

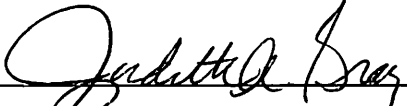
FOREST MANAGEMENT PLAN
FOR THE
FORT BELKNAP INDIAN RESERVATION



January 2007

FORT BELKNAP RESERVATION FOREST MANAGEMENT PLAN 2007 to 2021


Recommended Approval by:



Judith A. Gray, Superintendent
Fort Belknap Agency

3-7-07

Date

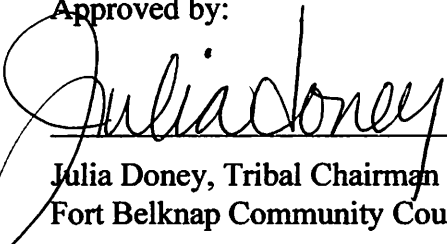


Gordon Jackson, Supervisory Forester
Rocky Mountain Region

3/13/07

Date

Approved by:



Julia Doney, Tribal Chairman
Fort Belknap Community Council

3-7-07

Date



Ed Parisian, Director
Rocky Mountain Region

3-13-07

Date

Fort Belknap Indian Community

WHEREAS, the Fort Belknap Indian Community Council is the governing body of the Gros Ventre and Assiniboine Tribes of the Fort Belknap Indian Community, Fort Belknap Indian Reservation, Montana, by the authority of the Constitution and By-Laws of the Fort Belknap Tribes approved on the 13 day of December 1935, and

WHEREAS, under the Constitution and By-Laws of the Fort Belknap Indian Community, the Community Council is charged with the duty of protecting the health, security and general welfare of the Fort Belknap Indian Community, and

WHEREAS, 25 CFR 163.11 provides for the preparation of forest management planning to support objectives to be beneficial to land owners and show an approximate balance between net growth and harvest; and,

WHEREAS, The Fort Belknap Community Council is in agreement with the proposed Environmental Assessment for the basis of the Forest Management Plan; and,

WHEREAS, The Fort Belknap Reservation Forest Management Plan will be in effect from MARCH 7, 2007 to December 31, 2021, unless otherwise revised through the Fort Belknap Community Council; and,

THEREFORE BE IT APPROVED, That Fort Belknap Community Council authorizes the Bureau of Indian Affairs to implement the Fort Belknap Reservation Forest Management Plan; and,

BE IT FURTHER RESOLVED, That the President and Secretary of the Fort Belknap Indian Community Council are hereby authorized to sign any and all documents which may be required to complete and validate this transaction.

ATTEST:


JULIA DONEY, President


JULIE KING KULBECK, Secretary-Treasurer

CERTIFICATION

I, the undersigned, as Secretary of the Fort Belknap Community Council of the Fort Belknap Indian Reservation, Montana, do hereby certify that the Fort Belknap Community Council is composed of 10 members, of whom 10 members, constituting a quorum were present at a meeting thereof, duly and regularly called, noticed, convened and held this 7TH day of March, 2007 and that the foregoing resolution has been adopted by the affirmative vote of 6 for, 0 opposed; 0 not voting; 0 absent; 0 excused absence; 4 temporarily absent and that the said resolution has not been rescinded in anyway.

DATE: 3/7/07

FORT BELKNAP INDIAN COMMUNITY
Tribal Government


JULIE KING KULBECK, Secretary-Treasurer

FORT BELKNAP AGENCY, HARLEM, MT
Address

PREFACE

This Forest Management Plan document is to provide the Fort Belknap Agency with guidance in the management of the Fort Belknap Reservation forested lands. It was developed to enhance the reservation's aesthetic value, recreational use and wildlife habitat, as well as, maintain the watershed and to provide income to the tribes. The former forest management plan was a ten-year plan established in 1984 and subsequently re-approved in 1994. This Plan is the result of the latest Continuous Forest Inventory analysis completed in June of 2006. As in the previous plan, it allows for the harvest of 500 thousand board feet per year. It is a fifteen-year plan to run from 2007 to 2021 with a review period after the fifteen-year period. The plan can be amended, if needed, by agreement between the Fort Belknap Council and the Director, Rocky Mountain Region.

Due to the diverse usage and access of this report, an attempt was made to write it in such a way that it would be understood by people not familiar with technical forestry terms.

ACKNOWLEDGEMENTS

The preparation of the Fort Belknap Forest Management Plan involved the contribution of the time and effort from many individuals. Major contributors include:

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1 Forest Description

1.1 Resource Assessment

1.1.1 Reservation Setting

The Fort Belknap Indian Reservation is home to members of the Assiniboiné (Nakoda) and Gros Ventre (Aa-Ah-Ni-Nen) Indian Tribes. The map in section 1.2 shows the general location of the reservation in north-central Montana. The northern boundary of the reservation is the Milk River, which roughly parallels U.S. Highway 2, about thirty miles south of the Canadian Border. This boundary lies between Harlem, Montana to the west and Dodson, Montana to the east. From these two corners, the Reservation boundaries run south for about forty miles. The southern portion includes most of the Little Rocky Mountains with the exception of a portion that was taken out by the Grinnell Treaty of 1895, which came about due to the discovery of gold. About 80 percent of the Reservation is in Blaine County, and 20 percent is in Phillips County. The map in section 1.3 shows the reservation boundaries, towns and roads of the Fort Belknap Reservation.

1.1.2 Topography

The reservation topography is generally made up of alluvial river bottom ground, glacial till plains, and steep mountainous terrain. The gently rolling plains and alluvial bottoms account for nearly 2/3 of the reservation area, and are used for farming and grazing. The steep, deeply dissected terrain in the Little Rocky Mountains and surrounding foothills make up the remaining 1/3 of the reservation acreage. This is where the vast majority of the forested land is located. Elevations on the reservation range from about 2,300 feet in the Milk River flood plain to just above 5,400 feet on the crest of Mission Peak.

1.1.3 Climate

The reservation has a continental climate, meaning hot summers and cold winters, with large diurnal temperature fluctuations (over 30 degree changes). Mean summer temperatures average

from 63 to 70 degrees F, with winter mean temperatures ranging from 15 to 19 degrees F. Short duration temperature extremes of above 100 degrees F in the summer to -50 degrees F in the winter can occur. Average annual precipitation is 17 inches in the Little Rockies and between 9 and 16 inches in the surrounding lower elevations. The average wind velocity for most of the year ranges between 10 and 15 miles per hour. This is slightly higher, between 15 and 20 miles per hour, during the winter. During the passing of cold fronts, thunderstorms or other weather events, wind gusts of 50 miles per hour or more may be experienced.

1.1.4 Soils

A soil and range survey was conducted on the Fort Belknap Reservation in 1976. Another soil survey was done on Blaine and Phillips County lands in 1996, which included reservation lands. Most of the soil sampling has been done on agricultural and grazing lands; however, general soil descriptions and classifications of forest soils in the mountains have been made. Soils maps and other information are on file at the Agricultural Branch of the Natural Resources Department of the Bureau of Indian Affairs (BIA) Fort Belknap Agency, as well as the Blaine and Phillips County NRCS offices. The reservation soils generally fall into one of three broad parent material categories:

1. Recent alluvial in the river and creek bottoms and swales; these soils are deep, well-drained soils. They are located on alluvial fans, stream terraces, escarpments and hills. Slopes are generally 0 to 5 percent. Mean annual precipitation is about 16 inches, and mean annual temperature is about 41 degrees F.
2. Glacial in the rolling prairie and range lands. These are very deep, well-drained soils that formed in till located on till plains and hills. Slopes are 0 to 15 percent. Mean annual precipitation is about 16 inches, and mean annual temperature is about 43 degrees F.
3. The mountain soils are well drained and are formed of alluvium and colluvium from limestone. Slopes are 0 to 70 percent and most of the soils are classified as gravelly loams. The upland mountain soils are classified as Chernozem soils. They are derived

from igneous granitic, limestone, or sedimentary shales and sandstone parent materials, and often have a coarse loam texture. Most of the soils in the Little Rockies, except for those derived from recent alluvium, are shallow.

1.1.5 Forest Acres

The Fort Belknap Reservation contains 618,228 acres of which 34,292 are classified as forested. Approximately 80 percent, 28,268 acres, is considered productive enough to be commercial timber lands. Aspen woodlands cover 1500 acres of commercial timber land. The remaining acres are further divided into cover types, including: ponderosa pine (22,610 acres), lodgepole pine (4,127 acres), and Douglas-fir (31 acres).

1.1.6 Management Units and Compartments

Fort Belknap Reservation timber lands are divided into seven compartments, of which the Little Rocky Mountains contain six of the compartments. The seventh compartment is located throughout the remaining reservation acres and consists mostly of hardwood stringers along riparian areas. All stands, which are situated on slopes greater than 45 percent, are categorized as inaccessible. There are 3,289 acres of steep, inoperable forested lands that are not being considered for any management actions. The map in Appendix C-1.1 shows the compartments and Table 3 in the Harvest Schedule (Section 3.5) lists the acres for thinning and harvest proposed for each compartment by year. Details about the planned fuels reduction projects listed in the compartment write ups can be found in the Fort Belknap Fire Management Plan 2006-2016, available at the Agency Office or the Tribal Fire Office.

Compartment 1 is Mission Canyon (4,193 forested acres). It is comprised of ponderosa pine sawtimber and lodgepole pine (large and small) sawtimber. There are 728 acres of thinning and 471 acres of harvest scheduled within this compartment during the ten-year scheduling period. The map in Appendix C-1.2 shows the approximate location of these proposed activities. In addition there are approximately 110 acres of planned fuels reduction in this compartment.

Compartment 2 is Middle Little Peoples Creek (2,427 forested acres). This compartment is comprised of both ponderosa pine and lodgepole pine large sawtimber. There are 335 acres of thinning and 23 acres of harvest scheduled within this compartment during the ten-year scheduling period. The map in Appendix C-1.3 shows the approximate location of these proposed activities. In addition there are approximately 90 acres of planned fuels reduction in this compartment.

Compartment 3 is Lodgepole Creek (7,125 forested acres). This compartment consists of pockets of ponderosa pine small and large sawtimber, and lodgepole large sawtimber. There is a limited access and time constraint within this compartment. Portions of the compartment are being considered for wilderness designation by the Community Council. If this designation occurs, actions will be implemented that will ensure that forestry activities are in compliance with the rules of designation. A portion of this compartment was salvaged in 2003 for insect and windthrown damage. There are 525 acres of thinning and 154 acres of harvest scheduled within this compartment during the ten-year scheduling period. The map in Appendix C-1.4 shows the approximate location of these proposed activities. In addition there are approximately 80 acres of planned fuels reduction in this compartment.

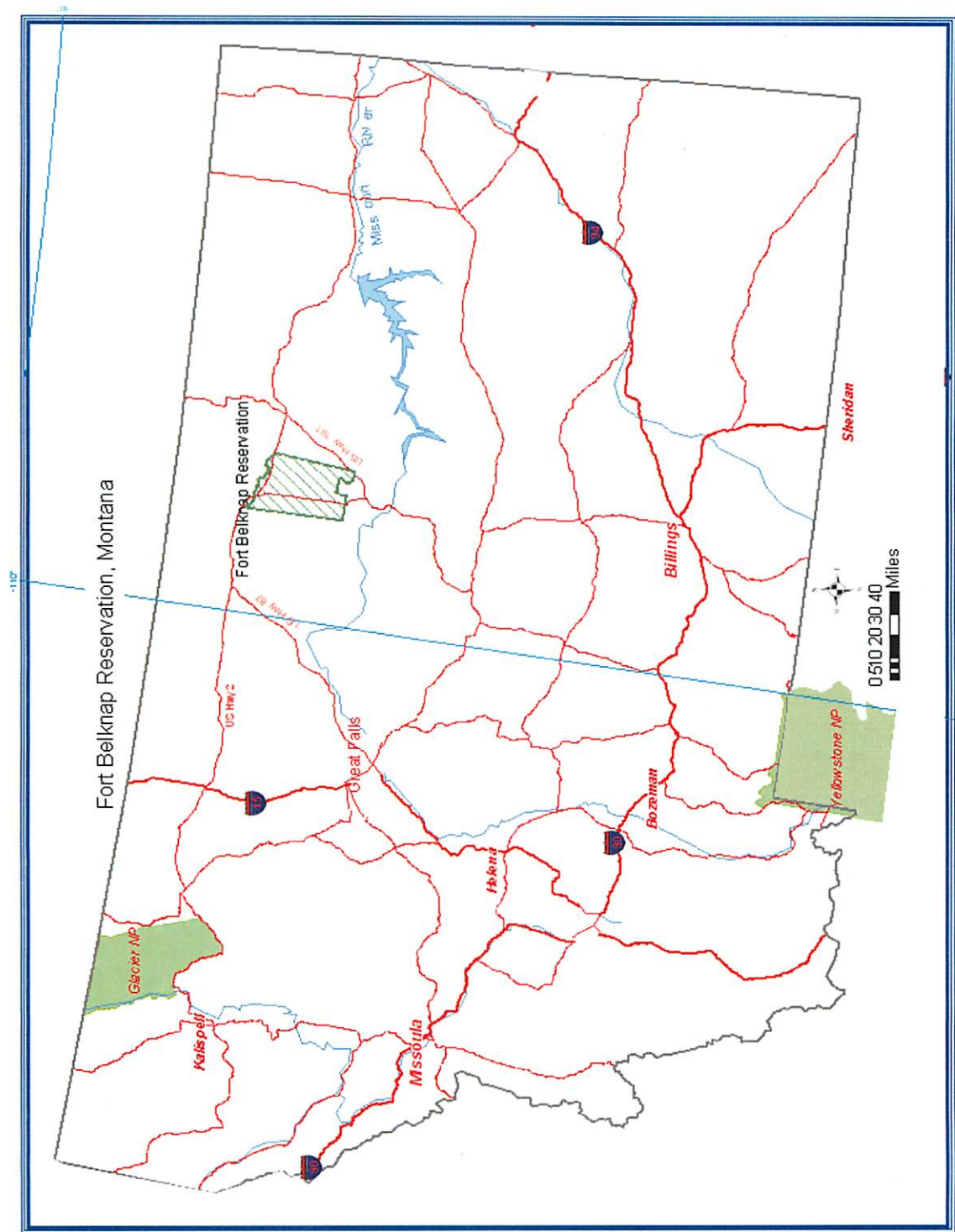
Compartment 4 is Big Warm Creek (2,643 forested acres). This compartment consists of ponderosa pine large sawtimber with strips of small sawtimber. There are 402 acres of planned thinning scheduled within this compartment during the ten-year scheduling period. No harvest is planned in this compartment. The map in Appendix C-1.5 shows the approximate location of the proposed thinning. In addition there are approximately 270 acres of planned fuels reduction.

Compartment 5 is Little Warm Creek (1,880 forested acres). This forest area holds mainly small sawtimber of ponderosa pine. There are 506 acres of thinning and 72 acres of harvest scheduled within this compartment during the ten-year scheduling period. The map in Appendix C-1.6 shows the approximate location of these proposed activities. There are approximately 30 acres of planned fuels reduction.

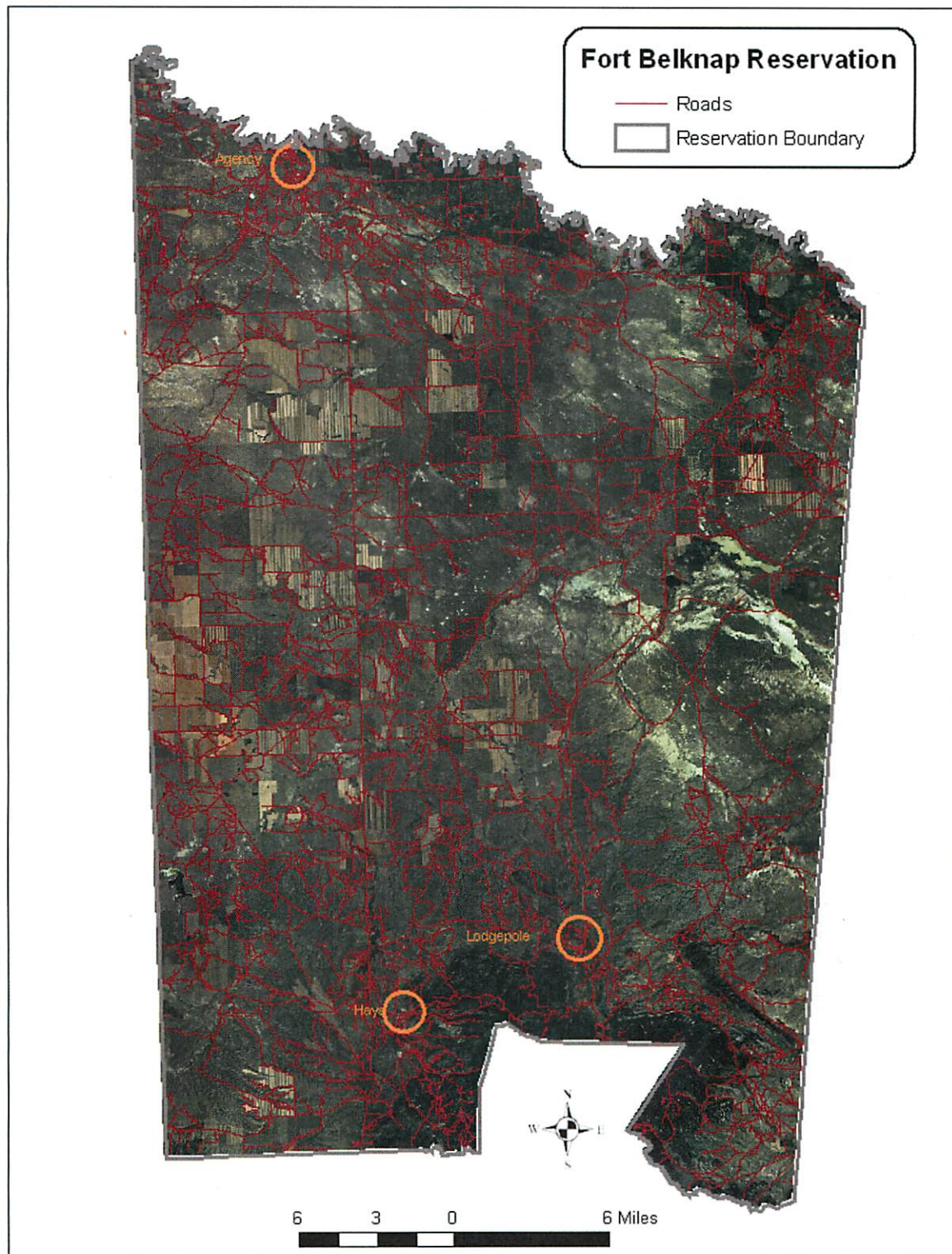
Compartment 6 is Beaver Creek (5,561 forested acres). This compartment consists of pole-sized sawtimber of ponderosa pine and small sawtimber on the north side with pockets of large sawtimber on the south side of the compartment. The understory consists of Douglas-fir and quaking aspen and other Populus species in the open areas. There are 833 acres of thinning and 280 acres of harvest scheduled within this compartment during the ten-year scheduling period. The map in Appendix C-1.7 shows the approximate location of these proposed activities. In addition there are approximately 95 acres of planned fuels reduction.

Compartment 7 is the northern portion of the reservation. This compartment consists of rangeland with sections of Cottonwood running along the riparian areas throughout the reservation lands. Approximately 8 percent of the area is forested (2,692 acres); also, 247 acres of scattered blocks exist. Currently there are no commercial uses for these hardwoods but they are used for firewood. No thinning or commercial harvest is proposed at this time in this compartment. Drought conditions are a concern in this area as they cause the vegetation to die back and snags are then left in the flood plain and the area is susceptible to erosion conditions.

1.2 General Location Map



1.3 Reservation Map



2 Protection

2.1 Ordinance and Standards

The fire program and wildland fire prevention activities are under Public Law 93-638 contract with the Assiniboine and Gros Ventre Indian Tribes, Contract No. CTC55T20446. The 638 contract gives responsibility of the Tribal Fire Program to the Tribes; this contract does not affect the distribution of the Wildland Fire Prevention Program or any Community Assistance Programs. The authority, responsibility, and policy concerning protection of Indian lands are outlined in the 53 Indian Affairs Manual Chapter 1, and referenced to the 90 IAM.

2.2 Fire

The Fort Belknap Fire Management Plan is a ten-year plan, which was approved in June of 2006 by the Fort Belknap Tribal Chairman, (Resolution No. 65-2006), and the Bureau of Indian Affairs Rocky Mountain Regional Director. This plan works in conjunction with the Forest Management Plan to provide for the most practical use of the Fort Belknap forested area. For more detailed information on the tribal fire management refer to the Fort Belknap Fire Management Plan 2006-2016.

2.2.1 Prevention

The Prevention Program works with the community assistance, education and awareness tribal programs in addition to issuing Fire Burning Permits, wildfire investigation, and hazard abatement. The Fort Belknap Reservation employs a tribal fire prevention technician and has an approved Prevention Plan in place. This person is responsible for directing all prevention activities on the reservation and its communities and is the Agency representative on the Interagency Prevention Council.

2.2.2 Preparedness

The Fort Belknap Indian Community 2006 Wildland Fire Preparedness Plan refers to activities prior to actual fire suppression. The Tribal Fire Management Officer is responsible for maintaining manpower resources and warehouse inventories adequate to support normal fire situations, and developing mutual aid agreements with rural fire departments. The Tribal Preparedness Plan is updated annually, and approved by Fort Belknap Reservation's governing body, the Fort Belknap Community Council.

2.2.3 Suppression

Fire suppression policy for the Bureau of Indian Affairs as expressed in 53 IAM 2-H and referenced to 90 IAM. Chapter 2 deals with wildland fires, whether on lands administered by the Bureau or adjacent thereto, which threaten life, man-made structures, or are determined to be a threat to the natural resources or facilities under the Bureau's jurisdiction. These fires will be considered emergencies and their suppression given priority over other Bureau operations. The highest priority will be given to preventing a catastrophic fire, which is the situation where a wildfire causes damage of such magnitude as to impact management objectives and/or socioeconomic conditions of the area. The Fort Belknap Agency Suppression Plan is updated annually, and reviewed by the Superintendent.

Reduction of excessive damage from catastrophic wildland fire will occur through the following actions:

- An aggressive fire prevention program.
- The maintenance of an adequate state of preparedness.
- The initiation of immediate and aggressive suppression action consistent with burning conditions and approved management objectives (Fort Belknap Fire Management Plan).
- The least expenditure of public funds for effective suppression.
- The use of methods of suppression least damaging to the resource and the environment.

- The integration of cooperative suppression activities with other qualified suppression organizations.
- The maintenance of control forces on fires until they are extinguished.



Pine Grove Fuel Reduction Project

2.2.4 Hazard Fuel Management

The goal of the Fuels Management Program is to reduce the risk of damage from wildland fire to human communities and forest stands. Fuel treatments must be coordinated across ownerships to effectively protect communities, and restore and maintain ecosystems.

The Fuels Management Program provides for fuel hazard reduction around the housing, powwow grounds and picnic sites in Mission Valley and White Cow Canyon. Large crowds frequent this area that is serviceable by one escape route, which makes the prevention of free ranging fire an important aspect. Creating buffers around these sites, by tree pruning and brush cutting to maintain a perimeter, lessens the chance that a fire could traverse from the valley floor to the surrounding hardwood and conifer stands.

Fuels management treatment alternatives are used to return or maintain the site at the desired condition and include fire, mechanical, chemical, and biological means to do this. Treatments may be used to effect reductions in both naturally occurring fuels and hazardous fuel

accumulations that result from resource management, fire exclusion, and land management practices, such as timber harvests. The Fuels Management Program plans to treat 75 acres annually throughout the reservation's forested lands. These acres are in addition to those shown in the Harvest Schedule (Table 3) and include projects such as broadcast burning, and thinning for habitat improvement.

2.3 Insect and Disease

Although the mortality rate for the forest is fairly low as forest activities increase it is likely to see more activity and mortality from insects and disease. Bark beetles and dwarf mistletoe are common insect and disease problems throughout Eastern Montana and the primary cause of mortality throughout the pine forests. If unchecked, insects and disease weaken trees, and can cause growth loss and mortality. They impair scenic, recreation, and watershed values, causing deformities that result in poor quality timber, and destroy seed crops essential for natural regeneration. They are always present at endemic (low) population levels, and, due to natural or man-caused conditions, can increase quickly to epidemic levels. Silvicultural practices emphasize prevention and suppression through forest management practices like harvesting and thinning, which maintain forest vigor and are the primary defense against insects and disease. Early discovery is important for forest management projects to be effective in treating various outbreaks. The beetles are attracted to disturbances such as: windthrow, root-diseased areas, stumps, slash, logging activities, fire and drought.

The best detection system is the day-to-day observation by agency personnel while performing field assignments. To facilitate discovery of problem areas, training is recommended to interested parties on recognition of forest pests.

All potentially destructive insect and disease infestations on the reservation will be evaluated by an entomologist to determine the significance of the outbreak. The evaluation will be utilized to determine the likely course of the outbreak as well as the damage or loss that might be incurred if no action is taken and the measures that should be used to suppress the outbreak. United States Forest Service personnel perform an aerial insect and disease survey of the reservation forest

upon request. Reports and maps summarizing the current insect and disease situation on the reservation are available at the Agency's Branch of Forestry Office.

2.4 Trespass

Trespass is any damage to lands or resources through activities from permits, contracts, theft outside of permit or contract or fire on Indian forest lands. Under Part 53 of the IAM, Forestry, Chapter 7, Forest Trespass, the Bureau's policy is to investigate any reported trespasses with the intent of verifying and demanding appropriate payments and prosecution to the proper authorities.

2.4.1 Timber

Most timber trespass on the reservation involves commercial sale of post, poles, and firewood material cut under the free use authority. This type of trespass is difficult to control. In any case, the Forest Manager is responsible for ensuring that an initial investigation to document land ownership, volume, value, and forest resource damage is conducted. After this first step is taken, the Agency Special Officer should complete the investigation. Penalties for any trespass whether unintentional or not include, but are not limited to:

- (i) Triple stumpage value of the highest obtainable price from the raw materials;
- (ii) The costs of rehabilitation, reforestation, loss of future revenue and lost profits, loss of productivity, and damage to other forest resources; and
- (iii) Payment of all reasonable costs associated with the enforcement of trespass regulation including detection and field examination, survey damages investigation, witness expenses, court costs and attorney fees.

2.4.2 Fire

Fire trespass can be either intentional or unintentional. Examples of unintentional trespass include trash fires that get away or fires caused by cigarettes carelessly tossed from a moving auto or by a spark from a tractor muffler. Intentional trespass fires are those that are deliberately set. Most fires on the reservation are human caused, and should be investigated to determine their origin. The Prevention Officer is responsible for initially investigating all fires within the Fort Belknap Reservation. If needed, qualified investigators can be ordered through the Rocky Mountain Regional Office, Branch of Forestry, in Billings, Montana.

Currently wildfire investigations, which result in the need for law enforcement assistance, are covered by local ordinances. The Fort Belknap Law Enforcement Department handles these cases when necessary. The Office of the Solicitor General in Billings, Montana is also available for assistance, but usually gets involved only when values and/or costs involved are very high. Generally, the local officials handle cases in which values do not exceed \$100,000.

2.5 Emergency Stabilization and Rehabilitation

All fires on the reservation will be evaluated for stabilization and rehabilitation needs, through the Fire Management Officer. Short-term stabilization and rehabilitation work is performed by the suppression personnel as part of fire projects, and funded with suppression funds. If the fire is severe enough to require a long-term stabilization or rehabilitation project, the Rocky Mountain Regional Burned Area Emergency Response (BAER) Team is available and will be ordered to evaluate the fire impacts and, if needed, write a BAER plan in accordance with 90 IAM 3.3B Guidelines. If the scope of the project is too large for the regional team, the National Interagency BAER Team can be requested. The Agency Superintendent has approval authority for these activities up to \$250,000 and the Regional Director has authority up to \$500,000. All funding for approval above these levels is at the discretion of NIFC, as described in 90 IAM Chapter 3 Rehabilitation.

2.6 Documentation, Monitoring, and Records

The Fire Management Office is organized under a contract between the Fort Belknap Tribes and the BIA, and maintains all fire records. The Tribal Fire Management Officer submits audits and evaluations directly to the Awarding Official for the Fire Management Program per PL 93-638 Contract No. CTC55T20446.

2.7 Planning, Coordination, and Communication

The Tribal Fire Management Officer is responsible for directing local preparedness and suppression activities. The Fire Management Plan includes annual preparedness and suppression plans.

2.8 Organization and Funding

Currently, the Fire Management Program uses a fire budget process called Fire Program Analysis (FPA). The process takes an interagency approach to setting preparedness funding for a geographical area. The Fort Belknap fire management office is contracted out to the Fort Belknap Tribes. The Fire Management Office works with the BIA Forestry Department in order to accomplish various suppression and fuels reduction projects. This office maintains staffing for five fulltime positions: a Fire Management Officer, a Fuels Specialist, a Prevention Technician, a Dispatcher, and a staff support person. Also included are six seasonal personnel: three engine bosses and three engine crew members. The remaining positions are filled with AD personnel who are hired during the fire season. To properly manage the Fort Belknap fire program and off reservation dispatches; the fire office has identified additional staffing needed to execute the fire management program specified by their management plan of an Assistant Fire Management Officer (AFMO), a Fire Control Officer, a seasonal assistant dispatcher, a staff support assistant for the fuels staff, and four additional personnel. In addition to their regular duties the office is in the process of building their Type I Hotshot Crew of 20 crewmembers, which will require additional funding to maintain properly. Funding required for the fire Management totals \$745,495 annually. A funding shortfall resulting in the loss of staff will cause delays in meeting the program goals.

The Fire Management Plan identifies 1,203 acres of Trust land Wildland Urban Interface (WUI) treatments. A good portion of these WUI projects have already been completed at the current time. Approximately 450 acres are currently under maintenance status. This analysis identified an additional 307 acres of reforestation projects and 913 acres of potential timber harvesting on the Fort Belknap Reservation (LongKnife, Fort Belknap Fire Management Officer). For more information refer to the Fort Belknap Fire Management Plan, which ties in with this Forest Management Plan.

3 Forest Land Management

3.1 Ordinance and Standards

The Bureau of Indian Affairs is committed to the principles of sustained yield management, as required by §163 Part B 163.11, forest management planning and sustained yield management, of the General Forest Regulations in Title 25, Code of Federal Regulations. The Annual Timber Use Policy Statement and Aquatic Resource Protection Ordinance (ARPO), of the Fort Belknap Indian Community, are utilized by the Fort Belknap Agency for management of the Fort Belknap Reservation Forest.

3.2 Silvicultural Guidelines

3.2.1 Ponderosa Pine

3.2.1.1 Natural Regeneration

In the semiarid environment of eastern Montana the mountainous soils are well-drained and prone to drought; pine forests are highly vulnerable to drought, insect attacks, and severe wildfire when overstocked with trees. With increasing competition, the growth rate declines as trees stagnate and their crowns recede. Forage production also drops off in dense stands.

