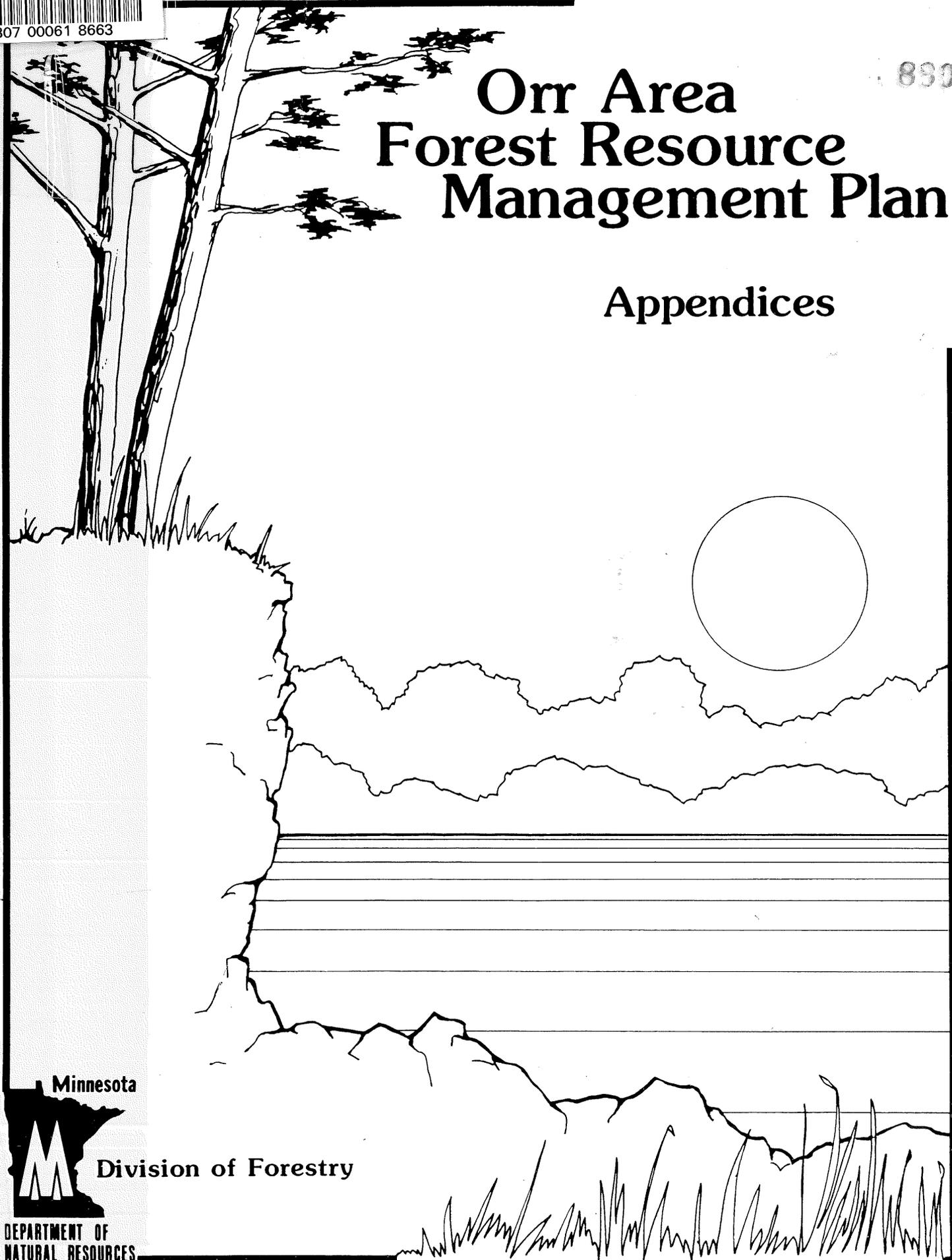




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Orr Area Forest Resource Management Plan

Appendices



Minnesota



Division of Forestry

DEPARTMENT OF
NATURAL RESOURCES

ORR AREA FOREST RESOURCE MANAGEMENT PLAN

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- A. Recreation Sub-Area Plan
- B. Timber Management Plan
- C. State Forest Road Plan
- D. Land Ownership and Administration
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ORR AREA FOREST RESOURCE MANAGEMENT PLAN

Appendix A. Recreation Sub-Area Plan

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INTRODUCTION

FOREST RECREATION PROGRAM GOAL

The goal of the Division of Forestry Recreation Management Program is:

To fulfill the outdoor recreation potential of Division administered lands by providing developed recreational areas and opportunities for dispersed recreational activities that are compatible with other forest uses and consistent with user demand.

This goal is consistent with the forest management philosophy of multiple use. In general, recreational development on Division of Forestry lands is to be at a level that has no significant effect on forest resources. When developed, facilities on forest lands should provide opportunities for contact with nature and require a minimum level of development and management. These policies generally limit Division of Forestry development to primitive campgrounds, day use areas, and recreational trails. Recreation uses of Division administered lands requiring no developed facilities include hunting, berry picking, bird watching, nature photography, and other forms of dispersed recreation.

PURPOSE

The purpose of this recreation plan is to provide for the orderly development of recreation on Division of Forestry administered lands in the Orr Area and at the same time, satisfy the planning requirements of the Minnesota Outdoor Recreation Act of 1975.

OUTDOOR RECREATION ACT

The Outdoor Recreation Act of 1975 (MS 86A) requires that a plan be prepared and approved before recreation facility development, except for repairs or maintenance, can take place.

The Outdoor Recreation Act recognizes the abundant opportunities for outdoor recreation and education provided by Minnesota's resources. It stresses the importance of Minnesota's outdoor recreational resources to the "...health, welfare, and prosperity of the citizens of Minnesota..." The act establishes an outdoor recreation system to "1) preserve an accurate representation of Minnesota's natural and historical heritage for public understanding and enjoyment, and 2) provide an adequate supply of scenic, accessible and usable lands and waters to

accommodate the outdoor recreational needs of Minnesota's citizens." The outdoor recreation system includes natural state parks; recreational state parks; state trails; state scientific and natural areas; state wilderness areas; state forests and state forest sub-areas; state wildlife management areas; state water access sites; state rest areas; state wild, scenic and recreational rivers; and state historic sites.

The portion of the Outdoor Recreation Act of 1975 concerning state forests and state forest sub-areas (MS 86A.05, subd. 7) states that:

- a) A state forest, as established by section 89.021, shall be administered to accomplish the purposes set forth in that section, and a state forest sub-area shall be established to permit development and management of specialized outdoor recreation at locations and in a manner consistent with the primary purpose of the forest.
- b) No unit shall be authorized as a state forest sub-area unless it is located within a state forest and contains suitable natural resources to accommodate any of the following uses:
 - 1) Day use areas. Areas which permit recreational use of the forest in its natural state, not requiring an overnight stay, including but not limited to picnicking, fishing, swimming, boat launching, hiking, interpretation, and nature observation.
 - 2) Campground. Provide minimum facilities to accommodate overnight camping.
- c) Outdoor recreation sub-areas located within state forests shall be administered by the commissioner of natural resources in a manner which is consistent with the purposes of this subdivision.

In addition to forest sub-areas the Outdoor Recreation Act allows the following secondary units to be authorized wholly or partially within a state forest: natural state park; recreational state park; historic site; wildlife management area; scientific and natural area; wilderness area; wild, scenic, and recreational river; trail; rest area; and water access site.

PLANNING REQUIREMENTS

The outdoor Recreation Act establishes the following planning requirements:

1. Plan preparation by managing agency (DNR, Division of Forestry).

2. An announced 30 day review period for the public and at least one public hearing. The public hearing would be better described as a public information session. A public hearing as described in the Minnesota Administrative Procedures Act (MN Stat. Chap. 14) is not required.
3. Review and approval by the State Planning Agency (SPA) or the governor. The SPA must review the plan within 60 days of its receipt and notify the DNR of any recommendations or changes it might suggest. The DNR then reviews the recommendations and notifies the SPA as to their disposition. The plan can be approved by the SPA at this point. If, however, the SPA feels that the plan fails to provide for the administration of the unit, as specified in the Outdoor Recreation Act, or fails to recognize values and resources within the unit that are primarily the responsibility of another managing agency to protect or develop, it may request an additional 60 day period for review by the Governor. If either the SPA or the Governor fail to act on the plan within the specified time, the plan is deemed approved.

STATE PLANNING AGENCY

MINNESOTA

ST. PAUL, MINN.

11/25/87

ORR AREA RECREATIONAL RESOURCES

RECREATIONAL ATTRACTIONS

Geologic processes are largely responsible for the recreation amenities which exist in the Orr Area today. The eastern and northern portions of the Area are characterized by ice scoured lake basins on the Laurentian Shield. The western portion of the area is part of a flat plain nearly devoid of lakes which was formed under the waters of Glacial Lake Agassiz. Recreation amenities are many and varied in the Orr Area as a whole, with the eastern and northern portions being extremely rich in recreation opportunity. The Area's large public land base enhances its potential for outdoor recreation activity.

The Orr Area contains much of the Boundary Waters Canoe Area Wilderness (BWCAW) which is the only designated water based wilderness in the continental United States. Many beautiful lakes lie within and outside of the BWCAW. Voyageurs National Park (VNP) has been set aside to preserve a number of large lakes and to depict natural processes for present and future generations. A number of rivers including the Little Fork, Pelican, Vermilion, Kawishiwi, Stony, Basswood, and Isabella have outstanding recreational features. The Little Fork River is a State Canoe and Boating Route. Because much of the Area's land base is undeveloped and publicly owned it provides a wide range of dispersed recreational opportunities such as hunting and nature observation. Recreational amenities in proximity to the Orr Area include the remainder of the BWCAW, many more lakes outside of the BWCAW, the North Shore of Lake Superior, and the St. Louis, Cloquet, Whiteface, and Sturgeon rivers.

RECREATION FACILITIES

The Orr Area contains a number of well developed recreational facilities (Table A.1). Major public facilities are administered by the DNR, the U.S. Forest Service, and the National Park Service. The DNR Division of Parks and Recreation administers Bear Head Lake and Tower Soudan state parks. The DNR Trails and Waterways Unit has responsibility for many public water accesses, the Little Fork Canoe and Boating Route and its campsites, 207 miles of grants in aid trail, and 92 miles of the Taconite and Tower to International Falls state trails. The DNR Division of Forestry administers 4 campgrounds, numerous dispersed campsites (many within the BWCAW), 1 day use area, and 30 miles of recreational trails. The Superior National Forest administers 8 campgrounds, numerous public water accesses and dispersed camping sites (both in and out of the BWCAW), and 274 miles of recreational trails. Voyageurs National Park administers dispersed campsites and 24 miles of

recreational trails. In addition the Minnesota Department of Transportation provides highway rest areas and local units of government provide county and municipal parks and trails.

Table A.1 Orr Area Recreation Facilities

Facility Type	Number	Comments
State Forests -----	7	Sturgeon River, Bear Island, Kabetogama, Lake Jeanette, Burntside, Insula Lake, Lake Isabella
National Forests -----	1	Superior
National Parks -----	1	Voyageurs
Wildlife Management Areas -----	2	Elbow River Snake River
Trails (miles of)		
X-C Skiing -----	242	
Interpretive -----	14	
Horseback Riding -----	3	
Snowmobiling -----	455	
Hiking -----	302	
State Parks -----	2	Bear Head Lake Tower Soudan
Campgrounds		
Public -----	32	419 sites, not including dispersed sites
Private -----	51	1471 sites
Public Group -----	1	Bear Head Lake
Private Group -----	8	1119 sites
Beaches		
Public -----	15	
Private -----	103	
Picnic Grounds		
Public -----	15	
Private -----	38	
Canoe and Boating Routes -----	1	Little Fork
Scientific and Natural Areas -----	1	Purvis - Ober
Public Water Accesses -----	58	

Private sector recreational facilities include 51 campgrounds and 8 group camps with 1,471 and 1,119 sites, respectively. There are a multitude of private resorts in the area serving a diverse clientele. A number of recreational outfitters are active in the area with the center of activity at Ely.

Major recreational facilities in proximity to the Orr Area include campgrounds, campsites, water access sites, and trails in the remainder of the Superior National Forest and numerous state parks and waysides. Tourist attractions including the Iron Range Interpretative Center and the U.S. Hockey Hall of Fame located at Chisholm and Eveleth respectively.

Table A.2 Recreational Trails in the Orr Area

Administrator / Trail	Trail Miles by Use					
	Hike	X-C	Interp	Horse	Snow	Total
<u>U S Forest Service</u>						
Kekekabic Hike Trail	10					10
Pow Wow Hike/Ski Trails	55	55				55
Old Pines Hike Trail	15					15
Snowbank Hike Trail	20					20
Angleworm Hike/Ski Trail	22	23				23
Moose/Fall Snow Trail					11	11
Secret/Blackstone Trail	5	5				5
Moose/Fence Ski Trail		6				6
Fernberg Ski Trail		6				6
Birch L. Plan Hike/Ski	2	2				2
Ole Lake Hike/Ski Trail	4	4				4
Sioux Hustler Hike/Ski	27	27				27
Stuart R./Baldpate L.	8	8				8
Norway Ski Trail	8	8				8
Big Moose Hike/Ski	2	2				2
Bass L. Hike Trail	6	1	6			6
Coxey Pond Hike/Ski	12	12				12
Ely-Grassy Snow Trail					35	35
Herriman L. Hike/Ski	11	11				11
Stuart L. Hike/Ski	2	8				8
Totals	209	178	6		46	274
<u>National Park Service</u>						
Lost Bay Hike Trail	17					17
Mukooda Hike/Ski Trail	7	7				7
Totals	24	7				24

(more)

<u>DNR Forestry</u>	Hike	X-C	Interp	Horse	Snow	Total
Putnam Lake Trail	7				7	7
Fishing Lakes Trail					11	11
*Myrtle Lake Trail					12	12
*Frazer Bay Trail					9	9
*Haley Trail				3	12	12
*Elbow River Trail					20	20
Ash Lake Trail					16	16
Ash R. Hike/Ski	13	13				13
Totals	20	13		3	87	100

* All or portions of these trails have been incorporated into the Tower to International Falls State Trail. The Division of Forestry currently administers about 30 miles of trail.

