would increase as the crowns of leave trees develop.
- Sawtimber-sized trees and snags in the thinning unit would be retained to maintain bird foraging and nesting opportunities.

No cumulative impacts are expected.

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

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

Grizzly bear, gray wolf, and Canada lynx use have been identified:

- 1) Grizzly bear: Critical use areas, timing, road closures, use restrictions, and hiding cover were evaluated.
- 2) Grey wolf: Ungulate use, hiding cover, denning sites, and rendezvous sites were evaluated.
- 3) Canada lynx: Foraging habitat, including stems per acre and height of crop trees, and relationship on the landscape of thinning units to denning habitat were evaluated.

No impacts are expected. See Attachment A

Precommercial thinning would have no impact on fisheries listed as threatened or endangered. Other threatened or endangered species would not be impacted because of the retention of trees 15 to 35 years old.

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**10. HISTORICAL AND ARCHAEOLOGICAL SITES:**

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

The State archaeologist reviewed these stands before they were harvested for their sawtimber under regeneration treatments. No known cultural resources were recorded.

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**11. AESTHETICS:**

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

- Proposed stands can be seen from various vantage points and from adjacent roads.
- After these stands are thinned, they would contain healthy, dominant leave trees at a desired spacing, producing a slight difference in stand texture or color when seen from a distance.

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

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

None

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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.*

As result of the Wedge Canyon Fire, DNRC is now harvesting burnt timber on Section 16, T36N, R22W (the Hornet Creek Section). An environmental analysis was completed before the timber harvest was initiated. The Hornet Salvage Timber Sale may still be in progress during the precommercial thinning.

Harvesting burnt timber on adjacent ownerships (Federal and private) may also happen. The timing and intensity of these harvests is not known at this time.

**IV. IMPACTS ON THE HUMAN POPULATION**

- *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.*

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**14. HUMAN HEALTH AND SAFETY:**

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

None

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

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

None

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

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

None

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

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

None

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**18. DEMAND FOR GOVERNMENT SERVICES:**

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

None

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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.*

DNRC manages forested trust lands according to the philosophy and direction given in the State Forest Land Management Plan (SFLMP), which states:

*“Our premise is that the best way to produce long-term income for the trust is to manage intensively for healthy and biologically diverse forests. Our understanding is that a diverse forest is a stable forest that will produce the most reliable and highest long-term revenue stream... In the foreseeable future, timber management will continue to be our primary source of revenue and our primary tool for achieving biodiversity objectives.”*

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

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

None

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

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

None

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**22. SOCIAL STRUCTURES AND MORES:**

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

None

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**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.*

None

<b>EA Checklist Prepared By:</b>	Ricky Komenda	<b>Date:</b> March 25, 2005
	<b>Title:</b> Forest Improvement Forester	

**V. FINDING**

**25. ALTERNATIVE SELECTED:** I reviewed this checklist and found the concerns were addressed; where needed, mitigation measures are to be applied by contract requirement. A more detailed environmental analysis is unwarranted. I select the Action Alternative.

**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> Michael D. Clark	
	<b>Title:</b> Forest Management Specialist	
<b>Signature:</b> <i>Michael D. Clark</i>		<b>Date:</b> March 25, 2005

**Komenda, Rick**

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**From:** Merz, Norm  
**Sent:** Thursday, March 25, 2004 8:06 AM  
**To:** Komenda, Rick  
**Subject:** Stillwater PCT

Hi Rick,

I reviewed your list of PCT projects. Based on the information you provided, it does not appear that these projects pose any serious wildlife impacts. In most cases, these areas do not meet the lynx habitat requirements outlined in the ARM or if the tree density and crop tree height criteria are met, the unit lays outside of lynx habitat. Additionally, units along open roads are small enough that leaving visual buffers would not accomplish the thinning goals and the areas are small enough that wildlife species could move around the units to stay in cover without large energetic costs. Therefore, some habitat shifts might occur, but these are expected to be negligible.