Natural regeneration is the most economical regeneration option, which provides for a better root system, no lag time in seedling adjustment to the area, and also provides for more adapted seedlings that will be less prone to environmental vulnerabilities. Harvesting plans should consider the use of natural regeneration in the silvicultural prescription.

3.2.1.2 Individual-Tree Selection

Utilizing individual tree selection on the mixed ponderosa pine stands should enhance the overall forest health, releasing tree species where possible and increasing the natural nutrients of the soil and water available to the various tree species. The selection will target the better phenotypes for retention and future growth. Reducing stocking will improve tree vigor and the ability to withstand beetle attacks. Tree selection will be based on risk, crown vigor, and spacing considerations. The silvicultural prescription for ponderosa pine is intended to maintain or develop an all-aged stand and to establish a desirable stocking level. Occasionally prescriptions

for individual stands may need to be modified in consideration of wind, stand structure, or aesthetics. The following is applicable to the average conditions in Fort Belknap's operable ponderosa pine stands. In most cases slash will be treated by lopping and scattering. If the slash load is heavy, piling and burning may be required.

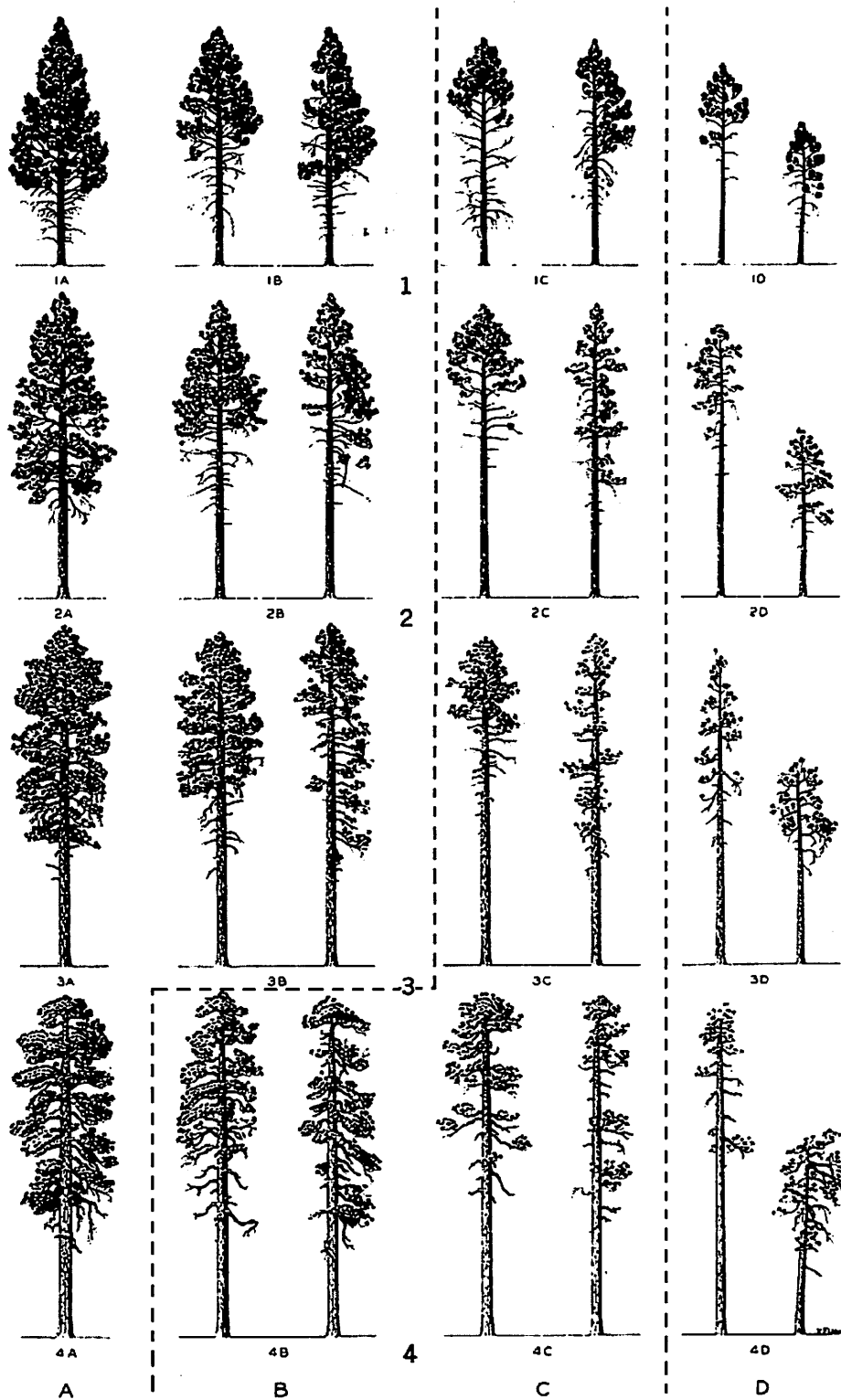
There has been a connection found between tree vigor and the possibility of outbreaks of pine beetle. Table 1 is a localized version of Keen's age and vigor classification system for ponderosa pine. Figure 1 gives a visual example of the differences in the ponderosa pine, and is a modified version of Bongberg's tree risk rating system. Stocking level guides will also be used as the basis for the tree selection system. These two classification systems are used to aid in the selection of high risk trees.

General Characterization

Age Classes	Age (years)	DBH (inches.)	Height	Bark	Branches	Top
1	< 75	< 12	Usually < 60% of mature height.	Dark, gray-brown to black. Rough, deeply furrowed, with narrow ridges, without plates.	Small. Upturned and 1 whorls for upper ¾ of crown.	Usually pointed with distinct whorls.
2	76-150	12 to 16	Usually < 90% of mature height.	Dark reddish brown with narrow plates on lower bole to dark, rough bark on upper bole.	Small to medium size. Upturned in upper half, horizontal near middle, horizontal or drooping below.	Usually pointed, at times rounded.
3	151-225	16 to 20	Level of general crown canopy unless suppressed.	Light, reddish brown, with fairly large plates on lower ¾ of bole. Dark in upper ¼ of bole	Moderately large. Upturned near top, horizontal in middle, drooping below.	Usually pyramidal or round, at times pointed.
4	226 +	>20	Full level of crown canopy unless suppressed.	Light yellow and uniform for entire bole, except extreme top.	Large, heavy, often gnarled or crooked. Mostly drooping except in extreme top. Plates large, smooth.	Usually flat. Occasionally rounded or irregular.

Table 1. Localized version of Keen's age and vigor classification system.

Keen's classification is based on two factors of age (four classes) and vigor (four classes) for a total of sixteen classes. Tree vigor is depicted as: full (A), good to fair (B), fair to poor (C), or very poor (D). Trees, in age class 1-3, classified as fair to full vigor and age class 4 with full vigor, would be reserved from harvest, unless the tree has a designation for harvest from the Bongberg chart. Trees of very poor stature of any age class would be harvested unless there is a need for a restocking seed source in which case these would have to be in the Bongberg's low to moderate risk. Trees classified as fair to poor at any age class and good to fair in age class 4 would be harvested unless they are needed to maintain stocking levels.



Reserve from harvest

*Harvest unless needed to maintain stocking and classified
in Bongberg's low or moderate risk*

Harvest

Figure 1 Keen's tree classification for ponderosa pine (Sketch by U. S. Forest Service). This figure is modified to incorporate Bongberg's classification system of high risk trees in order to depict a quick reference of harvestable trees.

3.2.1.3 Group Selection

Group selection will be utilized to target areas with root rot. Although group and individual selections are more difficult to manage and take more experience to prepare, they lead to a more preferable stand outcome. The forest leads to a greater degree of ecological stability than possible with many of the even-aged systems. The amount of man power and knowledge needed is greater than that needed for even-aged forest stand management.

3.2.1.4 Patchcut

Patchcuts should be used in even-aged, over mature and mature ponderosa pine stands, which are more susceptible to windthrow and also in stands infested by dwarf mistletoe. The addition of small, naturally appearing patchcuts (10 acres or less) will serve to mitigate visual impacts, provide a means to develop a balance of age classes, and generate stumpage and employment through timber sales. Areas with heavily infected mistletoe may require up to 25 acres of patchcuts; in these cases, patch cuts cannot be done in narrow strips. The chart for Dwarf Mistletoe Rating (DMR), in appendix F, would be utilized to identify management concern areas. In the chart, a rating of a three or higher would signify the removal of individual trees of an already established stand. Prior to the regeneration or susceptible tree species becoming three feet tall or ten-year old stands all dwarf mistletoe infected trees should be removed.

Utilized design and layout should be based on silvicultural criteria and consideration of all forest land uses, not simply on desired volumes and/or ease of operation. Reserve areas, will be left between patches and roads to provide a visual screen, and on areas where appropriate. The patches will be designed to compliment the natural features of the forest landscape and to provide a mosaic of small openings. These cuts enhance wildlife habitat by creating edge effect and increasing forage production.

The area within a stand or logging unit selected for harvest should comprise roughly twenty to thirty-five percent of the total unit's area. This should permit development of variable age classes over time and provide for a constant future supply of volume in the sawtimber size class. Following the harvest activity, the area will be open for firewood salvage, and then, depending on the amount of logging slash, slash will either be lopped and scattered or burned to prepare an

adequate seedbed. If the amount of slash is light, and the fire hazard is low, slash treatment will be limited to lopping and scattering. A light slash cover reduces temperature extremes for the soil surface and conserves soil moisture thereby increasing seedling survival. If the slash load were heavier, a low intensity, broadcast burn would be used to create openings for regeneration.

Harvest block layout guidelines are as follows:

- a. Determine the total unit and acreage (20 to 35 percent of the sale total).
- b. Design the appropriate number and size of cutting blocks using aerial photographs, USGS contour maps, proposed sale road locations, and most important, on-ground observations.
- c. Reserve areas will be left between cutting blocks and roads to provide a visual screen.
- d. Cutting areas should be designed to compliment natural features in the forest landscape to produce a mosaic of small openings and stands of varying ages. "Blocky" geometric designs will not be used.
- e. In harvest design, consideration will be given to site windthrow potential so that wind damage following timber harvest is minimized.

3.2.1.5 Seed Tree

Seed tree cuts will only be applied in ponderosa pine stands on sheltered sites that are free of mistletoe. The probability of windthrow from this type of cut will be reduced by confining its use to protected sites on lee slopes, and by leaving vigorous overstory trees in the first cut. Also, in order to improve the genetic composition of the stand, leave trees will be those having the most desirable characteristics and evidence of good cone production. Slash treatment would be the same as for the shelterwood cuts.

3.2.1.6 Shelterwood

True shelterwood and simulated shelterwood methods are appropriate in mature ponderosa pine stands, which do not have disease present. These methods may not have as broad an application as the patchcut method in ponderosa pine, but must be considered for use in the areas of low productivity where topography and soil conditions make regeneration difficult. Under these shelterwood methods, overstory leave trees increase the survival and growth of seedlings by

lowering the daytime ground surface temperatures and reduce water loss from seedlings and the soil.

The mature ponderosa stand will be removed in two harvest cuts approximately 20 years apart. The first cut should leave a residual overstory stand of 30 to 50 mature vigorous trees per acre, and the second cut will remove the residual overstory stand.

Under the true shelterwood method a major objective of the first cut is to secure regeneration. Leave trees should provide an adequate seed source. It is important to note that lodgepole pine and Douglas-fir species do not remain in the stand for this type of treatment as they may become dominant in the stand. After adequate regeneration is established, the second cut should be made to release the young trees and capture the value of the 30 to 50 overstory trees left from the first cutting.

The purpose of the simulated shelterwood is to protect existing advanced regeneration. It is used where a manageable understory stand exists at the time of the first cutting. The second cutting is made to release the understory after it has adapted to the more open condition created by the first cut. Use of designated skid trails is mandatory with this method so damage to established regeneration is minimized.

The probability of windthrow from this type of cut will be reduced by confining its use to protected sites on lee slopes, and by leaving vigorous overstory trees in the first cut. Also, in order to improve the genetic composition of the stand, leave trees will be those having the most desirable characteristics and evidence of good cone production.

3.2.1.7 Strip Patchcuts

Strip patchcuts should be used in even-aged, over mature and mature ponderosa pine stands. Narrow strips help to provide a better seed source and microclimate than other types of patchcuts; however, in cases of heavy mistletoe infection narrow cuts provide for continued opportunity for the mistletoe to spread at alarming rates infecting and destroying new growth.

Layout guidelines, similar to that of patchcuts, are as follows:

- a. Cutting areas should be designed to compliment natural features in the forest landscape to produce a mosaic of small openings and stands of varying ages.
In harvest design, consideration will be given to site windthrow potential so that wind damage following timber harvest is minimized.
- b. Design the appropriate number and size of cutting blocks using aerial photographs, USGS contour maps, proposed sale road locations, and most important, on-ground observations.
- c. The case of narrow strips there will be a maximum of two tree lengths wide with their long axis oriented perpendicular to prevailing wind conditions.

3.2.2 Lodgepole

3.2.2.1 Patchcut

As with ponderosa, patchcuts should be used in even-aged, over mature and mature lodgepole pine stands, which are more susceptible to windthrow and also in stands infested by dwarf mistletoe. Patchcutting is a practice of the silvicultural guidelines from the previously accepted forest management plan that should be continued. Lodgepole with signs of disease or infestation should be removed entirely from the stand.

3.2.2.2 Shelterwood

True shelterwood and simulated shelterwood methods are appropriate in mature lodgepole pine stands, which are wind firm and do not have a mistletoe problem. These methods may not have as broad an application as the patchcut method in lodgepole pine, but must be considered for use in the areas of low productivity where topography and soil conditions make regeneration difficult. Under both shelterwood methods, overstory leave trees increase the survival and growth of seedlings by lowering the daytime ground surface temperatures and reduce water loss from seedlings and the soil.

As in ponderosa pine the mature lodgepole stand will be removed in two harvest cuts approximately 20 years apart. The first cut should leave a residual overstory stand of 30 to 50 mature vigorous trees per acre, and the second cut will remove the residual overstory stand. The

probability of windthrow from this type of cut will be reduced by confining its use to protected sites on lee slopes, and by leaving vigorous overstory trees in the first cut.

Under the true shelterwood method a major objective of the first cut is to secure regeneration. The non-serotinous overstory leave trees should provide an adequate seed source. After adequate regeneration is established, the second cut should be made to release the young trees and capture the value of the 30 to 50 overstory trees left from the first cutting.

3.2.2.3 Strip Patchcuts

Strip patchcuts should be used in even-aged, over mature and mature lodgepole pine stands, which are more susceptible to windthrow. Narrow strips help to provide a better seed source and microclimate than other types of patchcuts; however, in cases of heavy mistletoe infection narrow cuts provide for continued opportunity for the mistletoe to spread at alarming rates infecting and destroying new growth. The same layout guidelines, used for patchcuts in ponderosa pine can be followed.

3.2.3 Douglas-fir

3.2.3.1 Individual-Tree Selection

The presence of Douglas-fir in stands are minimal as described by the Forest Inventory Analysis completed in June of 2006, the species is estimated to occupy 31 acres throughout the forested area. The species grows in the overly crowded areas beneath the ponderosa pine, being a shade tolerant species it is also capable of withstanding drought and fires to later grow better in open areas. Remove species where the stocking numbers are adequate for ponderosa pine. In areas where stocking is below target Douglas-fir can remain where they depict good phenotypes, vigor, and show no signs of damage, deformity, disease, or insect infection.

3.2.3.2 Group Selection

Group selection will be utilized to target areas with infection or disease. Although group and individual selections are more difficult to manage and take more experience to prepare, they lead to a more preferable stand outcome.

3.2.3.3 Shelterwood

Douglas-fir is well adapted to shelterwood cuts which should be used in any areas where Douglas-fir would be an advantage in stocking levels. Douglas-fir is shade tolerant at youth where they may not be affected by all the diseases of the dominant species at this point the light impacts reflect the need to remove them with in the shelterwood cut.

3.2.4 Aspen

3.2.4.1 Individual-Tree Selection

Aspen covers approximately 1,500 acres within the Little Rockies and helps maintain dependable stream flow for downstream irrigation. It is considered to be overstocked but not considered of any commercial value. However, it does offer individual uses in the form of cultural activities and personal heating uses. The option of special request for usage of the species will remain an active part of the Timber Permit (Appendix D 1. Free use permits 1.c.pp.5). Aspen woodlands are found in the northern Rockies and intermountain regions. They exist as pure stands on moist sites, or in association with other species on the dry end of its range, IAM part 53 chapter 10 p. 2. Reproduction by root sprouts is preferred since planting procedures often produces undesirable features.

3.2.4.2 Group Selection

Group selection will be utilized to target areas with rot. Care must be taken as to the removal of the infected area. Aspen is considered a clone species and removal of infected areas may trigger a larger infection and increasing the outcome.

3.2.5 Tree Marking Guidelines

In general, thinning guidelines and tree marking techniques for stand leave trees should be chosen from dominant and co-dominant trees to insure adequate regeneration. When necessary, intermediate crown classes may remain to maintain crown coverage. Cut trees will be marked except when it is more efficient to mark leave trees, in order to lessen the residual effect on the stand following the management project.

Ordinarily trees will be marked four and a half feet above the ground and at the base of the tree below the cut line; cut trees will be designated with slash marks on opposite sides of the tree, on

the downhill side where necessary, and leave trees will be marked with a ring around the tree at each point. Blue paint will be used to signify tribal areas and orange or yellow paint will be used for any allotments, red paint will be used for cutting unit boundaries, and white will be used for waste scaled material.

3.3 Annual Allowable Cut

The Indicated Allowable Cut (IAC) is the maximum sustainable cut, where growth equals harvest plus mortality. The IAC for this planning period is based on the harvest of over-mature timber. To accomplish this sustainable silvicultural practices were employed to assure proper stand regeneration, and capture the timber's value, a period of 50 years was used to harvest the over-mature timber. Fort Belknap's Forest IAC was 710 thousand board feet (MBF) annually; however, this does not take into account fluctuating market conditions and stand specific silvicultural prescriptions.

The Annual Allowable Cut (AAC) is the maximum amount of timber that can be harvested annually under current management restraints. The preferred alternative sets the AAC at 500 MBF, but may be exceeded in any given year to allow the emergency salvage of timber following wildfire and/or insect and disease outbreaks. The maximum board foot total over the fifteen-year planning period will be 7,500 MBF, which includes commercial thinning and harvesting. The fifteen-year maximum cannot be exceeded without the approval of the Fort Belknap Community Council and the BIA Director of the Rocky Mountain Region.

3.4 Harvest Policy

Preference for the sale of forest products will be given to tribal members of the Assiniboine and Gros Ventre Tribes where possible. The Fort Belknap Community Council has the authority to modify this policy at any time. Timber products will be sold using the standard BIA contract or permit forms, and sales will be cruised and sale documents (Forest Officer Report, Environmental Analysis, Prospectus, and Advertisement) will be prepared in accordance with 53 IAM requirements. Commercial and free-use harvest under permits will be as stipulated in the Agency Timber Policy and Use Statement, which is to be updated annually. Under Rocky

Mountain Region Addendum to 10 BIAM 4, Delegation of Authority, the Fort Belknap Agency Superintendent has the authority to approve timber contracts and documents for sales of 500 MBF or less. All documents pertaining to the sale of timber will be provided to the Rocky Mountain Regional Office for informational purposes.

3.4.1 Sale Policy

By Fort Belknap Community Council Resolution #54-2005 dated April 22, 2005, the tribes established a policy that timber permits would be constrained to tribal members, as in appendix D. In support of that policy, sales will be designed so they are of a size and type that does not require a large investment to operate. The only exceptions to this policy will be if the tribes would approve salvage sales to non-tribal members when needed to mitigate losses from a fire or disease or if an unforeseen opportunity to recruit forest industry to the local area should develop. Policy exceptions will be considered on a case by case basis.

3.4.2 Timber Sale by Permit

All timber cutting other than through contract (Form 5-5324) will be accomplished under timber cutting permits (Form 5-5331) or Special Allotment Timber Cutting Permit (SATCP) (5-5328). Permits for tribal timber will conform to the policies established by the Tribal Council, and to the policy and general regulations outlined in the Code of Federal Regulations. 25 CFR Sections 163.3, 163.21, and 163.22, 163.26 The permit authority will be reviewed, updated and approved annually by the Tribal Council and the Bureau of Indian Affairs. Major goals of the permit program are to provide for Indian ventures, reduce fuel loading and to accomplish thinning through harvest while insuring that sound silvicultural principles are followed.

3.5 Harvest Schedule

Table 3 lists the proposed treatment schedule during the management plan and should be followed unless fire, insect or disease outbreaks, or some other unforeseen development necessitates otherwise. An Environmental Assessment, Appendix A, was completed prior to the completion of the Continuous Forest Inventory. This assessment chose an annual allowable cut of 500 MBF. This chosen volume requires a greater amount of forested acres to be managed per year than was originally stated in the Environmental Assessment. The harvest schedule will be

used as a guide in management plans, and modified as necessary. The management plan will be reviewed after ten-years to provide new harvesting areas for the forest. The acres chosen in the harvest schedule may be modified to keep up with the annual allowable cut.

Table 3. Fort Belknap Harvest Schedule.

Proposed Fiscal Year	Forest Compartments	Thinning Acres	Logging Acres	Total Acres
2007	Mission Canyon		54	54
2007	Lodgepole Creek	13		13
2007	Big Warm Creek	136		136
2007	Little Warm Creek	78		78
2007	Beaver Creek	106	50	156
Total ac.		333	104	437
2008	Mission Canyon		100	100
2008	Lodgepole Creek	250		250
2008	Big Warm Creek	100		100
Total ac.		350	100	450
2009	Mission Canyon		46	46
2009	Middle People Creek	229	23	252
2009	Lodgepole Creek	100		100
Total ac.		329	69	398
2010	Mission Canyon		100	100
2010	Middle People Creek	106		106
2010	Big Warm Creek	166		166
2010	Lodgepole Creek	52		52
Total ac.		324	100	424
2011	Mission Canyon	380	126	506
Total ac.		380	126	506
2012	Mission Canyon		45	45
2012	Lodgepole Creek		54	54
2012	Little Warm Creek	316		316
Total ac.		316	99	415
2013	Mission Canyon	183		183
2013	Lodgepole Creek	110		110
2013	Beaver Creek		100	100
Total ac.		293	100	393
2014	Mission Canyon	165		165
2014	Little Warm Creek	68	46	114
2014	Beaver Creek	100	50	150
Total ac.		333	96	429
2015	Lodgepole Creek		60	60
2015	Little Warm Creek	44	26	70
2015	Beaver Creek	248	20	268
Total ac.		292	106	398
2016	Lodgepole Creek		40	40
2016	Beaver Creek	379	60	439
Total ac.		379	100	479

3.6 Forest Development

3.6.1 Administration

Forest development activities include those that maintain, increase, and improve tree growth and promote regeneration. Funding for forest development activities is based on the agency's backlog acres for planting and thinning. The Forest Manager plans, administers, and monitors the forest development program, as well as, maintains project records. The records should include permanent maps of all accomplishments, project specifications, and progress inspection reports. At the end of the fiscal year, a forest development accomplishment report will be submitted to the Rocky Mountain Regional Office. 53 IAM contains more specific reporting requirements.

3.6.2 Pre-commercial Thinning

Ponderosa pine is present throughout the Fort Belknap Forest and is the more commercially valuable species. Lodgepole pine stands are susceptible to overstocking and stagnation causing a reduction of useable volume growth and increased susceptibility to insect and disease attack. The most productive sites in need of thinning will be given priority in scheduling. Most stands will be thinned to approximately 302 stems per acre (12 x 12 sq ft tree spacing). Thinning will be accomplished by Agency seasonal employees or contract.

3.6.3 Reforestation

Stocking surveys will be the basis for determining reforestation needs. Currently there is a backlog of 2,104 acres. A site will be considered stocked if it has 300+ trees per acre. Sites with less than 300 trees per acre will be evaluated on a site-by-site basis. Sites with no available seed source will be given priority. Sites will be planted on spacing prescriptions dependent on species. Planting will be done with a combination of tribal members and professional contractors. Preference will be given to tribal members where possible. Seed for growing stock will be collected from the reservation, from trees showing superior genetics and/or resistance to disease. In the event seed is not available, seed from adjacent forests will be used. Planting

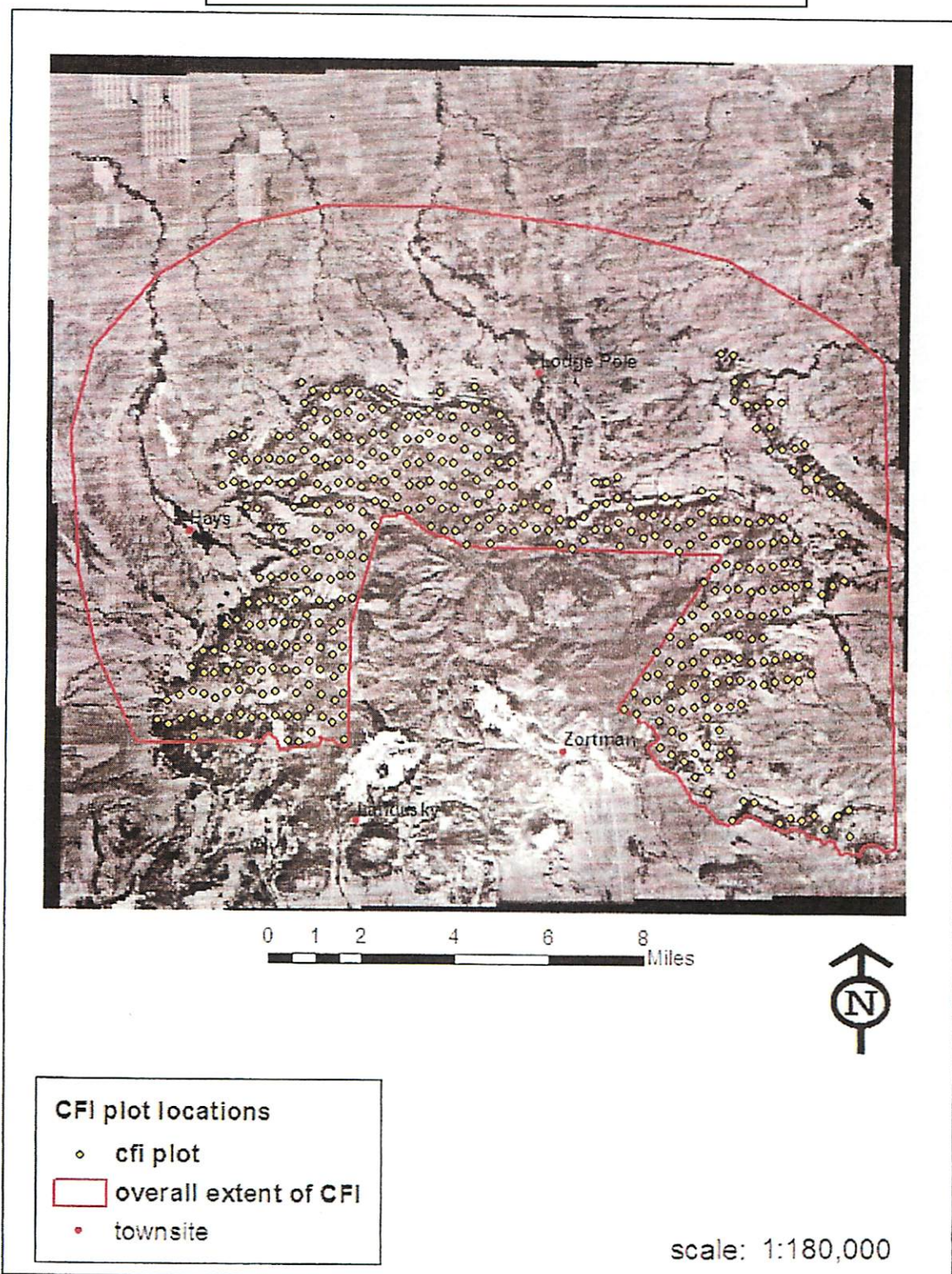
projects would provide employment opportunities for tribal members as well as increase the quality and commercial value of the forest.

Direct seeding may be used in sites with enough bare mineral soil suitable for germination. However, the advantage of direct seeding is rarely seen since it is in the form of proper root alignment. This is a long-term developmental advantage and could be utilized with patchcuts and unforeseen events that may leave large blocks of land area ready for planting as is the case in fires.

3.7 Data Collection

The Fort Belknap Agency is on the standard BIA fifteen-year forest management planning cycle. The current inventory completed in June of 2006 covers approximately 32,000 of the 34,292 acres of Fort Belknap's forested land; many of the cottonwood acres found near streams were not included in the sample plots. The forest inventory systems in the Fort Belknap forest are based on a combination of fixed- and variable-radius plots located on a systematic grid. The inventory design uses plots on a 20 by 40-chain grid across the identified lands, allowing each plot to represent approximately 80 acres of the surrounding forest. The inventory contained 348 plots with (Figure 2) one out of every five plots a permanent fixed-radius plot (refer to the CFI Field Manual Rocky Mountain Region Reservations-2004). All trees (live and dead) with a 5 inch or larger diameter at breast height (DBH) and determined to be "in" the plot radius were measured and recorded. All live hardwood species of sapling size are also tallied on this plot. Output of the CFI was designed to produce forest-wide estimates of species composition, volume and growth, documented in the *Forest Inventory Analysis for the Fort Belknap Reservation Montana* June 2006. The next planning period is scheduled to begin in 2011 and be completed by 2013.

Figure 2 CFI Plot Little Rockies
Fort Belknap CFI – 2004



3.8 Documentation, Monitoring, and Records

Documentation and records for all timber sales, commercial permits, free-use permits, and forest development activities are kept at the Fort Belknap Agency, Branch of Forestry. This documentation is summarized quarterly and annually in forest development and timber sale reports, and sent to the Rocky Mountain Regional Office (RMRO). The RMRO also compiles these reports into the Government Performance Results Act (GPRA) Report for the Washington Office. This report tracks accomplishments.

In cases of timber trespass the initial investigation would be done by the forestry department including documentation of land ownership, volume, and value and forest resource damage. The authority and responsibility for criminal investigation and prosecution lies with Bureau and Tribal Law and Order personnel. Timber trespass policy and procedures are in 53 BIAM, Supplement 7.

3.9 Organization and Funding

The Forestry Branch, under the Deputy Superintendent, is headed by a forest manager and staffed with a forestry technician. The forest manager is responsible for overall program coordination. This includes budgeting, staffing, and supervision of all facets of the forestry program. The responsibility for the presale activities of timber sale layouts (prescription writing, harvest unit layout, road location, inventory, and EA preparation), and the sale administration (monitoring all logging operations to ensure contract compliance) are that of the forest manager.