<u>DNR Trails & Waterways</u>	Hike	X-C	Interp	Horse	Snow	Total
Taconite State Trail	26				32	32
Tower to Int. Falls					60	60
Totals	26				92	92

<u>DNR State Park</u>	Hike	X-C	Interp	Horse	Snow	Total
Bear Head L. St Park	8	13	7		2	13
Tower Soudan St Park	9		1		10	10
Totals	17	13	8		12	23

<u>County</u>	Hike	X-C	Inter	Horse	Snow	Total
Tomahawk Corridor					42	42
Isabella-Happy Wanderer		20			30	30
Kawishiwi Loop	6				35	35
Voyageurs Trail					100	100
Totals	6	20			207	207

* Kawishiwi Loop has 35 miles of dog sled trail

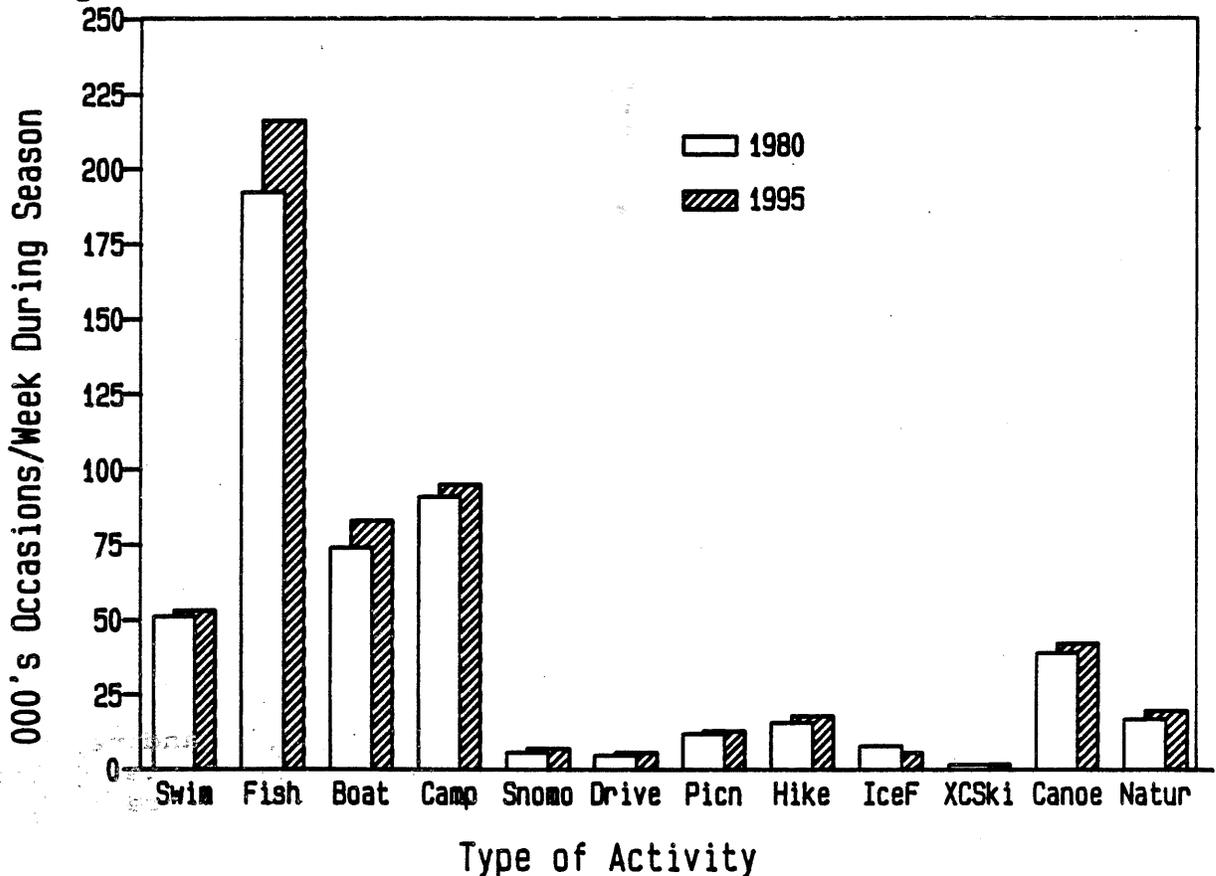
<u>City</u>	Hike	X-C	Interp	Horse	Snow	Total
Hidden Valley Ski Trail		11			11	11
Totals		11			11	11
Totals by Use	302	242	14	3	455	731

Source: DNR Trails Inventory 1985

RECREATIONAL USE PROJECTIONS

Recreational use statistics developed from data gathered through the State Comprehensive Outdoor Recreation Plan (SCORP) (MN DNR - Planning, 1985) surveys show that fishing, boating, camping, swimming and canoeing are the recreational activities which people participate in most in the Orr Area (Figure A.1). The area provides a substantial percentage of statewide occasions for canoeing (17%), fishing (14%), and camping (12%). Percentages of statewide occasions for other activities include boating (7%), swimming (3%), driving (2%), picnicking (2%), hiking (2%), ice fishing (2%), cross-country skiing (1%), and snowmobiling (1%).

Figure A.1 Orr Area Recreation Activities 1980-95



Use estimates for hunting, horseback riding, and three wheeling in the Orr Area were not generated. However, the 1979 SCORP (MN DNR - Planning, 1979) showed hunting to be the number one recreational activity requested by residents of the Arrowhead Region when they were questioned about needs for increased recreational opportunities. The 1979 SCORP also showed that approximately 7% of the horseback riding in the state occurs in the Arrowhead Region. Most of this riding activity probably occurs outside the Orr Area near the city of Duluth where riding facilities are present. Use of three wheeled vehicles in the state has increased dramatically within the past few years. According to a study entitled Three Wheeled Off Road Vehicle Gasoline Consumption in Minnesota prepared for the DNR by Environmental Resources Management North-Central of Bloomington there are about 90,000 three wheeled vehicles in the state presently. Of this number about 75,000 are said to be used for recreational purposes. Another report entitled Off Road Vehicle Use In Minnesota (MN DNR, 1984) indicates that the amount and location of three wheel use is closely related to population density. If this relationship continues, the Orr Area should continue to experience relatively light use of these vehicles because of low population levels.

The 1979 SCORP projected a need for increased opportunities for the following forest related recreational activities in the Arrowhead Region: cross-country skiing, camping, hunting, fishing, bicycling, and swimming.

The preponderance of recreational activities which are taking place in the Orr Area require a high quality natural resource base (e.g. fishing and canoeing). The most popular activities occur during the summer months and are likely to require an extended stay. People are willing to travel a considerable distance to participate in the activities available in the area. The Edge of the Wilderness Study (MN DNR - Planning, 1985) indicated that 80 percent of the recreationists using the BWCAW and surrounding areas had travelled at least 100 miles. Thus facilities for overnight lodging such as campgrounds and resorts, are a necessity. Winter recreational activity in the Area is lower than summer use and fewer participants are from outside the Area.

More specific recreational use projections and needs assessments for various recreation opportunities which the Division of Forestry traditionally provides are included in the following section.

RECREATIONAL NEEDS ANALYSIS

Hunting

The vast majority of the 1,790,000 acres of public land in the Orr Area are available for hunting. This is an adequate land base to provide hunting opportunities for many years to come if present hunting patterns are an indication of future trends. Opportunities exist to make it more convenient for hunters to locate public hunting areas. Development, advertisement, and distribution of maps showing the location of public lands is perhaps the best way to increase hunter awareness of the Area. The opportunity also exists to improve wildlife populations through better habitat and species management.

Snowmobile Trails

There are 455 miles of snowmobile trails in the Orr Area, including the Taconite and Tower to International Falls state trails. Managers indicate that trail use is well below capacity and snowmobile registrations in the state as a whole have been declining, so existing trail mileage should be adequate to handle use. Changes in the routes of some trails and addition of small segments of trail may be needed to connect communities, resorts, or local establishments to the existing trail system. Much of the necessary work can be accomplished by local snowmobile clubs through the state's grants-in-aid snowmobile program. It may be desirable to close some segments of existing trail because of lack of use or resource management considerations.

Cross-country Ski Trails

There are 20 cross-country ski trails, totaling 242 miles in the Orr Area. Sixteen of the trails are administered by the U.S. Forest Service within the Superior National Forest. The majority of these trails are not groomed. Managers indicate that ski trail use in the Area is well below capacity. Possible reasons for this include driving distances from major population centers such as the Twin Cities and Duluth and the fact that cross-country skiing facilities are well developed near these population centers. It may be possible to increase the number of cross-country skiers by providing unique skiing opportunities such as connecting resorts by trail or by simply increasing the availability of overnight lodging facilities. The distribution of existing cross-country ski trails is such that no facilities exist in proximity to some of the local population centers. This is particularly evident in the case of small towns along U.S. Highway 53 such as Cook, and

Orr. Trails should be provided near these areas to serve local demand. When properly developed, cross-country ski trails can be used for summer recreational trail uses such as hiking. The opportunity for off trail cross-country skiing experiences in the Area is abundant.

Camping

There are 32 public campgrounds with 419 sites in the Orr Area not including dispersed campsites such as those in the BWCAW and Voyageurs National Park. There are 51 private campgrounds with 1,470 sites. Traditionally, public and private campgrounds provide a spectrum of camping opportunities for campers, with the private sector usually providing full service facilities and the public sector providing a more primitive type of facility. The facilities provided by the Division of Forestry are generally primitive in nature. While use at individual public campgrounds varies, managers indicate that except for some holiday weekends or other isolated instances campgrounds are not at capacity. It should be remembered that physical capacity of a campground is not a good measuring device to determine whether supply and demand for campgrounds are in balance. Individual campsites need time to recover from use, or damage to the site will occur. Also, if all available campsites are full incoming campers would have to be turned away. These facts indicate that the number of campsites in an individual campground should be maintained in excess of the number of camping parties that are expected to use them. In general, managers of public facilities feel that there are presently an adequate number of sites to serve the demand for developed campgrounds. It should be noted however that public campgrounds are concentrated in the northern and eastern portions of the area (within Superior National Forest) and that there are no public campgrounds along U.S. Highway 53 which is the major route to Voyageurs National Park.

Another need is for more dispersed camping opportunities outside of the BWCAW. Congressional action has closed many opportunities for dispersed camping by persons using motor boats. The opportunity exists to restore dispersed camping areas on lakes outside of the BWCAW.

Opportunities exist to make the public more aware of public camping facilities in the area. These include advertising, signing, mapping, and better information dispersal.

picnickers when they are not full. Most often picnic grounds are associated with some other type of recreation development such as parks, campgrounds, rest areas, accesses, or beaches. Most Orr Area recreation facilities provide adequate picnicking opportunities. If there is a need for picnic facilities in the area it would be within or near population centers.

Hiking and Backpacking

There are approximately 300 miles of hiking trail in the Orr Area. Hiking is an activity which is compatible with developed recreation facilities such as campgrounds and picnic areas. Consideration should be given to providing hiking trails at existing or future developments if opportunities permit. Backpacking is available on some of the trails in the area, notably within Superior National Forest and Voyageurs National Park. Managers say that current backpacking pressure is light. The State Comprehensive Outdoor Recreation Plan (MN DNR - Planning, 1985) states that a large number of Minnesota residents, indicate through surveys, that they are backpackers. Advertising of backpacking opportunities could increase backpacking use as little advertising of backpacking opportunities currently takes place in the state. Because of the scenic diversity in the Area, opportunities do exist for quality backpacking experiences. Many sites have the potential for additional trail development.

ORV Use

Managers say that the use of two, three, and four wheeled recreation vehicles in the Area is low. Most use occurs during hunting seasons when hunters use the vehicles to "get to the stand" or to transport game. Use of three wheelers is expected to increase only slightly in Area because of the correlation between population density and ORV use. Despite the fact that ORV use levels are expected to remain low it should be recognized that these vehicles have a high potential to create problems such as erosion or use conflicts. Managers should take measures to adequately provide for use, protect significant natural resources, resolve anticipated use conflicts, and provide for the safety of all trail system users.

Other Dispersed Recreation Activities

The large public land base in the Area provides many opportunities for dispersed activities. Increased management of flora and fauna can enhance these recreational opportunities greatly. Interpretation of natural features also increases public understanding and enjoyment.

DIVISION OF FORESTRY RECREATION MANAGEMENT PROPOSALS

PROJECT SUMMARY AND ESTIMATED COSTS

Table A.3 summarizes the major recreation facility development proposals for the Orr Area during the next ten years. Detailed descriptions of the proposed actions follow the table.

Table A.3 Recreation Capital Improvements, Year Funding Requested, and Estimated Costs by Funding Source

Project	Year Funding Requested	Costs

FORESTRY FUNDED PROJECTS *		
1. Wakemup Bay Campground	85	\$34,000
2. Wakemup Bay Road & Related Projects	87	224,000
3. Wooden Frog Road	89	35,000
4. Hinsdale Island Campground Dev. and Rehab.	89	10,000
5. Ash River Dispersed Campsites	89	4,000
6. Vermilion River CCC Camp	89	15,000
7. Ash River Campground Rehab.	89	15,000
8. Pine Island & other Dispersed Campsites	89	8,000
9. Bear Island Lake Dispersed Campsites	89	2,000
10. Wolf Bay Dispersed Campsite Dev.	91	10,000
Subtotal		\$357,000
TRAILS AND WATERWAYS FUNDED PROJECTS		
1. Pin Cherry Road X-C Trail Dev.	87	8,000
2. Bear Island Lake Snowmobile Trail Dev.	87	1,000
3. Ash River Trail Rehab.	89	26,000
4. Pelican Lake Access (New Campground)	89	20,000
5. Pelican River Canoe Route	89	3,000
6. Vermilion River Canoe Route	89	2,000
7. Crane Lake Access	91	38,000
8. Burntside State Forest Trails Dev.	95	10,000
Subtotal		\$108,000

GRAND TOTAL		\$465,000

* Funding received in 1985.

EXISTING CAMPGROUNDS AND OTHER FACILITIES

Wakemup Bay Campground

Location

On Lake Vermilion - From Cook take Co. Rd. 24 N. 2 1/2 miles to Co. Rd. 78; turn right (E.) 3 mi.; left (N.) 1 mi. on Co. Rd. 478.

Existing Facilities

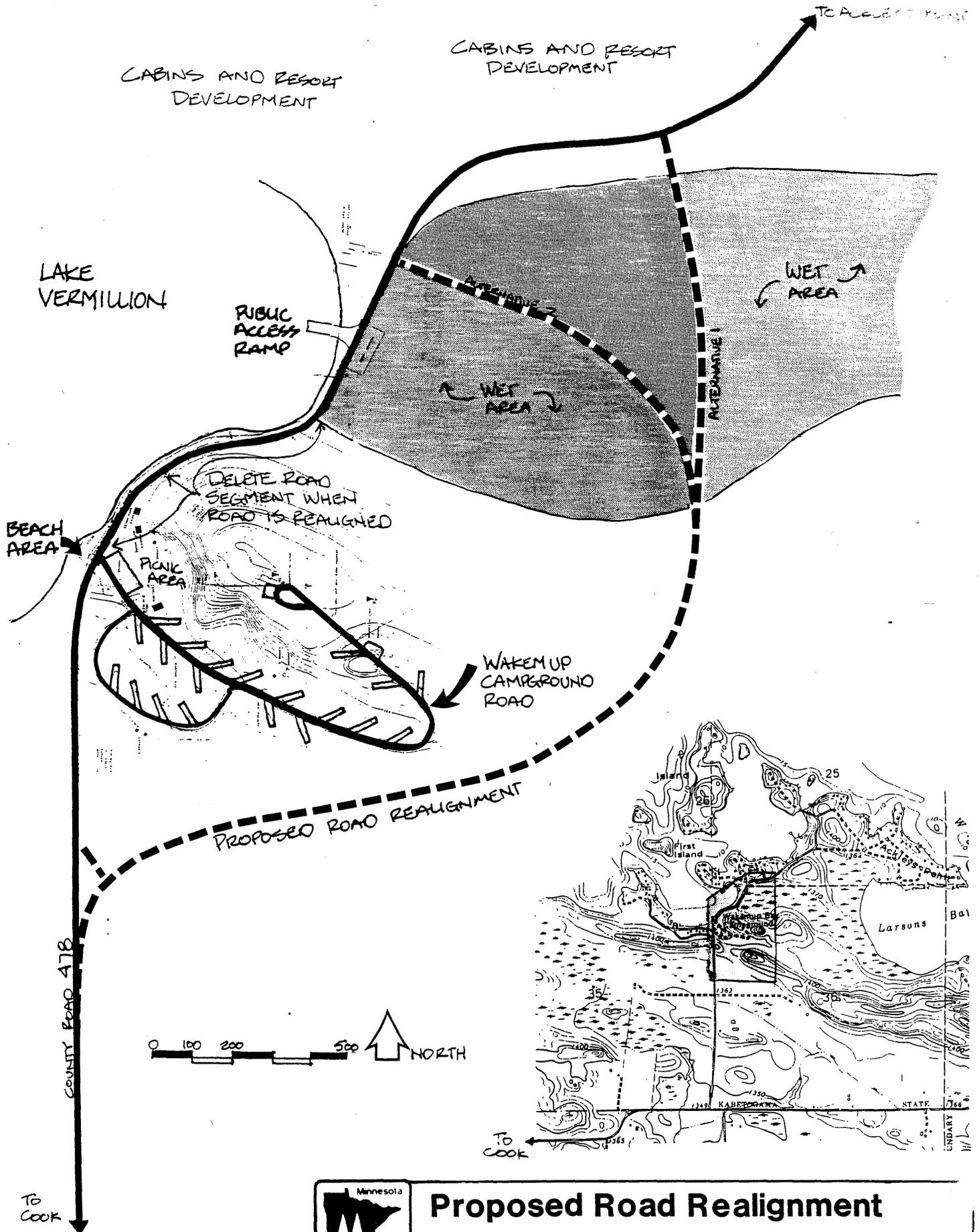
21 campsites with fire rings, picnic tables, and parking spurs
8 pit toilets
3 picnic sites with fire rings and tables
1 cash box
1 well
1 picnic pavilion with fireplace
1 beach changing house
1 beach
1 public water access
1 hiking trail

Use Data

Primary use of this campground is by self contained recreational vehicles (75%) and the remainder (25%) is by tenters. During holiday weekends in the summer the campground is filled to overflowing. On other weekends in June and during the first half of July capacity is approached. Numbers of visitors drop off on weekends after mid-July except when softball tournaments are being held in Cook. Use during the week is spotty and sparse.