Take Care,

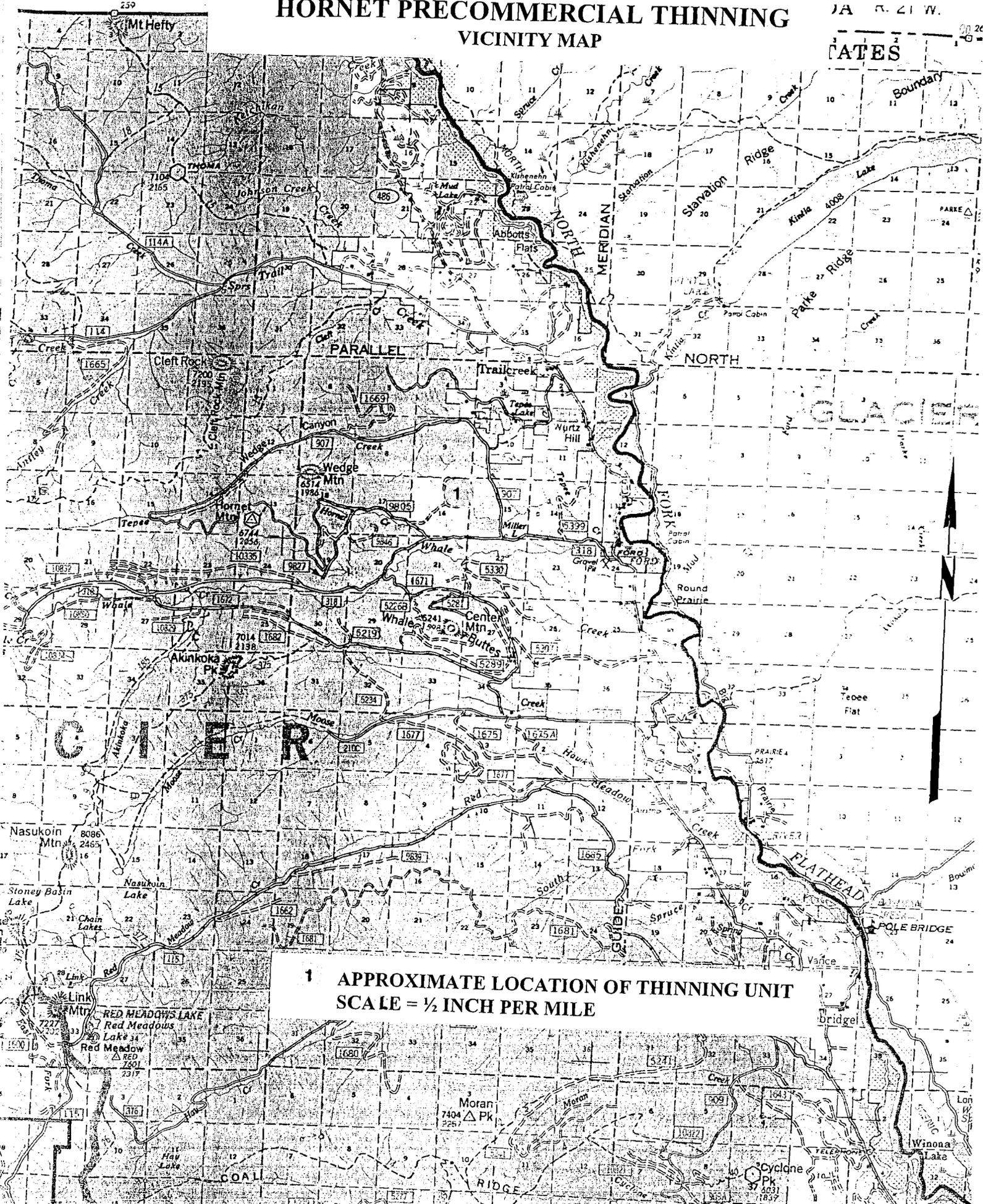
Norm

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# STILLWATER UNIT HORNET PRECOMMERCIAL THINNING VICINITY MAP

DATES



**1** APPROXIMATE LOCATION OF THINNING UNIT  
 SCALE = 1/2 INCH PER MILE