Plan and design of timber sales will utilize interdisciplinary expertise and involve the Fort Belknap Community Council (FBCC) at various points. The planning process will begin when the FBCC approves preparing and advertising a timber sale. After preliminary reconnaissance and mapping of the sale area, Fish and Wildlife personnel along with an archeologist from Fort Belknap and the Rocky Mountain Regional Office will be involved so that considerations regarding cultural and fish and wildlife resources can be built into the final sale design. Other resource specialists (e.g., soil scientist, hydrologist, etc.) will be brought into the planning/NEPA process as necessary. When the sale unit design is finalized, the sale will be cruised and required

documents (Forest Officer Report, Appraisal, Prospectus, and Advertisement) will be prepared. After the sale has been advertised, the Superintendent will make the decision to award the contract, and present it to the FBCC for approval.

Additional staffing will be needed to execute the timber management program specified in this plan; this would include a presale forester (salary-\$35,752, training-\$2,500, and vehicle-\$7,500), a timber sale administration officer (salary-\$35,752, training-\$2,500, and vehicle-\$7,500) and three additional seasonal employees (4-months each salaries-\$28,862 and vehicle-\$7,500) to prepare projects at the time of the thinning, planting, or specified program. A funding shortfall would result in the loss of staff and will cause delays in meeting the annual harvest quota of 500 MBF.

3.10 Trends

The demand for reservation timber is not expected to increase in the near future. Currently, the closest sawmill is located in Lewistown, approximately 170 miles away. There are no longer any sawmills in the area; the amount that would come off the reservation reserves alone would not be able to support/supply a large sawmill for any amount of time nor would the current loggers be able to harvest for a mill on the reservation. Most green sawlogs from the reservation are processed by small, local one person bandmills owned/operated by the people doing the harvesting.

4 Social and Economic Benefit Assessments

The Fort Belknap forested lands are not large enough to sustain a large mill for an extended amount of time, although they present added benefits for the community, cultural and recreational activities included, which are often harder to measure, but none-the-less just as important.

4.1 Income

Annual stumpage revenue to the tribes could be as much as \$50,000 with a sustained annual harvest of 500 MBF of timber. This would be dependant on the timber market and timber quality at the time of sale. Presently little income is gathered from the timber reserve. Current employment opportunities are limited to small timber sales, sale of post and poles and forest development and fuel reduction projects.

4.2 Indian Benefits

Reservation forest products are sold by tribal members. Products supplied are firewood, posts & poles, green sawlogs, tepee poles, and occasionally house logs. These products are available to the enrolled members with various stipulations depending on the products.

4.3 Regional Economic Impacts

The main source of employment in the Fort Belknap community comes from the Indian Health Service, local schools, and Bureau of Indian Affairs. The money earned by loggers, forestry workers, and firefighters is largely spent in the local community.

4.4 Social Assessment

4.4.1 Water Resources

Forested areas of the reservation are important for the accumulation, storage and control of water. Most of the streams on the southern part of the reservation start in the Little Rocky Mountains. When forest management activities might significantly affect watersheds, specialists with expertise in hydrology will be consulted. The stipulations and conditions set forth in the Aquatic Protection Ordinance (Appendix E) will be followed for management activities concerning riparian areas.



4.4.2 Aesthetics

The Little Rockies hold a high aesthetic value. They are not only the major source of scenic value for the area, but they pose a significant value in terms of recreational, cultural and/or traditional use. Forest Management activities would seek to put emphasis on forest protection and preservation while providing use of forest resources, which can still prove to be beneficial to the economy as a resource during the fifteen years of this plan, which plans to harvest 500 MBF annually according to the accepted Environmental Assessment (EA). The policy during this plan period will seek to maintain a high quality of visual characteristics of the landscape, particularly in traditional use, wildlife-wilderness, and recreational areas.

4.4.3 Recreation

The Fort Belknap forest receives widespread recreational use by tribal members. The Fort Belknap Tribes control recreational development and use of the reservation. Forest management activities on the reservation are reviewed and approved by the tribes thereby providing the means for coordinated forestry and recreation programs. Concern about the high density of small trees in some areas was expressed during a public meeting in July of 2006. The meeting was held to get public input for the Forest Management Plan Environmental Assessment. Management to refurbish old horse trails for community use will be considered during thinning and harvest project development. The areas in question are used for horseback riding and hiking, and the tree density is great enough to hamper these activities.

4.4.4 Wildlife & Fisheries

Members of the Fort Belknap Community use the tribal timber reserve for hunting, fishing and other recreational activities throughout the year. The wildlife and fishery resource on the reservation is managed by the Fort Belknap Tribes. Where these activities could affect wildlife and fisheries careful planning along with Tribal input and authorization is required. Further, when conditions require other professionals such as BIA and Fish and Wildlife Service biologists will be contacted to add their expertise and recommendations to the planning process.

Elk and deer are the main big game species seen in the Little Rockies. Appendix C-3 shows the area used most by elk on the reservation, most of the reservation is considered deer habitat, which is not depicted on a map. Adequate cover, which is an important element of good quality elk habitat, will also meet the cover needs of deer in the forested portion of the reservation. Cover is necessary for both hiding (security cover) and protection from the elements (thermal cover). The two types of cover in combination should be managed to cover 40 percent of the area in dry forest types and 60 percent in moist habitat types. Also, cover along streams will be maintained in accordance with the Tribal Aquatic Resource Protection Ordinance. Several forestry activities such as timber harvest, thinning and prescribed burns can result in increased diversity and quantity of forage in heavily and overstocked stands. High quality forage areas in close proximity to cover will enhance overall habitat for elk and deer. During individual project planning and design to meet the annual allowable cut for timber sales and other forest activities the Forest Manager will coordinate with the Tribal Fish and Wildlife Department to ensure that adequate cover and forage are maintained.

The northwestern portion of the forested area contains road closures set up by the tribal offices. Road construction, use and closure are discussed in the attached EA (Appendix A) and the Decision Record (Appendix B) with these decisions supported by Tribal Resolution Number 125-2006. That decision incorporates all mitigation measures listed in the EA. One of the mitigation measures adopted states; "Road closures, access and building will be done on a case by case basis for each sale. Road building would be kept to a minimum, proposed only where necessary. Roads may be designated by the Tribal Fish and Game Department to be closed after any harvest to maintain and protect forest and wildlife areas." Designation and timing of closure

will be dependent upon need for the road and Council approval. This will be defined in each sale EA.

Domestic livestock grazing could hamper reforestation efforts, damage existing reproduction, and inhibit the utilization of habitat areas by elk and bighorn sheep. For these reasons, it is strongly recommended that tribal government continue the current policy of excluding domestic grazing from the timber reserve.

According to the Interagency Rocky Mountain Front Wildlife Monitoring/Evaluation Program bighorn sheep utilize three major habitat types: bunchgrass, rocky reef and old burns. Appendix C-4 depicts the bighorn sheep habitat on the reservation and those areas with 60 percent or greater slope. Habitat types that have been influenced by past fires and are in close proximity to rocky terrain are of great significance. Timber sales, thinning projects and prescribed burns in close proximity to steep rocky slopes will be planned and designed to improve bighorn sheep forage. These projects will also reduce vegetative cover used by predators. The increased variety of forage and bunchgrass will improve yearlong forage conditions for bighorn sheep. In some areas bighorn sheep make a seasonal migration to higher elevations during the summer therefore, project work to improve habitat should be done at different elevations during the life of this plan.

4.4.5 Access/Road Conditions

The forest area has an extensive road system with a density of 3.74 miles of road per square mile on the reservation. Construction of access roads may be necessary to complete management activities. Any new or proposed roads would be a part of each proposed sale which would be reviewed and accepted on an individual basis. The stipulations and conditions set forth in the Aquatic Protection Ordinance (Appendix E) will be followed for all new road construction.

Ditches and culverts would be utilized to offset runoff where needed. Culverts and bridges would be constructed as needed; culverts will be removed if they are located in areas to be closed. If a culvert or bridge is not feasible, crossing will be located perpendicular to the stream on stable rocky out-crossings of the stream, to minimize the possible adverse environmental impacts.



Plot 95W South of Baker Creek

4.4.6 Noxious Weeds

Noxious weeds continue to be a problem along roadsides and project sites, which are generally spread throughout an area by vehicles driving through infected areas and carrying seed to other areas. Control practices are carried out through the soil conservationist. Equipment used in forest management (logging and thinning) will be cleaned before being allowed on reservation lands, to prevent additional infestations from spreading. An evaluation of all forest activity areas will be conducted to determine the presents of noxious weeds and the risk of spreading.

This forest management plan, which works in conjunction with the fire management plan proposes guidelines for forest management activities over the next 15 years and sets forth management standards to protect and manage Fort Belknap Reservation's forest and associated resources. The plan is one portion of a continuous planning effort to mange natural resources according to the needs of the environments and the wishes of the Fort Belknap Community.

Terminology:

+Co-Dominant Trees – Trees that are not as tall as dominants, with crowns receiving overhead light. They may be confined laterally by dominants and other co-dominants and usually make up the main canopy with these cohorts.

++Cut Tree – All trees required to be cut as designated in the technical specifications.

DBH (diameter breast height) – Diameter of the trunk measured four feet six inches above the ground level on the uphill side of the tree. The measurement is done to the nearest whole inch.

+Dominant Trees – Trees that are somewhat above the general level of the canopy and are exposed to full sunlight from above and to a certain extent laterally.

***Elk Hiding Cover** – Vegetation capable of hiding 90 percent of a standing adult elk from human view at a distance of 200 feet or less.

***Elk Thermal Cover** – Tree stands 30 to 60 acres in size in the sapling-pole stage or older with canopy closures of 70 percent or greater.

+Intermediate Trees – Trees shorter than dominant and co-dominant but with crowns extending into the crown cover formed by co-dominant and dominant trees; receiving some direct light from above but none from the sides.

++Leave Tree – Any tree that is selected or required to be left standing; also known as crop of release tree.

++Lopping and Scattering – Cutting limbs from trunks of cut trees and moving and rearranging of slash concentrations to reduce the fuel bed height above ground level, according to technical specifications.

MBF (thousand board feet) – Signifying a measurable volume to be attained from a log.

Slash - Any tree branches or vegetation that was cut in the process of thinning or harvesting.

Spacing – The horizontal distance from the center of one leave tree to the center of the next nearest leave tree.

+++Stocking – A proportion used to depict a measurement of the amount of trees remaining in a chosen area using factors such as number and size of trees.

⁺2006, *Indian Forest Management Handbook 53 IAM 5-H*, pp.33.

⁺⁺2006, *Indian Forest Management Handbook 53 IAM 5-H*, Illustration 14 53 IAM 5-H pp.11&13 of 17.

⁺⁺⁺Smith, David, 1986, *Practice of Silviculture*, eighth edition, pp.119.

*Hoover, R. L. and D. L. Wills, ed. 1984. *Managing Forested Lands for Wildlife*. Colorado Division of Wildlife in cooperation with USDA Forest Service, Rocky Mountain Region, Denver, Colorado, 459 pp.

+**Suppressed Trees** – Trees with crowns entirely below the general level of the crown cover, receiving no direct light either from above or from the sides.

****Streamside Management Zone (SMZ)** – Refers to the stream itself and the adjacent area of varying width where management practices that might affect water quality, fish, or other aquatic resources are modified. The SMZ is not a zone of exclusion but of closely managed activity. The SMZ acts as an effective filter and absorptive zone for sediment; maintains shade; conserves aquatic and terrestrial riparian habitats; protects the stream channel and banks; and promotes floodplain stability.

+2006, *Indian Forest Management Handbook 53 IAM 5-H*, pp.33.

****Longknife, Dennis, Belgarde, Morris, and Kinsey, Daniel, 2003. *Aquatic Resource Protection Ordinance of the Fort Belknap Indian Community (APRO)*, Fort Belknap Agency. p.10.**

APPENDIX A

ENVIRONMENTAL ASSESSMENT

ENVIRONMENTAL ASSESSMENT
FOR
FOREST MANAGEMENT PLAN
FOR THE
FORT BELKNAP INDIAN RESERVATION
2006

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ENVIRONMENTAL ASSESSMENT
FOR
FOREST MANAGEMENT PLAN
FOR THE
FORT BELKNAP INDIAN RESERVATION
2006

I. Purpose and Need for Action

1.1 Introduction

The Fort Belknap Agency Branch of Forestry proposes to implement a Forest Management Plan to provide direction and continuity to forest management activities on the Fort Belknap Reservation for the Fifteen-year period of 2006-2020. The forest management goal of the Fort Belknap Community Council is to produce business opportunities and employment for the tribal members while protecting environmental quality and providing for recreation, wildlife, and aesthetic values. The objectives of this program are to institute growth in a sustainable forest program, to produce business opportunities and employment for tribal members while protecting environmental quality and providing for recreation, wildlife, and aesthetic values.

1.2 Project Planning Area

The Fort Belknap Reservation is located in north-central Montana. The northern boundary of the reservation is the Milk River. This boundary lies between Harlem Montana to the west, and Dodson Montana to the east. The reservation is approximately 28 miles from east to west and 43 miles from north to south, shown on Appendix C-2. The southern portion includes most of the Little Rocky Mountains with the exception of a portion which was taken out by the Grinnell Treaty of 1895, which came about due to the discovery of gold. The forest area covers 32,980 acres located in the southern quarter of the Fort Belknap Reservation. The forest is sectioned into seven forest management units shown on the map in Appendix C-1.1. Appendix C-2 shows the forested lands of the Fort Belknap Reservation.

The need for these actions has been identified in the Forest Management Plan, Fire Management Plan, and The Wildfire Hazard Assessment and Mitigation Plan.

Resource concerns associated with potential treatments are: potential for air quality degradation in surrounding areas; potential for visual impairment in surrounding areas; potential for soil erosion resulting from hydrophobic conditions caused by burning or forest management activities, particularly road construction and use and; potential for aesthetic consequences resulting from burned areas and timber harvest areas.

To provide direction for the forest management activities, a survey was given to the enrolled members of the Fort Belknap Reservation that were of voting age, the results of the survey are posted in Appendix C.

Proposed Action

The proposed action of Alternative 3: Forest Management, harvest 500 mbf per year also incorporates the Fire Management Plan approved in May of 2006. This alternative includes Hazardous Fuel Management and Wildland Urban Interface projects for the Fort Belknap Reservation.

II. Alternatives Including the Proposed Action

The three alternatives carried forward for further consideration (Alternatives 1, 2 and 3) all have emergency management for forest stands as their control component. Employment figures are included in the description of each alternative.

A. Alternative 1: No Action (Custodial Management harvest 100 thousand board feet (mbf) per year).

This alternative would not permit the proposed plan to be implemented. By Bureau of Indian Affairs Policy, only six (6) actions are allowed for Agencies operating without a current approved Forest Management Plan. Those actions are:

- Preparation of a Forest Management Plan (25 CFR 163.11)
- Emergency sale of timber on allotted lands held in trust (25 CFR 163.14(b)).
- Free use cutting without permit (25 CFR 163.27).
- Fire management measures (25 CFR 163.28(a), (b), and (c)).
- Trespass protection and prosecution (25 CFR 163.29).
- Insect and disease control (25 CFR 163.31(b)).

This alternative represents the current level of forest management on the Fort Belknap Reservation. However, under this alternative no fuel treatments would be allowed to take place in the forested areas. The average annual timber harvest level over the past thirteen years has been just over 100 mbf. Included in this average volume are four large sales of timber including one timber trespass, between 200 and 500 mbf each, which were sold to non-member contractors from off the reservation. The trespass involved Tribal members. Except for the trespass, these sales were advertised in order to salvage timber killed by fire and bark beetles or to prevent further timber damage by bark beetles and account for most of the average timber harvest from the reservation. Roughly 20 mbf each year is harvested by Tribal members under paid permits primarily for posts and poles. Most of the harvesting has been done using partial cutting harvest systems which remove an average of 5 mbf per acre. The average number of acres impacted each year under this alternative is twenty.

Employment would be limited to a small forestry staff to investigate timber trespass cases and prepare timber sales to salvage fire and insect damaged stands of mature timber. This would result in approximately two BIA worker years, no Tribal worker years and one-half private contractor worker year annually.

At \$100 per mbf this alternative would result in \$10,000 of stumpage revenue to the Fort Belknap Tribes.

B. Alternative 2: Stand Improvement/Fuels Reduction (harvest 100 mbf per year).

This alternative is the same as the Custodial Management Alternative except that pre-commercial thinning and hazardous fuels reduction projects would be implemented on 300-450 acres of young, over stocked forest stands each year. Mechanical fuels treatments would be used to reduce the natural fuels and some activity fuels (activity fuels over five years old) on the Fort Belknap Reservation. Mechanical treatments would include mulching, cutting, removal and other mechanical methods recognized as effective in reducing fuels. This alternative would continue to use advertised timber sales to salvage mature fire and insect damaged timber stands. However, as with the previous alternative, timber stands on the Fort Belknap Reservation would continue to grow to maturity at a rate faster than they are harvested. More and more of the forest area on the reservation would be covered with mature timber stands. Timber would be harvested from an average of twenty acres annually.

Employment requirements would be the same as those identified under the previous alternative with the addition of thinning crews and equipment operators to reduce fuels and stand stocking levels. This would result in approximately two BIA worker years, twelve Tribal worker years and one-half private contractor worker year annually.

At \$100 per mbf this alternative would result in \$10,000 of stumpage revenue to the Fort Belknap Tribes.

C. Alternative 3: Forest Management, harvest 500 mbf per year (Proposed Action)

This alternative would expand the use of advertised timber sales to harvest the volume of timber that the Fort Belknap Tribes have identified as annual allowable cut. It would work to eliminate losses to fire and insects and balance the forest structure over the full range of age classes providing a continuous, sustained flow of timber for harvest. All forest accesses would be used to set up timber thinning projects and sales to manage for forest health. Trees per acre would be reduced in order to maintain and increase stand production. Management for insect and disease control by using the resources available to pinpoint attacks and salvage damaged trees would help prevent outbreaks. The plan would also provide preventative practices rather than clean-up; setting up areas for timber sales in the form most economically feasible, utilizing larger logging companies where necessary, but focusing primarily on development of local Indian forest logging contractors. Approximately 100 acres per year would be harvested under this alternative and 300-450 acres per year would be thinned. If 550 acres were treated over the life of the plan approximately 25 percent of the forested area on Fort Belknap would be treated. This would help to protect Tribal forested lands from large wild fires (Finney, 2002). Activity fuels generated by forest practices can not be treated by fuels dollars unless planned in advance. These treatments would normally be piling and burning, broadcast burning, lopping and scattering or machine crushing. The particular method would be determined and analyzed on a case by case basis at the time a particular project is proposed.

This alternative would encourage coordination of efforts between the Fort Belknap Tribal, Fuel Management Program and the BIA, Forestry Program to reduce natural fuels accumulations in timbered areas as well as provide added protection of lives and structures from wildfire in the wild land urban interface (WUI). It would also reduce the natural fuels accumulations in timbered areas as well as treating valuable areas that are at risk of insect and disease attack. The use of the Best Management Practices and the Streamside Management Zones (BMP's and SMZ's) would be an active addition to the work preformed on the forest level in order to mitigate damages to forest resources.

Employment requirements would be the same as those identified under the previous alternative with the addition of logging contractors to harvest the increased timber volume. The total employment would be approximately two BIA worker years, twelve Tribal worker years one tribal contractor year and two and one-half private contractor worker years annually.

At \$100 per mbf this alternative would result in \$50,000 of stumpage revenue to the Fort Belknap Tribes.

Mitigation Measures Common to Both Action Alternatives (Alternatives 2 and 3).

Best Management Practices for the Streamside Management Zone guidelines, adopted by the Fort Belknap Community Council on January 7, 2003, would be adhered to with regard to natural resource management on the Fort Belknap Reservation. (Refer to Appendix E.)

An evaluation of all forest activity areas will be conducted to determine the presents of noxious weeds and the risk of spreading of the population.

Landing sites and possible disturbance areas due to forest practices will be monitored for 1 year proceeding any forest activity to evaluate and treat any noxious weed outbreak. Gerald Hockholter, soils technician, Fort Belknap Agency contact for treatment to noxious weed will be notified.

Road closures, access and building will be done on a case by case basis for each sale. Road building would be kept to a minimum, proposed only where necessary. Roads designated by Tribal Fish and Game Department will be closed after any harvest to maintain and protect forest and wildlife area.

Appropriate project plans (i.e. timber sale plan, burn plan, etc.) and NEPA documentation will be prepared for all forest management treatments. Close coordination regarding these proposals will take place with the Fort Belknap Agency Resource Specialists and the Tribal Environmental Protection Agency and Fish and Game Department.

No forestry activities will take place within one half mile of any prairie dog town that is occupied by black-footed ferrets.

If an active bald eagle nest is discovered within one mile of a project during the implementation of the project, work will stop until the appropriate consultation with the US Fish and Wildlife Service has taken place.

The effects of forestry activities on big game habitat will be evaluated and addressed within each individual project plan.

Cultural resource mitigation measures have been categorized into three types. They are:

Project Review: An archaeological review will be performed on all areas targeted for forestry activities. This review will concentrate on identifying areas where ground disturbances are likely to occur. If necessary, cultural resource inventories will be conducted in these areas and appropriate mitigation measures will be developed to protect any identified resources.

Inadvertent Discoveries: If any historical or archaeological sites are inadvertently discovered during the course of project implementation, work within the immediate project area will stop until the sites can be evaluated and appropriate mitigation measures can be developed.

Fire Suppression: Archaeological surveys will be conducted on all mechanically constructed fire lines. Resource ordered archaeologists or locally trained paraprofessionals will be called in immediately whenever heavy equipment is used to construct fire lines. These individuals will be used to examine mechanical lines and identify any archaeological sites that were damaged by fire line construction. Rehabilitation of lines will not occur in the vicinity of identified sites until cleared.

III. Affected Environment

D. Physical Components

1. Project Area

The project area is the Fort Belknap reservation located in North Central Montana. The reservation is rectangular in shape, (roughly 43 by 28 miles), and covers an area that extends from the Milk River on the North to an irregular boundary along roughly the middle of the Little Rockies on the South. The elevation ranges from 2250 to 5100 feet above sea level and rainfall ranges from 10 inches per year in the lower elevations to 20 inches per year in the higher parts of the mountains. The majority of the proposed treatments are in the Little Rocky Mountains. Each individual proposed treatment project will have a plan entailing all the specifications for that particular area.

2. Air

Air quality is good to excellent on the Reservation. Prevailing winds generally keep the air clear.

1. Water

There are approximately 125 miles of perennial streams, not including almost 90 miles of the Milk River, which runs the northern border; and 2,324 miles of intermittent streams on the Fort Belknap Reservation. These waters along with reservoirs and lakes provide water for irrigation and habitat for aquatic organisms. They are also used for fishing and recreational activities. The use of the Best Management Practices and the Streamside Management Zone guidelines would be an active addition to the work performed on the forest level in order to complete the forest prescription.

Water quality on the Reservation is generally good. Some streams, (including the Milk River), are subject to mineralization during periods of low flow. This is primarily from sub-surface drainage from upstream irrigation. The Milk River and Peoples Creek are used for irrigation on the Reservation. Water quality in the area is generally good for livestock and wildlife year-round.

2. Soil

Soils fall into six general categories on the Reservation – glacial, alluvial, colluvial, residual, terrace, and mountain. These soils are formed by three main processes: deposits from glaciers, deposition from rivers, and the weathering of the parent bedrock. These soils run from shallow to deep and are fine grained and subject to erosion. The deeper soils are on the range lands and if irrigated are productive. Shallow soils exist in the mountains with deeper soils in the draws, in creek bottoms, and along breaks in topography where steeper slopes begin to level out.

E. Biological Components

1. Vegetation

The forest of the Fort Belknap Reservation is made up of timber types based on Ponderosa pine, Douglas fir, Lodgepole pine and hardwood tree species. Hardwoods consist of primarily aspen with cottonwoods in the riparian area along the Milk River. Ponderosa pine is the predominant tree species covering 22,642 acres of the 26,768 acres of commercial forest; Lodgepole pine covers 4,127 acres, with Douglas fir covering only 31 acres, Aspen woodlands cover an additional 1,500 acres (Sawyer, 2006).

In 1936 a 58,000 acre wildfire on the Reservation burned roughly 95% of the Reservations forested lands, 20,000 acres (Historical Research Associates, 1980). Small pockets of timber and individual trees, plus the Lodgepole

pine's serotinous cones were left to re-seed the forest. These unburned pockets make up what is now the old growth forest on the Reservation.

Large time periods of fire suppression and an influx of regeneration has allowed for some significant changes to occur in the ecosystem. Producing areas of overstocked stands, susceptible to insect and disease infestation. The Fort Belknap Community Council has adopted fire management strategies to provide for the reduction of fuel loads and improve habitat on forest and rangelands.

The 1936 fire instigated natural re-growth and planned re-seeding projects in areas along the northern and western mountain faces. Which now have stands of overstocked lodgepole and Ponderosa pine (Historical Research Associates, 1980).

Ponderosa pine, lodgepole pine, and Douglas-fir are the three main type of commercial species found on the reservation. Average timber volume comes to 1.46 mbf/acre (Sawyer, 2006).

a. Ponderosa Pine

84.5 percent (31.4 mbf). The ponderosa pine shows itself in uninterrupted bands along all aspects of the lower slopes of the Little Rockies. This species does best on cool aspects at intermediate elevations, where they produce dense stands. The Northern aspects tend to support ponderosa pine/chokecherry and ponderosa pine/snowberry communities; while the Southern aspects pine forests are more open (Sawyer, 2006).

b. Douglas-fir

The presence of this species is by far the least likely to be seen in the forested area, it covers only 31 acres throughout the forest, when found is often combined with Lodgepole species. Douglas-fir is a fire sensitive species, in which the fires keep the species from taking over the ponderosa pine habitat. This is depicted through the small numbers of Douglas-fir found throughout the forest riddled with previous fires (Sawyer, 2006).

c. Lodgepole Pine

Appears in small groups in the lower to middle north slopes. Lodgepole exist on poor to thin soils where they will eventually become the dominant species. Lodgepole are extremely shade intolerant and may be out grown by shade tolerant species such as Douglas-firs (Sawyer, 2006).

Pine beetle prefers much older stands than the 40-70 year old stands that are present here on the reservation, at the moment. By helping maintain tree vigor and thinning helps reduce the risk of bark beetle outbreaks.

Common grass, forb and shrub species include: Rough fescue, Idaho fescue, bluebunch wheatgrass, needle and thread, western wheatgrass, mountain brome, balsamroot, lupine, western yarrow, fringed sagewort, American vetch, Astragalus, wild onion and phlox, sedges, thermopsis, milkvetch, penstemon, pussytoes, sticky geranium, stickseed, larkspur, snowberry, rose, bitterbrush and big sagebrush.

Noxious weeds are a management concern with any resource disturbing activity on the reservation. The major invasive species present on the reservation include Spotted Knapweed, Russian Knapweed, Leafy Spurge and Canada Thistle with Spotted Knapweed being the species that is the most wide spread and affecting land management issues across the reservation. Also, Salt Cedar is becoming an invasive species on the reservation.

2. Wildlife

Wildlife species common to the Northern short grass prairie and mountain ranges within the prairie may be found on the Fort Belknap Reservation. Big game animals include the mule deer, Rocky Mountain elk (Appendix C-3), white tail deer, pronghorn antelope, Rocky Mountain bighorn sheep (Appendix C-4) and mountain lion. Upland game species include sage grouse, sharp-tail grouse, hungarian partridge, dove and ringneck pheasant. Also inhabiting the area are many species of raptors, such as: the American kestrel, goshawk, sharp-shinned hawk, harrier, peregrine falcon, turkey vulture, bald eagle and golden eagle. Owl species include the short eared owl, great horned owl, screech owl, burrowing owl, and snowy owl.

Threatened or Endangered species that are known to use the area are the bald eagle and the black-footed ferret. No active bald eagle nests are known to occur within proposed project areas (Kaiser, Personal communications). If active nests are found the project would be stopped until consultation with the US Fish and Wildlife Service has been completed.

Appendix C-5 shows the location of black-footed ferret releases from 1997 and 1998. The two special management areas on the northern half of the reservation are approximately 70 square miles in size. The map also shows the location and size of all known prairie dog towns on the reservation. No burning or mechanical treatment would be allowed within one half mile of prairie dog towns that are being used by the black-footed ferret.

Livestock grazing has not been permitted in the Little Rocky Mountains portion of the reservation in the recent past. The introduction of cattle grazing to the forest land may have a profound affect on the wildlife in the area. Allowing a short season of grazing may improve the grazing area for the elk herd's winter habitat areas providing them with compact nutrients grazing for

winter. However, the presence of livestock may decrease the possibility of elk remaining in the area and increase the loss of riparian communities.

F. Socioeconomic Components

1. Cultural or Historical Resources

The Fort Belknap Reservation includes a broad range of topographic features, extending from the steep high mountain ridges of the Little Rocky Mountains on the south to the flat flood plain of the Milk River to the north. The reservation consequently contains a broad range of archaeological and historical sites.

No wide-scale systematic survey has been conducted on the Reservation, but known archaeological sites include stone feature sites such as stone circles, cairns, and rock alignments, as well as surface artifact concentrations (lithic scatters), surface and buried camp sites and bison kill sites. The time range of these sites extends from nearly 10,000 before present to early contact.

The Little Rocky Mountains are culturally important to Gros Ventre and Assiniboine Tribes and areas within the Little Rockies contain fasting sites and plant collecting areas.

2. Recreation

The major recreational activities in the forested portions of the Fort Belknap Reservation include hunting, horseback riding, picnicking, camping, sightseeing and driving for pleasure. Camping is often done in conjunction with hunting and ceremonial gatherings. The density of some stands of trees is increasing to the point that hunting and horseback riding are becoming difficult in some areas. Recreational areas are becoming over grown making use virtually impossible.

3. Employment and Revenue

Currently there are three small working saw mills on the reservation owned by tribal members. These mills operate on an irregular basis producing limited amounts of rough-cut lumber for local use. Timber sales on the reservation are not large enough to sustain a larger mill. The average stumpage revenue generated for the Tribes by the forests on the Fort Belknap Reservation over the last thirteen years is \$6,113.92 per year. Timber stand improvement projects and thinning have employed Tribal members for short periods of time on an irregular basis.

IV. Environmental Consequences

This chapter describes the probable effects caused by implementation of each particular alternative and assumes all mitigation measures stated in the alternatives section would be implemented. This chapter is organized by resource so that impacts from each alternative appear under the discussion of that resource. Resources are discussed in the order that they appear in the Affected Environment Chapter.

A: Air Quality:

1. Alternative 1: No Action (Custodial Management harvest 100 mbf per year).

Under this alternative there would be no impact to air quality in the short term. Over the long term air quality may be temporarily, negatively impacted whenever wildfires are burning. The intensity of wildfires would become more severe as fuel loads continue to increase. This impact may be greater than with prescribed fire because the timing, intensity and size of prescribed fires can be somewhat controlled. The impacts of wildfires would be greater than those expected from prescribed burning because burning conditions and fuel loading and treatments are not controlled.