Condition, Repair and Improvement Needs

The campground as it exists is generally in good condition but numerous improvements should be made to provide a more useable and desirable facility. In 1982 the pavilion was reconstructed and the beach changing facilities were reconstructed. The public water access was reconstructed in 1984 but the parking lot is still in need of enlargement to handle present use. A 40 foot portable dock at the access would enable campers to secure their boats when not in use instead of trailering them or parking them in the beach area. A fish cleaning house should be constructed near the access for camper convenience and health considerations. The 8 pit toilets should be replaced with 4 unisex concrete vault toilets for better sanitation. Two of the toilets should be handicapped accessible. A major problem with this campground is that County Road 478 (which serves cabin owners further down the lake shore) separates the campsites from the beach and water access areas, creating an unsafe and disruptive situation (see Figure A.2). Rerouting this road around the campground, away from the lake, would solve this problem and the abandonment of the old section of road would provide additional land for beach and campground



Proposed Road Realignment
Wakemup Bay Campground
Orr Unit Plan - Division of Forestry

expansion (4 or 5 sites). Rerouting of this road should be done in cooperation and with financial assistance from St. Louis County. Campsites near the beach in the lower part of the campground are very closely spaced and 3 or 4 should be removed to provide adequate space for users. Trees should be planted where the sites have been removed and in open areas over the entire campground to provide shade and aesthetics. The sites which have been removed should be replaced as tent only sites on the ridge which extends along the lake in the upper part of the campground. The site which is currently at the end of the road should be converted to a parking area for the walk in tent sites. Interior campground roads should be graveled and erosion control measures taken to stabilize the uphill portions. All campground spurs should be graveled and defined with posts. Tent pads at some sites should be flattened and better defined. A fishing pier somewhere along the lakeshore would provide a desirable facility for campground users. An information board should be added at the picnic area which could show information such as area service facilities, a lake map, fishing opportunities or other area attractions. Tables and fire rings require replacement and maintenance on an ongoing basis.

Rehabilitation and development work on this campground will be phased as \$34,000 was appropriated for some of the campground rehabilitation during the 1985 - 87 biennium. The remainder of the work is contingent on the road rerouting project.

Proposed Actions	<u>Costs</u>
1. Construct portable dock	\$ 1,000
2. Construct fish cleaning house	10,000
3. Construct 4 unisex vault toilets. Two should be handicapped accessible	16,000
4. Regravel all interior campground roads and install erosion control measures on hill portions of road	3,000
5. Regravel and define all campground spurs with poles	2,000
6. Develop information board	1,000
7. Repair and define tent pads	1,000
SUBTOTAL (for work done with 1985 appropriation)	<u>\$34,000</u>
8. Reroute road around campground in cooperation with other agencies	\$200,000
9. Enlarge access parking lot	5,000
10. Remove abandoned road in campground	5,000
11. Expand beach area	1,000
12. Develop 3 campsites on abandoned roadway	3,000
13. Remove 3 or 4 campsites from lower portion of campground.	1,000

14. Plant trees in areas where campsites are removed and in other open areas of the campgrounds	2,000
15. Construct 4 tent only campsites	4,000
16. Construct parking area for tent only campsites	1,000
17. Develop fishing pier	2,000
SUBTOTAL (for road related projects)	\$224,000
 GRAND TOTAL	 \$258,000

Hinsdale Island Campground

Location

On Hinsdale Island in Lake Vermilion. Boat access only.

Existing Facilities

10 individual lakeshore primitive campsites with picnic tables, fire rings, and individual open air toilets. Two of the sites are on small islands to the southeast of Hinsdale Island.

Use Data

Hinsdale Island campground operates at approximately 75% of capacity during the camping season with weekend use often at capacity. This is an extremely popular spot for family fishing trips, and as a picnic spot for lake residents and guided fishing parties. Church groups occasionally visit the campground for 3 to 4 day stays.

Condition, Repair and Improvement Needs

Some sites are suffering vegetative mortality and should be hardened to prevent further damage. Room is available for 3 additional sites to provide more camping opportunities at this popular location. On going maintenance is necessary for tables, fire rings, and toilets.

Proposed Actions

	<u>Costs</u>
1. Harden existing sites to prevent further vegetation damage.	\$5,000
2. Develop 3 new campsites.	5,000
Total	\$10,000

Wooden Frog Campground

Location

On Lake Kabetogama off U.S. Highway 53 and County Road 122.

The Wooden Frog Campground Recreation Sub-Area Plan (MN DNR - Forestry, 1984) was prepared and approved in 1984.

Rehabilitation and expansion of the Wooden Frog recreation area was completed in 1985 and 1986. Some of the actions

proposed in the plan were slightly modified during construction to better suit the site. Additionally because costs were higher than anticipated the new campground entry road was not constructed.

A summary of the actions proposed in the 1984 plan follows:

Proposed Actions for Campground	<u>Costs</u>
1. Close 20 campsites on the point and use the area less intensively to allow vegetation to recover.	\$5,000
2. Close the 20 campsites that are too small or too close together on the upper loop and revegetate.	3,000
3. Remove deteriorated fireplaces.	1,000
4. Replace the 40 campsites that have been removed by constructing a new campground loop adjacent to the upper campground. Clear views to the lake from campsites whenever practical.	88,000
5. Construct 6 new vault toilets or acceptable substitutes in association with new camping loop. At least two of these toilets should be handicapped accessible.	18,000
6. Expand water system to new loop.	10,000
7. Construct a floating dock along campground road. Clear and brush the area near the dock.	1,000
Subtotal	<u>\$126,000</u>

Proposed Actions for Access	<u>Costs</u>
1. Develop lead in loop.	\$5,000
2. Construct a parking lot for 25 vehicles with trailers.	15,000
3. Lengthen launching ramp to facilitate launching during low water levels.	2,000
Subtotal	<u>\$22,000</u>

Proposed Actions for Picnic Area, CCC Building and Parking Area	<u>Costs</u>
1. Develop picnic area - 10 tables and fire rings.	\$2,000
2. Obtain cooperative agreement or lease CCC building to National Park Service with specifications that they be responsible for upgrading and maintenance. If they do not wish to continue to use the building, develop it as a picnic shelter.	0
3. Develop a 25 car parking lot to serve these facilities and reserve 5-10 spaces for public access users.	15,000

4. Properly sign parking lot and construct bulletin board (see sign section).	
5. Construct new 4 stall toilet building to replace six existing vault toilets at the beach/picnic area. This building should be handicapped accessible.	30,000
6. Construct a log amphitheater (about 100 person capacity).	<u>1,000</u>
Subtotal	<u>\$48,000</u>

Proposed Actions for Nature Trail	<u>Costs</u>
1. Reroute trail as necessary to develop campground	<u>\$1,500</u>
Subtotal	<u>\$1,500</u>

* Proposed Actions for Campground Entry Road	<u>Costs</u>
1. Develop 1/4 mile of new entry road.	<u>\$30,000</u>
2. Close and revegetate abandoned road segment	<u>5,000</u>
Subtotal	<u>\$35,000</u>

* This action was not accomplished because of lack of funds during the 1985-86 rehabilitation of the Wooden Frog campground.

Proposed Actions for Signing	<u>Costs</u>
1. Properly sign all use areas.	<u>\$2,500</u>
2. Properly sign all trails and provide "you are here" signs at all trail heads.	500
3. Provide information bulletin boards at campground and in association with facilities on the point.	<u>1,000</u>
Subtotal	<u>\$4,000</u>

Grand Total \$231,500

Potential Future Actions

It has been suggested by some, including the National Park Service, that the Wooden Frog Campground should have a shower facility. Showers have not been put in any Division of Forestry campground to date because of an existing policy to provide less developed "primitive facilities" and the lack of on site maintenance personnel. The policy is based on the Division's desire to provide recreational experiences characterized by contact with nature and to minimize competition with the private recreational provider. A exception to the policy would be necessary if showers were to be provided. The Division of Forestry feels that a new private camping facility with showers that has recently been developed near Wooden Frog provides campers with a viable alternative to the primitive facilities at the Wooden Frog Campground.

Maintenance

Estimated annual maintenance costs for the Wooden Frog Campground are \$7,000. The 1984 sub-area plan proposed that a technician be hired to supervise Wooden Frog Campground because it is the largest and most heavily used campground that the Division of Forestry operates. This technician's primary responsibilities during the official open camping season would be to enforce campground and day use area rules, perform minor maintenance, supervise the Greenview maintenance contract, collect fees, and be available to assist campers with information or answer their questions.

Ash River Campground

Location

On the Ash River Trail (County Road 129) off U.S. Highway 53. The Ash River Trail provides one of the access routes to Voyageurs National Park.

Existing Facilities

9 campsites with fire rings, picnic tables, and parking spurs
3 pit toilets
1 picnic site with table and fire ring

Use Data

The Ash River campground is nestled in amongst the resort community at the end of the Ash River Trail. Yearly campground receipts have been averaging between \$800-\$1000 per year. Most campsites are occupied on the opening of fishing season and Memorial Day with use fairly sporadic the rest of the season. There is a private campground 1/2 mile down the road which has electrical hookups and shower facilities. Use is generally by fisherman and canoe campers who take advantage of the calm river and scenic route to Kabetogama Narrows and Namakan Lake.

Condition, Repair and Improvement Needs

This campground is in good overall condition and no major repairs are necessary. Minor improvements would make the campground a more desirable facility. Campsites are currently in a large grassy area. Planting trees and vegetative screening between some of the sites would provide some privacy and separation for campers. Two handicapped accessible vault toilets should be provided for user convenience and sanitary considerations. Campground roads and spurs and should be regravled and defined with posts to keep vehicles off the grass. An information sign should be developed at the picnic grounds. The DNR Trails and Waterways Unit is improving a water access across from the campground. Construction of the access and campground should be done simultaneously, by one contractor if possible, so that cost savings can be realized.

Proposed Actions	<u>Costs</u>
1. Plant trees and vegetative screening between sites	\$3,000
2. Construct two handicapped accessible vault toilets.	8,000
3. Regravel roads and spurs and define with posts	3,000
4. Construct information sign	<u>1,000</u>
Total	\$15,000

Vermilion River CCC Camp Day Use Area

Location

On the Vermilion River five miles south of Buyck on County Road 24.

Existing Facilities

- 1 picnic site with fire ring and table
- 2 pit toilets
- 5 car parking lot
- 1 carry-in access

Use Data

This facility is currently designated as a day use area. However, two open areas are often used for camping by fishermen, canoeists, and whitewater boaters who are using the Vermilion River. The open areas are adequate for group tent camping but if groups occupy these sites no sites are available for individuals or small parties desiring separation and privacy. One of the open areas is a carry-in boat and canoe access. There is no drinking water available at this site.

Condition, Repair and Improvement Needs

For the most part this facility is in good repair. Small improvements would make it a more desirable facility. Three carry-in campsites should be added along the river. The campsites should be separated from the access area to provide privacy for the campers. The two existing pit toilets should be replaced with one handicapped accessible vault toilet for user convenience and sanitary considerations. A well should be provided for drinking water. The 1/4 mile entry road and the parking lot require gravel and grading on a regular maintenance schedule. A sign is needed at the beginning of the entry road on County Road 24. An information board describing facilities and features along the Vermilion River should be placed at the access.

Proposed Actions	Costs
1. Develop three carry-in campsites	\$2,000
2. Construct one unisex handicapped accessible vault toilet	4,500
3. Provide well and pump	5,000
4. Gravel road and parking lot	2,000
5. Place sign at entry to road	500
6. Place information board at access	1,000
Total	<u>\$15,000</u>

Little Fork River Canoe Route

The portion of the canoe route in the Orr Area is maintained by the DNR Trails and Waterways Unit.

Condition, Repair and Improvement Needs
No action proposed.

Bear Island Lake Access

Picnic tables have been removed from this area because of recurring vandalism problems.

Condition, Repair and Improvement Needs
No action proposed.

Pelican Lake Access (Farmer John's Landing)

Located on the west side of Pelican Lake at the end of a county road.

Existing Facilities

This site includes a makeshift access at the end of a county road and a wildcat campground.

Condition, Repair and Improvement Needs

The ownership of the land underlying the access is in question. The land is either owned by St. Louis County as part of the road right of way, or by a private individual. Camping occurs on Division of Forestry administered land to the north even though this is not a designated Division of Forestry campground. Littering and use of the area for parties has caused problems in the past. The DNR will explore alternatives to provide more convenient access to Pelican Lake. The pit toilet will be removed and the access trail to the areas used for camping will be blocked in an attempt to reduce problems associated with use of the area.

Proposed Actions

Costs

- 1. Remove toilet, block trails, and take appropriate actions to eliminate camping.

0

BWCAW Campsites

About 200 campsites are located on Division of Forestry administered land in the BWCAW. For ease of administration the Division has a cooperative agreement with Superior National Forest for maintenance of sites on a geographic basis. The Division maintains 51 sites and 16 miles of portage trail annually within the BWCAW. Consistency of enforcement is currently a problem within the BWCAW because DNR rules (Minnesota Rules Chapter 6140, formerly NR 1000) have not been revised to reflect changes brought about by 1978 Federal legislation. The DNR rules should be amended. Because most of the lands in the BWCAW are trust fund lands the Division of Forestry is proposing that they be exchanged with Superior National Forest for lands outside of the BWCAW which are capable of producing revenue for the trust.

Proposed Actions

Costs

- 1. Continue the cooperative agreement with Superior National Forest until Forestry lands within the BWCAW are exchanged.
- 2. Amend Minnesota Rules Chapter 6140 to provide appropriate enforcement authority within the BWCAW.

0

0

PROPOSED CAMPGROUNDS AND OTHER FACILITIES

Wolf Bay Dispersed Campsites (Lake Vermilion)

Location

On Wolf Bay T63N R17W secs. 13, 14, 23, and 24.

Projected Use

Several unofficial campsites exist in this area already. By constructing campsites, camping areas could be hardened and the use of fire controlled. The Hinsdale Island Campground 2 miles away shows heavy use. Construction of these campsites could relieve some of the pressure at Hinsdale Island. Construction would also help replace sites for motorized boat-in camping lost when the BWCAW was closed to motorized use. Sites selected for development will avoid active or potential eagle nesting areas. The type of person who is looking for a boat-in camping experience is probably not the type who is looking to stay in a commercial resort. So this type of development should not effect the business of the private operator.

Proposed Actions	<u>Costs</u>
1. Construct 10 primitive campsites with picnic tables, fire rings, and open air pit toilets.	
Provide landing and mooring areas for boats.	\$10,000
	<u>\$10,000</u>

Pine Island and other Dispersed Campsites (Lake Vermilion)

Location

On scattered parcels of state land on Pine Island and along the north shore of Vermilion.

Projected Use

Several unofficial campsites exist in this area already. By constructing campsites, camping areas could be hardened and the use of fire controlled. Active and potential eagle nesting areas will be avoided. Construction would help replace sites for motorized boat-in camping lost when the BWCAW was closed to motorized use. The type of person who is looking for a boat-in camping experience is probably not the type who is looking to stay in a commercial resort. So this type of development should not effect the business of the private operator.

Proposed Actions	<u>Costs</u>
Construct 8 primitive campsites with fire rings, and open air pit toilets. Provide landing and mooring areas for boats.	
	\$8,000
	<u>\$8,000</u>

Bear Island Lake Dispersed Campsites

Location

On Bear Island Lake (T61N, R13W)

Proposed Actions	<u>Costs</u>
Construct 2 primitive dispersed campsites with fire rings and open air pit toilets. Provide landing and mooring areas for boats. Avoid eagle nesting areas.	\$2,000
Total	<u>\$2,000</u>

Pelican River Canoe Route

Location

The Pelican River flows out of Pelican Lake and is a tributary to the Vermilion River.

Projected Use

The Pelican River has the potential to be included as one of the state Canoe and Boating Route Rivers. The river is currently floated by canoeists and passes through numerous

parcels of state and county land where dispersed campsites could be developed. Evaluation and development should be done by the DNR Trails and Waterways Unit.

Proposed Actions	<u>Costs</u>
1. Develop three dispersed campsites with canoe landing areas, picnic tables, fire rings, and open air toilets.	\$3,000
Totals	<u>\$3,000</u>

Ash River Bay Dispersed Campsites

Location
On Ash River Bay in Lake Kabetogama.

Proposed Actions
This site has the potential to be developed for boat in campsites. If developed this site should be constructed by Voyageurs National Park.

Ash River Dispersed Campsites

Location
On the Ash River adjacent to Ash River Falls.

Projected Use
This location provides the opportunity to develop two to four small primitive campsites which would be accessible to the backpacker via the proposed extension to the Ash River Recreation Trail (See Existing Unit Trails) and to boaters on the Ash River. In the recent past, Boise Cascade maintained a small camping area near this location which was very popular with canoeists and boaters.

Proposed Actions	<u>Costs</u>
1. Construct 2 to 4 campsites with picnic tables and fire rings.	\$2,000
2. Construct 2 open air pit toilets.	\$1,000
3. Develop boat landing area	<u>\$1,000</u>
Total	\$4,000

Vermilion River Canoe Route

The Vermilion River should be included in the Minnesota State Canoe and Boating Route system. The river contains long placid stretches, whitewater of varying difficulty, and two major waterfalls. Portages currently exist around all hazard areas. The Vermilion River is already a cooperative project between the Minnesota Department of Natural

Resources and Superior National Forest for recreational purposes. This agreement should be reviewed and updated. The Division of Forestry has maintenance responsibility for 4 designated campsites and 2 miles of portage. Three undesignated campsites, where no facilities are provided, are also maintained. These sites should be upgraded and officially designated. For user convenience and safety signs should be replaced along the river. Portage trails require annual maintenance. A parking lot and carry in access could be developed in conjunction with a proposed road in the Shively Falls area (2-63-17). This project should be a cooperative project of the Division of Forestry, the DNR Trails and Waterways Unit and the Superior National Forest.

<u>Proposed Actions</u>	<u>Costs</u>
1. Upgrade, provide facilities, and officially designate the undesignated camping sites.	\$1,500
2. Replace deteriorated signs.	500
3. Develop parking lot at end of proposed Shively Falls Road with portage trail to the river.	
4. Review and update agreement with Superior National Forest.	
Total	<u>\$2,000</u>

Crane Lake Access

The former Crane Lake District Forestry station is located on the south side of Crane Lake. There is currently no public access to this lake which is an entry point to Voyageurs National Park, Quetico Park, and the BWCAW. The DNR Division of Enforcement currently uses the site to store equipment and dock boats. The Division of Enforcement anticipates housing an officer at this location in the near future. With proper planning the 2.60 acre site would be capable of handling an administrative site and an access and parking facility for approximately 75 to 100 vehicles and trailers. A small picnic area and vault toilets would provide additional amenities.

<u>Proposed Actions</u>	<u>Costs</u>
1. Design the site in cooperation with the DNR Division of Enforcement.	
2. Develop an access for 75 to 100 vehicles with trailers.	20,000
3. Develop 10 site picnic area.	10,000
4. Develop two handicapped accessible unisex vault toilets.	<u>8,000</u>
Total	\$38,000

EXISTING TRAILS

A 1985 inventory by the DNR Trails and Waterways Unit showed that the Division of Forestry administered approximately one hundred miles of unit trail in the Orr Area. Since the inventory was completed much of that trail mileage has been incorporated into the newly developed Tower to International Falls State Trail or is no longer maintained. Currently the Division administers about 30 miles of trail including 12 miles of cross-country ski trail, 10 miles of hiking trail and 18 miles of snowmobile trail. A number of grants in aid trails and two state trails cross Division of Forestry administered land. The grants-in-aid trails and the state trails are administered by the DNR Trails and Waterways Unit.

Ash River Recreation Trail (Hiking and Cross-country skiing)

Location

Five miles off U.S. Highway 53 on the Ash River Trail (CSAH 129).

Facilities

12 miles of cross country ski trail
9 miles of hiking trail
2 parking lots
2 trail shelters

Use

The Ash River Trail is just south of Voyageurs National Park. Ski touring is presently the major use of this trail, with the majority of users coming from the International Falls area. Because of the close proximity to the park, use can be expected to increase. Most hiking use of the trail is for late summer berry picking and hunter access in the fall.

Condition, Repair and Improvement Needs

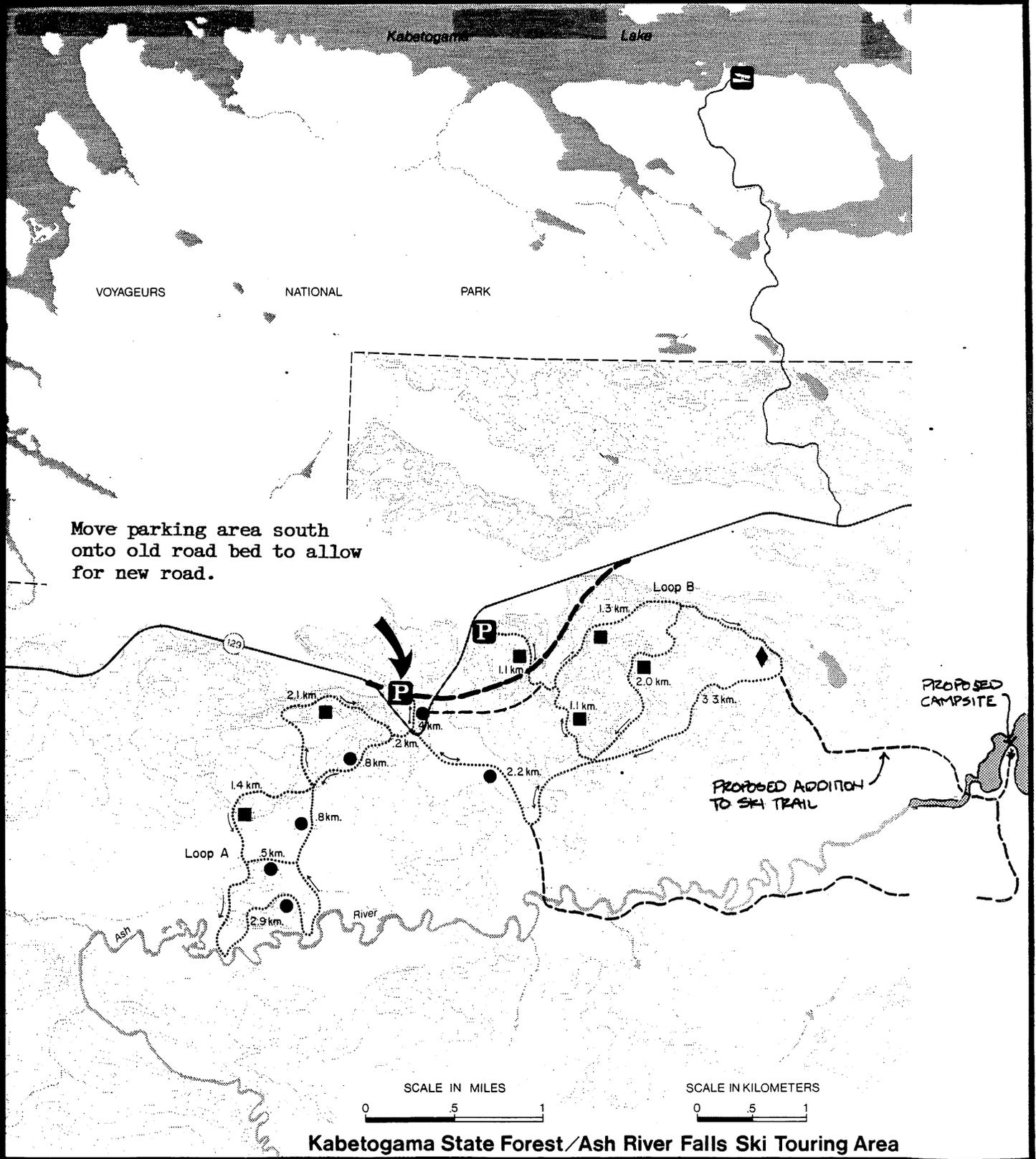
The trail and associated facilities are in good to excellent condition. The opportunity exists to develop a spur trail off the main trail to Ash River Falls. The reconstruction of an existing bridge and the construction of another at Ash River Falls would be necessary. This spur trail would require land acquisition or an easement to cross lands owned by Boise Cascade. The opportunity also exists to tie this trail system into a proposed system to be developed by Voyageurs National Park.

TRAILS

- Ski Touring/Hiking
- easy
- more difficult
- ◆ most difficult

FACILITIES

- P** Parking
- W** Water Access - trailer
- W** Water Access - carry in
- A** Campground
- PROPOSED SKI TOURING
- * PROPOSED CAMPSITE
- NEW ROAD (1987-88 CONST.)



Kabetogama State Forest/Ash River Falls Ski Touring Area

Proposed Actions	<u>Costs</u>
1. Acquire land or obtain easement and develop 5 1/2 mile spur trail to Ash River Falls.	\$5,000
2. Reconstruct existing bridge across the Ash River (50 ft. span)	5,000
3. Construct bridge across the Ash River (25 ft. span)	15,000
4. Develop connection with Voyageurs Park trail system when developed.	<u>1,000</u>
Total	\$26,000

Haley Snowmobile Trail

Location

Connects Cook and Gheen.

Description

Most of this 12 mile snowmobile trail has recently been incorporated into the Tower to International Falls State Trail. The remainder should be removed from the snowmobile trail system.

Condition, Repair and Improvement Needs

None. Maintenance of portions incorporated into the state trail will be carried out by the DNR Trails and Waterways Unit.

Frazer Bay Snowmobile Trail

Location

From Frazer Bay on Lake Vermilion to Cook

Description

This trail was recently incorporated into the Tower to International Falls State Trail.

Condition, Repair and Improvement Needs

None. Maintenance will be carried out by the DNR Trails and Waterways Unit.

TRAILS

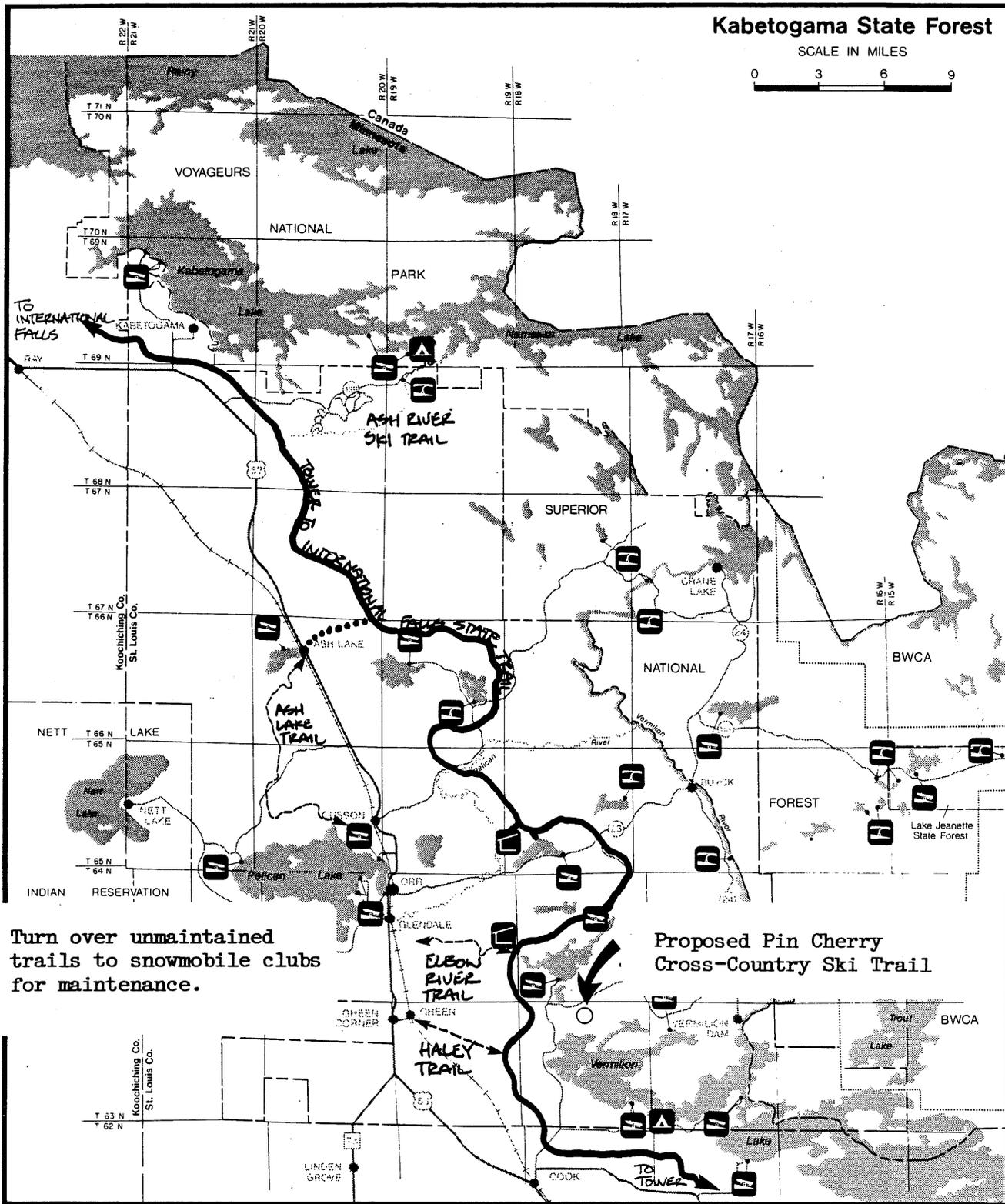
- Ski Touring/Hiking
- easy
- more difficult
- ◆ most difficult
- Snowmobile (NOT MAINTAINED)
- SNOWMOBILE (PROPOSED)
- TOWER - I' FALLS STATE TRAIL

FACILITIES

- P** Parking
- W** Water Access - trailer
- A** Campground
- H** Water Access - carry in
- TS** Trail Shelter
- RS** Ranger Station

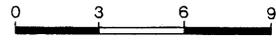


Because lands exist within the boundaries of this forest that are not under the jurisdiction of the D.N.R. check with the forest ranger if you plan to use facilities such as trails & roads other than those shown



Kabetogama State Forest

SCALE IN MILES



Turn over unmaintained trails to snowmobile clubs for maintenance.

Proposed Pin Cherry Cross-Country Ski Trail

Ash Lake Trail (Snowmobile)

Location

Connects the towns of Orr and Ash Lake

Description

This 16 mile trail is no longer maintained by the Division of Forestry. If this trail is to be continued it should be picked up by a local snowmobile club as a grants-in-aid trail. A three mile expansion of this trail to the east from Ash Lake would connect it to the Tower to International Fall State Trail which in combination with the Elbow River Trail would form a 40 mile loop trail beginning and ending in Orr.

Proposed Actions

Costs

- | | |
|--|-----|
| 1. Allow trail to become part of grants-in-aid system upon request of local snowmobile club. | \$0 |
|--|-----|

Elbow River Trail (Snowmobile)

Location

From east of Orr to the Tower to International Falls State Trail.