2. Alternative 2: Stand Improvement/Fuels Reduction (harvest 100 mbf per year).

Implementation of this alternative would result in negligible impacts to air quality. Some dust would result from large equipment operations; this would be limited to the immediate vicinity where equipment is being operated and be of short duration. Over the long term air quality may be temporarily, negatively impacted whenever wildfires are burning. The intensity of wildfires would become more severe as fuel loads continue to increase. This increase would be due to the increase in latter fuels and lowering of the canopy base height due to ingrowth and overcrowding of the stands. The impacts of wildfires would be greater than those expected from prescribed burning because burning conditions and fuel loading and treatments are not controlled.

3. Alternative 3: Forest Management, harvest 500 mbf per year (Proposed Action)

This alternative would result in slight negative impacts to air quality when prescribed fire treatments are being implemented. These impacts are expected to be of short duration due to frequent winds. Impacts from mechanical

treatments implemented as part of this alternative would be the same as those described for alternative 2. In the long-term this alternative would reduce fuel loading in mature stands and convert old stands to all aged stands. The younger, managed stands would be much less likely to be destroyed by wildfire or attacked by insects.

B: Water Quality

1. Alternative 1: No Action (Custodial Management harvest 100 mbf per year).

Under this alternative there would be no impact to water quality in the short term. Increased fuel loading over the long term would be expected to result in more high intensity wildfire. Water quality would deteriorate in drainages where these fires occur. Increased density and fuels would result in the higher rates of evapo-transpiration and reduced soil moisture. The degree and duration of the deteriorated condition would be dependant upon several factors including the percentage of a particular watershed that was burned, slope and aspect of the burned area and the proximity of the fire to streams.

2. Alternative 2: Stand Improvement/Fuels Reduction (harvest 100 mbf per year)

Under this alternative there would be no impact to water quality in the short term. Increased fuel loading over the long term would be expected to result in more high intensity wildfire. Water quality would deteriorate in drainages where these fires occur. The degree and duration of the deteriorated condition would be dependant upon several factors including the percentage of a particular watershed that was burned, slope and aspect of the burned area and the proximity of the fire to streams. Wildfire impacts would be slightly reduced and less likely over time because of fuels treatments and thinning in young stands. However, mature stands would continue to accumulate fuels and be at increased risk for wildfire and insect attack.

3. Alternative 3: Forest Management, harvest 500 mbf per year (Proposed Action)

This alternative would have no significant impact on water quality and the use of streamside management zones would shorten the possible negative impacts from any logging practices. The risk of water quality damage from large wildfire would decrease over time as mature stands would be converted to all-aged stands and fuel loading would be reduced.

C: Soil

1. Alternative 1: No Action (Custodial Management harvest 100 mbf per year).

This alternative would result in negligible short term impacts to the soil resource. The onset of a diseased area infected with things such as root disease could affect the capability of the soil to hold any trees as well as new growth. The formation of pockets of root disease within the forest may inhibit the growth and quality, or predispose trees to further attack by other agents. In the long term any high intensity wildfires in the forest types would result in increased soil erosion due to the removal of vegetation. Increased fuel loading over the long term would be expected to result in more high intensity wildfire. Soil productivity and stability would deteriorate in drainages where these fires occur.

2. Alternative 2: Stand Improvement/Fuels Reduction (harvest 100 mbf per year)

This alternative would result in negligible short term impacts to the soil resource. The onset of a diseased area infected with things such as root disease could affect the capability of the soil to hold any trees as well as new growth. The formation of pockets of root disease within the forest may inhibit the growth and quality, or predispose trees to further attack by other agents. In the long term any high intensity wildfires in the forest types would result in increased soil erosion due to the removal of vegetation. Increased fuel loading over the long term would be expected to result in more high intensity wildfire. Soil productivity and stability would deteriorate in drainages where these fires occur. Limited soil disturbance would be possible under this alternative in areas where equipment would be used to reduce fuels.

3. Alternative 3: Forest Management harvest 500 mbf per year(Proposed Action)

Under this alternative fuel loading in mature stands would be reduced by timber harvesting and prescribed fire. Small areas where activity and natural fuels have been piled and burned would be negatively affected for a short period of time until vegetation is reestablished. Broadcast burning in the forest and rangeland areas of the Fort Belknap Reservation would have no affect on soil stability or productivity.

D: Vegetation

1. Alternative 1: No Action (Custodial Management, harvest 100 mbf per year).

Short term impacts under this alternative assume that a large catastrophic wildfire would not occur, therefore vegetation conditions would not change appreciably. The productivity of the forested sites would decline. Increased stocking would be in small diameter trees causing stagnation of the forest area, decreasing forest health; trees would be more susceptible to attack by insects and diseases. Increased stocking would lead to increased fuel loading over time and the probability of a catastrophic wildfire would increase. Encroachment of woody and non native species into the short grass prairie would continue, and, over the long term, result in a decrease in forage for livestock and wildlife. As mature timber stands continue to increase in fuel loading and susceptibility to attack by insects and diseases the risk of destruction of these stands by wildfire would also increase.

2. Alternative 2: Stand Improvement/Fuels Reduction (harvest 100 mbf per year)

Under this alternative some undesired tree damage would take place as management sites are treated with large equipment. Areas with lopped and scattered and left on site would not provide as good a seed bed for establishment of new vegetation as would prescribed fire, which would be determined on a site by site basis.

Lop and scattered can lead dendroctonus beetle species into an area where they may attack remaining trees. Slash that is evenly scattered would result in a continuous layer of fuel that can increase flame length and rate of spread of a fire if the slash is dry and a ground fire occurs with sites bordering untreated forest sites. As mature timber stands continue to increase in fuel loading and susceptibility to attack by insects and diseases the risk of destruction of these stands by wildfire would also increase.

3. Alternative 3: Forest Management harvest 500 mbf per year (Proposed Action)

This alternative would improve the overall health of timber stands. Short term damage may occur by wind and other environmental factors to treated areas. Treatment of areas where forest stands have produced dog eared and over grown stumpage holding BA which stress out the trees investments in resources (i.e. tree planting) have taken place would reduce the risk of catastrophic wildfire and disease and insect outbreak in these areas protecting past investments. Understory browse, grass and forb species would be expected to increase in these areas. Non sprouting woody species that have

encroached into the short grass prairie rangeland would decrease in the areas where prescribed fire is used resulting in the maintenance or increase of forage for livestock and wildlife. In the long-term this alternative would reduce fuel loading in mature stands and convert old stands to all aged stands. The younger, managed stands would be much less likely to be destroyed by wildfire or attacked by insects.

E: Wildlife

No impact to Threatened or Endangered species would occur under any of the alternatives. No fire or forestry actions are proposed within 1 mile of any known bald eagle nest or black-footed ferret occupied prairie dog town.

1. Alternative 1: No Action (Custodial Management harvest 100 mbf per year).

Impacts to wildlife species and their habitat would be negligible over the short term. As the productivity of the forested areas declines the habitat for some species will also decline. Species that require more open forest stands would be negatively affected as stands continue to close. If a high intensity wildfire occurred, the area would become unsuitable for species that require mid or late seral habitats. Beneficial impacts of alternative 3 would not be realized.

2. Alternative 2: Stand Improvement/Fuels Reduction harvest 100 mbf per year.

Wildlife species would be displaced for short periods of time while the mechanical fuels and timber harvesting treatments during implementation. This impact would be very localized in the immediate vicinity of the particular project. Beneficial impacts would be realized from the reduced risk of insect and disease outbreak and the opening up of some forest stands which would result in increased ungulate forage in the forest understory. In areas where maintenance of big game habitat is of high priority, openings created by root diseases may provide extensive browse and, therefore, be beneficial. For information on forest pest management refer to Chapter 6 of the 53 Indian Affairs Manual.

3. Alternative 3: Forest Management harvest 500 mbf per year (Proposed Action)

This alternative would have beneficial impacts to species that utilize early and mid seral stage forest and short grass prairie habitats. Forage species would increase in the areas treated with prescribed fire and the reduced risk of high intensity wildfire would be beneficial to species that utilize other than early successional stage habitats. Timber harvest and thinning projects in the

immediate vicinity of elk habitat would improve forage for elk. This beneficial effect would be greatest when hiding cover is within one quarter mile of the harvested or thinned area (Hoover and Wills, 1984). Rocky Mountain bighorn sheep prefer relatively open areas with grass and short shrubs near steep rocky slopes (Schoenecker, 2004). These areas allow the sheep to graze where they can see predators approaching and escape to the steep slopes. Harvesting timber and prescribed burning near steep slopes would improve bighorn sheep habitat. Negative impacts would result from disturbance in the immediate vicinity during the implementation of each particular project. This impact would be of short duration. Use of slash piles may increase the small mammal habitat which would be beneficial to raptors and other predators that rely on these animals for food. Thinning takes into consideration animal habitat providing and maintaining animal habitat. Increasing the edge affect in the forest provides increased land base where forage and cover are in close proximity to each other.

F: Cultural and Historical

1. Alternative 1: No Action (Custodial Management harvest 100 mbf per year).

Prior to the harvest of timber damaged by fire, insects or disease an archeological survey of the area to be harvested would be requested through the Rocky Mountain Regional, Archeologist and any Tribal Cultural Committee recognized by the Tribal Community Council would be notified. Any archeological or cultural sites identified in the survey would be marked on the ground and avoided during harvest operations. By avoiding archeological and cultural sites there should be little or no impact to these resources. In the event that any previously unidentified archaeological or cultural material is encountered during harvest operations the logging contractor would be required to cease operations, and notify the Fort Belknap Agency, Superintendent. Logging operations would remain suspended until a site inspection could be conducted through the Regional Archeology Office and written permission to proceed could be obtained from the Superintendent. Constraints placed on logging by any archaeological finds would become part of the contract.

2. Alternative 2: Stand Improvement/Fuels Reduction (harvest 100 mbf per year)

Prior to the harvest of timber damaged by fire, insects or disease an archeological survey of the area to be harvested would be requested through the Rocky Mountain Regional, Archeologist and any Tribal Cultural Committee recognized by the Tribal Community Council would be notified. Any archeological or cultural sites identified in the survey would be marked

on the ground and avoided during harvest operations. By avoiding archeological and cultural sites there should be little or no impact to these resources. In the event that any previously unidentified archaeological or cultural material is encountered during harvest operations the logging contractor would be required to cease operations, and notify the Fort Belknap Agency, Superintendent. Logging operations would remain suspended until a site inspection could be conducted through the Regional Archeology Office and written permission to proceed could be obtained from the Superintendent. Constraints placed on logging by any archaeological finds would become part of the contract.

3. Alternative 3: Forest Management harvest 500 mbf per year (Proposed Action)

This alternative would have little effect on the condition of cultural and/or historical areas. Prior to the harvest of any timber an archeological survey of the area to be harvested would be requested through the Rocky Mountain Regional, Archeologist and any Tribal Cultural Committee recognized by the Tribal Community Council would be notified. Any archeological or cultural sites identified in the survey would be marked on the ground and avoided during harvest operations. By avoiding archeological and cultural sites there should be little or no impact to these resources. In the event that any previously unidentified archaeological or cultural material is encountered during harvest operations the logging contractor would be required to cease operations, and notify the Fort Belknap Agency, Superintendent. Logging operations would remain suspended until a site inspection could be conducted through the Regional Archeology Office and written permission to proceed could be obtained from the Superintendent. Constraints placed on logging by any archaeological finds would become part of the contract.

G: Recreation

1. Alternative 1: No Action (Custodial Management, harvest 100 mbf per year).

Under this alternative the volume of the timber stands would continue to increase in density and the chances of a large stand replacement wildfire would increase over time. If a large fire occurred it would likely burn areas currently used by tribal members for recreation. Also, some areas where tree density continues to increase would become less desirable for certain recreation activities such as horseback riding and hunting.

2. Alternative 2: Stand Improvement/Fuels Reduction (harvest 100 mbf per year)

This alternative would result in thinning approximately 300-450 acres of overstocked stands that are or have the potential to limit recreational activities. Tree density would be reduced on another 20 acres as part of the timber harvest program. Over time the chances of a large stand replacement wildfire would be reduced, as well as, the likelihood of negative effects from such a fire to recreation activities. The minimal acres in this alternative can lose some effectiveness by the increasing number of projected new growth of the existing forest lands.

3. Alternative 3: Forest Management harvest 500 mbf per year (Proposed Action)

This alternative would have the same amount of thinning as alternative 2 but would result in about 100 acres of timber harvest per year. This harvest and thinning level would further reduce the risk of large scale wildfire which would have negative effects on recreation activities. Also, this level of management would reduce the number of areas that tree density is negatively impacting some recreation activities. In the long term hunting for elk and bighorn sheep would improve as the habitat for these species improved from the increase in foraging areas near hiding and escape cover.

H: Employment and Revenue

1. Alternative 1: No Action (Custodial Management harvest 100 mbf per year).

Employment would be limited to a small forestry staff to investigate timber trespass cases and prepare timber sales to salvage fire and insect damaged stands of mature timber. This would result in approximately two BIA worker years, no Tribal worker years and one-half private contractor worker year annually.

At \$100 per mbf this alternative would result in \$10,000 of stumpage revenue to the Fort Belknap Tribes.

2. Alternative 2: Stand Improvement/Fuels Reduction (harvest 100 mbf per year)

Employment requirements would be the same as those identified under the previous alternative with the addition of thinning crews and equipment operators to reduce fuels and stand stocking levels. This would result in

approximately two BIA worker years, twelve Tribal worker years and one-half private contractor worker year annually.

At \$100 per mbf this alternative would result in \$10,000 of stumpage revenue to the Fort Belknap Tribes.

3. Alternative 3: Forest Management harvest 500 mbf per year (Proposed Action)

Employment requirements would be the same as those identified under the previous alternative with the addition of logging contractors to harvest the increased timber volume. The total employment would be approximately two BIA worker years, twelve Tribal worker years one tribal contractor year and two and one-half private contractor worker years annually.

At \$100 per mbf this alternative would result in \$50,000 of stumpage revenue to the Fort Belknap Tribes.

V. Participating BIA and Tribal Staff

Judy Gray, Fort Belknap Agency Superintendent
Mike Longknife, Tribal FMO
Lee Black Crow, Tribal Fuels Specialist
Monica Blackman, BIA, Fort Belknap Agency Forester
Gordon Jackson, BIA, Regional Forester
Bruce Card, BIA, RMRO, Forest Development Forester
Tom Corbin, BIA RMRO, Fire Management Officer
Mike LeBrun, BIA, RMRO, Timber Sales Forester
Fred Taylor, BIA, RMRO, NEPA Officer
Mike Caprata, BIA, RMRO, GIS Specialist
Ken Bixby, BIA, RMRO, GIS Technician
Jerry Kaiser, BIA, RMRO, Wildlife Biologist
Marvin Keller, BIA, RMRO, Archaeologist
Larry Beneker, BIA, RMRO, Soil Conservationist
Daniel Rasmussen, BIA, RMRO, Assistant Fuels Specialist
Mark Azure, Tribal Fish and Game
Tom Jones, Tribal Fish and Game
AJ Bigby, Tribal Fish and Game
Morris Belgard, Tribal Water Quality Specialist, Environmental Protection

APPENDIX A

LITERATURE CITED

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**Survey for the Forested lands
and Results**

FOR THE FOLLOWING QUESTIONS OR STATEMENTS, PLACE A CHECK (✓) NEXT TO THAT RESPONSE WHICH MOST ACCURATELY CORRESPONDS TO YOUR FEELINGS ABOUT THE SUBJECT.

1. What do you feel are the most important uses for forested areas on the Fort Belknap Reservation? Rank 1 to 11, 1 being the most important to you and 11 being the least.

<input type="checkbox"/> Tribal Income	<input type="checkbox"/> Water Quality
<input type="checkbox"/> Grazing	<input type="checkbox"/> Erosion Control
<input type="checkbox"/> Logging	<input type="checkbox"/> Cultural/Religious Sites
<input type="checkbox"/> Tribal Employment	<input type="checkbox"/> Scenic Values
<input type="checkbox"/> Wildlife Habitat	<input type="checkbox"/> Other (Specify)
<input type="checkbox"/> Recreation	

2. During the past year have you received income from forest management practices? ☐ Yes ☐ No. If yes, from which of the following areas:

<input type="checkbox"/> Thinning/Slash Piling	<input type="checkbox"/> Sawmill Employment
<input type="checkbox"/> Wood cutting	<input type="checkbox"/> Trucking (Log Hauling)
<input type="checkbox"/> Firefighting	<input type="checkbox"/> BIA or Tribal Forestry
<input type="checkbox"/> Planting	<input type="checkbox"/> Sale of Timber
<input type="checkbox"/> Logging	<input type="checkbox"/> Other (Describe)

3. Do you own an interest in a forested allotment? ☐ Yes ☐ No

If yes, do you want it managed for timber income? ☐ Yes ☐ No

4. Is spread of pine trees onto rangeland a problem? ☐ Yes ☐ No ☐ No Opinion

5. Is clearcutting of small, well designed logging units on highly productive timber sites an acceptable practice? ☐ Yes ☐ No ☐ No Opinion

6. Do you think road closures benefit wildlife? ☐ Yes ☐ No

7. Should timber management practices be restricted around home sites? ☐ Yes ☐ No ☐ No Opinion
If yes, how far? _____

8. During an average year I use Little Rocky Mountain forested areas for recreation, hunting, fishing, or cultural/spiritual reasons for approximately:

☐ 0 to 6 days ☐ 2 weeks to 1 month
☐ 1 to 2 weeks ☐ more than 1 month

9. If you feel that the Little Rocky Mountain forest is a disappearing resource, what do you think are the main reasons for their decline? Place a number 1 next to the most important reason, number 2 next to the second most important reason, etc.:

☐ Excessive wood cutting
☐ Failure to plant new trees
☐ Attack by insects or disease
☐ Global warming/air pollution
☐ No management
☐ Livestock overgrazing
☐ Other (Specify) _____

10. Should timber prepared for sale to tribal members be sold to non-tribal members when it is beyond the capacity of the tribal members to harvest it?

☐ Yes ☐ No ☐ No Opinion.

11. Should areas be opened for free-use or commercial timber cutting?

☐ Yes ☐ No ☐ No Opinion

12. If the use of forestry practices improve wildlife forage conditions on some forestry units but reduces the number of trees per acre on those units, should the forestry practice be done anyway?

☐ Yes ☐ No ☐ No Opinion

ADDITIONAL COMMENTS:

WE NEED YOUR INPUT On Developing a Forest Management Plan for Forest Resources on the Fort Belknap Reservation

The Bureau of Indian Affairs, Fort Belknap Agency, is in the process of developing a ten (10) year Forest Management Plan. This plan will outline management of the forest resource for the next ten (10) years. It is very important that the needs and desires of the Fort Belknap people be addressed in this plan. Please take a few minutes of your time to answer the following questions. Your thoughts and comments are very important to the future management of the forest resources on the Fort Belknap Reservation.

Please return this postage paid survey form by tucking this section in, with the Reply Mail address on the outside, and dropping it in a U.S. Postal Service box as soon as possible. Thanks for your interest in the Fort Belknap forest resources.

Please return this questionnaire by June 9, 2006.

TALLY REPORT
Fort Belknap Indian Reservation

Total Collected Surveys= 196

Question #1.

Rank of most important uses for forested areas by average on a scale of 1-11 out of 154 surveys

	<u>AVG.</u>	<u>Number of times marked #1</u>
1. Water Quality	3.58%	50
2. Wildlife Habitat	3.77%	32
3. Cultural/Religious sites	4.67%	20
4. Scenic Values	5.30%	11
5. Erosion Control	5.52%	7
6. Recreation	5.74%	9
7. Tribal Employment	5.89%	9
8. Tribal Income	6.60%	12
9. Grazing	7.13%	4
10. Logging	8.74%	1
11. Other	10.74%	0

Question #2.

Number marked yes to having received income from forest management practices
Total: 7

1. Thinning/ Slash Piling	2
2. Wood Cutting	5
3. Firefighting	2
4. Planting	1
5. Logging	3
6. Sawmill Employment	1
7. Trucking (Log Hauling)	0
8. BIA or Tribal Forestry	1
9. Sale of Timber	1
10. Other	0

Number marked No=146

Question #3.

Number marked yes for forest allotment	22
Number marked no for forest allotment	131
Number marked yes for timber income	7
Number marked no for timber income	3

Question #4.**Spread of Pine Trees as a problem?**

Number marked Yes	23
Number marked No	120
Number marked No Opinion	53

Question #5.**Clear cutting of logging units an acceptable practice?**

Number marked Yes	89
Number marked No	74
Number marked No Opinion	33

Question #6.**Road closures benefit wildlife?**

Number marked Yes	139
Number marked No	57

Question #7.**Timber Mgmt practices to be restricted around home sites**

Number marked Yes	
107	
Number marked No	46
Number marked No Opinion	43

If yes how far?

100 ft?	9
100 yds.?	14
1 mile?	11
3 miles?	8
3-5 mile?	20

Question #8.**Use of the Rocky Mt. areas for recreation, hunting, fishing, or cultural/spiritual reasons:**

0 to 6 days	103
-------------	-----

1 to 2 weeks	26
2 weeks to 1 month	19
More than 1 month	48

Question #9.

Top reasons for resource decline in the Little Rocky Mountains on a scale of 1 to 7 out of 116 surveys

	<u>AVG.</u>	<u>Number of times marked #1</u>
1. No management	3.45%	24
2. Failure to plant new trees	3.34%	19
3. Excessive Wood Cutting	3.49%	23
4. Attack by insects or disease	4.84%	25
5. Livestock or overgrazing	2.84%	7
6. Global warming/air pollution	3.93%	10
7. Other	4.86%	8

Question #10.

Should timber prepared for sale to tribal members be sold to non-tribal members when it is beyond the capacity?

Number marked Yes	78
Number marked No	100
Number marked No opinion	18

Question #11.

Should areas be opened for free-use or commercial timber cutting?

Number marked Yes	31
Number marked No	150
Number marked No Opinion	15

Question #12.

If the use of forestry practices improve wildlife forage conditions on some forestry units, but reduce the number of trees per acre on those units, should the forestry practice be done anyway?

Number marked Yes	77
Number marked No	93
Number marked No Opinion	26

The following are specified answers to the “other” category in question number one

- 1) “Preserve our land, let the one’s who took our land destroy their own.”
- 2) “Use for heating tribal homes, (fuels).”
- 3) “Creator made it.”
- 4) “Whatever best benefits the tribe.”
- 5) “Leave untouched for the sake of the environment.”
- 6) “No mining or drilling”
- 7) “Home material”
- 8) “Fuel for homes, (wood cutting)”
- 9) “This should have been taken care of a long time ago”
- 10) “Low management”
- 11) “Leave the land alone”
- 12) “Fire wood”
- 13) “Mining”
- 14) “Good forestry management”

The following are specified answers to the “other” category in question number nine

- 1) “Clear cut of hillside for timber just last year”
- 2) “Polluted Water, dead mine, all a waste”
- 3) “Mining, bad water”
- 4) “Grazing is needed for fuels/plants”
- 5) “People driving around”
- 6) “Mining should be on here”
- 7) “Hunting”
- 8) “People”
- 9) “Apathy”
- 10) “The mine”
- 11) “BIA management”
- 12) “Mining and burning”
- 13) “Neglect”
- 14) “Pollution from mine”
- 15) “Gold mining”
- 16) “Mining causing water poisoning”
- 17) “People driving”
- 18) “Water quality”
- 19) “Forest fires”
- 20) “Mining”
- 21) “Pollution from the gold mine next door”
- 22) “Bugs are the worst”
- 23) “White people”
- 24) “We forget that everything is connected and has a purpose”

The following are additional comments stated at the end of the brochure.

- 1) "Plant trees around the housing areas"
- 2) "Timber sales will lead to erosion mismanagement, tribal members will not benefit from this"
- 3) "The timber resources in the Little Rocky Mountains are not sufficient to support sustainable commercial harvesting"
- 4) "I am proud to be an Indian. I am proud to be recognized as a member of the tribe. I like the sound of the wind when it blows through the trees, if you listen it will tell a story. I live in the city, I see what goes on. I see the destruction of Mother Earth. I see the animals be destroyed because they have nowhere else to go. I say, save what little we have left"
- 5) "Bad people are in control"
- 6) "The main problem is the bugs killing trees"
- 7) "Put your prisoners to work and clean the mission canyon, what a mess! Trash all over the place! We brought friends from Norway and Sweden to see, I was embarrassed"
- 8) "The environmental services on this Fort Belknap Indian Reservation take their time in restoring the natural beauty and are lackadaisical in enforcing any given laws"
- 9) "Need better forestry management overall, also more trees need to be planted to replace burned areas and insect infestation"
- 10) "If these things don't make the land and the water worse than they are, maybe it would be OK to an extent. Only if it benefits the tribe and no one else"
- 12) "Keep people out!"
- 13) "Clean up the Zortman mine"
- 14) "Stop killing our Mother Earth!"
- 15) "Indians are suppose to know habitat and animal life, not selling timber"
- 16) "Keep people out of the forests. They go up there, drive around, and litter"
- 17) "Keep people out! No driving around"
- 18) "The BIA has never been able to manage anything effectively, leave the Little Rockies alone"
- 19) "Leave our trees alone"
- 20) "Please just leave our forests on all reservations alone. We need trees for fresh clean air"
- 21) "Please let the Little Rockies be a wildlife refuge and religious site"
- 22) "Leave it to the local people in the mountains, they have to live their"
- 23) "The forest is the only natural water-shed barrier to the streams; we need water as a filter"
- 24) "The Mountains on the reservation are for its people"
- 25) "The use of ground water from the Zortman mine is polluting the whole Little Rocky Mountains. Clean up that then worry about something else"

- 26) "We logged 250 acres several years ago, if done by a professional logger (which ours was), the land heals without harm. We logged related to overgrowth and disease prevention"
- 27) "I did not think that active harvesting of the trees would be a problem if trees were replaced by a good management and replanting plan. Also, that would increase tribal employment and pride in their lands"
- 28) "Tribal income: How is it used? Who determines the use of the money? Is it invested in the good of all the people?"
- 29) "Very important to have a properly implemented plan"
- 30) "Land preservation is very important, what you take from the earth you must put back. Human livelihood is also important, and keeping native land to its people is ultimately important. Do not open up to outsiders"
- 31) "Leave Fort Belknap alone"
- 32) "Why is Texas concerned about an Indian reservation in Montana? Leave us alone"
- 32) "Usual forest trees do not grow on flat land unless planted. Leave nature alone, help by killing insects and disease. We need water shed"
- 33) "We need to continue to maintain what we have for the future of our people"
- 34) "We have to protect our land and forests for future generations"
- 35) "Any game animal on Fort Belknap reservation is a survivor. Most of the residents there among the unemployed would not work no matter what"
- 36) "The Little Rockies are a great resource that should be managed and protected to the fullest"
- 37) "With the unemployment rate where it is on the reservation, we need to create jobs. Just be careful not to degrade the mountains. It could be a tough balancing act"
- 38) "If timber needs to be harvested, it should be done by tribal members"
- 39) "Help Mother Nature, do not destroy her"
- 40) "Under Mitchell, the BIA has a trust responsibility toward this plan. Will NEPA compliance follow? Does ESA apply? Will this plan involve replanting? What about the biodiversity?"
- 41) "As long as they plant more trees in some other areas to keep the mountain looking good"
- 42) "The Little Rocky Mountains are doing well for trees, but there should be some planting of Spruce trees and Evergreens. About 85% of the mountain trees are Buck Pine"
- 43) "Sanctioned spiritual grounds should be made thoroughly sanctioned and protected"
- 44) "God gave us beautiful trees to enjoy and to balance nature. Trees are a ritual part of Mother Earth and should not be abused, used or destroyed for any reason"
- 45) "Do not touch the land. Do not sell the timber to tribal members or non-tribal members"

Fort Belknap Indian Community

WHEREAS, the Fort Belknap Indian Community Council is the governing body of the Gros Ventre and Assiniboiné Tribes of the Fort Belknap Indian Community, Fort Belknap Indian Reservation, Montana, by the authority of the Constitution and By-Laws of the Fort Belknap Tribes approved on the 13 day of December 1935, and

WHEREAS, under the Constitution and By-Laws of the Fort Belknap Indian Community, the Community Council is charged with the duty of protecting the health, security and general welfare of the Fort Belknap Indian Community, and

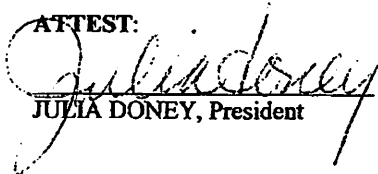
WHEREAS, 25 CFR 163.11 provides for the preparation of Forest Management planning to support objectives to be beneficial to land owners and show an approximate balance between net growth and harvest.

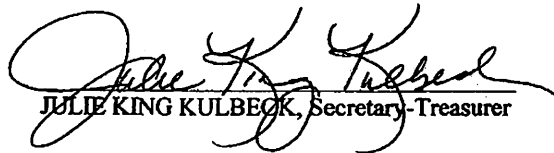
WHEREAS, The Fort Belknap Community Council has reviewed and selected alternative 3 from the Environmental Assessment for the basis of the Forest Management Plan.

NOW THEREFORE BE IT RESOLVED, that the Fort Belknap Indian Community Council supports the preferred alternative No. 3 of the Environmental Assessment for the Forest Management Plan and

BE IT FINALLY RESOLVED, that the President and Secretary of the Fort Belknap Indian Community Council are hereby authorized to sign any and all documents which may be required to complete and validate this transaction.

ATTEST:

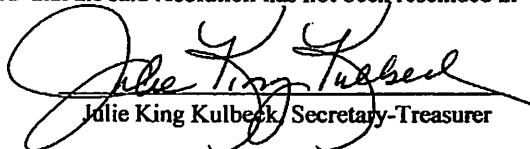

JULIA DONEY, President


JULIE KING KULBECK, Secretary-Treasurer

CERTIFICATION

I, the undersigned, as Secretary of the Fort Belknap Indian Community Council of the Fort Belknap Indian Reservation, Montana, do hereby certify that the Fort Belknap Indian Community Council is composed of 10 (ten) members of whom 8 members constituting a quorum were present at a meeting thereof, duly and regularly called, noticed, convened and held this 11th day of September, 2006; and that the foregoing Resolution of the Fort Belknap Indian Community Council was duly adopted and approved the affirmative vote of 6 for; 1 opposed; 1 not voting; 0 temporary absent; 2 excused absent; and that the said resolution has not been rescinded in any way.