Description

This 20 mile trail is no longer being maintained by the Division of Forestry. The eastern portion of this trail has been incorporated into the Tower to International Falls State Trail. The western portion connects the Tower to International Falls State Trail and the city of Orr. This trail is a portion of a potential loop system from the city of Orr when combined with the Tower to International Falls State Trail and the Ash Lake Trail. If the segment of trail that connects to Orr is to be continued it should be picked up by a local snowmobile club as a grants-in-aid trail.

Proposed Actions

Costs

- | | |
|--|-----|
| 1. Allow trail to become part of the grants-in-aid trail system upon request of local snowmobile club. | \$0 |
|--|-----|

Myrtle Lake Trail (Snowmobile)

Location

East of Orr.

Description

This 12 mile trail has been incorporated into the Tower to International Falls State Trail.

Putnam Lake Trail (Snowmobile/Hiking)

Location

West of Bear Head Lake State Park off of the Taconite State Trail.

Facilities

7 miles of hiking and snowmobile trail
1 parking lot
1 trail shelter at Putnam Lake

Description

This trail is a portion of a proposed loop system around Bear Head Lake State Park.

Condition, Repair and Improvement Needs

This trail is in good condition. It is groomed by DNR Trails and Waterways Section in conjunction with their grooming of the Taconite State Trail. This trail should be combined with the Fishing Lakes Trail and the proposed Bear Island Lake Trail under a common name.

Fishing Lakes Trail (Snowmobile/Hiking)

Location

Southwest of Bear Head Lake State Park.

Description - This 11 mile trail forms the southwest portion of a proposed trail around Bear Head Lake State Park.

Condition, Repair and Improvement Needs

This trail is in good condition. It has recently been widened. The Trails and Waterways Unit is carrying out grooming and maintenance activities in conjunction with the Taconite State Trail. This trail should be joined with the Putnam Lake and the proposed Bear Island Trails under a common name.

PROPOSED TRAILS

Bear Island Lake Trail (Snowmobile)

Location

South and east of Bear Head Lake State Park.

Projected Use

This trail, in combination with the Taconite State Trail, a grants-in-aid trail, the Putnam Lake Trail, and the Fishing Lakes Trail will form a loop around Bear Head Lake State Park. The trail would be on 5 miles of existing logging road

Bear Island State Forest

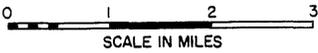
LEGEND

TRAILS

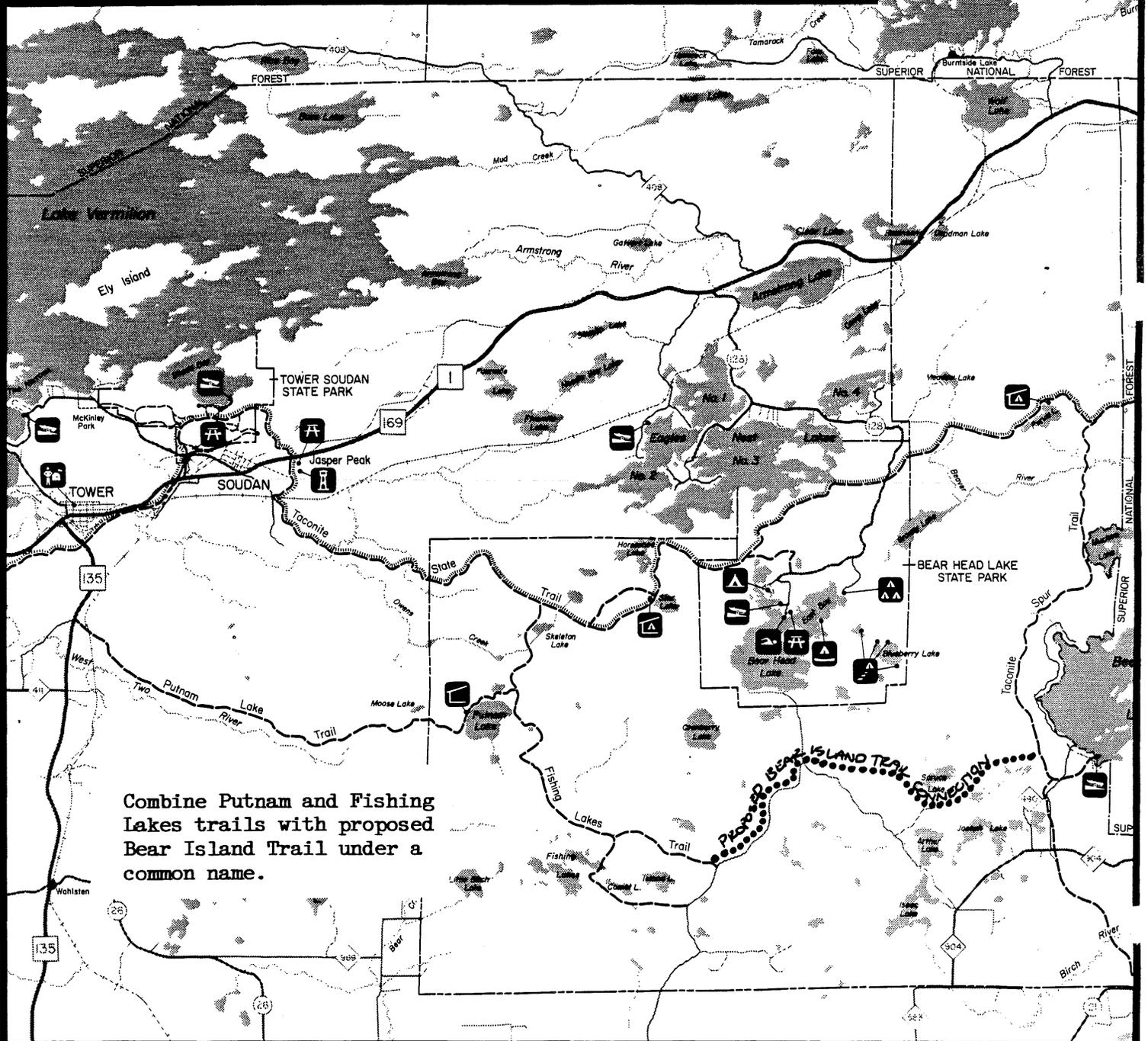
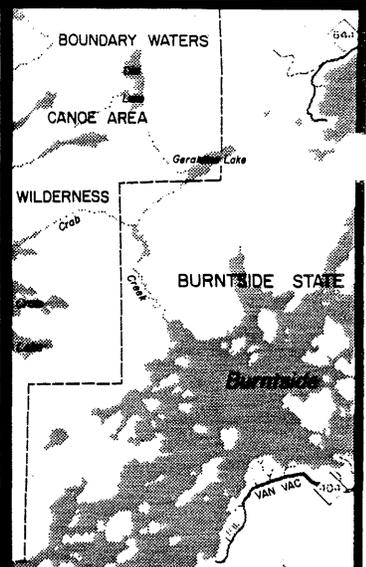
-  Taconite State Trail
-  Snowmobile/Multi-purpose
-  SNOWMOBILE/PROPOSED
-  Hiking

FACILITIES

-  Ranger Station
-  Fire Tower
-  Picnic Area
-  Boat Ramp
-  Canoe Access
-  Shelter
-  Shelter/Campsite
-  Campground
-  Group Camp
-  Walk-in Camping
-  Canoe Camping



Because lands exist within the boundaries of this forest that are not under the jurisdiction of the DNR, check with the forest ranger if you plan to use facilities such as trails & roads other than those shown.



Combine Putnam and Fishing Lakes trails with proposed Bear Island Trail under a common name.

and no construction would be necessary if private landowners permission can be obtained for legal right of way. Maintenance of this trail should be done by the DNR Trails and Waterways Unit.

Proposed Actions	<u>Costs</u>
1. Obtain necessary permission from land owners and develop trail.	<u>\$1,000</u>
Total	<u>\$1,000</u>

Pin Cherry Road Cross-country Ski Trail

Location

Fifteen miles north of Cook on County Road #24.

Projected Use

Thirty local residents recently formed a ski club and now plan a trail network around Lake Vermilion (Ash-a-wa Ski Trail) that would tie in with this trail. The trail is close to several resorts that are planning on winterizing their cabins. The nearest designated cross-country ski trail to Cook is 25 miles south of town.

Proposed Actions	<u>Costs</u>
1. Construct an 11 mile single track cross-country ski trail loop system.	<u>\$8,000</u>
	<u>\$8,000</u>

Burntside State Forest Ski, Hiking and Horseback Trails

Location

In the Burntside State Forest (T63N R14W) within the BWCAW.

Projected Use

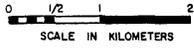
Before this area became a portion of the BWCAW it was intensively managed State Forest land. Numerous abandoned logging roads would form the core of this trail system.

Proposed Actions	<u>Costs</u>
1. Establish legal access on Wolf Lake Road. Brush out approximately 15 miles of established roads and trails and sign as appropriate.	<u>\$10,000</u>
Total	<u>\$10,000</u>

LEGEND

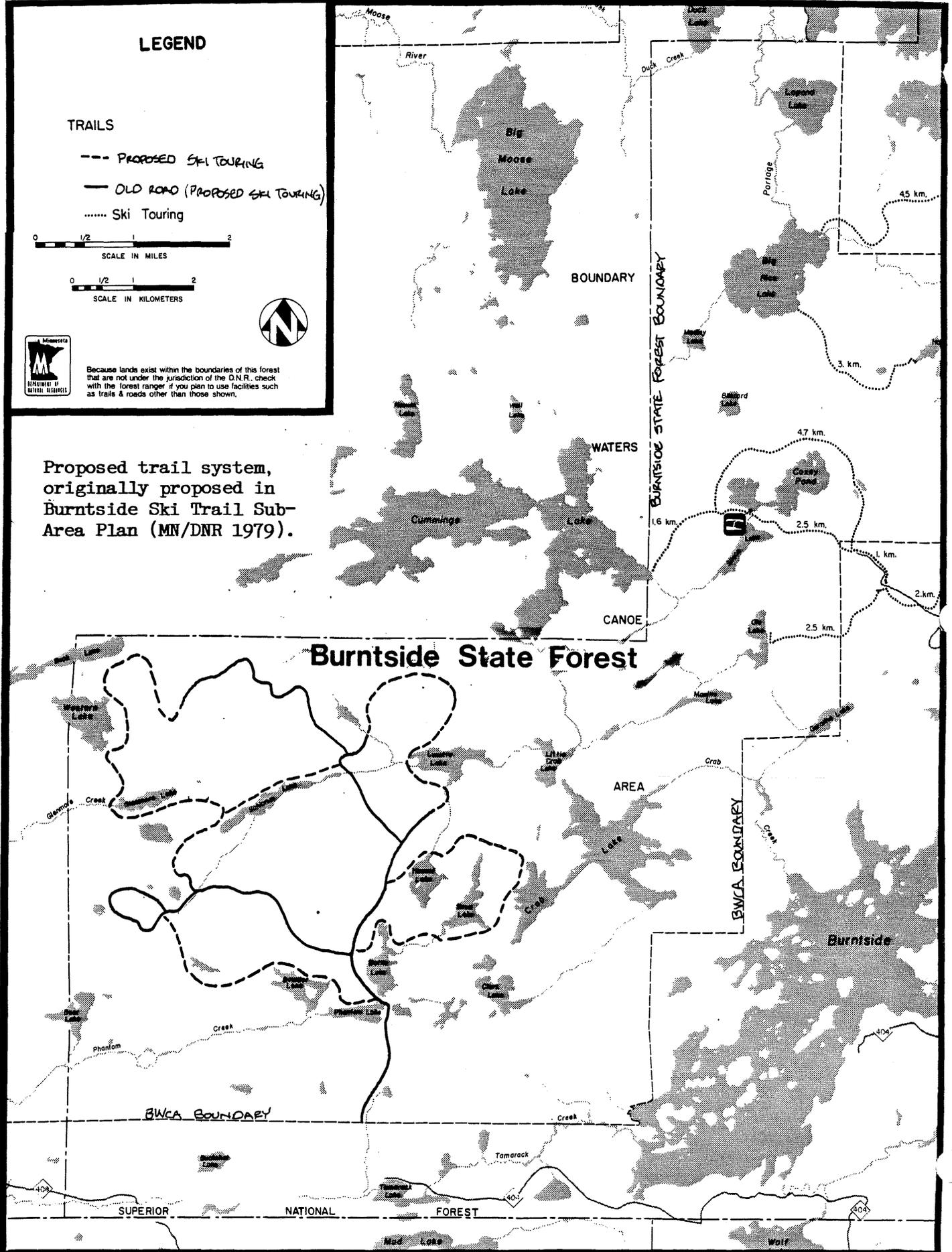
TRAILS

- PROPOSED SKI TOURING
- OLD ROAD (PROPOSED SKI TOURING)
- Ski Touring



Because lands exist within the boundaries of this forest that are not under the jurisdiction of the DNR, check with the forest ranger if you plan to use facilities such as trails & roads other than those shown.

Proposed trail system,
originally proposed in
Burntside Ski Trail Sub-
Area Plan (MN/DNR 1979).



TRAILS POLICIES

The Department of Natural Resources has developed policies for State, Unit, and Grants-in-Aid trails (DNR Policies 10, 11 and 12). Division of Forestry Circular Letter 3501 sets forth guidelines concerning timber cutting and extractive operations adjacent to recreational trails on state land. Operational Order # 85 governs Recreational Motor Vehicle Use on DNR Administered Lands.

Division of Forestry administered lands are generally open for use by recreational motor vehicles. Recreational motor vehicles are generally prohibited in State Parks, State Trails, Non-ATV Grant-in-Aid Trails, Scientific and Natural Areas, Wilderness Areas, State Forest Campgrounds and Day Use Areas, State Wildlife Management Areas, State Water Access Sites, State Historic Sites, and State Rest Areas. Exceptions to these general guidelines must be posted or established in management plans that include opportunity for the public to comment on the exceptions. (Note: Snowmobiles are not considered recreational motor vehicles.) Areas normally open to recreational motor vehicle use can be closed on a temporary or permanent basis when such use is causing or is likely to cause: 1) significant damage to state property; 2) conflict with other recreational users, adjacent landowners or communities, or resource management activities; 3) damage to environmentally sensitive areas; or 4) unsafe operation conditions or levels of use.

The following Division of Forestry administered areas and trails in the Orr Area are closed to recreational motor vehicle use:

- All State Forest Campgrounds and Day Use Areas
- Ash River Hiking and Ski Trail
- Pin Cherry Ski Trail
- All Division administered snowmobile trails from December 1 to the following April 1
- All State land in the BWCAW.

Four wheel drive motor vehicle use will be restricted to roads because of the potential for environmental damage.

MAINTENANCE

On going maintenance of recreational facilities is necessary if quality is to be maintained. Each individual facility differs as to its maintenance requirements. For example, pickup of garbage at campgrounds is a routine maintenance procedure which must occur frequently to insure user health and aesthetics. Other maintenance such as the grading of roads or the repair of trails occurs less frequently. The money and personnel necessary to carry out the maintenance

of forest recreation facilities has been, for the most part, inadequate for the task. Proper levels of funding for maintenance of recreational facilities is a cost-effective means of preventing deterioration and maintaining quality facilities.

Based on statewide averages, the estimated dollar needs for maintaining the Orr Area's existing campgrounds, day use areas and other dispersed facilities is approximately \$80,000 per year. When new facilities are developed or when use increases, maintenance costs will increase proportionally. Over a ten year period maintenance costs are expected to rise from \$80,000 to \$120,000 per year (on a constant dollar basis).

Trail maintenance budgets are based on a per mile maintenance cost. For example, the estimated annual cost for the maintenance of one mile of snowmobile trail is approximately \$125. This includes brushing, grooming, bridge and treadway repair. If summer use occurs on the same stretch of trail additional funds are necessary to maintain the trail. Cost estimates for adequate maintenance of the existing Orr Area trail system is approximately \$10,000 per year. When new miles are added to the trail system, when trails serve both winter and summer use, or when use increases in general, increased maintenance budgets are necessary. Trail maintenance needs are projected to increase from \$10,000 to \$15,000 per year in the next 10 years (on a constant dollar basis).

ENFORCEMENT

An effective enforcement program is necessary to provide adequate protection to forest visitors, natural resources, and public and private property. The objective of any enforcement program is to gain compliance with that which is considered to be an acceptable standard of conduct and behavior. State laws, forest campground and day use area rules, and other rules and regulations promulgated by the Department of Natural Resources establish bounds of acceptable behavior and provide a legal framework for enforcement action. These measures do not go far enough in some instances, however. Additional rules are necessary to adequately manage dispersed recreation activities which occur outside of specifically designated recreational areas. Current laws and rules pertaining to trails lack clarity, which causes interpretation and thus enforcement problems. It is the responsibility of the DNR, Division of Forestry to promulgate rules for the lands it administers. New rules pertaining to dispersed recreation, and more concise trail rules, must be promulgated if recreation on state forest lands is to be managed effectively.

Appropriate laws, rules, and regulations are only a first step to adequate enforcement. Enforcement personnel must also visit recreation sites frequently during high use periods. Enforcement of laws and rules on DNR administered lands is the primarily the responsibility of DNR Conservation Officers. Other enforcement personnel such as county sheriffs also have enforcement authority. In some cases DNR Forestry personnel, when delegated authority by the Commissioner, can enforce Minnesota Rules for State Forest Campgrounds and Day Use Areas.

Most of the time this level of enforcement is adequate. The responsibility for dealing with extraordinary problems rests with the Division of Forestry and law enforcement officials. To insure better cooperation, forestry personnel should meet annually, or immediately as the need arises, with local Conservation Officers and Sheriffs to discuss and implement enforcement procedures.

Public education, posting of rules, and regular campground patrols make enforcement easier. Copies of applicable rules should be available at all recreation sites.

ORR AREA FOREST RESOURCE MANAGEMENT PLAN

APPENDIX B. TIMBER MANAGEMENT PLAN

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INTRODUCTION

This appendix contains the timber management plan for the Orr Area for fiscal years 1987 - 1996. It was developed by members of the interdisciplinary planning team using Phase II forest inventory information and the computer based Timber Management Planning Information System (TMPIS). This plan indicates the timber management activities that could or should be done if there were no constraints on budget and staff and if all timber recommended for harvest could be sold. It is also based on the assumptions that the mix of products (i.e. pulpwood, sawtimber) to be provided and silvicultural techniques used will remain relatively constant.

The Phase II inventory information used in developing this plan was current as of January 1985. The data was edited and sorted by Resource Management Unit (RMU). Summary tables were prepared for each RMU to characterize the timber resource. An initial meeting was held to discuss market conditions, insect and disease problems, wildlife concerns, and soils limitations that would affect timber management in the Orr Area. General cover type management guidelines and future cover type composition goals were also discussed. Based on the inventory information and discussions, the Area Silviculturist and District Foresters developed rotation ages and TMPIS selection criteria for each cover type in each RMU.

District foresters and area wildlife personnel ran the TMPIS for each RMU. They used inventory information, their knowledge of access and market conditions, management guidelines, and wildlife habitat compartment analyses (where available) to determine which stands selected by TMPIS should be listed for various management practices. If stands selected for harvest were larger than the recommended maximum acreage for clearcuts, or if it was important to maintain a portion of a stand for wildlife, aesthetics, or other reasons the entire stand was listed for treatment but a tally of the acreage to be reserved from treatment was maintained. Additional stands (beyond the allowable cut) were listed for treatment to replace the reserved acreage. Portions of stands were reserved only if it was likely that the reserved timber would survive until the next management period and that it would be economical to manage the deferred acreage. Stands listed for various management activities were color coded on Phase II township inventory maps to provide a spatial illustration of areas to receive timber management treatments.

AREAWIDE SUMMARY

GENERAL TIMBER MANAGEMENT GUIDELINES

The Division of Forestry administers over 250,000 acres of commercial forest land in the Orr Area. State statutes require that the timber on these lands be managed in accordance with multiple use, sustained yield policies. The Division is also required to reforest harvested lands and other deforested or poorly stocked lands.

Within these statutory guidelines, the Division's timber management activities will create and maintain diverse and productive forests to meet anticipated resource demands.

The Division has adopted or developed the following documents which provide general guidelines for the management of state timber:

Manager's Handbooks for various timber types published by the North Central Forest Experiment Station (1977).

Timber Sales Manual (MN DNR - Forestry, 1982).

Forestry - Wildlife Guidelines to Habitat Management (MN DNR, 1985).

In the Orr Area the following specific guidelines will apply in addition to, or in place of the general guidelines referenced above.

Appraisal and Marketing Guidelines

Recognize the fact that fuelwood is abundant and price accordingly.

Stumpage prices will not be reduced beyond the level authorized in the price guide factors unless approved by the Area Forest Supervisor.

In locations where it has been difficult to market aspen, balsam poplar, or balsam fir, require these species to be felled if consistent with the regeneration plan but only require payment if these species are utilized.

Where necessary, to make state timber sales more accessible, and thereby encourage bids, lend culverts to be used on roads, clear right of ways, or construct roads.

Contact owners of adjacent land to obtain access permission prior to selling timber.

Use U&M assistance, creative advertising, and personal contacts with loggers to promote timber sales.

Coordinate state timber sales with nearby sales of other agencies or forest industries.

Sale Regulations and Utilization Standards

On sites to be regenerated by sprouting, require all stems over two inches DBH to be felled. Snags or other desirable wildlife trees should be reserved in accordance with the Forestry - Wildlife Guideline to Habitat Management (MN DNR, 1985).

On sites planned for artificial regeneration, all stems should be felled during harvest or site preparation. Individual trees left standing on the site complicate reforestation, may promote certain diseases, and present safety hazards during aerial operations. Therefore, snags on sites likely to need aerial release should not exceed 30 feet in height. Exceptions are along edges, within wetland buffer strips, in clumps, or other areas excluded from spraying where tree height will not be a safety factor. Snags in plantations should be hardwoods, not conifers.

Only in extreme cases authorized by the Area Forest Supervisor will just bolts be sold from a stand.

Conduct aerial inspections to identify areas in need of salvage at least annually. Lower stumpage prices to encourage sales of salvage timber.

Encourage tree length hauling under consumer scale to improve utilization. If consumer scale cannot be used, piece count, scaling specialist scales, or sold on appraised volume sales may increase utilization.

Sell fuelwood on appraised volume to increase utilization.

Offer high quality and summer access sales in the same proportion as they exist in the unit to avoid selling only the best stands.

Authorize short term extensions for sales if harvesting in the last few months of the regular sale period would have resulted in site damage.

Small portable band saw operations increase utilization but also complicate sale administration. These sawmills may be permitted to operate on timber sales as outlined in the "Proposed Interim Guidelines for Sawmill Operations on State Permits" (Memo from Lewis Lohn dated 1-23-85, file #3460).

Sale Administration Guidelines

Each active timber sale should be inspected at least once a week to ensure compliance with sale regulations.

When the timber sales workload exceeds 20 informal sales or five auction sales per Forest Officer the District should request help through the Area to ensure adequate sale administration.

Regeneration Guidelines

To ensure the success of regeneration efforts and to maintain well stocked stands the following guidelines will be followed:

- Planting areas will be field sampled for survival and competition at one and three years after planting and will be visually inspected at age five and ten.
- Upland seeding areas will field sampled two and five years after seeding and will be visually inspected at ten years.
- Lowland seeding areas will inspected three and ten years after seeding.
- Natural regeneration areas will be field checked three years after harvest.

A record of planting, seeding, and natural regeneration areas will be kept at the Area. A list of areas needing field checks will be sent to the Districts annually by April 1.

The establishment period will be three years for plantations, lowland seeding areas, and natural regeneration areas and two years for upland seeding areas. Inventory alterations will be submitted at the end of the establishment period.

Encourage the development of blister rust resistant white pine stock.

Coordinate stock size requirements with the nursery to avoid planting extra large stock on unsuitable ground.

Reduce annual fluctuations in the reforestation program due to large sales by requiring complete harvest of one cutting block before entry into another.

When possible reduce stand establishment costs by requiring felling of residual stems and full tree skidding. With proper sale design and communication this should result in little or no increased cost to the logger.

Bare root nursery stock should be available to meet normal regeneration needs. Unavoidable excess needs can be met in a short time by using container stock.

Table B.1 lists the stand density standards to be used in determining regeneration success in the Orr Area.

Table B.1 Orr Area Stand Density Standards by Species and Method of Regeneration (a)

Species/Method	Initial Density	Acceptable at 3 years	Density for interplanting	Density for replanting
JP, BSU/Plant	1000	600	200-600	0-200
BSL, Tam, Ced/Plant	1000	600	200-600	0-200
R&WP, WS, Larch/Plant	800	500	160-500	0-160
Seed & Hot Caps	1000	600	200-600	0-200
BS/Nat. or Seeded	2 oz. (d)	600	200-600	0-200
JP/Nat. or Seeded	3 oz. (d)	500 (b, f)	200-500	0-200
R&WP, WS/Nat or Seed	(e)	500 (b, f)	160-500	0-160
Aspen, Balsam Pop/Sprout		3300 (c)	(consider conversion if not acceptable at 3 years)	
Birch/Seeded		3000		
Birch/Sprout		1000	"	"
Other Hdwds./Seeded		5000	"	"
Other Hdwds./Sprout		1000	"	"

Notes: (a) Density in stems per acre. Stems should be well distributed on area, free to grow or likely to grow with release. Viable and compatible volunteer reproduction should be included in density counts.

(b) Survival checks on upland seeded sites should be conducted at two years to prevent loss to competition due to lead time needed to schedule herbicide release.

(c) Acceptable density varies with site index and mortality rate. See Managers Handbook for Aspen. Value shown assumes 10% mortality and site index 55 or greater.

(d) Use calibrated seeder and carrier with seed. Monitor aerial operation to ensure full coverage. Increase seeding rate if site preparation is spotty.

(e) Broadcast seeding not successful.

(f) Stand density at age 2. Can expect approximately 10% more seedlings at age 3 for JP and WS.

Coordination

Hold annual meetings with other timber management agencies and forest industry representatives to discuss immediate and projected timber needs, special projects of interest, and areas of possible cooperation.

Hold annual meetings with personnel from other DNR divisions to review work plans, special projects, and research results.

Coordinate road construction and other projects with industry and other agencies.

Contact private landowners when timber management activities on adjacent state land will affect them. The PFM Specialist should be involved if it is likely that the landowners will consider management activities on their land.

There should be frequent, informal meetings between District personnel and Wildlife managers to discuss current and proposed harvest plans, regeneration plans, and wildlife projects.

A wildlife management specialist should be assigned to the Orr Area. This would simplify problems resulting from overlapping administrative boundaries, paper flow, and lack of day to day communication between disciplines.

MANAGEMENT GUIDELINES BY COVER TYPE

Ash

Recommended Rotation Age and Product by Site Index

Site Index	Rotation Age	Product	Percent of Type
<60	90	Fuelwood	99
61-70	90	Pulp/Bolts	1
71+	90	Sawlogs	<1

Silviculture

Conversion of lower site stands is difficult and probably should not be attempted. This type is often found in narrow bands along streams and can be easily maintained to meet wildlife and diversity goals without significant loss of fiber production. Quality is generally too low for logs. Fuelwood will be the main product from stands with site index below 40.

The easiest method of silviculture is clear cutting with natural regeneration by stump sprouts. Care must be taken to avoid raising the water table. If the stand structure permits, all-age management may work the best. The need for stump culture on better sites should be investigated. A considerable portion of this type will be managed on an all-aged basis because of Shipstead-Newton-Nolan setbacks and to provide habitat for wildlife requiring mature forest.

Some existing ash acreage may be lost to other types, but this should be more than offset by natural conversion of lowland hardwood type to ash as a result of Dutch elm disease.

Lowland Hardwoods

Recommended Rotation Age and Product by Site Index

Site Index	Rotation Age	Product	Percent of Type
< 60	90	Fuelwood	92
61-70	90	Pulp/Bolts	6
71+	90	Sawlogs	2

Silviculture

All elm stands should be considered for conversion to avoid additional loss to Dutch elm disease. Resistant individual elms should be noted and reserved. Harvest any live elm at any marketable age. A fair amount of this type will be managed on an all-aged basis because of Shipstead-Newton-Nolan setbacks and to meet old growth and wildlife habitat diversity goals. The acreage of lowland hardwoods will decrease because of disease problems. There will be a resultant increase in ash, low quality aspen, balm of Gilead, birch, or cedar types.

Insect and Disease Guidelines - The greatest timber losses in lowland hardwood forests are the result of disease organisms which deform, decay, or discolor standing timber. The two main causes of loss are canker diseases and wood decay in the form of heart, top, or butt rot. A discussion of these problems and general control guidelines can be found in the northern hardwood guidelines.

Dutch elm disease, Ceratocystis ulmi, is one of the few diseases which causes widespread mortality in lowland hardwoods. This disease has essentially eliminated native elms as a viable management option. Elm regeneration should be discriminated against in all management practices.

Aspen

Recommended Rotation Age and Product by Site Index

Site Index	Rotation Age	Product	Percent of Type
<60	40	Pulpwood/Fuel	22
61-70	50	Pulpwood	35
71+	60	Pulpwood/Bolts	43

Silviculture

The longer rotation ages recommended above reflect an attempt to obtain higher quality products and to spread the harvest of older stands over a longer period to solve the forth coming age class

imbalance problem. After the imbalance problem has passed, or if insect or disease problems become prevalent a shorter rotation can be used. There is such a preponderance of older stands that rotation age won't be a factor in this ten year period.

Current research indicates that aspen stands with site index less than 60 be considered for conversion. Up to 58% of the aspen in some RMU's has site indices less than 60. To avoid excessive conversion and to maintain the aspen type the standard above which conversion will not be done was set as low as SI 50 in some RMU's.

A fairly large scale aspen recycling program can be used to insure adequate future stocks of aspen. Another possible approach to avoid future shortages of harvestable aspen would be to plant fast growing hybrid aspen cuttings. As this is still in the development stage and the hybrids currently available have strict site requirements, it is unlikely that hybrid aspen will be planted in this ten year period.

Proper harvest is necessary to obtain adequate natural regeneration. This means clear cutting all stems over two inches in DBH (except reserved snags, etc.), preferably in the winter. As demand for summer harvest is increasing, it is important to match the soil type and harvest period. Stands on low, wet, or clay soils should be harvested in the winter. Summer harvesting of stands on upland soils should also be avoided during periods of high soil moisture, such as after heavy rains. This will require understanding and close cooperation of all parties - the DNR, loggers, and industry. This is a serious problem that requires additional research and equipment development work. Shifting demand to landowners or agencies with less stringent harvest controls will not resolve the problem of compaction and reduced regeneration.

Large toothed aspen should be promoted on the better sites as it is more disease resistant and longer lived than quaking aspen. However large toothed aspen should be discriminated against on poorer sites.

The aspen type acreage will probably decrease slightly due to conversion of low site stands. It will still be the predominant type in the Orr Area.

Insect and Disease Guidelines - Two defoliators and wood boring beetles are the major insect pests of aspen. The Forest Tent Caterpillar, Malacosoma disstria, and the large aspen tortrix, Choristoneura conflictana, occasionally defoliate areas of several thousand square miles. Severe defoliation reduces growth but rarely causes mortality unless coupled with other stress. Wood boring beetles of the genus Saperda cause increased wind breakage and lumber and veneer degrade. As much as 64% of all mature aspen may be attacked. Larval tunnels serve as infection points for canker causing and wood rotting fungi.

The major diseases of aspen are Hypoxylon mammatum and white rot, Phellinus igniarius. Hypoxylon causes annual losses which approach the net annual aspen growth. White rot decay can reduce gross merchantable yields by up to 10 percent with 50 percent of the trees infected.