DATE: September 19, 2006


Julie King Kulbeck, Secretary-Treasurer

Fort Belknap Indian Community Council
Tribal Government

RR1 Box 66, Harlem, Montana 59526
Address

APPENDIX B

FINDING OF NO SIGNIFICANT IMPACT



United States Department of the Interior
BUREAU OF INDIAN AFFAIRS

Fort Belknap Agency
Rural Route 1, Box 980
100 BIA Road
Harlem, Montana 59526



PHONE: 406-353-2901
FAX: 406-353-2886

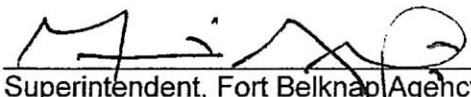
IN REPLY TO:

**Decision Record and Finding of No Significant Impact
For the Proposed
Forest Management Plan
For the Fort Belknap Indian Reservation**

Based on the attached Environmental Assessment I have determined that Alternative 3: Forest Management, harvest 500mbf per year will be the decided upon proposed action. This alternative will not have a significant impact on the quality of the human environment. Therefore, an Environmental Impact Statement is not required.

The reasons supporting this finding are as follows:

1. The Proposed action supports the goals and objectives of the Assiniboine and Gros Ventre Tribes. Both the Assiniboine and the Gros Ventre support the proposed action.
2. The proposed action does not represent a significant change in the current resource use pattern on the reservation timber reserve.
3. The proposed action will increase forest health and improve habitat on the forest lands of the reservation.
4. Prior to forest activities the proposed management area(s) will be reviewed for threatened or endangered species in accordance with the Endangered Species Act, management areas will be moved if species exist within the project boundaries. All proposed management areas will also be reviewed for cultural sites, if any are discovered; the project will be assessed to its impact from management activities.
5. Any unusual or unique problems and sensitive issues would be addressed in depth by an individual environmental assessment for major projects in the reservation timber reserve.
6. There are no negative impacts that cannot be mitigated to adequately reduce adverse affects.



ING Superintendent, Fort Belknap Agency

SEP 13 2006

Date

Decision Notice and FONSI For Forestry Permits

This Decision Notice documents my decision and rationale for selecting the Permit with forest management alternative as the management strategy for forestry permits. The management strategy for authorizing forestry products on the Fort Belknap Reservation, the analysis of the alternatives considered, and the public issues that were identified, can be found in the "Environmental Assessment for the Management Plan for the Fort Belknap Indian Reservation 2006". This analysis and decision has been accomplished in accordance with the National Environmental Policy Act of 1969 as amended.

The goal of this EA is to disclose the environmental consequences and social ramifications of permitting acreage for forest products use.

PUBLIC INVOLVEMENT

Issues and concerns related to the development of this EA were developed by the Interdisciplinary Team (IDT) based on responses from initial scoping contacts, and during comments received on the draft EA. Area tribes, Agency Offices, Federal and State government agencies were contacted during scoping and review of the draft document.

ALTERNATIVES

Alternatives were considered which show a range of options which analyze the best way to protect the environment and provide a continuing economic base for the Indian people who depend on the land for income, all have emergency management for forest stands as their control component. The alternatives, as listed below, discuss the strategy and scope of each.

Alternative 1: No Action (Custodial Management harvest 100 thousand board feet (mbf) per year).

This alternative would permit utilization of emergency sale of timber on allotted lands held in trust, free use cutting without permit, fire management measures, trespass protection and prosecution, and insect and disease control. Use of this alternative removes the option of performing fuel treatments in the forested areas.

Alternative 2: Stand Improvement/Fuels Reduction (harvest 100 mbf per year).

This alternative is the same as the Custodial Management Alternative except that pre-commercial thinning and hazardous fuels reduction projects would be implemented on 300-450 acres of young, over stocked forest stands each year. Mechanical fuels treatments would be used to reduce the natural fuels and some activity fuels on the Fort Belknap Reservation. This alternative would continue to use advertised timber sales to salvage mature fire and insect damaged timber stands.

Alternative 3: Forest Management, harvest 500 mbf per year (Proposed Action)

This alternative would work to eliminate losses to fire and insects and balance the forest structure over the full range of age classes providing a continuous, sustained flow of timber for harvest. All forest accesses would be used to set up timber thinning projects and sales to manage for forest health. Trees per acre would be reduced in order to maintain and increase stand production. The plan would also provide preventative practices rather than clean-up; setting up areas for timber sales in the form most economically feasible, utilizing larger logging companies where necessary, but focusing primarily on development of local Indian forest logging contractors.

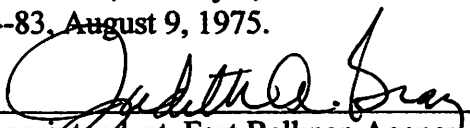
This alternative would encourage coordination of efforts between the Fort Belknap Tribal, Fuel Management Program and the BIA, Forestry Program to reduce natural fuels accumulations in timbered areas as well as provide added protection of lives and structures from wildfire in the wild land urban interface (WUI). It would also reduce the natural fuels accumulations in timbered areas as well as treating valuable areas that are at risk of insect and disease attack.

DECISION NOTICE

I have decided to approve the issue of forestry permits in the Fort Belknap Reservation. This allows the resource manager to control the collection of forest products for the benefit of the environment and economic stakeholders in the land. This allows choices in management strategy based on existing conditions, needs, and goals; as well as the dynamic management of the acreage in response to variations (climate, pest infestations, crop selection, etc.) within the ecosystem.

FINDING OF NO SIGNIFICANT IMPACT (FONSI)

It has been determined that the Bureau of Indian Affairs issuance of forestry permits is not a federal action significantly affecting the quality of the human environment as would require the preparation of an Environmental Impact Statement in accordance with Section 102 (2) © of the National Environmental Policy Act of 1969, Pub. L. 91-190, 42 U.S.C. 4321-4347, January 1, 1970. As amended by Pub. L. 94-52, July 3, 1975, and Pub. L. 94-83, August 9, 1975.


Superintendent, Fort Belknap Agency

5/29/08
Date

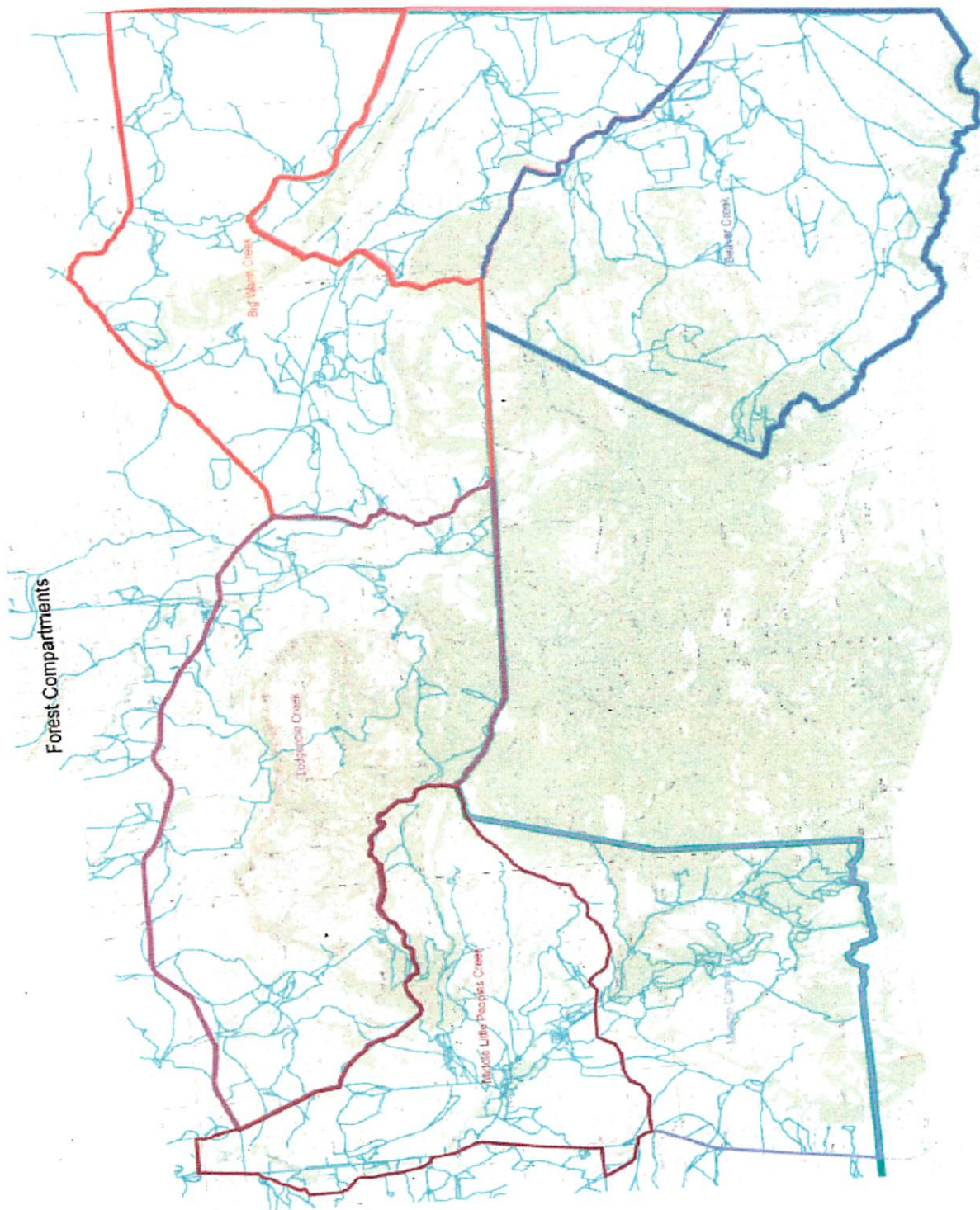
APPENDIX C

RESERVATION MAPS

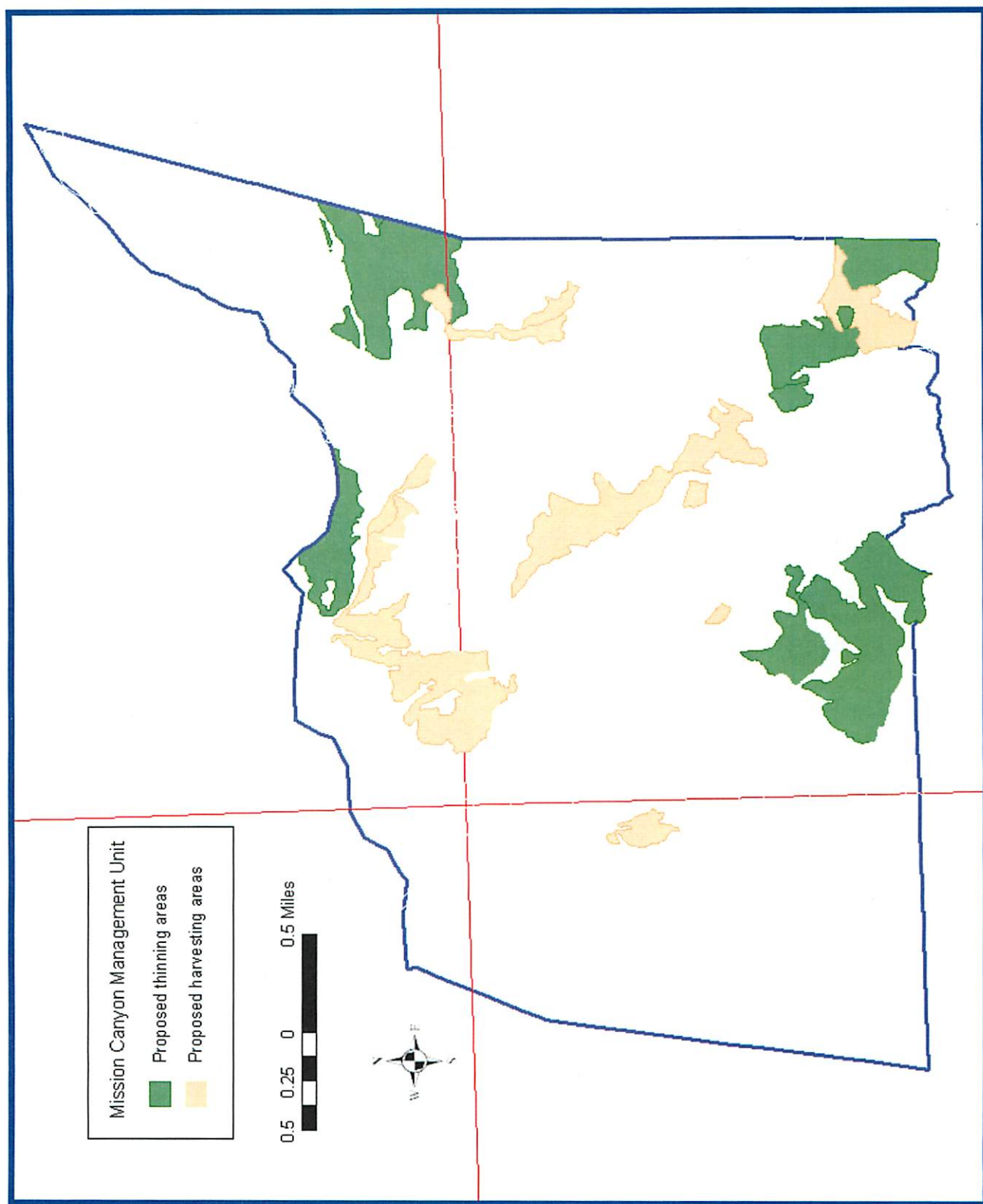
APPENDIX C-1

Forest Compartments

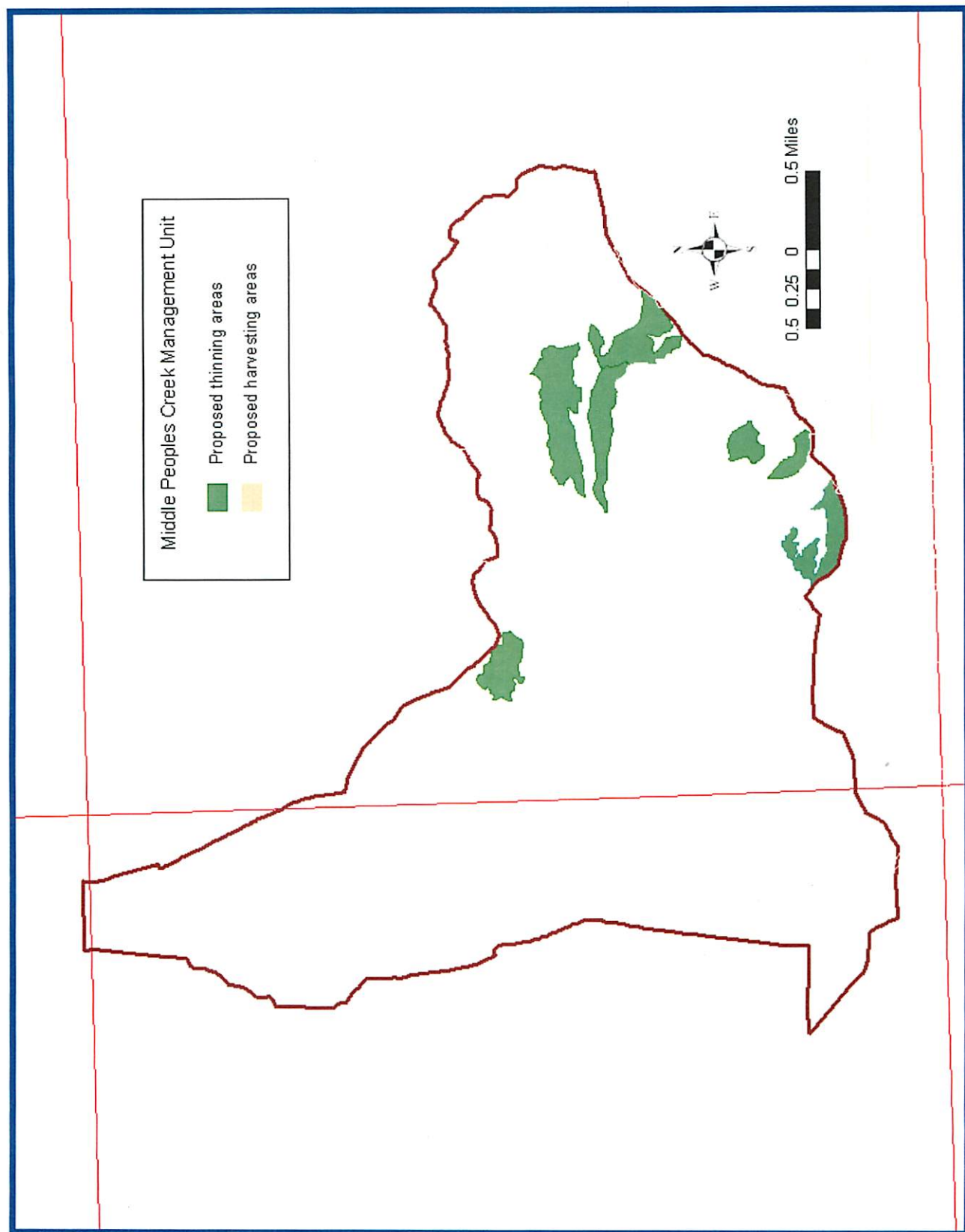
C-1.1 Forest Compartments



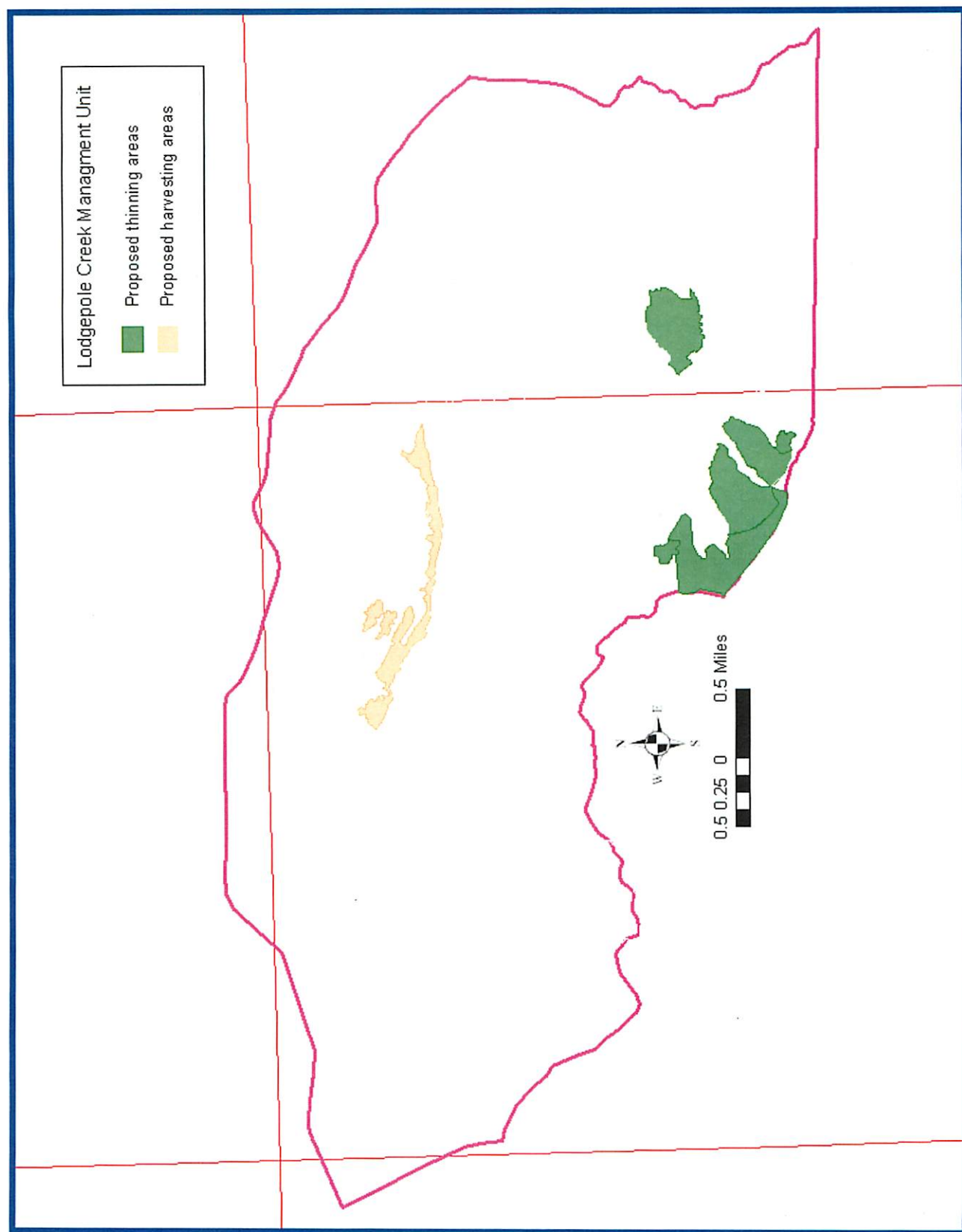
C-1.2 Mission Canyon Compartment



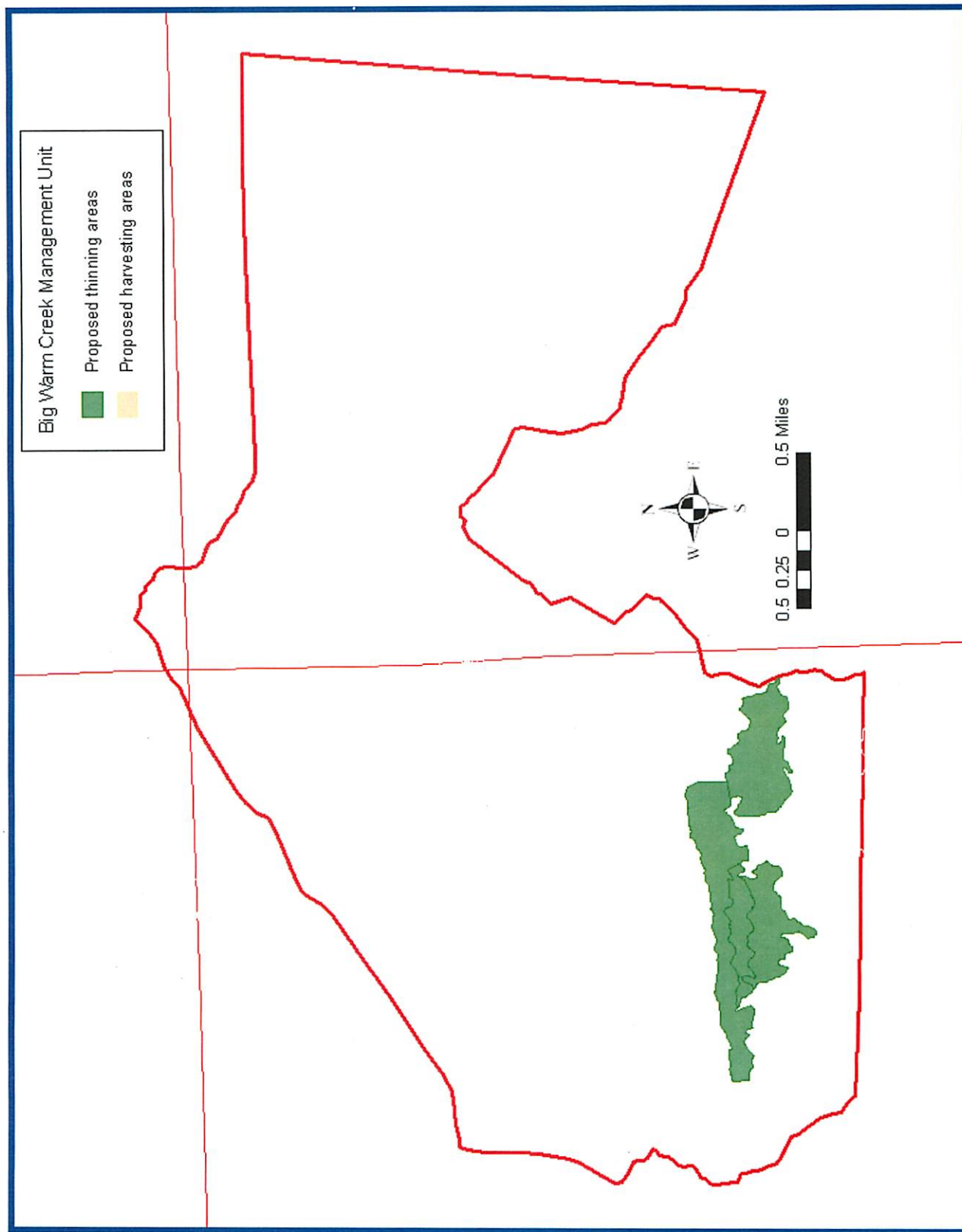
C-1.3 Middle Little Peoples Creek Compartment



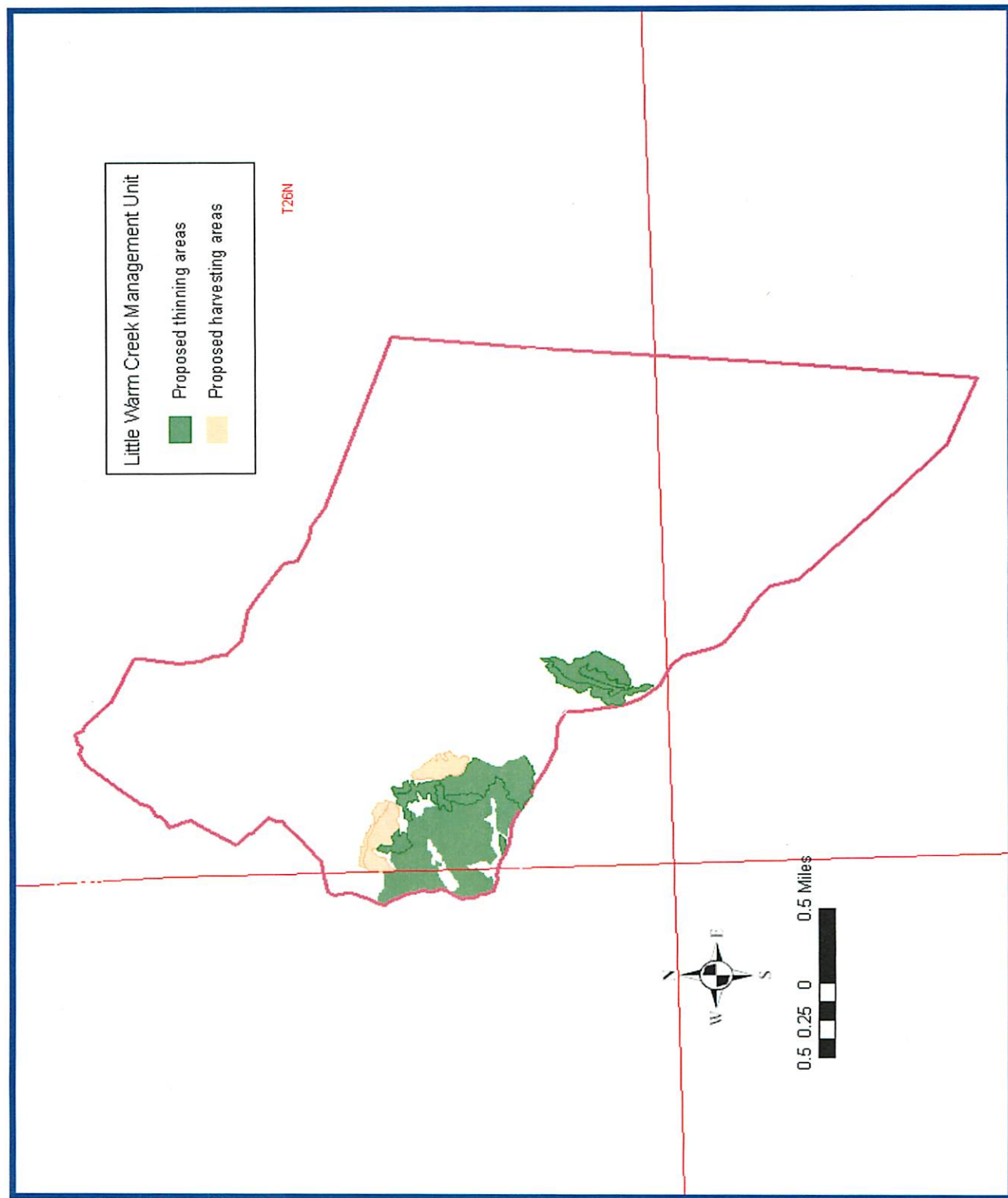
C-1.4 Lodgepole Creek Compartment



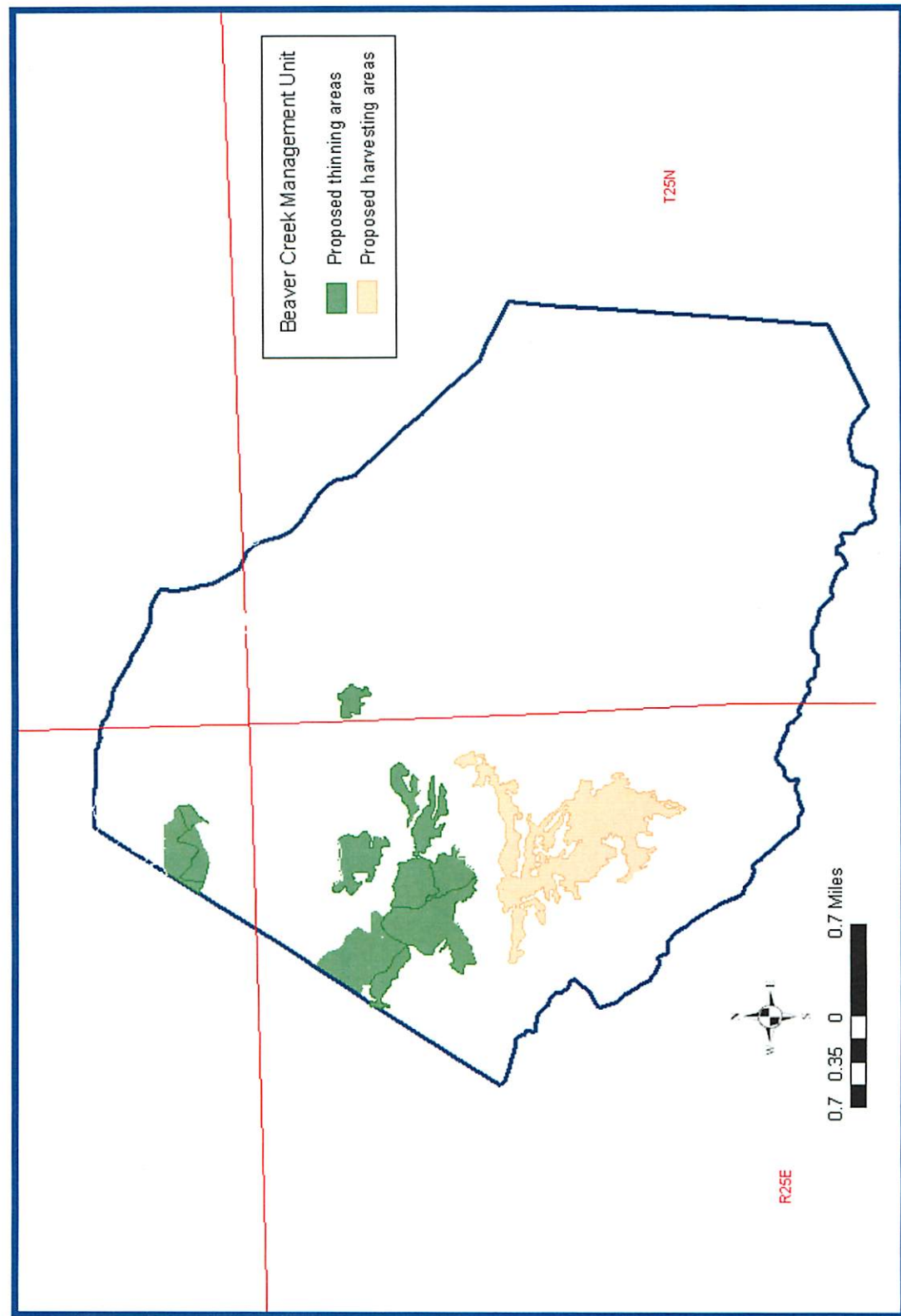
C-1.5 Big Warm Creek Compartment



C-1.6 Little Warm Creek Compartment

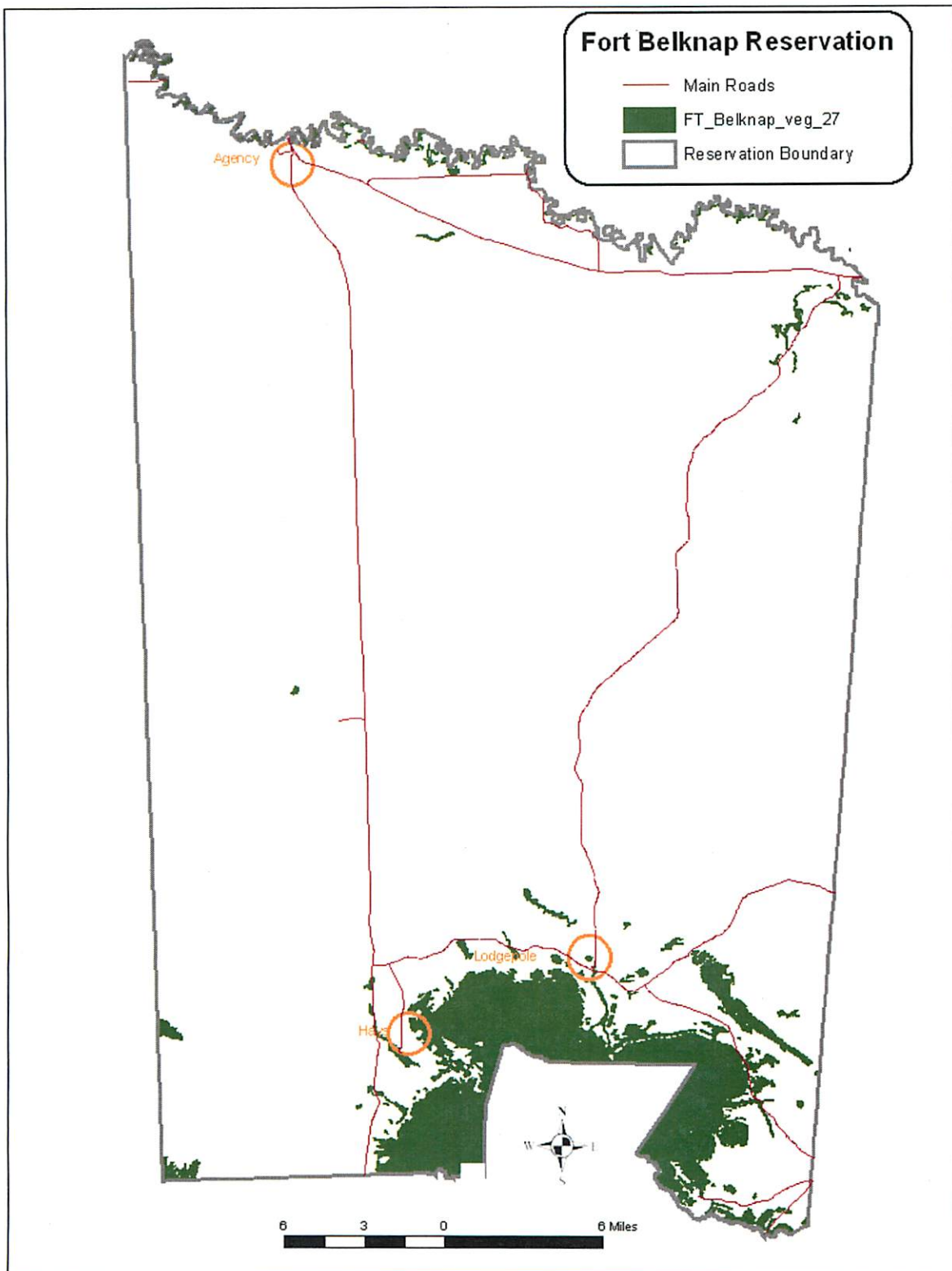


C-1.7 Beaver Creek Compartment



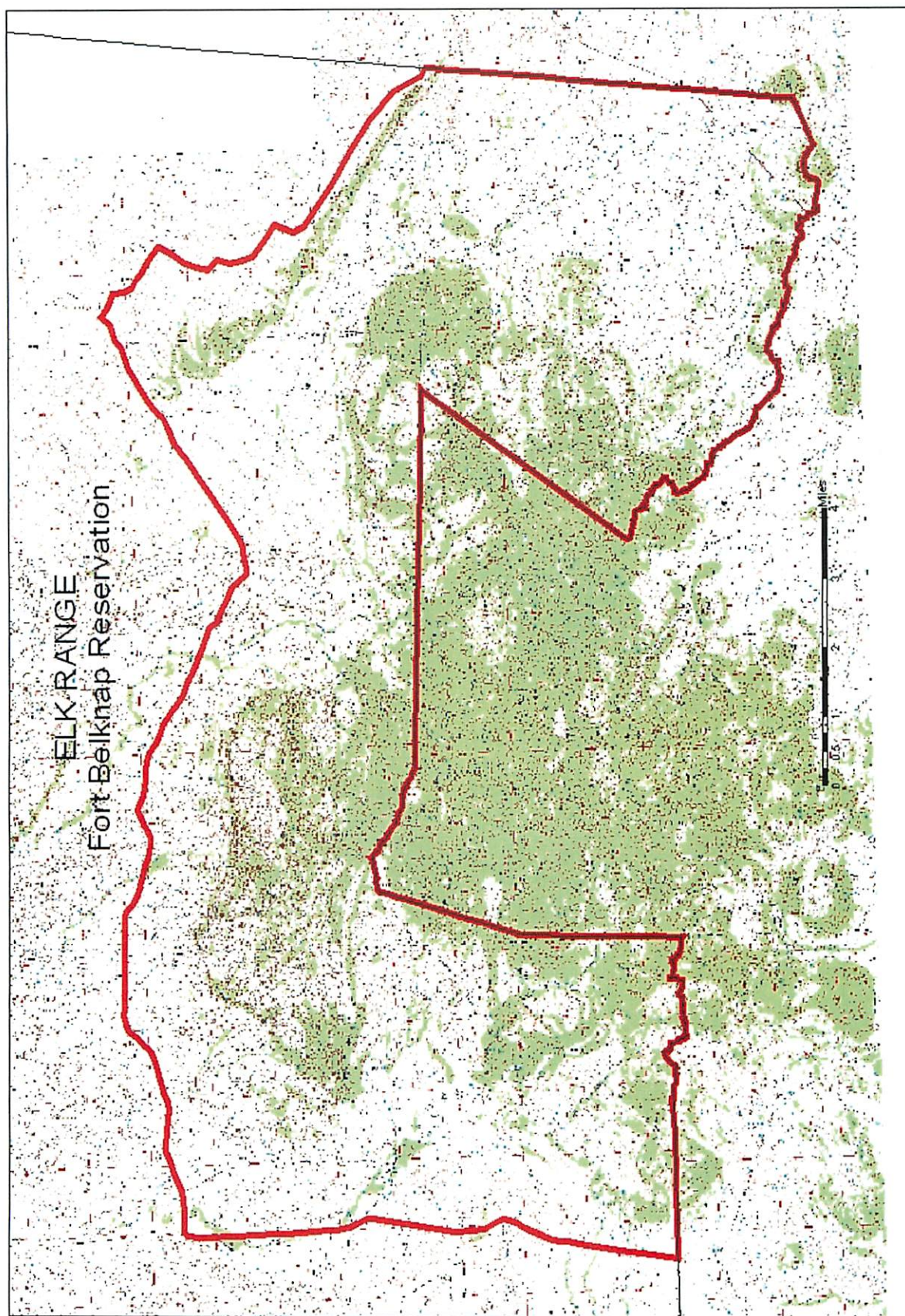
APPENDIX C-2

Fort Belknap Reservation Forest land



APPENDIX C-3

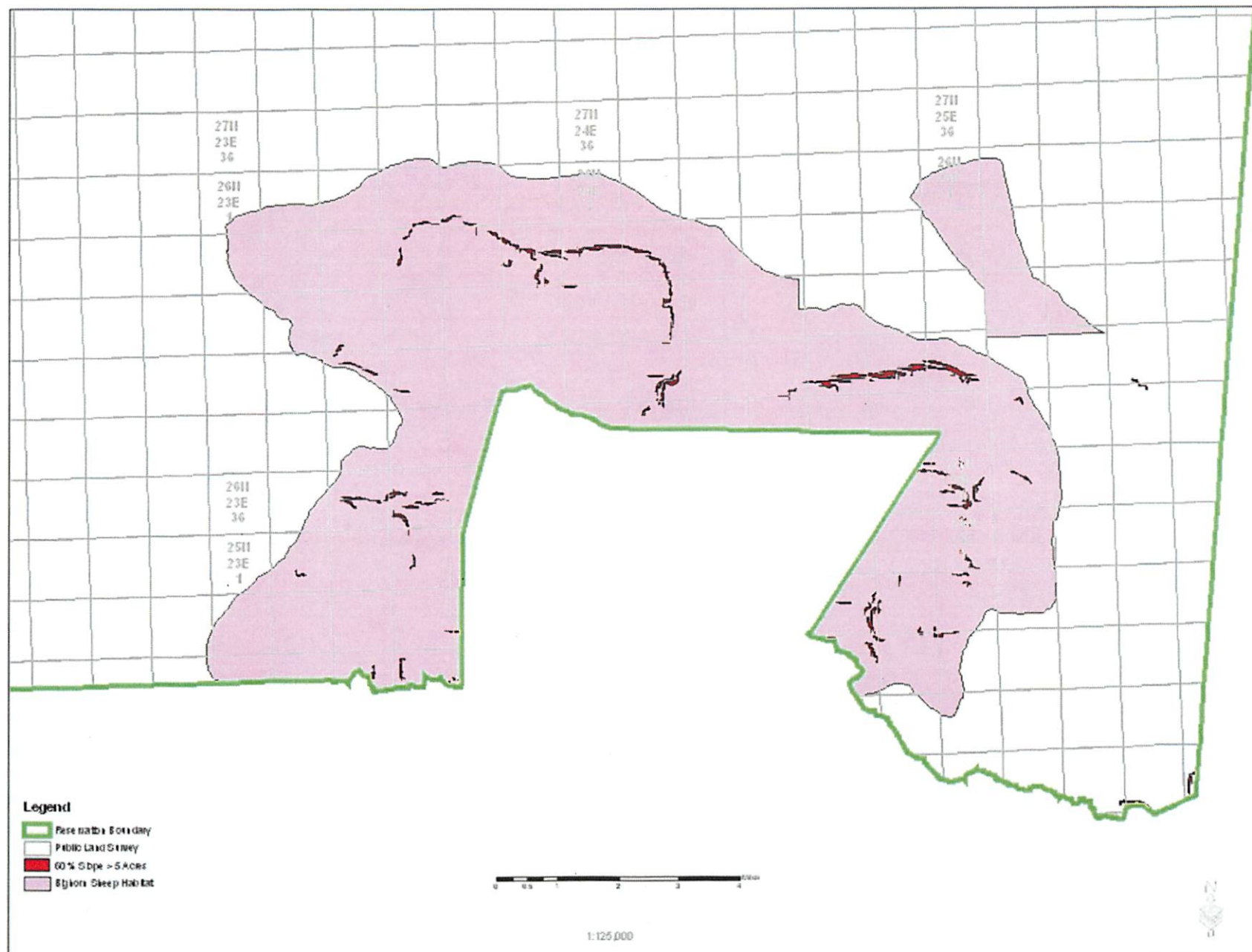
**Fort Belknap Reservation
Rocky Mountain Elk Habitat
(Kaiser and Jones, Personal communications)**



APPENDIX C-4

Fort Belknap Reservation Big Horn Sheep Habitat (Kaiser and Jones, Personal communications)

C-4 Big Horn Sheep Habitat



APPENDIX C-5

Fort Belknap Reservation Prairie Dog Towns and Release locations of Black footed Ferret

Fort Belknap Reservation

Ferret Zones



0.4 0.8 1.2 1.6 2.0 Miles

APPENDIX D

Fort Belknap Reservation Timber Permit

Fort Belnap Indian Community

WHEREAS, the Fort Belnap Indian Community Council is the governing body of the Gros Ventre and Assiniboine Tribes of the Fort Belnap Indian Community, Fort Belnap Indian Reservation, Montana, by the authority of the Constitution and By-Laws of the Fort Belnap Tribes approved on the 13 day of December 1935, and

WHEREAS, under the Constitution and By-Laws of the Fort Belnap Indian Community, the Community Council is charged with the duty of protecting the health, security and general welfare of the Fort Belnap Indian Community, and

WHEREAS, 53 IAM 4.5 provides for preparation of an annual policy and procedural statement for the issuing of Timber Cutting Permits on Tribal Lands, and

WHEREAS, The Fort Belnap Indian Community Council has reviewed and approved the following statement for the issuing of Timber Cutting Permits on Tribal Lands, now

THEREFORE BE IT APPROVED: That this resolution and Timber Policy Statement hereby rescinds all previous resolutions pertaining to the issuance of Timber Cutting Permits, now

BE IT FURTHER RESOLVED: That this Annual Timber Cutting Policy Statement shall be in effect on an annual basis until rescinded by the Fort Belnap Indian Community Council.

**ANNUAL TIMBER USE POLICY STATEMENT
FORT BELKNAP RESERVATION
TIMBER CUTTING PERMITS - ANNUALLY FROM 2005**

A. GENERAL USE RULES AND REGULATIONS

1. All permits will be issued in accordance with the regulations of 25 CFR Chapter 1, Part 163.26 and 163.27, Forestry, and the instructions of 53 IAM 4.5, Permit Sales of Forest Products.
2. Permits shall be issued only to enrolled adult members of the Fort Belnap Indian Community. Tribal members who obtain permits may not retain non-members to work for them under the auspices of said permits. However the permittee's immediate family (spouse, son, daughter) regardless of their enrollment, may assist the permittee with the timber cutting operation.
3. The holder of any Timber Cutting Permit must have the permit in his/her possession at all times when cutting, loading or transporting permitted items.



Annual Timber Use Policy Statement 2005

Page 2

4. Permits shall not be transferable from the permittee to another individual.
 5. Failure of the permittee to comply with the permit stipulations will result in immediate cancellation of the permit. Stipulations are listed on the back of all permits, and on the attached supplement issued with each permit.
 6. Permit periods will include a starting date, and an ending date that is up to 90 days from the date of issue.
 7. Permits may not be extended, and no refunds will be made for non or partial use of a paid permit. When conditions beyond the control of a permittee preclude the completion of a permit, the Forest Officer may modify or extend the permit, in writing, upon the request of the permittee. This action must occur on or before the permit's expiration date, and must be conducted in the Tribe's best interest.
-
8. Timber to be cut under permits shall be marked in such a manner that cutting is consistent with sound silvicultural and economic principles that maintain and enhance the timber stands.
-
9. No permit or cutting will be allowed in designated recreational areas, ceremonial grounds, or similar locations; e.g. Wilson Park, Tin Cup, Eagle Child, etc.
 10. When operating under a permit where the cutting area is not specifically designated by the Forest Officer, the permittee or his/her associates shall be responsible for recognizing land ownership boundaries, and knowing who's property they are on.
 11. Unauthorized cutting in previously thinned stands is prohibited except for salvage of already felled or wind thrown material.
 12. Lodgepole Pine will be the primary tree species used for posts and poles. Other species may be used if they are compatible with forest management objectives.
 13. Cutting is prohibited within 100 feet of primary access roads in order to maintain visual and recreational integrity of the access routes. Designated primary roads include Mission Canyon and White Cow Canyon.
 14. Adjacent to all other access routes, felled material, slash, and debris shall be piled ten (10) feet back from the edge of the road. No material or debris will be left or piled in the road ditches.

15. All residual slash will be piled, lopped and scattered, or otherwise treated as specified in the permit stipulations. (Piling will be the preferred treatment in most cases.)

16. Permits may be limited, suspended or terminated during periods of "Very High" or "Extreme" fire danger, or during fires or other emergency situations.

17. In accordance with CFR 163.21, a Performance Bond for an amount specified by the Forest Officer, may be required of the Permittee, in connection with the Timber Cutting Permit.

18. If conflicts arise due to any part of this policy, the instructions of 53 BIAM 4.5, or the Constitution and By-Laws of the Fort Belknap Indian Community will govern.

19. The BIA and the Fort Belknap Indian Community Council will not be held liable or responsible for any actions of the permittee or his/her associates while operating under a Timber Cutting Permit.

20. The Superintendent of the Fort Belknap Agency is hereby authorized to issue Timber Cutting Permits, collect stumpage fees and deposit them in the appropriate Tribal Proceeds of Labor Account. When the value of the permit is \$5,000.00 or more, a designated percentage of the gross receipts will be deducted for timber sale administration in accordance with 25 CFR 163.25c.

21. No road construction will be allowed without prior written approval from the Community Council.

22. Harvesting practices will be conducted in a manner that will minimize soil disturbance or damage. Operations may be suspended during periods of snow run-off, or wet weather.

23. All skidding will be kept at least 132 feet (two chains) away from all springs, streams, and other bodies of water, unless given prior written approval from the Forest Officer.

24. Unauthorized cutting of, or excessive damage to leave trees or other resources or developments, may be charged against the permittee at triple the stumpage rate and/or the permit may be revoked at the discretion of the B.I.A. Branch of Forestry.

25. If the permittee or his/her associates damage any roads, culverts, ditches, fences, or other improvements, he/she shall replace or repair them to their original condition to the satisfaction of the Forest Officer.

26. All litter and trash will be removed from the area of operation and taken home with the permittee to be properly disposed of.

B. FREE USE PERMITS

1. Free Use Permits may be issued for:

a. Use of timber for the improvement, maintenance, and construction of tribal property and other legitimate tribal purposes.

b. Reservation, Education, Cultural, Youth and Elder groups and programs, where use of timber will benefit the Reservation and Tribal members.

c. Fuel wood for personal use from Tribal Lands. Logging slash, thinning slash, insect or disease infested trees, or dead timber may be taken for fuel wood. Green trees may be cut for fuel wood when designated by the Forest Officer, for proper forest management.

d. Christmas trees: Individuals may cut one Christmas tree per family for all Tribal members, residents, and employees of Fort Belknap. In addition, trees may be cut for use in offices and public places for Fort Belknap as needed.

e. Up to two sets of twenty (20) Tee Pee Poles per set, may be cut by tribal members for their individual use.

f. No fuel wood or Christmas trees shall leave the Fort Belknap Indian Reservation.

C. PAID PERMITS

1. The stumpage value that may be cut under permit, in any one year by any one individual shall not exceed \$10,000.00.

2. Stumpage payment will be made in advance of the approval of any permit.

3. For large permit sales, the sale unit boundaries will be delineated and the trees to be cut (or left standing) will be marked with a specified paint color at DBH (4.5 feet above the ground) and also below stump height at the tree's base.

4. Christmas Trees: Anyone not qualifying under the free-use stipulations will be charged \$2.00 in advance, for each tree cut.

5. Organized groups/clubs desiring to cut Christmas trees for resale must first receive approval from the Fort Belknap Indian Community Council. Specific areas will be designated for tree cutting, and a \$1.00 charge per tree will be assessed.

6. House Logs: Anyone desiring to cut house logs must submit a drawing or blueprint for the house to be built, along with a detailed list of the number and length of the logs needed to build the planned house.

7. The trees designated to be used for house logs will be marked for cutting by the Forest Officer in cooperation with the purchaser of the house logs. The purchaser of the house logs will be charged \$.50 per running foot for the logs used in the construction of the house.

8. Only one house log permit will be issued per person per lifetime.

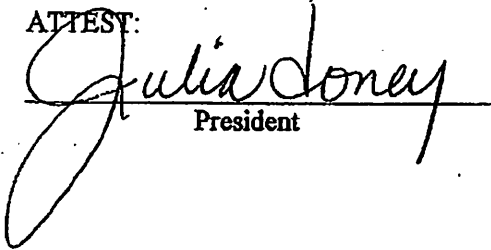
STUMPAGE RATES

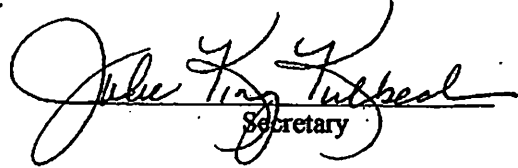
<u>ITEM</u>	<u>UNIT</u>	<u>COST</u>
House Logs (Blueprint or drawing required)	per running foot	\$.50
Saw Logs	MBF (thousand board feet)	Negotiable, based on market conditions with a minimum price of \$50.00/MBF.
Dead Saw Logs	MBF	Negotiable with a minimum price of \$25.00 /MBF.
Fence Posts and poles	Each	\$.10
Christmas Trees:		
Individual family	1 Each	Free
Resale by group or club	Each	\$1.00
All others	Each	\$2.00
Fuel Wood (Including resale to Tribal Members)	Cord	Free
Transplants (tree seedlings)	Each	\$1.00
Tee Pee Poles	Set of 20	Free

Any trees which are cut without a valid Timber Cutting Permit, or are cut in violation of the stipulations of the permit will be charged to the offender at triple the stumpage rates listed herein above. Other Fines and/or penalties may be assessed to the offender as decided by the Ft. Belknap Indian Community Council.

BE IT FURTHER RESOLVED, That the President and Secretary of the Fort Belknap Indian Community Council are hereby authorized to sign any and all documents which may be required to complete and validate this transaction.

ATTEST:

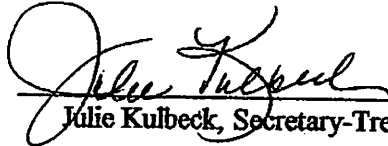

President


Secretary

CERTIFICATION

I, the undersigned, as Secretary of the Fort Belknap Community Council of the Fort Belknap Indian Reservation, Montana, do hereby certify that the Fort Belknap Community Council is composed of 10 members, of whom 6 members, constituting a quorum were present at a meeting thereof, duly and regularly called, noticed, convened and held this 6 day of April, 2005 and that the foregoing resolution has been adopted by the affirmative vote of 6 for, 0 opposed; 0 not voting; 0 absent; 0 temporary absent; 3 excused and that the said resolution has not been rescinded in any way.

DATE: 4-22-05


Julie Kulbeck, Secretary-Treasurer

FORT BELKNAP INDIAN COMMUNITY
Tribal Government

FORT BELKNAP AGENCY, HARLEM, MT
Address

Form 5-6331
Revised
May 1976

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF INDIAN AFFAIRS

TIMBER CUTTING PERMIT

Indian ☐
Non-Indian ☐

Allotted ☐
Tribal ☐
Permit No. _____

Fort Belknap Indian Reservation

Permission is hereby granted to _____
whose address is _____
to cut and remove in accordance with the regulations on the reverse side of this permit, on or before
_____ 20 _____ from the following lands on which authority to grant
timber permits has been obtained:

tribal land or allotment of
allotment number _____; timber of kind, quantity, and price as follows:

I accept this permit and agree to comply with the foregoing conditions and with the provisions
on the reverse side of this permit.

SIGNED: _____
(Permittee)

WITNESSES:

(Name) AUTHORIZED: _____
(Allottee)

(Address) APPROVED: _____

(Name) (Approving Officer)

(Address) (Title)

(OVER)

Illustration 4 (Page 1 of 2)

This permit is issued under the following provisions:

1. "Approving Officer" means the officer approving the permit or his authorized representative.
2. "Superintendent" means the Superintendent or other officer in charge of the Indian Agency having jurisdiction over the permit area, or his authorized representative.
3. "Officer in Charge" means the forest officer of highest rank assigned to the supervision of forestry work at the Indian Agency having jurisdiction over the permit area, or his authorized representative.
4. "Permittee" means the Permittee, his employees, or his subcontractors.
5. Only such timber as designated by the Approving Officer or the Officer in Charge may be cut.
6. Young growth will be protected as far as possible.
7. Stumps will be cut low as practical so as to avoid waste. The mean height of any stump shall not exceed one-half its diameter, except that where this height is considered to be impracticable, higher stumps may be authorized by the Officer in Charge.
8. Waste in high stumps, butts, tops, breaks, and partially sound logs, and all trees which are left felled or lodged or badly damaged by the Permittee's operations will be scaled for their merchantable contents and charged against the Permittee.
9. Carelessness on part of fallers or other employees of the Permittee that results in unnecessary breaking of trees will be penalized by scaling such trees full as if they had not been broken.
10. For convenience in scaling, logs or other products shall be docked, stacked, or otherwise held at scaling points designated by the Officer in Charge and will not be moved therefrom until they have been scaled, stamped, numbered or otherwise released by the Officer in Charge. Products that are moved contrary to the instructions of the Officer in Charge shall be paid for by the Permittee at double the permit stumpage rates.
11. If required by the Officer in Charge, the slash resulting from the cutting operations, including limbs, tops, damaged young growth and other material will be piled compactly and away from reserve trees on the whole area.
12. Burning of the piled slash by the Permittee will be done at such times and in such manner as may be required by the Officer in Charge. Whenever fire runs through slash, except in compliance with instructions of the Officer in Charge, the Permittee may be required to lop and scatter or repile and return the slash.
13. During the wildfire season the Permittee shall have a cache of firefighting equipment of the kind and quantity as determined by the Officer in Charge in the area of his operation.
14. It is agreed that during the permit period the Permittee shall take immediate and independent fire suppression action on all fires on or threatening the area covered by this permit. It is further agreed that the Permittee will assist the Bureau of Indian Affairs in suppressing other fires when called upon.
15. It is understood and agreed that the Permittee shall be liable for all suppression costs of fires caused by negligence on the part of the Permittee. It is further understood and agreed that for fires caused by operations or activities of the Permittee, but not through neglect, the Permittee shall pay one-half of the total suppression cost provided that the Permittee's obligation shall be limited to the total value of the permit.
16. The Permittee will be paid for fighting fires, other than those caused by the Permittee's neglect or operations, at rates as determined by the Superintendent.
17. The Permittee shall be liable for all damages from fires caused by his neglect or operations to timber or any other property of the Indians or the Government in an amount to be determined by the Superintendent.
18. If timber on the permit area is damaged or destroyed by fire, the cause of which was no fault of the Permittee, the Permittee may be authorized by the Approving Officer to utilize products from adjacent areas to fulfill the value terms of this permit.
19. A bond may or may not be required as determined by the Approving Officer.
20. The Permittee will comply with all other laws and regulations governing the reservation within which the permit area is located.

NOTE: This form is to be used for all Indian Lands, allotted and tribal and is to be executed in triplicate. In case of allotted lands, the allottee or his heirs shall authorize the permit unless a valid power of attorney has been executed. In case of tribal lands, authorization for cutting may be obtained by a Council resolution approving the annual policy statement governing the issuance of permits.

APPENDIX E

Aquatic Resource Protection Ordinance of the Fort Belknap Indian Community (ARPO)

**AQUATIC RESOURCE PROTECTION ORDINANCE
OF THE
FORT BELKNAP INDIAN COMMUNITY (ARPO)**
Environmental Protection Offices, 104 (B)(3) Wetlands Program



Approved: January 7, 2003

Developed by: Dennis Longknife, Jr. / 104 (B)(3)-Wetland Specialist; Morris E. Belgard / 106-Water Quality Coordinator; Daniel Kinsey / Former Wetlands Specialist.

AQUATIC RESOURCE PROTECTION ORDINANCE

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Fort Belknap Indian Community
Environmental Protection Office
Aquatic Resources Protection Ordinance



Section 1. Introduction

- a. It is important that Aquatic Resources on the Fort Belknap Indian Reservation be protected for the Fort Belknap Indian Community (Gros Ventre & Assiniboine Tribes), its members and descendants.
- b. Any impacts from the unregulated use of Aquatic Resources be prevented or minimized and protection is critical to the preservation of fish and wildlife, the maintenance of water quality, and a strong and vital environment.
- c. An Ordinance authorizing, directing and regulating the protection of Aquatic Resources, the enforcement of necessary and proper regulations for the protection of Aquatic Resources, and the establishment of a permit to regulate projects in and or adjacent to Aquatic Resources.
- d. The Fort Belknap Indian Community, has both the right and the duty to regulate Aquatic Resources on the Reservation based on the various treaties, executive orders and statutes (Winters v. United States, 207 U.S. 564-1908), and pursuant to applicable case law, under which the reservation was established, under article 5 of the Constitution and Bylaws of the Fort Belknap Indian Community of the Fort Belknap Indian Reservation, approved December 13, 1935.

Section 101: Short Title This Ordinance shall be known and may be cited as "Aquatic Resources Protection Ordinance".

Section 102: Delegation of Policy It is the policy of the Fort Belknap Indian Community that all Aquatic Resources on the Fort Belknap Indian Reservation are to be protected and preserved, and the degradation of Aquatic Resources be prevented or minimized through the reasonable regulation of such resources.

Section 103: Definitions

"Administrator" Administrative Review Board made up of respective people in the Natural Resource field.

"Aquatic Resources" means all Tribal Waters, whenever located or within a wetland.

"Avoidance" designing a project in such a way as to avoid impacts to wetlands.

"Compensatory Mitigation" to compensate or replace unavoidable wetland losses resulting from permitted projects after all appropriate and practicable avoidance and minimization have been applied. Compensatory mitigation methods include preservation, restoration, enhancement, and creation.

"Council" means the Fort Belknap Community Council.

"Creation" the process of converting an upland site to a functional wetland. This form of mitigation sometimes has a high degree of failure in some complex ecosystems (e.g. estuaries). This approach also has proven to be a workable in some ecosystems (e.g., in prairie wetlands) and should be considered when applicable.