Management recommendations are as follows:

1. Check all aspen stands routinely for insects and disease.
2. Rotation: As stand age increases, volume losses due to insects and disease increase.
 - a. If 15 to 25 percent of the trees are infected with Hypoxylon, harvest the stand early and treat the site to encourage good aspen reproduction.
 - b. If more than 25 percent of the trees are Hypoxylon infected, harvest immediately and convert to other species.
 - c. Lightly infected stands can be managed on rotations longer than 40 years.
 - d. If surveys indicate heavy white rot infection over 30 percent of basal area/acre of trees (with rot) a pathological rotation of 35-40 years is required to minimize losses.
 - e. To estimate the total amount of white rot in an aspen stand, first determine the basal area of trunks with visible conks and then add 90 percent of this area to account for hidden decay.
 - f. In stands that have sustained 2 to 3 years of successive defoliation, rotation age can be adjusted with years added if maximum fiber production is desired in the absence of severe Hypoxylon or white rot infection.
3. Stocking: If 30 to 40 thousand new stems per acre are produced after cutting or burning and densely stocked, uniform stands of pure aspen are maintained throughout the rotation, insect and disease losses will be reduced.
 - a. Conduct harvesting operations during the winter to regenerate dense stands.
 - b. Remove all residual species to regenerate pure and dense stands of sprouts.
4. Site index: As low site index aspen (<50) is more susceptible to insect and disease loss than high site aspen (>70), good sites for aspen production should be favored.
5. Species and Clonal Varieties: The extent of losses due to insects and diseases varies within aspen species and between clones.
 - a. Since bigtooth aspen is five times as resistant to Hypoxylon as quaking aspen, and balsam poplar is rarely infected, these species should be promoted in heavily infected areas.

- b. Selection of superior clones for their expansion in stands should include rating of their susceptibility to white rot and Hypoxylon.

Birch

Recommended Rotation Age and Product by Site Index

Site Index	Rotation Age	Product	Percent of Type
<50	50	Fuelwood	35
51-60	60	Fuelwood	56
61-70	70	Pulpwood/Small Bolts	7
71-80	80	Bolts	2
81+	90	Sawlogs	<1

Silviculture

Stands with site index less than 50 will be evaluated for possible conversion when harvested. Higher site stands should be regenerated to birch when possible to maintain an adequate supply of birch for local industries and to provide wildlife habitat. Stump culture can be attempted in higher site stands. There are limited areas that could be converted to birch when an artificial regeneration method is perfected. The birch type will decrease in acreage. Fuelwood production should not be affected by conversion of low site stands since there will be adequate birch in other timber types to meet demand. Utilization of birch bolts from non-birch stands should be improved.

Insect and Disease Guidelines - Paper birch has experienced a general decline through much of Minnesota. The major contributing factors to this decline include lack of soil moisture, increases in soil temperatures, restricted root growth, and invasion by the bronze birch borer, Agrilus anxius.

Management recommendations to minimize birch decline are as follows:

1. Manage birch only on soils characterized by being acidic, relatively deep, moist, and moderately well drained to reduce susceptibility to decline.
2. Soil temperature increases of as little as 4°F can cause root death leading to tree mortality. Therefore, avoid regenerating birch on south and west slopes, and attempt to maintain a closed canopy in existing stands.

Silviculture

The northern hardwoods type occurs on only 376 acres of Division of Forestry administered land in the Orr Area. It is more valuable for wildlife habitat diversity than for fuelwood production. All timber management activities in this type will be planned in conjunction with Division of Fish and Wildlife personnel to benefit wildlife habitat.

Oak

Recommended Rotation Age and Product by Site Index

Site Index	Rotation Age	Product	Percent of Type
41-50	50	Fuelwood	100

Silviculture

This type covers only 17 acres of Division of Forestry administered land in the Orr Area. This type will be managed primarily for wildlife habitat rather than timber production. All timber management activities will be planned in conjunction with Division of Fish and Wildlife personnel.

White Pine

Recommended Rotation Age and Product by Site Index

Site Index	Rotation Age	Product	Percent of Type
<50	90	Pulpwood/Bolts	77
51-60	100	Sawlogs	22
61-70	120	Sawlogs	<1
71+	140	Sawlogs	<1

Silviculture

Management of this type is severely limited by white pine blister rust. It would be desirable to increase the acreage of this type to better utilize some sites but this will not be possible until blister rust resistant stock becomes available. Existing underplantings of white pine should be monitored. If they are successful, underplanting could be resumed. Conversion decisions should be based on the presence of blister rust. Stands under site index 40 can be converted at harvest to a more suitable species.

Insect and Disease Guidelines - White Pine Blister Rust, Cronartium ribicola, and White Pine Weevil, Pissodes strobi, are the major insect and disease problems of white pine. These problems have restricted new plantings and greatly reduced the existing commercial range of the species. Introduced Pine Sawfly, Diprion similis, may at times be responsible for local severe defoliation with some top kill occurring.

Recommendations for establishment of white pine in the high and medium Blister Rust hazard zones of northern Minnesota are as follows:

1. Establishment must be attempted only in understory situations where it is possible to control the overstory through gradual removals. This will change understory humidity and temperature conditions so that Blister Rust spore infections will be reduced. It will also make weevil attack less likely or severe. Spacing in openings (space between crowns) should not exceed one-fourth the height of the surrounding trees. Once a stand is established, thinning must be carried out in a manner which allows maximum height growth to be maintained.
2. Plan to prune lower branches to 50 percent of live crown at age 5-7 and continuing every two years until there are no branches within 9 feet of ground level.
3. Manage for white pine only in medium and high site index areas: site index 60 to 80.
4. Final release should be carried out when trees reach 35 feet.
5. Consider use of resistant stock when it becomes available.
6. For further recommendations, contact Forest Insect and Disease Specialists.

In all cases, future plans for tending an intensively managed stand should be laid out prior to initiation of management and clearly adhered to.

The second generation of the Introduced Pine Sawfly can usually be controlled by the application of insecticide should it become a problem. In this case, contact the Regional Forest Insect and Disease Specialist.

Norway (Red) Pine

Recommended Rotation Age and Product by Site Index

Site Index	Rotation Age	Product	Percent of Type
<50	90	Pulpwood/Bolts	45
51-60	100	Sawlogs/Cabin Log/Pole	42
61-70	120	Log/Cabin Log/Piling/Pole	12
71+	140	Log/Cabin Log/Piling/Pole	<1

Silviculture

Stands with site index under 40 can be considered for conversion at harvest. This type will increase in acreage in the future and precommercial and commercial thinnings will be necessary. Norway pine is a valuable timber type that has relatively few insect and disease problems. However it is not as valuable as hardwoods or other conifers in terms of providing deer habitat. It is important to work closely with wildlife personnel to develop diverse forests that meet both timber and wildlife objectives.

Insect and Disease Guidelines - The major insect pests of red pine are Saratoga spittlebug, Aphrophora saratogensis and several species of bark beetles. The Saratoga spittlebug causes branch and seedling mortality in overstocked, drought stressed, wind thrown, burned or poorly harvested plantations. See Forest Insect and Disease Leaflet 3 and How to Identify and Control Pine Engraver Beetle Damage.

Red pine has two major diseases, Scleroderris canker, Gremmeniella abietina, and Armillaria root rot, Armillariella mellea. Two strains of the fungus causing Scleroderris canker occur in North America. The North American strain is present in northeastern Minnesota where it kills branches of larger trees and can cause mortality to trees under six feet tall. The European strain is presently found only in the northeastern states and Canada where it has caused extensive mortality to a limited number of stands of red and Scots pine of all ages. Armillaria root rot can be an important mortality factor in young stands on former hardwood sites. See Forest Insect and Disease Leaflet 130 and the Root Rot Pest Alert.

Management recommendations are as follows:

1. Remove all overstory pine from a site scheduled for red pine plantings as they are potential insect and disease carriers.
2. New plantings should not be established adjacent to older pine plantations with existing insect or disease outbreaks without treatment of those problems.

3. Planting site preparation should include:
 - a. removal of pine slash to reduce bark beetle brood material.
 - b. weed control to eliminate or reduce the abundance of alternate hosts of Saratoga spittlebug.
 - c. breakup of old hardwood stumps where possible to reduce Armillaria buildup.
4. To reduce the potential for Scleroderris occurrence and spread:
 - a. do not plant red pine in frost pockets.
 - b. do not plant red pine within one half mile of an existing Scleroderris infection.
 - c. do not replant old infection sites to red pine.
5. Large stands of red pine are conducive to severe insect and disease outbreaks, plans to plant areas greater than 40 to 60 acres should include the potential use of alternate species (not pines) in strips of two chains or more to split up the red pine blocks.
6. To reduce bark beetle and wood borer damage:
 - a. avoid cutting operations between April 1 and September 1.
 - b. when logging or thinning is done between these dates, remove all material larger than two inches in diameter within three weeks after cutting.
 - c. try not to wound trees during harvest.
 - d. leave branches with the green needles on to aid in rapid drying of unmerchantable stem wood and expose this slash to full sunlight.
 - e. trees stagnating due to wet soil, nutrient deficiencies, drought, defoliation or disease, and pockets of blowdown should be harvested as soon as possible.

Jack Pine

Recommended Rotation Age and Product by Site Index

Site Index	Rotation Age	Product	Percent of Type
<40	45	Pulpwood	3
41-50	50	Pulpwood	34
51-60	55	Pulpwood/Bolts	49
61-70	60	Pulpwood/Bolts/Poles	13
71+	70	Pulpwood/Logs/Poles	1

Silviculture

Jack pine is usually the best species on rocky, thin upland soils. Low site index stands on these soils should not be

considered for conversion. Low site index stands on low, wet soils can be converted to other species. Higher site index stands on upland soils are often better suited to other species, either because of ease of natural regeneration in stands with a significant aspen component or because of higher potential fiber production through conversion to red pine.

Jack pine regeneration is best accomplished by clear cutting, full tree skidding, scarifying, and seeding. Competition can be controlled by using herbicides for site preparation or release in the third growing season. Consider limiting planting to paper pot containerized seedlings to solve problems caused by thin soils and the short time frame for planting bare root seedlings.

Conversions from and to the jack pine type will probably result in a slight net increase in jack pine acreage over the next ten years.

Insect and Disease Guidelines - The major insects attacking jack pine are the jack pine budworm, Choristoneura pinus, the pine tussock moth, Dasychira pinicola, white pine weevil, Pissodes strobi, and bark beetles, Ips spp. Insect damage includes deformed stems from weevil attacks, top-kill from budworm defoliation, or tree mortality resulting from bark beetle attacks or heavy defoliation by budworm and tussock moth.

The major diseases of jack pine include heart rots, particularly Phellinus pini; Armillaria root rot, Armillariella mellea. Armillaria root rot and the North American strain of Scleroderris canker are primarily confined to young trees. The European strain of Scleroderris, not present in Minnesota, has the potential of causing widespread mortality in all ages of jack pine. P. pini causes about 90 percent of the heart rot in all ages of jack pine, and this decay becomes more prevalent as the trees get older.

Control strategies for the white pine weevil can be found under the white pine type guidelines. A discussion of bark beetles, Armillaria root rot, can be found under the red pine guidelines.

Control strategies for the budworm and the tussock moth are as follows:

1. Use direct control strategies for budworm and tussock moth control in stands which are not salvageable or stands in which populations have built up high enough to cause damage. Consult the Regional Pest Specialist for specific control recommendations.

2. Large-crowned, open grown trees (wolf trees) and trees in the suppressed and intermediate crown classes contribute to a budworm buildup due to the high production of staminate cones. Therefore, maintain an optimumly stocked stand, between 70 and 100 square feet of basal area to reduce the numbers of wolf trees and suppressed trees.
3. Stands with a site index of at least 55 should be favored in order to maintain vigorously growing stands of jack pine.
4. On good sites, 60+, and where economically feasible, thin jack pine from below to reduce the proportion of suppressed and intermediate trees. Thin to 80 square feet of basal area, and thinning should be done as soon as a commercial sale is possible.
5. Where economically feasible, cut out the wolf trees in the stand.
6. Do not store mature jack pine on the stump. Rotation ages, based on budworm considerations, should be between 45 and 50 years. On only the very best sites, 70+, should jack pine be held longer than 50 years. The poorer the site, the earlier the harvest should be.
7. Break up large, extensive stands of jack pine with 2 to 5 chain wide buffer strips, hardwood stands, white spruce, or larch plantings. These will help to disrupt the dispersal of the budworm. Even-aged stands of jack pine should not exceed 20 to 40 acres. Do not break up the jack pine stands with other species of pine. During a budworm outbreak, other species of pine will be damaged by budworm feeding and may even aid in carrying over a budworm population during the low point of its population cycle.

Heart rot control strategies are as follows:

1. The major entry points for heart rotting fungi include mechanical wounds in the bole, rust cankers, dead branches or dead and broken tops. Therefore, when intermediate cultural activities take place in jack pine stands, care should be taken to avoid wounding the residual trees.
2. Priority for harvesting should be based on stand condition and stand age as follows:
 - a. Stands with bole wounds or with broken and damaged tops possibly from adverse weather conditions should be given a high priority for harvesting, and
 - b. Stands at or beyond the recommended rotation age should have a high priority for harvesting.

White Spruce

Recommended Rotation Age and Product by Site Index

Site Index	Rotation Age	Product	Percent of Type
<40	50	Pulpwood	4
41-50	60	Pulpwood	22
51-60	70	Pulpwood/Bolts	33
61-70	80	Pulpwood/Bolts	35
71+	90	Sawlogs	7

Silviculture

The longer rotation ages recommended above reflect a decision to encourage sawlog production in the future. At present there is not a great enough price differential between pulp and logs to justify sorting bolts or logs from pulp by loggers. There is a real possibility of recovering a more valuable product from this forest type. If the price differential does not increase in the future, rotation ages can be lowered to produce strictly pulpwood. There will also be a need for precommercial and commercial thinnings in the white spruce type in the future.

Conversion possibilities should be considered when stands with site index less than 40 are harvested. This type should increase greatly in acreage due to conversion of aspen and balsam fir stands.

Insect and Disease Guidelines - The major insect and disease problems on white spruce are yellowheaded spruce sawfly, Pikonema alaskensis, spruce budworm, Choristoneura fumiferana, white pine weevil, Pissodes strobi, and armillaria root rot, Armillariella mellea. Armillaria root rot (see red pine) can be an important killing agent especially when hardwood sites are converted to white spruce. White pine weevil (see white pine) kills the leader and causes forked or crooked stems. It is primarily a problem when white spruce is grown close to or with white pine. Spruce budworm outbreak can cause heavy mortality to white spruce growing within extensive acreages of the spruce-fir type. High levels of yellowheaded spruce sawfly are very destructive to spruce. The sawfly prefers open grown trees in grassy areas and seldom builds up to damaging levels on shaded trees. Completely defoliated trees may die by midsummer. Trees suffering 3 or 4 consecutive years of moderate to heavy defoliation will also be killed. Top kill may result from heavy defoliation.

Management recommendations for the yellowheaded spruce sawfly are as follows:

1. Do not completely release white spruce plantations until the spruce are 10-12 feet in height. Twelve foot tall trees generally have enough foliage to withstand attack by high

populations of the sawfly. White spruce is fairly tolerant and puts on good growth even when partially shaded. The sawfly prefers open-grown trees and seldom builds up to damaging levels on shaded trees.

2. Inspect open growing plantations with trees less than 10-12 feet tall in early June for sawfly larvae. If sawfly larval populations are high, especially if defoliation occurred last year and tree mortality or top kill are likely, direct control should be taken. Consult with the Region Insect and Disease Specialist when deciding if direct control is necessary. Sawfly damage generally occurs in pockets in plantations. In that case, only the pockets of heavy damage should be sprayed rather than the entire plantation. If no tree mortality is likely to occur, the trees should not be sprayed to give the parasites and predators a chance to build up.

Balsam Fir

Recommended Rotation Age and Product by Site Index

Site Index	Rotation Age	Product	Percent of Type
<40	40	Pulpwood	14
41-50	40	Pulpwood	34
51-60	50	Pulpwood	40
61-70	50	Pulpwood/Bolts	11
71+	60	Sawlogs	1

Silviculture

Balsam fir is subject to severe insect, disease, and wind throw problems. Markets for balsam fir are poor and sporadic. For these reasons the balsam fir type will be converted to other species when possible. There are no plans to artificially reforest balsam fir. Natural or advance reproduction will generally result in a balsam component in other forest types.