"Enhancement" the process of improving one or more functions or values of the existing wetland. This type of mitigation can be achieved without too much risk of failure. Enhancement probably does not contribute to the "no net loss" goal because the area to be enhanced is most likely already in wetland status. An example of an acceptable form of enhancement could include fencing degraded wetlands to preclude further damage from livestock and thus enable recovery.

"Grinnell Lands" or "Grinnell Agreement", an agreement to sell land to the United States from the Fort Belknap Reservation, located in the Little Rocky Mountains, signed on October 9, 1895 (29 Stat., 350).

"Sub-marginal Land" Original land returned to the Fort Belknap Indian Community adjacent to the southwest lands of the Fort Belknap Reservation, as identified by an act of congress or otherwise designated tribal lands.

"Mean Annual High Water Mark" means that line on the shore of Tribal Waters established by the fluctuations of water and indicated by physical characteristics such as clear, naturally occurring line impressed on the bank; shelving changes in the character of soil, paucity or lack of terrestrial vegetation; or the presence of water borne litter or debris.

"Minimization" implementation of appropriate and practicable steps to minimize the adverse impacts to wetlands through project modifications and permit conditions.

"Person" means any individual, trust firm, joint stock company, federal agency, corporation (including a government corporation), association, state, municipality, commission, political subdivision of a state or any interstate body.

"Preservation" the process of ensuring perpetual existence of wetland functions. An acceptable form of preservation would be preserving an exiting unique wetland. Preservation will not contribute to the "no net loss" goal because the area being preserved is already in wetland status.

"Project" means any physical alteration of Aquatic Resources, or any activity affecting Aquatic Resources in this Ordinance, including but not limited to dredging, filling, unregulated access detrimental to such lands, irrigation diversions and returns, drainage ditches and construction on or adjoining Aquatic Resources, and the maintenance or repair involving any of the above activities.

"Restoration" the process of returning a disturbed or totally altered site to functional wetland status. The focus often is restoration of the hydrology and original plant community to the extent practicable. In most situations, this form of compensation yields the greatest benefit with the least amount of risk.

"Riparian lands" means lands above the mean annual high water mark that are adjacent to Tribal Waters, where terrestrial vegetation is or would be strongly influenced by the presence of water, which are critical for groundwater recharge or as habitat for wildlife.

"Tribal Waters" means;

1. All bodies of water included in land purchases, exchanges, that are in sole possession and property of the Fort Belknap Indian Community, including any returns of the "Grinnell Lands", signed October 9, 1895 29 Stat., 350 and "sub-marginal lands"
2. all naturally occurring bodies of water within the exterior boundaries of the Reservation regardless of alteration by man, including but not limited to lakes, rivers, streams, (including intermittent streams), mudflats, wetlands, springs, sloughs, potholes and ponds, and any bodies of water classifiable as "waters of the United States" under federal law.
3. tributaries of waters identified in subpart 1. above; and
4. wetlands.

"Wetlands" means those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands include but are not limited to mudflats, seeps, swamps, marshes, bogs, potholes and other similar areas.

Section 104: The Fort Belknap Community Council shall be responsible for the administration and management of this Ordinance and compliance with the rules and regulations authorized in Section 106.

Section 105: Powers and Duties of the Fort Belknap Community Council. The Council has the full power and authority to carry out and administer the provisions of this Ordinance. The Council shall have jurisdiction and authority over all persons and property, tribal, institutional and private, necessary to lawfully enforce the provisions of this Ordinance.

Section 106: Promulgate Rules and Regulations Pursuant to the purposes of the Ordinance, the Council shall promulgate such rules and regulations as are necessary and feasible for the protection of Aquatic Resources. The rules and regulations shall be a part of the Ordinance and shall have the full force and effect of law.

Section 107: Delegation of Authority The Council shall delegate administrative and enforcement authority to carry out the provisions of this Ordinance to the Administrative Review Board.

Section 201: Permit Application Requirements

Any person who intends to undertake a project that may affect any aquatic lands or riparian lands shall apply for a permit for the project with the Environmental Protection Office. The application shall be on a form provided by the department and shall include, but is not limited to:

- (a.) A specific description of the proposed project and the purpose and need for the project (Construction Mitigation Plan).
- (b.) No work may commence on a project until a permit has been issued to the owner of the project, after all alternative methods were reviewed and examined.
- (c.) A description of how the project will avoid adverse impacts on aquatic vegetation, aquatic life, wildlife, and Water Quality.
- (d.) The permit shall authorize construction of the project in accordance with the terms and conditions of the project permit, including a plan that lays out the project activities, materials, access to project area, and length of time.
- (e.) A contractor shall not commence any construction activities until the owner provides the permit to the contractor. The permit shall be prominently displayed at the project site for the duration of construction activities.

The administrator may require such additional information as may be necessary to evaluate the application.

Section 202: Permit Fees An application for a permit shall be accompanied by payment of a non-refundable fee to cover costs associated with permit issuance and administration. The amount of the fee shall be fixed from time to time by regulation, shall take into account the scope of the proposal and whether the applicant is a profit making entity, and shall be reasonable.

Section 203: Permit Application Review Process

- (a.) The Administrator shall review an application for a permit for adequacy and for project technical feasibility. The Administrator shall also assess the impacts of the project on Tribal waters and riparian lands.

- (b.) In reviewing project technical feasibility and assessing the impacts of the project on Aquatic Resources and riparian lands, the Administrator shall call a team together within 15 days of receipt of the application for an on-site inspection. Members of the team shall include, but not be limited to, representatives of the Fort Belknap Environmental Protection Programs, the Tribal Fish and Game Program, the Planning Department, the Tribal Water Resources Program, and the Tribal Natural Resources (Land) Department.
- (c.) The administrator may, if it is deemed appropriate, grant, deny, or identify additional action needed before a permit will be granted. If additional action is needed, a time frame for completion of these items shall be set forth. If not completed within said time frame, the permit application shall be deemed denied. If additional action is necessary, the Administrator must verify completion before a permit is granted. The Administrator shall notify the applicant in writing of the decision within 45 days of the date of the application, or such earlier time as a decision is made. The notice shall include any conditions on the permit, if granted, and any time limits on the permit.
- (d.) If the applicant decides to proceed with the project, the applicant shall notify the Administrator.

Section 204: Standards for Advisement of Permit Application

- (a.) The Administrator shall take under advisement the following matters in consultation with scientific and technical staff in evaluating the adequacy and feasibility of all projects:
 - (1) whether all construction activities shall be accomplished in such a manner as to minimize or preclude adverse impacts on the environment and ecosystem;
 - (2) if the application is for a permanent structure, whether it will be designed and constructed in such a manner as to assure permanence; and
 - (3) whether the project will pass reasonably anticipated water flows, currents, or fluctuations in surface elevation without creating erosional situations upstream, downstream or on the project location.
- (b.) The Administrator shall take under advisement, in consultation with scientific and technical staff, how to obtain the following matters in evaluating impacts on fish, aquatic animals, wildlife and plants:
 - (1) the impacts of any dredge or fill activities on Aquatic Resources;
 - (2) the impacts of construction on Aquatic Resources and riparian lands;

- (3) changes to, or creation of flow patterns, currents, turbidity and volume of Aquatic Resources resulting from the proposed project, including whether Tribal Waters will be de-watered; and
- (4) the disruption of life cycles, seasonal uses, and populations of fish, aquatic animals, wildlife, and plant life existent on or in or dependent on Aquatic Resources or riparian lands.

Section 301: Construction Requirements

The ensuing construction requirements will apply in advancement of this Ordinance.

- (a.) Wetlands shall not be filled, dredged, drained or otherwise impacted unless no feasible alternative exists and such action, after consideration of all relevant factors, is necessary for the completion of a project that has been determined by the Administrator to satisfy all other requirements of these regulations.
- (b.) No construction equipment shall be operated below the existing water surface without specific authorization contained in a permit.
- (c.) All temporary methods of ingress and egress, crossings, bridge supports, culverts or other structures that will be needed during the period of construction shall be designed to satisfactorily pass and withstand high water conditions and to minimize or preclude siltation, turbidity and the introduction or reactivation of pollutants or toxic substances into Tribal Waters. All such temporary structures shall be removed upon conclusion of construction and the affected areas shall be restored to their pre-construction condition, subject to any conditions placed upon restoration during the permitting process.
- (d.) All technically feasible steps shall be taken to minimize or preclude removal, relocation, siltation, or other adverse impacts to Aquatic Resources and riparian lands.
- (e.) Heavy equipment used in construction of projection when occurring in or on wetlands, shall not cause any permanent damage, and all measures necessary for reclamation measures shall be utilized.
- (f.) Construction of roads, bridges, culverts, and similar methods of crossing or channeling Tribal Waters and Aquatic Resources, shall be designed and constructed in such a manner as to allow free and unrestricted passage of flowing waters and to accommodate and interfere the least with any current or bed load patterns or erosions and depositional characteristics of Tribal Waters at or near the project location. Such structures will be designed and constructed so as to cause the least change in sediment load and turbidity of

Tribal Waters and to minimize or preclude adverse impacts to Aquatic Resources and riparian lands.

- (g.) Rip-rap of banks and shorelines will be allowed upon a showing of no or minimal impact to Tribal Waters, Aquatic Resources, and riparian lands due to changes in velocity, sediment load, current and wave pattern or channel readjustment, and then only as a last alternative solution to resolve the matter the proposed project has been formulated to address.
- (h.) Diversions to obtain water for agricultural purposes shall be designed and constructed in such as to minimize or preclude adverse impacts to Aquatic Resources and riparian lands. Diversions shall also be constructed in such a manner as to minimize or preclude loss of fish from the source waters, and preclude de-watering of the stream. Diversions may involve, depending upon technical feasibility, screening of open diversions, construction of a return flow structure of sufficient quality to provide an avenue for fish that enter an open diversion to return to the source water in a healthy condition, or pumping in lieu of open diversions.
- (i.) Use of explosives on or near Tribal Waters or Aquatic Resources shall be evaluated on a case by case basis and shall take into account alternatives to blasting, the impact upon resident fish, wildlife or plant, and any special seasonal requirements such as spawning or nesting.
- (j.) Creation of impoundments may be permitted if the impacts to flora and fauna, Tribal Waters, Aquatic Resources, and riparian lands is otherwise acceptable under this Ordinance and such impoundment is the only technically method to achieve the purposes of the project.
- (k.) Scientific devices such as staff gauges, recording devices and fish weirs will necessitate application to the Administrative Review Board prior to commencing placement.
- (l.) Pipelines and other similar structures either buried or placed above ground shall be constructed in such a manner as to preclude the potential for leakage of the transported substance into or on Tribal Waters, Aquatic Resources, and riparian lands and shall be built to incorporate the highest degree of technologically available safety and environmental standards.
- (m.) Power lines, utility lines, guy lines and similar structures shall be located so as to incorporate the most direct and fewest number of crossings over or under Tribal Waters, Aquatic Resources, and riparian lands in order to minimize or preclude interference or other disturbance or destruction of fly-ways for avian species and to minimize or preclude the potential for adverse impacts upon the natural, scenic, and aesthetic values of Tribal Waters, Aquatic Resources, and riparian lands.

- (n.) Docks, weirs, breakwaters, jetties and other similar structures shall be constructed in such a manner as to minimize or preclude interference with navigation, fish, aquatic animals, wildlife and plant life cycles and habitat, natural and scenic values, existent water flow patterns and sediment loads, public health, and property interests.

Section 302: Wetland Mitigation Criteria

The purpose of this section is to establish a policy for wetland mitigation occurring within the exterior boundaries of the Fort Belknap Indian Reservation. Mitigation may be required for unavoidable impacts to wetlands associated with projects permitted under the Tribal Aquatic Resources Protection Ordinance (ARPO).

The Council on Environmental Quality (CEQ) defines mitigation at to include: avoiding impacts, minimizing impacts, reducing impacts over time, and compensating for impacts (40 CFR 1508.20).

Another purpose of this section is to provide a means for the Fort Belknap Indian Community to contribute to the nationwide goal of "No Net Loss" of wetlands.

- (a) Sequencing: The 1990 Memorandum of Agreement between the Department of the Army (Corps of Engineers) and EPA regarding mitigation 404 permits requires an application of sequence of wetland mitigation in the following order:

1. Avoidance
2. Minimization
3. Compensation

- (b) 404 permits: The permits are the backbone for wetlands protection, Federal Wetland Policies and Nationwide Permits will be honored if mitigation is needed on tribal wetlands-a copy of the EA/EIS thru section 404 (b)(1) will be attached to the tribal permit.

The same order of sequencing will be required on wetland mitigation as is required for projects permitted under the Tribal Waters Protection Ordinance.

- (c) Mitigation Ratios: Wetland mitigation ratios are generally expressed in acreage of compensatory replacement required to make up for acreage of lost wetlands from permitted projects.

Compensation ratios greater than one to one are preferred because of the fact that created wetlands generally provide fewer wetland functions over time on a per acre basis than the original wetland (King et al, 1993). Preservation and enhancement do not create any additional acres; therefore compensation ratios will be greater than 1:1, also. The following ratios shall be the minimum replacement wetland ratios for permitted projects occurring within the Fort Belknap Indian Reservation.

<u>CREATION</u>	pre-project	=	1.5:1
	post project	=	2.0:1

<u>RESTORATION</u>	pre-project	=	1.1:1
	post project	=	1.5:1
<u>ENHANCEMENT</u>	pre-project	=	3:1
	post-project	=	4:1

The above ratios are consistent with the U.S. Forest Service Region 6 recommended minimum replacement wetland ratios.

- (d) Preservation: Preservation may be an acceptable option for compensatory mitigation occurring on the Fort Belknap Indian Reservation. Although this form of mitigation does not replace actual wetland acreage impacted by permitted projects, it can be used to preserve high quality or unique wetlands that may be threatened with impacts. Preservation is best used in combination with restoration or enhancement in order to create habitat diversity. It is important to include upland habitat with preservation efforts. The U.S. Fish and Wildlife Service recommends a minimum ratio of uplands to wetlands of 4:1 for optimal water-bird production.

- (e) Site Selection: All compensatory mitigation that is required for permitted projects occurring on the Fort Belknap Indian Reservation shall be placed within the exterior boundaries of the Reservation.

On-site/in-kind compensatory mitigation is the preferred approach for projects occurring on the Fort Belknap Indian Reservation. This refers to locating mitigation sites adjacent to the impacted site and the replacement wetland should be of the same type that was impacted. Also, the replacement wetland should provide the same functions as the impacted site.

In the event on-site mitigation is not a practical option because of public safety issues or threats of human impacts, off-site/in-kind compensatory mitigation may be applied. This refers to locating mitigation away from the impacted site; however, the replacement wetland should be of the same type that was impacted. It is also preferred that the replacement wetland be located in the same watershed as the impacted site. Also, the replacement wetland should provide the same functions as the impacted site.

In the event in-kind compensatory mitigation is not practical, out of kind mitigation may be applied. This refers to the replacement wetland not of the same type as the impacted site. On-site locations should be considered before off-site locations are chosen.

Mitigation site locations should have a permanent water supply to ensure proper wetland hydrology. Hydrophytic vegetation should be collected from the impacted site and transplanted to the replacement site, if practical. The substrate of the replacement site should be sufficient enough to result in the site to be inundated or saturated long enough during the growing season to develop anaerobic conditions.

- (f) Monitoring: Mitigation sites shall be monitored to evaluate the success of the project. Sites are to be monitored for a minimum of 5 years in order to insure successful replacement of impacted sites. If it becomes apparent that the replacement project site is not successful within the 5 year monitoring period, the project owner will implement corrective measures.

Reference sites should be used to evaluate the success of the replacement site. Reference sites should be a natural occurring healthy wetland of the same type as the replacement type. The replacement site should be monitored by functional and biological assessments in order to determine if it provides the same functions as the reference site.

**Section 401: Gros Ventre & Assiniboine Tribes of Fort Belknap Indian Community
Best Management Practices for Forestry in the Little Rocky Mountains**

The Fort Belknap Indian Community Council has developed a Forestry Management Plan that was implemented in 1983 by Resolution No. 34-83. To add to the present management plan would clearly define more innovative methods of forestry management practices.

I. DEFINITIONS

1. "Hazardous substance" means a material which by its nature is toxic, dangerous to handle or dispose of, or a potential environmental contaminant, and includes petroleum products, pesticides, herbicides, chemicals, and biological wastes.
2. "Streams" means a natural watercourse of perceptible extent with defined beds and banks, which confine and conduct continuously or intermittently flowing water. Definite beds are defined as having a sandy or rocky bottom, which results from the scouring of water flow.
3. "Streamside Management Zone (SMZ)" means the stream itself and the adjacent area of varying width where management practices that might affect water quality, fish, or other aquatic resources are modified. The SMZ is not a zone of exclusion but a zone of closely managed activity. The SMZ acts as an effective filter and absorptive zone for sediment; maintains shade; conserves aquatic and terrestrial riparian habitats; protects the stream channel and banks; and promotes floodplain stability.

II. ROADS

A. PLANNING AND LOCATION

1. Minimize the number of roads constructed in a watershed through comprehensive road planning, recognizing intermingled ownership and foreseeable future uses. Use existing roads where practical, unless use of such roads would cause or aggravate an erosion problem.
2. Review available information and consult with professionals as necessary to help identify erodible soils and unstable areas, and to locate appropriate road surface materials.
3. Fit the road to the topography by locating roads on natural benches, and following natural contours. Avoid long, steep road grades and narrow canyons.
4. Locate roads on stable geology, including well-drained soils and rock formations that tend to dip into the slope. Avoid slumps and slide-prone areas characterized by steep slopes, highly weathered bedrock, clay beds, concave slopes, hummocky topography, and rock layers that dip parallel to the slope. Avoid wet areas, including moisture-laden or unstable toe slopes, marshes, fens, wet meadows, and natural drainage channels.
5. Locate roads a safe distance from streams when roads are running parallel to stream channel. Provide an adequate SZM to trap sediment and prevent its entry into the stream.
6. Minimize the number of stream crossing and choose stable stream crossing sites.
7. Locate roads to provide access to suitable (relatively flat and well-drained) lod landing areas to reduce soil disturbance.

B. DESIGNS

1. Properly design roads and drainage facilities to prevent potential water quality problems from road construction.
2. Design roads to the minimum standard necessary to accommodate anticipate use and equipment. The need for higher standard roads can be alleviated through better road-use management.
3. Design roads to balance cuts and fills or use full bench construction (no fill slope) where stable fill construction is not possible.
4. Design roads for minimal disruption of drainage patterns. Vary road grades to reduce concentrated flow in road drainage ditches, culverts, and on fill slopes and road surfaces.
5. Design stream-crossing for adequate passage of fish (if present), minimum impact on water quality.

C. DRAINAGE FROM ROAD SURFACE

1. Provide adequate drainage from the surface of all permanent and temporary roads by using out-sloped or crowned roads, drain dips, or in-sloped roads

with ditches and crossdrains. Space road drainage features so peak drainage flow on the road surface or in the ditches will not exceed the capacity of the individual drainage facilities.

- a. Out-sloped roads provide means of dispersing water in a low-energy flow from the road surface. Out-sloped roads are appropriate when fill slopes are stable, drainage will not flow directly into the stream channels, and transportation safety considerations can be met.
 - b. For in-sloped roads, plan ditch gradients steep enough, generally greater than 2%, but less than 8%, to prevent erosion. The higher gradients may be suitable for more stable soils; use the lower suitable gradients for less stable soils.
 - c. Proper constructed drain dips can be an economical method of channeling surface flow off the road. Construct drain dips deep enough into the subgrade so the traffic will not obliterate them.
2. Skew ditch relief culverts 20 to 30 degrees toward the inflow from the ditch to improve inlet efficiency. Protect the upstream end of cross drain culverts from plugging.
 3. Where possible, install ditch relief culverts at the gradient of the original ground slope; otherwise armor outlets with rock or anchor downspouts to carry water safely across the fill slope.
 4. Provide energy dissipators (rock piles, logs, etc.) where necessary at the downstream end of ditch relief culverts to reduce the erosion energy of the emerging water. Crossdrains, culverts, water bars, dips, and other drainage structures should not discharge onto erodible soils or fill slopes without outfall protection.
 3. Prevent downslope movement of sediment by using sediment catch basins, drop inlets, changes in road grade, headwalls, or recessed cut slopes.
 4. Route road drainage through SMZ, filtration fields, or other sediment-settling structures. Install road drainage features above stream crossing to route discharge into filtration zones before entering a stream.

D. CONSTRUCTION

1. Keep slope stabilization, erosion and sediment control work as current as possible with road construction. This includes installing drainage features as part of the construction process. Complete or stabilize road sections within the same operation season, ensuring that drainage structures are fully functional prior to spring or fall runoff and that major road sections are not left in an unstable condition over winter.

2. Stabilize erodible, exposed soils by seeding, compacting, rip-rapping, benching, mulching, or other suitable means prior to fall or spring runoff.
3. At the toe of potentially erodible fill slopes, particularly near stream channels, pile slash in a row parallel to the road to trap sediment. When done concurrently with road construction, this practice can effectively control sediment movement and can provide an economical way of disposing of roadway slash. Limit the height, width and length of these "slash filter windrows" so not to impede wildlife movement.
4. Minimize earth-moving activities when soils appear excessively wet. Do not disturb roadside vegetation more than necessary to maintain slope stability and to serve traffic needs.
5. Construct cut and fill slopes at stable angles.
6. Avoid incorporating potentially unstable woody debris in the fill portion of the road prism. Where possible, leave existing rooting trees or shrubs at the toe of the fill slope to stabilize the fill.
5. Consider road surfacing to minimize erosion.
6. Place debris, overburden, and other waste materials associated with construction and maintenance activities in a location to avoid entry into streams. Include these waste areas in soils stabilization planning for the road.
7. Minimize sediment production from borrow pits and gravel sources through proper location, development and reclamation.
8. When using existing roads, reconstruct only to the extent necessary to provide adequate drainage and safety; avoid disturbing stable road surface.

E. MAINTENANCE

1. Grade road surface only as necessary to maintain a stable running surface and to retain the original surface drainage.
2. Maintain erosion control features through periodic inspection and maintenance, including cleaning dips and cross-drains, repairing ditches, marking culverts inlets to aid in location, and clearing debris from culverts.
3. Avoid cutting the toe of cut slopes when grading roads or pulling ditches.
4. When plowing snow for winter timber harvest, provide breaks in snow berm to allow road drainage.

5. Haul all excess material removed by maintenance operations to safe disposal sites and stabilize these sites to prevent erosion. Avoid side-casting material into stream or locations where erosion will carry material into a stream.
6. Avoid using road during wet periods if such use would likely damage the road into a stream.
7. Upon completion of seasonal operations, the road surface should be crowned, out-sloped, in-sloped, or water-barred. Remove berms from the outside edge where runoffs channeled.
8. Leave abandoned roads in a condition that provides adequate drainage without further maintenance. Close these roads to traffic; reseed and/or scarify; and. If necessary, re-contour and provide water bars or drain dips.

III. TIMBER HARVESTING, STREAMSIDE MANAGEMENT AND SITE PREPARATION

1. Plan timber harvest in consideration of your management objectives and the following:
 - a. Soils and erosion hazard identification.
 - b. Rainfall.
 - c. Topography.
 - d. Silvicultural objectives.
 - e. Critical components (aspect, water courses, landforms, etc.)
 - f. Habitat types.
 - g. Potential effects on water quality and beneficial water uses.
 - h. Watershed condition and cumulative effects of multiple timber management activities on water yield and sediment production.
 - i. Wildlife habitat.
2. Use the logging system that best fits the topography, soil type, and season, while minimizing soil disturbance and economically accomplishing silvicultural objectives.
3. Use the economically feasible yarding system that will minimize road densities.
4. Design and locate skid trails and skidding operations to minimize soil disturbance. Using designated skid trails is one mean of limiting site disturbance and soil compaction. Consider the potential for erosion and possible alternative yarding system prior to planning tractor skidding on steep or unstable slopes.
5. Locate skid trails to avoid concentrating runoff and provide breaks in grade. Locate skid trails and landing away from natural drainage systems and divert runoff to stable areas. Limit the grade or constructed skid trails on geologically unstable, saturated, highly erosion. Or easily compacted soils to a

maximum of 30%. Use mitigating measures, such as water bars and grass seeding, to reduce erosion on skid trails.

6. Minimize the size and number of landings to accommodate safe, economical operation. Avoid locating landing that require skidding across drainage bottom.

B. STREAMSIDE MANAGEMENT

1. Designate SMZs to provide stream shading, soil stabilization, sediment and water filtering effects, and wildlife habitat. The SMZ encompasses a strip at least 25 feet wide on each side of a stream, measured from the ordinary high-water mark or definable bank. The width of the SMZ extends beyond the 25-foot minimum to include wetlands along the stream bottom and to provide additional protection in areas of steep slopes or erosive soils. "Stream" means a natural water course of perceptible extent with definite beds or banks which confine and conduct continuously or intermittently flowing water. Definite beds are defined as having a sandy or rocky bottom which results from the scouring action of water flow. Consult with forestry professionals, soil and water conservation specialists, or biologists if assistance is needed in setting appropriate SMZ boundaries.
2. Consider the following practices when harvesting timber in the streamside management zone.
 - a. Retain hardwood trees, sub-merchantable conifers, and shrubs adjacent to the stream.
 - b. Retain trees necessary for bank stabilization and as a future source of large woody debris to the stream channel. In the proper locations, large woody debris in the stream channel helps to dissipate stream energy, stabilize banks, and form pools that trap sediment and provide essential fish habitat.
 - c. When clear-cutting up to the stream edge, consider the length of the stream channel opened to the sun. Where possible, keep continuous opening under 600 feet of stream length. This helps to prevent increased in the water temperature and promotes wildlife habitat diversity.
 - d. Recognize that in some soil and drainage types, clear-cutting can cause marked increases in the water table, cold-air ponding, and grass/shrub competition. All of these factors can inhibit conifer regeneration. To ensure conifer reestablishment, some mature trees may need to be left on site.
 - e. Maintain or provide sufficient ground cover to trap sediment. Hand-scalping and planting may be preferable to machine scarification or burning within SMZ. Whole-tree or tree-length yarding can reduce the need for slash disposal in the SMZ.
 - f. Steep slopes containing material that could roll downslope and fall into a stream during burning should receive special attention. Trees logged along streams can be high-stumped to help prevent this debris buildup in streams.

A slash-free zone may be necessary to maintain streamside vegetation if site preparation will involve burning on steep ground adjacent to the SMZ.

3. Minimize operation of wheeled or tracked equipment within the SMZ, and avoid equipment operation in wetlands, except when the ground is frozen (see Section IV on Winter logging). Do not operate equipment on stream banks.
4. Use directional falling for harvest operations in the SMZ or wetlands. Avoid falling trees or leaving slash in streams or water bodies. Limb or top trees above the high-water mark.
5. Suspend the lead end of the log during skidding whenever possible, and use cables to end-line logs out of SMZs and wetlands when ground skidding systems are employed. Logs should be fully suspended when skyline skidding across a stream and immediately above streambanks. Ground skidding through any perennial stream requires a 310 permit. (see Section III on stream crossings.)
6. Avoid decking logs within the ordinary high-water mark of any stream.

C. OTHER HARVESTING ACTIVITIES

1. Tractor skid when compaction, displacement, and erosion will be minimized. Avoid tractor or wheeled skidding on unstabled, wet, or easily compacted soils and on slopes that will exceed 40% unless operation can be conducted without causing excessive erosion. Avoid skidding with the blade lowered.
2. For each landing, skid trail, or fire trail, provide and maintain a drainage system to control the dispersal of water and to prevent sediment from entering stream.
3. Install necessary water bars on tractor skid trails, appropriate spacing between bars is determined by the soil type and slope of the skid trails. Timely implementation is important.
4. When natural revegetation is inadequate to prevent accelerated erosion before the next growing season, apply seed or construct water bars on skid trails. Landing and fire trails. A light ground cover of slash or mulch will retard erosion.

D. SLASH TREATMENT AND SITE PREPARATION

1. Rapid reforestation of harvested areas is encouraged to re-established protection vegetation.
2. Use brush blades on dozers when piling slash. Avoid use of dozers with angle blades. Site preparation equipment producing irregular surfaces is preferred. Care should be taken to preserve the surface soil horizon.

3. Minimize or eliminate elongated exposure of soils up and down the slope during mechanical scarification.
4. Scarify the soil only to the extent necessary to meet the reforestation objective of the site. Low slash and small brush should be left to slow surface runoff, return soil nutrient, and provide shade for seedlings.
5. Carry out brush piling and scarification when soils are frozen or dry enough to minimize compaction and displacement.
6. Carry out scarification on steep slopes in a manner that minimizes erosion. Broadcast burning and/or herbicide application is the preferred means for site preparation, especially on slopes greater than 40%.
7. Stabilize or reclaim landings and temporary roads on completion of use.
8. Remove all logging machinery debris and temporary roads on completion of use.
9. Limit water quality impacts of prescribed fire by constructing water bars in firelines; not placing slash in drainage channels; maintaining the SMZ; and avoiding intense fires unless needed to meet silvicultural goals.

IV. STREAM CROSSING

A. Legal Requirements

1. Under the National Streambed and Land Preservation Act of 1975; PL310, any activity that would result in physical alteration or modification of a perennial stream, its bed or immediate bank must be approved in advance by the supervisors of the local conservation districts. Permanent or temporary stream crossing structures, fords, rip-rapping or other bank stabilization measures, and culverts installation on perennial streams are some of the forestry-related projects subject to 310 permits.

Before beginning such a project, the operator must submit a permit application to the conservation district indicating the location, description, and project plans. The evaluation generally includes on-site review, and the permitting process may take up to 60 days.

2. A short-term exemption from water quality standards may be required if construction activities will add sediment to surface water and thus violate water quality standards.
3. Stream-crossing projects initiated by federal, state, local agencies, or tribal government are subject to approval under the Fish, Wildlife and Parks 124 permit process, rather than the 310 permit.

B. DESIGN CONSIDERATIONS (310 permit required)

1. Cross streams at right angles to the main channel if practical. Adjust the road grade to reduce the concentration of water carried by drainage ditches to stream crossings. Direct drainage flow through an SZM and away from the stream crossing site.
2. Avoid unimproved stream crossings. When a culvert or bridge is not feasible, locate drive-throughs on a stable, rocky portion of the stream channel.

C. INSTALLATION OF STREAM CROSSINGS (310 permit required)

1. Minimize stream channel disturbance and related sediment problems during construction of road and installation of stream crossing structures. Do not place erodible materials into stream channels. Remove stockpile material from high water zones. Locate temporary construction bypass roads in locations where the stream course will have minimal disturbance. Time construction activities to protect fisheries and water quality.
2. When using culverts to cross small streams, install those culverts to conform to the natural streambed and slope on all perennial streams and on intermittent streams that support fish that provide seasonal fish passage. Place culverts slightly below normal stream grade to avoid culvert outfall barriers. Do not alter stream channels upstream from culverts, unless necessary to protect fill or to prevent culvert blockage.
3. Install culverts to prevent erosion of fill. Compact the fill material to prevent seepage and failure. Armor the inlet and/or outlet with rock or other suitable material where needed.
4. Consider dewatering stream crossing sites during culvert installation.
5. Use 1-foot minimum cover for culverts 18 to 36 inches in diameter, and a cover of one-third diameter for larger culverts to prevent crushing by traffic.
7. Use culverts with a minimum diameter of 15 inches for permanent stream crossings and cross drains.

V. WINTER LOGGING

A. GENERAL

1. Consider snow-road construction and winter harvesting when logging sites that are characterized by wet meadows, high-water tables, sensitive riparian conditions or other potentially significant erosion and compaction hazards.
2. Conduct winter logging operations when the ground is frozen or snow covered is adequate (generally more than one foot) to minimize site disturbance. Be prepared to suspend operations if conditions change rapidly and when the erosion hazard becomes high.

3. Consult with operators experienced in winter logging techniques.

B. ROAD CONSTRUCTION AND HARVEST CONSIDERATIONS

1. For road systems across areas of poor foundations, consider hauling only during frozen periods. During cold weather, plow any snow cover off of the roadway to facilitate deep freezing of the road grade prior to hauling.
2. Before logging, mark existing culvert locations. During and after logging, make sure that all culverts and ditches are open and functional.
3. Use compacted snow for roadbeds in unroaded, wet or sensitive sites. Conduct snow roads for single-entry harvests or for temporary roads.
4. Designate or mark all streams courses, including small streams, prior to snowfall. Conduct activities in streamside zones so the ground disturbance is minimized. Following completion of snow-road use, restore stream crossing to near pre-road conditions to prevent ice dams. Do not use stream channel for the roadway except for crossings.
5. Prior to falling in wet unfrozen soil areas, use tractors or skidders to compact the snow for skid road locations. Avoid steeper areas where frozen skid trails may be subject to erosion the next spring.
6. Return the following summer and build erosion barriers on any trails that are steep enough to erode.
8. Do not leave slash and tops in streams.

Section 501. BEAVER DAMS

I. BEAVER DAMS AND ROAD MAINTENANCE

(1) Except as needed for road maintenance, operators shall not remove beaver dams and other natural obstructions from waters of the Fort Belknap Indian Community during forestry or road operations without prior approval of the Fort Belknap Indian Community Council. Any beaver dam or other natural obstruction that is **within 25 feet** of a culvert shall be considered for removal as be needed for road maintenance.

A. RULE COMPLIANCE

This section is subject to enforcement action. Removal of any beaver dam or any other channel obstruction which is **greater than 25 feet** from a stream crossing **without first obtaining prior approval** is a violation and should be cited.

B. ADMINISTRATION AND IMPLEMENTATION

Other obstructions include debris in culverts, debris jams in streams, and landslide deposits. Operators may remove any jam or dam that is **within 25 feet** of a culvert (or stream crossing structure) without prior approval or notification, as this is considered **routine road maintenance or emergency road construction**.

However, operators must obtain prior approval before removing any beaver dam or other obstruction which is **further than 25 feet** from a **stream crossing structure**.

Granting of prior approval shall be based on sections (2) and (3) of this rule.

II. BEAVER DAMS OR OTHER NATURAL OBSTRUCTIONS

(2) Prior approval for removal of a beaver dam or obstruction may be granted if:

- a. A beaver dam or obstruction threatens existing forests or roads; or
- b. Beaver dam removal is part of a beaver population control approval by the Fort Belknap Indian Community Council; or
- c. Retaining the beaver dam or obstruction would result in greater environmental harm than benefit.

A. RULE COMPLIANCE

This section not is subject to enforcement action.

B. ADMINISTRATION AND IMPLEMENTATION

This section provides guidance to the Fort Belknap Indian Community Council on granting prior approval for removal of beaver dams or other natural obstructions. Prior approval should not be granted unless there is clear potential for **significant** stand or stream damage associated with leaving the beaver dam or other obstruction and this damage will cause by flooding.

- Subsection (a) applies only to water damage, and not beavers eating trees.
- Consult the Fort Belknap Indian Community Council on potential environmental damage from beaver dams.

III. BEAVER DAMS AND SEDIMENT RELEASES

(3) Sediment releases and downstream channel scouring can occur when beaver dams are removed. Operators are encouraged to use techniques that result in a gradual release of water when a dam is removed.

A. RULE COMPLIANCE

This section is not subject to enforcement action.

B. ADMINISTRATION AND IMPLEMENTATION

This section provides guidance to a department or operator on methods for beaver dam removal to protect water quality.

If a department or operator encounters a situation where a large volume of water is stored behind a beaver dam or natural obstruction, the department or operator should consult with the Fort Belknap Environmental Protection Department after

informing the landowner of the problem. If prior approval is required, do not allow the operator to rapidly drain the obstruction without first consulting Fort Belknap Indian Community Council.

- Methods that should be avoided include blowing up the dam with explosives or using other methods that would "pull the plug" quickly. Methods that could be used include removal when the dam is empty, pumping, siphoning, constructing a spillway that does not outlet onto steep fill material.

IV. BEAVER DAMS AND ALTERNATIVE METHODS

(4) Alternative methods prior to removal of beaver dams or natural obstructions.

A. RULE COMPLIANCE

This section is not subject to enforcement action.

B. ADMINISTRATION AND IMPLEMENTATION

This section provides guidance to a department or operator on methods for alternative beaver dam control to protect water quality.

If a department or operator encounters a situation where a large volume of water is stored behind a beaver dam or obstruction, the department or operator should consult with the Fort Belknap Environmental Protection Department after informing the landowner of the problem. If prior approval is required, determine if beaver dam or natural obstruction is beneficiary to stream ecology, aquatic life and wildlife habitat. Before removal see alternative methods beginning on page 29.

(Alternative Methods Figures 1-6, page 29)

Section 601. HAZARDOUS SUBSTANCES

A. GENERAL

1. Know and comply with regulations governing the storage, handling, application (including licensing of applicators), and disposal of hazardous substances.
2. Do not transport, handle, store, load apply or dispose of any hazardous substance or fertilizer in such manner as to pollute water supplies or waterways, or cause damage or injury to land, including humans, desirable plants and animals.
3. Do not store, mix or rinse hazardous below the high-water mark or where they might enter tribal waters.
4. Develop a contingency plan for hazardous substance spills, including clean up procedures.

B. PESTICIDE AND HERBICIDE

1. Use an integrated approach to weed and pest control, including manual, biological, mechanical. Preventive and chemical means.
2. To prevent the entry of hazardous substances into surface waters:
 - a. Chemical treatments within the SMZ shall be by hand and shall be applied only to specific targets.
 - b. Leave a 25 foot buffer along surface waters when chemicals are being applied through ground application with power equipment.
 - c. For aerial application, leave at least a 50 foot buffer along live water and do not spray in the SMZ.
 - d. Always refer to chemical label instructions for additional guidance on use near water and required buffer zones.
3. To enhance effectiveness and prevent transport into stream, apply chemicals during appropriate weather conditions (see Section 501: **PESTICIDE RULING**, A. Label Statement Guidance).

PESTICIDE RULING

LABEL STATEMENTS FOR SPRAY APPLICATION

The Fort Belknap Indian Community Council (FBICC) has developed a set of labeling statements as guidance for use on agricultural, home lawn and garden, and other outdoor use product labels. FBICC considers these statements to be generally appropriate for all pesticides affected by this code. These mitigation measures generally can be implemented for most products, regardless of the active ingredient and formulation chemistry. However, FBICC acknowledges that this guidance may not be appropriate for all products and their uses and that for certain products there may be exceptions to the wording of these statements in which some part(s) should not apply and/or other wording may be more appropriate. For example, while this code applies to bio-pesticides applied as sprays or dusts, label statements will be determined on a case-by-case basis due to their usual low risk characteristics.

A. Label Statement Guidance

1. Products Applied as Sprays--All Affected Products, Except Home and Garden Products:

"Do not allow spray to drift from the application site and contact people, structures people occupy at any time and the associated property, parks and recreation areas, nontarget crops, aquatic and wetland areas, woodlands, pastures, rangelands, or animals.

For ground boom applications, apply with nozzle height no more than 4 feet above the ground or crop canopy and when wind speed is 10 mph or

less at the application site as measured by an anemometer. Use _____ (registrant to fill in blank with spray quality, e.g. fine or medium) or coarser spray according to ASAE 572 definition for standard nozzles or VMD for spinning atomizer nozzles.

For aerial applications, the boom width must not exceed 75% of the wingspan or 90% of the rotary blade. Use upwind swath displacement and apply only when wind speed is 3 -- 10 mph as measured by an anemometer. Use _____ (registrant to fill in blank with spray quality, e.g. fine or medium) or coarser spray according to ASAE 572 definition for standard nozzles or VMD for spinning atomizer nozzles. If application includes a no-spray zone, do not release spray at a height greater than 10 feet above the ground or the crop canopy.

For overhead chemigation, apply only when wind speed is 10 mph or less.

The applicator also must use all other measures necessary to control drift."

2. Products Applied as Dusts--All Affected Products, Except Home and Garden Products:

"Do not allow dust to drift from the application site and contact people, structures people occupy at any time and the associated property, parks and recreation areas, nontarget crops, aquatic and wetland areas, woodlands, pastures, rangelands, or animals.

For ground rig applications, apply product no more than 4 feet above the ground or the crop canopy and only when wind speed is 10 mph or less at the application site as measured by an anemometer.

For aerial applications, use upwind swath displacement and apply only when wind speed is 3 -- 10 mph as measured by an anemometer. If application includes a no-spray zone, do not release dust at a height greater than 10 feet above the ground or the crop canopy.

The applicator also must use all other measures necessary to control drift."

3. Hand-applied Products, Including Home and Garden Products, to be Applied as Sprays or Dusts:

"Do not allow spray (or dust) to drift from the application site and contact people, structures people occupy at any time and the associated property, parks and recreation areas, nontarget crops, aquatic and wetland areas, woodlands, pastures, rangelands, or animals. Apply only when wind speed is not more than 10 mph. For sprays, apply largest size droplets possible."

B. Possible Additional Product-Specific Labeling

Other labeling statements may be appropriate for certain products depending on the potential risks from the labeled uses to humans, plants, and wildlife or contamination of surface water. FBICC will consider the available information on a pesticide's incident

history, current uses, and estimated exposures and risks, including estimates of deposition from available models, to determine the need for additional drift mitigation measures. Examples of such measures include limiting application height, spray quality (droplet size), use of no-spray zones, and prohibition of an application method.

If FBICC determines that a no-spray zone is necessary for a product, the following label statement will be used:

"Do not apply this product within ____ (distance to be determined) of ____ (sensitive areas to be determined for the product). Under no circumstances apply this product within ____ (distance to be determined) of people or these areas."

FBICC may find that the addition of no-spray zones to the above labeling statements is prudent as an additional drift management tool for applicators to protect people and sensitive areas from drift. FBICC in its risk management decisions will determine whether one or more no-spray zones and their distance(s) are necessary for products using available information about the pesticide's uses and risk assessments.

Section 701: Emergencies

- (a.) The provisions of this Ordinance do not apply to emergency actions which are necessary to safeguard life or property during periods of immediate and substantial endangerment to life or property. The responsible person for the project shall notify the Administrative Review Board in writing within fifteen days of the action taken as a result of an emergency and Provide a copy of action taken to the Environmental Protection Office.
- (b.) The Administrator shall make an on-site inspection of an action and cause a written report of such observations to be filed with the Environmental Protection Office, with a copy to the responsible person. The report shall include:
 - (1) A finding as to whether an emergency situation existed at the time the action was taken;
 - (2) A finding as to whether the action required a permit;
 - (3) Any recommendations for a permanent solution.
- (c.) The responsible person shall implement any proposed permanent solution within a reasonable time period recommended by the Administrator.

Section 801: Enforcement

- (a.) Violations. The following actions shall constitute an act of non-compliance with this Ordinance:

- (1) Commencement or initiation of a project by the owner or a contractor without the owner first obtaining a permit;
 - (2) Continuation of work on an un-permitted project;
 - (3) Failure to comply with the terms or conditions of a permit;
 - (4) Failure to comply with the terms and conditions of this Ordinance and any regulations promulgated under this Ordinance;
 - (5) Failure to comply with orders of the Administrator.
- (b) Notice of Non-Compliance. When the Administrator has reason to believe that a violation of this Ordinance, any regulations adopted to implement this Ordinance or any permit issued under pursuant to this Ordinance has occurred, a Notice of Non-Compliance shall be issued. The Notice shall specify: (1) the nature of the violation, (2) the method and time for cure, if any, and (3) the type and amount of fine or penalty being assessed, if any, and (4) that the person to whom the Notice has been sent may appeal to the Appeals Board within fifteen days of the date of the Notice. The Notice of Non-Compliance shall be served personally or by Certified Mail, Return Receipt Requested.
- (c) Curative Measures. If the person to whom the Notice has been sent agrees to undertake the curative measures specified in the Notice or otherwise approved by the Administrator, and the curative measures are completed within a reasonable time and to the satisfaction of the Administrator, no further proceedings shall be held and no fine or no penalty shall be assessed.
- (d) Hearing Before the Appeals Board. An Appeals Board made up of the managers of the Fort Belknap Environmental Protection Program, the Fort Belknap Fish and Game Department, the Fort Belknap Planning Department, and the Fort Belknap Natural Resources (Land) Department shall hear all appeals of the Notice of Non-Compliance. Any final decision or order of the Appeals Board may be appealed to the Fort Belknap Tribal Court within thirty days of the date of the decision or order.

Section 901: Penalty for Violation

- (a) Upon a finding by the Administrator that a violation has occurred, the Administrator may:
- (1) revoke the applicable permit;
 - (2) order that the project be removed and the underlying property be restored; and/or

(3) prescribe such other remedial measures as may be appropriate.

The imposition of any one of the above remedies shall not preclude the imposition if any of the other remedies, or the imposition of the fine provided for in sub-section c.

- (b) In the event the Administrator orders that a project be removed and the underlying property restored, the Administrator shall specify a time period within which such action must be taken. If the person responsible for the project does not comply with the Administrator's order, the Administrator shall take steps to remove the project and restore the land, and the owner of the project shall be assessed the cost of such work. The Administrator shall notify the responsible person by mail at least five days in advance of removal of the project and any necessary restoration.
- (c) The Administrator may levy a fine not to exceed \$25,000.00 for each separate violation. Each day during which an act of non-compliance shall continue and during which an adequate attempt to comply is not made, shall be considered a separate violations.

Section 1001: Actions to Enforce

The Administrator may institute an action in Tribal Court to enforce this Ordinance, including actions to collect against any person who has been ordered to pay a penalty or perform remedial measures and who has not appealed such decision or who has not paid an assessed fee, cost or penalty. The Administrator may also pursue any other remedies that may be available under applicable tribal laws.

Section 1101: Effective Date

This Ordinance shall become effective upon adoption and approval of the Fort Belknap Community Council. This Ordinance shall not apply to existing projects except to the extent that it is shown that the project is failing or is technically inadequate or that it has a substantial detrimental impact on Tribal Waters.

Section 1201: Explanation of Regulations

Section 101 of the Clean Water Act (CWA), established goals for the attainment of good water quality.

Section 303, states are required to develop and implement water quality standards for all waters of the U.S. including wetlands. **In the absence of wetland standards, water quality standards established for surface waters, apply to wetlands as well.** While water quality standards can help protect preserved wetlands, such standards provide no direct means to avert or discourage the elimination of wetlands.

Section 319 establishes a national program for control of non-point source pollution including wetlands. Section 319 uses financial incentives to encourage voluntary state prioritization and protection of wetlands, but provides no regulatory wetlands protection.

Section 402 of the CWA-Section 402 (p), which established the National Pollutant Discharge Elimination System program (NPDES). While the NPDES program does not regulate activities conducted in wetlands nor the destruction of wetlands in any direct way, it's goal is to reduce pollutant discharges that may otherwise degrade wetlands from a water quality standpoint (USEPA 1995).

Section 404 had no control over groundwater pumping which can completely dewater a wetland until 1989 (USEPA 1989), which is now reflected in Federal Register 33 CFR-332223.2 (d). Agriculture has been a major cause of past wetland losses, however, the 1995 & 1990 Farm Bills have attempted to fill this gap in coverage.

Swampbuster provision of the 1985 & 1990 Farm Bills to address the significant agriculture has played in the alteration and loss of wetlands, the food security act (Farm Bill) of 1985 included two major wetland provisions "Swampbuster" and the Conservation Reserve Program (CRP). Swampbuster provision requires withholding of all USDA program benefits from any person who converts wetland for agricultural commodities that was converted after December 23, 1985 or converts a wetland for agricultural commodity production after November 28, 1990, even if a crop is not planted. Benefits that can be lost thru Swampbuster provision include commodity supports (oats, wheat), crop insurance, and disaster payments until wetland is restored or replaced.

Water Bank Act (WBA) is a federally operated incentive approach geared largely to agricultural wetland protection, similar to the CRP, but initiated long before it, with the 1970 passage of the WBA (16 U.S.C. 1301). The WBA is targeted to the Prairie Pothole Region, and offers 10-year easements on wetlands and adjacent areas. Landowners agree not to drain, fill, level, burn, or otherwise destroy wetlands and to maintain ground cover essential for the resting, breeding, or feeding of migratory waterfowl in exchange for annual payments. This act made a significant contribution to wetland protection than the WRP and the CRP.

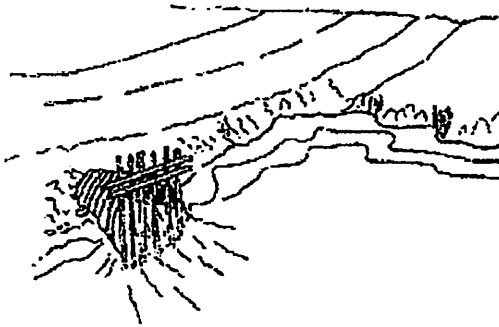
Migratory Bird Hunting and Conservation Stamp Act / Small Wetland Acquisition Program (SWAP)- SWAP established under the Migratory Bird Hunting Conservation Stamp Act is the oldest and largest of the federal protection programs and is rooted in bird hunting interests. This program is similar to the Water Bank Program in which landowners give up their rights to drain, fill, burn, or level wetlands (GAO, 1991).

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BEAVER DAM AND OTHER NATURAL OBSTRUCTIONS ALTERNATIVE METHODS

FIGURE 1



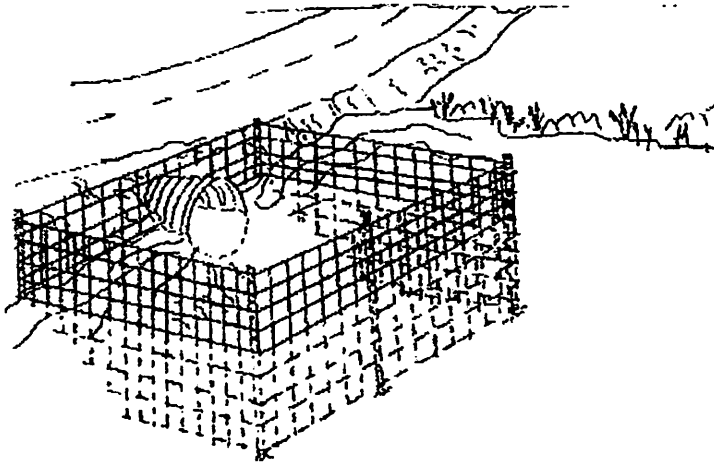
Pitchfork Guard

This device prevents beavers from building a dam inside a culvert. This is a preventive measure and not a water regulation device. If beavers build a dam in front of the culvert, other measures should be taken.

- 1/2"-3/4" metal rods spaced 6" apart and held together only at the top with horizontal rods.
- Held in place by the current and by driving the vertical rods into the bottom.
- Easier to remove than wire mesh because there are no horizontal bars to catch on deposited material.

BEAVER DAM AND OTHER NATURAL OBSTRUCTIONS ALTERNATIVE METHODS

FIGURE 2



Deep-Water Fence

The purpose of the deep-water fence is to physically exclude beavers from plugging the intakes of road culverts and prevent them from detecting the flow of water into the culvert which can initiate dam building activity.

Installation Guidelines

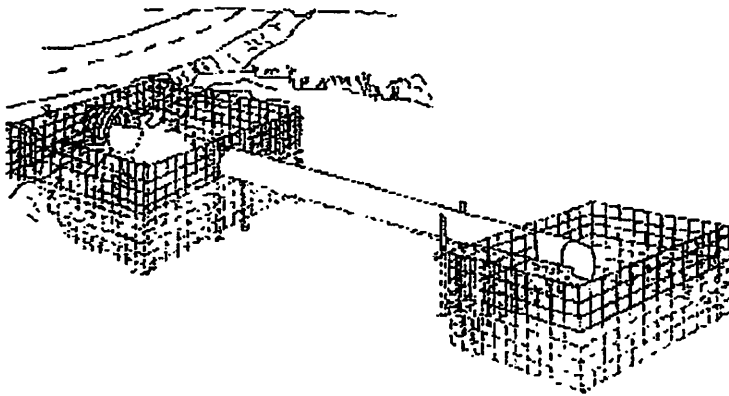
1. Beavers must be prevented from gaining access to the culvert by keeping the wire enclosures tight against the bottom and extending the wire 18-24 inches above the water level.
2. The enclosure must be of sufficient size so as to effectively eliminate the sensation of waterflow entering the culvert. If material is deposited on the wire and it becomes a temporary dam, the flow capacity of the enclosure must be at least equal to that of the road culvert.
3. A 10' x 10' area is generally adequate. Culverts with high flow may require larger enclosures. The larger the enclosure, the more effective it is in reducing the sensation of flow.
4. In areas with uneven bottoms, a floor may be added to prevent beavers from swimming underneath the enclosure.

Materials Needed

1. 6" x 6" mesh 60" wide concrete reinforcement wire (6 gauge) has been found to exclude beavers and still allow debris to pass through. This comes in 5' x 10' panels and in 60" wide rolls.

BEAVER DAM AND OTHER NATURAL OBSTRUCTIONS ALTERNATIVE METHODS

FIGURE 3

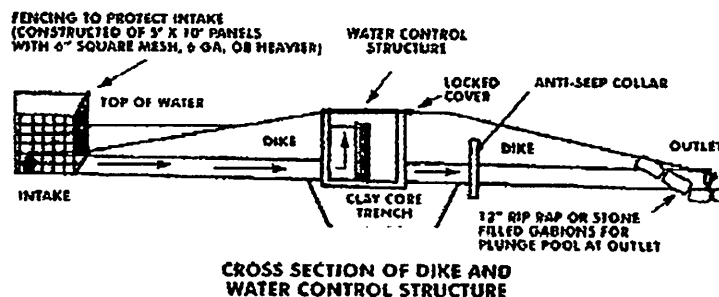


2. Heavy duty steel posts.

If beavers do begin to construct a dam against a fence installed to protect a culvert, it then may be necessary to install a WLCD to regulate the water level. The deep-water fence protecting the culvert will act as an emergency spillway during high run-off conditions when the WLCD cannot handle the flow. (Note: Road grades cannot usually be used as dikes. Deposited debris may have to be removed or modified.)

BEAVER DAM AND OTHER NATURAL OBSTRUCTIONS ALTERNATIVE METHODS

FIGURE 4



Modifying Sites to Discourage Beaver Occupation

Whenever possible, include beavers damage prevention, control techniques or structures in initial engineering plans. For instance, where it is feasible, trees and shrubs on the banks of streams and ditches should be removed. This eliminates material beavers might use to construct dams and/or utilize as a food source. This can be particularly effective along agricultural drainage ditches and immediately upstream and downstream of road culverts.

To make mowing easier, the banks of drainage ditches and man-made ponds should be gently sloped. This discourages beaver from burrowing and minimizes the probability of dam construction. (Note: Without an Article 24/15 Permit, it is a violation of The Environmental Conservation Law to disturb the bed or banks of any protected stream). Beaver activity can also be discouraged by eliminating pools and creating riffle areas leading into road culverts. This can be accomplished through mechanical grading and placement of coarse stone or rubble in the stream bed.

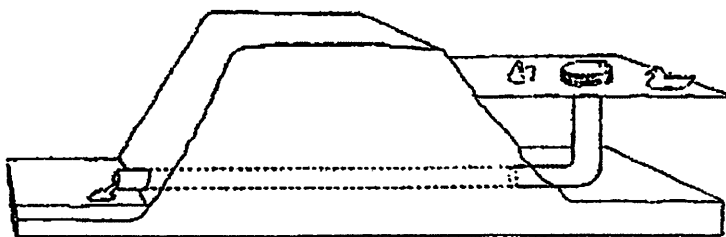
This prevents beavers from obtaining mud and/or from moving material to a site which they have previously dammed. Beaver are also less likely to construct dams in high gradient areas. Again, this is most effective when all vegetation is removed from the immediate area.

Beaver control technology should be incorporated into engineering designs for pond and marsh construction. In shallow water impoundments, dikes should be constructed with wide bases, gentle slopes, and be no higher than the top of the water control box. The control should be an in-line water control structure placed in the center of the dike or as far away from the intake as possible. The top of the box should be protected with a locked cover. Water levels should be maintained so that the intake remains completely under water. The intake should also be protected with a deep water cage or fence to prevent beaver or flood debris from plugging it. To facilitate mowing of the dike, the control box can be set at grade on the top of the dike.

The objectives of this design are two-fold. One is to construct a wide, low level dike which minimizes the washout potential. The other objective is to disguise the flow of water at the intake and protect the water control box from beaver activity.

BEAVER DAM AND OTHER NATURAL OBSTRUCTIONS ALTERNATIVE METHODS

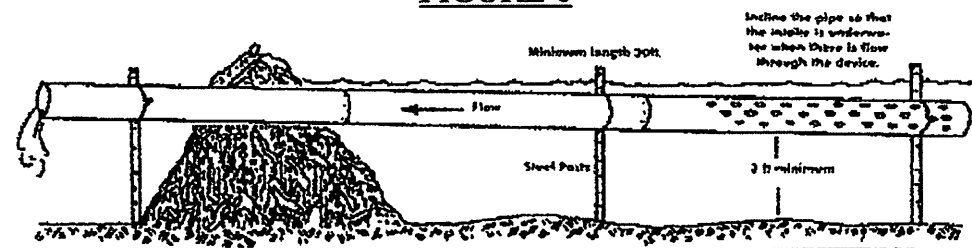
FIGURE 5



Mesh bars installed to protect the riser from dogging.

BEAVER DAM AND OTHER NATURAL OBSTRUCTIONS ALTERNATIVE METHODS

FIGURE 6



Dam Installation of a Beaver Drain Tube

1. Pipe size and material can vary depending on flow requirements and the material available.
2. Soft pond bottoms will reduce the useful life of the tube. This WLCD lasts longer in ponds with gravel or hard clay.

APPENDIX F

Dwarf Mistletoe Rating

appears as a clustered mass of twigs and foliage. Stimulation brooms are often mistaken for mistletoe brooms. The following is a list of guidelines to distinguish dwarf mistletoe brooms from stimulation brooms:

Dwarf mistletoe brooms

Commonly see several trees with brooms grouped together

Presence of shoots or basal cups

Brooms occur at any height and at any distance along the bole

Dead brooms may be found on live or dead trees in the stand and also on the ground

Stimulation brooms

Broomed trees are scattered

Broomed trees are frequently associated with recent stand openings.

No shoots or basal cups

Usually occur below 30 feet and usually at or near the bole

No dead brooms

Dwarf Mistletoe Rating.—The Hawksworth 6-class dwarf mistletoe rating (DMR) system is a numerical system used to assess dwarf mistletoe infection levels in individual trees and stands (Figure 1). Stand DMR rating is the average of the DMR's of all the individuals in the stand.

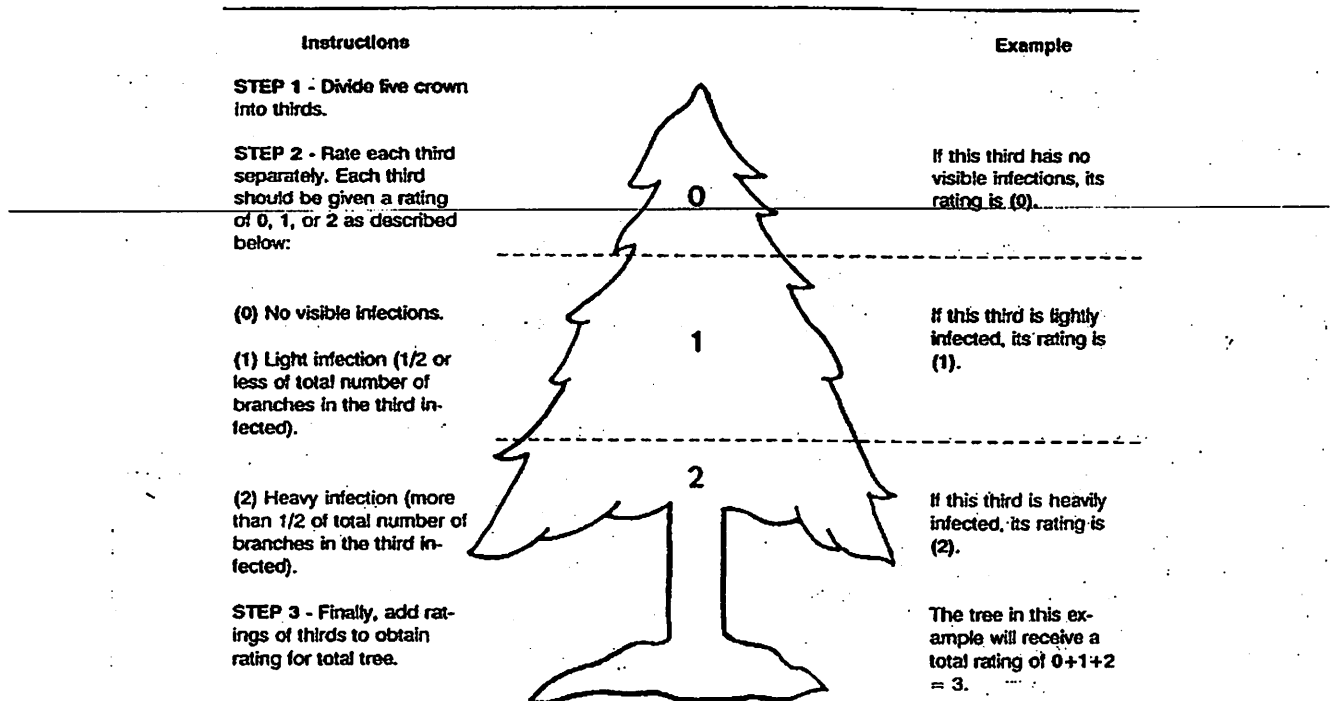


Figure 1. - The Hawksworth 6-Class Dwarf Mistletoe Rating System.