Insect and Disease Guidelines - The spruce budworm and various decays commonly attack, injure and kill all age classes of spruce-fir types. The spruce budworm, Choristoneura fumiferana, is the most destructive insect in Minnesota forests, causing the greatest volume loss. The budworm prefers balsam fir but can also be a problem on white spruce. Decays also cause a large volume loss. Root and butt rots cause by Armillariella mellea and/or Inonitus tomentosus are present in most stands of spruce-fir older than 30 years. Stereum sanguinolentum, a heart rot, enters the trees through broken tops, branches, and other injuries and causes the majority of the rot found in living fir trees.

Specific management recommendations are listed below:

1. Manage the spruce-fir on a rotation of approximately 40-45 years, since mature and overmature trees suffer the most severe damage.
2. Prevent stands from reaching maturity simultaneously over large areas by improving the distribution of age classes through planned cuttings.
3. Harvest spruce-fir by clearcutting. Fell all white spruce and balsam fir when harvesting stands where the next crop will be provided by balsam fir advanced regeneration. The residual trees may act as sources of budworm infestation to the regeneration.
4. Avoid regenerating spruce-fir on coarse, acidic, or shallow soils as these sites favor the development of root and butt rots. Root and butt rots increase tree mortality when these stands are defoliated by spruce budworm.
5. Maintain or promote mixed species composition by encouraging white spruce and hardwoods and discouraging balsam fir to decrease the component of fir in the stands. Highest risk stands are pure balsam fir. White spruce suffers much less damage from budworm.
6. Break up susceptible spruce-fir types into small areas separated by other species.

If the budworm population becomes epidemic, the following steps should be taken:

1. Identify mature, overmature, and high volume stands; accelerate cutting on such stands.
2. Plan to salvage spruce-fir stands expected to suffer heavy losses.
3. Aerial spraying may be necessary to prevent heavy losses in valuable stands. Chemical control is aimed at foliage protection to keep trees alive rather than budworm control. A second buildup of budworm usually occurs after spraying and may actually prolong the duration of budworm outbreaks.

Lowland Black Spruce

Recommended Rotation Age and Product by Site Index

Site Index	Rotation Age	Product	Percent of Type
<23	120+	Xmas Trees	1
24-40	110	Pulpwood/Rails	89
41-50	100	Pulpwood	10
51-60	80	Pulpwood/Bolts	<1

Silviculture

In most cases harvested stands of black spruce will be regenerated to spruce. Conversion can be considered when dwarf mistletoe problems are present. Tamarack can be used as a buffer between mistletoe infection sources and new reproduction or as a replacement for spruce where mistletoe is too prevalent. Regeneration on sites with a sphagnum seedbed is accomplished by harvest with full tree skidding followed by seeding. Sites with brush or feather moss should be prescribed burned before seeding. If too large of an area of fairly wet spruce is harvested the water table can rise enough to deteriorate the site. Wind throw is also a serious problem. Exposed, narrow strips of trees should not be left around harvest areas. Cutting on the west edge of stands should be avoided.

The acreage of this type should remain fairly constant until lowland reforestation research provides reliable methods to reclaim sites lost to lowland brush.

A considerable acreage of black spruce with low site index was placed in the Reserve class when TMPIS was run. The intent was to remove stands with extremely long rotation ages from the clear cut base to avoid over cutting. These stands will be considered for harvest on an individual basis.

Insect and Disease Guidelines - The major problems of black spruce are dwarf mistletoe, Arceuthobium pusillum, and root and butt rots. Black spruce is attacked and killed in all stages of its development by dwarf mistletoe. Root and butt rots caused by Armillariella mellea and Inonotus tomentosus are present in all stands over 30 years of age. Losses from root and butt rots may range up to 40 percent of the merchantable volume of the stand. Rots are the major contributing factor to wind damage.

Dwarf mistletoe is best controlled at the time of harvest. Specific harvest principles to consider include:

1. Kill all black spruce stems over 5 feet tall. Require this on all timber sales since it can be difficult to determine if an individual tree is infected or not. Control is achieved by killing infected trees because mistletoe survives only on living trees.

2. Adjust timber sales boundaries to include the mistletoe pockets plus a two chain buffer strip on non-infected (no witches brooms) black spruce sites. This is to remove latent infections that cannot be seen.
3. Locate landings in mistletoe pockets if possible.
4. Mistletoe control should be a factor in preparing planned cutting lists to control mistletoe pockets while they are still small.
5. Establish buffer strips between infected and uninfected stands; primarily between recent cutover sites and infected unmerchantable residuals.

Timber harvests with the 5 foot cutting rule included may not achieve adequate control of mistletoe in the following situations:

1. The stand is too heavily infected with mistletoe to get a logger to purchase the sale if the 5 foot cutting rule is included.
2. The stand to be cut is bordered by unproductive black spruce site infected with mistletoe.
3. The stand is immature but so badly infected with mistletoe it will never be merchantable and a new stand must be regenerated.

In these types of situations, other methods must be used to kill all the residual black spruce on the site, in an infected edge, or where entire immature stands must be removed. Methods which may be used are listed below:

1. If the acreage or the number of trees involved is small, a hand crew can be utilized.
2. With large projects and immature stands, it may be more economical to use a caterpillar with a KG blade to shear the standing timber.
3. A skidder can be used to shear and push over infected trees. If the site is being harvested, the most economical method would probably be to hire the logger who is harvesting the timber. A prescribed burn may have to be used in combination with this method to insure that small trees are killed and not just pushed over.
4. Prescribed burning is a proven method of eradicating dwarf mistletoe. Whenever possible, slash disposal regulations should stipulate that the slash will be lopped and evenly scattered on infected sites. Slash-free alleys with a minimum width of 16 feet should be required.

5. In immature stands on better sites where the acreages or number of trees involved is small, so the entire stands do not have to be destroyed, direct control of affected areas (killing of infected trees) may be used.

Root and butt rots become critical in upland spruce sites, on mineral soils, which range between 70 and 100 years of age, and in swamp stands, on organic soils, when stands reach 100 years of age. Once roots become established, clearcut the stand to avoid losses. Treatment of just the pocket of rot is not sufficient since many nearby trees showing no symptoms are also infected.

Root and butt rots caused by Inonotus tomentosus seem to be most prevalent under the following conditions:

1. acidic soils with pH's ranging between 4 and 5;
2. soils low in nutrients;
3. soils low in moisture holding capacity;
4. and in situations in which root depth is limited by shallow soils or a hard pan.

If an upland stand of black spruce is growing under these conditions and rot is evident, clearcut the stand and convert to pine, balsam fir or hardwoods.

Tamarack

Recommended Rotation Age and Product by Site Index

Site Index	Rotation Age	Product	Percent of Type
<30	130	Posts	17
31-40	120	Posts/Rails	42
41-50	100	Pulpwood	28
51-60	90	Pulpwood/Poles/Timbers	12
61+	80	Pulpwood/Poles/Timbers	1

Silviculture

Low site tamarack stands are not suitable for conversion. Higher site stands that are not excessively wet can be converted to black spruce. Tamarack can also be established as a buffer to prevent the spread of dwarf mistletoe or as a replacement for black spruce where dwarf mistletoe eliminates spruce as an option. If seed trees are used for regeneration all harvested timber must be skidded a considerable distance away from seed trees to avoid bark beetle infestation. Harvest of too large an area can cause the water table to rise, resulting in site deterioration.

Insect and Disease Guidelines - The most serious insect pest of tamarack is the larch sawfly. This insect was responsible for widespread defoliation resulting in growth loss and mortality in the past. An outbreak during the years 1947-1969 resulted in 300,000 acres of timber being moderately to heavily defoliated. Recent introduction and dispersal of exotic parasites have occurred. Since then losses have not been significant except in isolated circumstances.

Economic losses due to wood rotters, Phellinus pini, Phaeolus schweinitzii, and Armillariella mellea are important in off-site situations, overmature stands, and where injury has occurred. Probably the most important injuries are due to abnormal water levels, both flooding or drought.

Specific management recommendations are listed below:

1. Tamarack grows best on the same type of soils as cedar except it will grow better on more acidic soils where cedar is best on slightly alkaline soils. The management decision here is to choose between tamarack with faster growth rate and poor regeneration possibilities and black spruce with usually slower growth and more favorable regeneration.
2. Where trees have been predisposed to some damaging agent such as drought, sawfly attack, overmaturity, etc., they may be attacked by the bark beetle, Dendroctonus simplex. For specific bark beetle recommendations, see Red Pine.
3. Tamarack is one of those species for which many of the management recommendations may not be too reliable at present as much research is yet needed to determine optimum rotation age, regeneration techniques, etc.

Northern White Cedar

Recommended Rotation Age and Product by Site Index

Site Index	Rotation Age	Product	Percent of Type
<30	120	Posts	83
31-40	130	Posts/Poles/Bolts	15
41-50	110	Posts/Poles/Bolts	1
51-60	90	Poles/Logs	<1
61+	80	Logs	<1

Silviculture

The above rotation ages are being extended in the site index 30 and 40 classes to prolong the time these stands can be used as deer winter cover. The longer rotation ages are also desirable because of the current lack of knowledge about cedar

reforestation. When the regeneration problem is resolved rotation ages can be lowered. Conversion should only be considered on stands identified by wildlife as non-essential. It is sometimes necessary to convert to black spruce or tamarack because of cedar regeneration problems.

It would be desirable to increase the acreage of this type, but it will likely decrease until reliable regeneration techniques are available.

Insect and Disease Guidelines - Compared to most other species, northern white cedar is a relatively insect and disease free species. There are no insects which cause significant damage. The black carpenter ant has caused some damage by attacking the heartwood of living trees, but this is always in trees which already have been extensively attacked by wood rotters. Wood rotting fungi, Poria subacida, causing white stringy butt rot, and Polyporus spp. causing brown cubical rot, however, can be a serious problem, mainly in overmature timber.

These are butt rotters, the rot column of which seldom extends more than 16 inches into the trunk of the tree. This has resulted in a volume loss of approximately 25-30 percent in cedar managed for sawbolts. This is because much of this type has been high-graded in the past and the remaining timber is over-mature.

Specific management recommendations are listed below:

1. Northern white cedar grows best on shallow, well-drained, slightly alkaline, well-decomposed organic soil and on moist, though well-drained, slightly alkaline mineral soil. Sites other than these should be considered for management for other species much as tamarack, balsam fir and black spruce.
2. To avoid wood rotting problems, grow stands to recommended rotation ages of approximately 80 years on good sites and 90 years on medium sites. Better site stands which show indications of much rot should be cut as soon as practical considering the need for the establishment of advance regeneration. Much of the time it is very difficult to determine the presence of rot, however, possible indicators of internal rot are the presence of basal fire scars, frost cracks, wind cracks, pine knots on the lower trunk, injuries to exposed roots, and woodpecker holes.
3. To maintain vigor and to provide for advance regeneration, thin stands to 130 square feet of basal area at middle-age and to 90 square feet at 10 year intervals until rotation age.

Upland Black Spruce

Recommended Rotation Age and Product by Site Index

Site Index	Rotation Age	Product	Percent of Type
<40	70	Pulpwood	52
41-50	70	Pulpwood	44
51-60	70	Pulpwood/Bolts	4
61+	70	Pulpwood/Bolts	<1

Silviculture

The rotation age can be modified to the rotation age of the species that is managed in conjunction with the upland black spruce (usually jack pine). Sites with rocky, thin soils and southern exposures should be converted to other species to avoid loss to drought. Stands with site index below 30 should also be converted at harvest. Upland black spruce can be used to break up large areas of jack pine.

The acreage in upland black spruce will probably decrease.

Insect and Disease Guidelines - (See Lowland Black Spruce)

Cutover Area

This is a temporary cover type. Eventually all acres in this type will be reforested. The acreage classified as cut over area depends on fluctuations in harvesting, site preparation, reforestation, and aspen recycling. There will always be a substantial acreage in this type because of the time between harvesting and the three year field check that determines success of regeneration. Even though the type acreage fluctuates, and the location of the type varies it provides openings for wildlife habitat and should be considered in setting cover type composition goals.

Lowland Grass

The acreage in this type is expected to remain fairly constant. Future research may provide techniques to allow reforestation of minor amounts of this type. Regenerating black spruce types often provide lowland grass habitat on a temporary basis.

Upland Grass

Much of this type is designated wildlife openings, heliports, or areas that have been cut over. The areas that are not essential for wildlife openings should be reforested if feasible. The acreage classified as upland grass will decrease slightly in the near future and then increase as more permanent wildlife openings are established. A substantial amount of upland grass habitat is also present on site prep areas and young plantations, even though these areas will be classified as some other type.

Lowland Brush

This type consists of areas that are too wet to be commercially productive and areas that formerly supported commercial stands. Fire or timber cutting removed trees to a point where water levels increased eliminating the potential for reforestation. Research is being proposed to develop techniques to allow reclamation of sites that were once commercial forest. The acreage in this type should remain constant for about five years. At that time knowledge and techniques necessary to convert lowland brush to black spruce and tamarack should be available. First priority for reclamation will be sites over ten acres in size within one mile of a road having physiographic class 4. Sites along flood plains should not be reforested even if otherwise suitable since floods would likely destroy the stands before they mature.

Upland Brush

Upland brush stands not essential for wildlife habitat diversity should be reforested if feasible. Upland brush acreage is expected to decrease. Site prep areas and young plantations provide additional upland brush habitat even though they are classified as other cover types.

EXISTING CONDITION

Table B.2 Orr Area Timber Summary

Type	Acres	% Of Area	Avg Site Index	Avg Updated Age	% At High Risk
Ash	5806	2	42	96	2
Lowland Hardwoods	1535	0	49	85	6
Aspen	107964	34	68	46	15
Birch	13258	4	53	72	9
Balm of Gilead	6530	2	67	50	6
Northern Hwds.	221	0	47	47	0
Oak	17	0	45	14	0
White Pine	3845	1	46	91	9
Red Pine	7293	2	51	63	1
Jack Pine	13953	4	54	55	8
White Spruce	3579	1	58	33	1
Balsam Fir	11173	4	50	54	5
Black Spr. Lowland	44352	14	32	73	2
Tamarack	3846	1	39	66	2
N. White Cedar	13404	4	27	110	4
Black Spr. Upland	4387	1	41	61	4
Cutover Area	7213	2			
Lowland Grass	1319	0			
Upland Grass	690	0			
Lowland Brush	16260	5			
Upland Brush	700	0			
Unproductive Forest	29478	9			
Non Forest	17612	6			
Total	314,435	100			

COVER TYPE COMPOSITION GOALS

Based on existing cover type conditions, timber markets, wildlife concerns, land administration proposals, and economic and biologic limitations and potentials, the following composition goals have been established for the Orr Area.

Table B.3 Orr Area Cover Type Composition Goals

Cover Type	Present		Ten Year		Long Term	
	Acres	%	Acres	%	Acres	%
Ash	5806	2	5747	2	6076	2
Lowland Hardwoods	1535	0	1338	0	1228	0
Aspen	107964	34	109660	35	108790	35
Birch	13258	4	9406	3	6852	2
Balm of Gilead	6530	2	6038	2	4840	2
Northern Hardwoods	221	0	89	0	111	0
Oak	17	0	17	0	17	0
White Pine	3845	1	3022	1	2364	1
Norway Pine	7293	2	12016	4	15488	5
Jack Pine	13953	4	18366	6	19546	6
White Spruce	3579	1	6855	2	11028	4
Balsam Fir	11173	4	7604	2	4318	1
Black Spruce Lowland	44352	14	45733	15	44597	14
Tamarack	3846	1	6551	3	8627	3
N. White Cedar	13404	4	13452	4	13384	4
Black Spruce Upland	4387	1	3387	1	2318	1
Larch	0	0	71	0	71	0
Cutover Area	7213	2	3610	1	1477	0
Lowland Grass	1319	0	1208	0	1208	0
Upland Grass	690	0	164	0	359	0
Lowland Brush	16260	5	14189	5	13252	4
Upland Brush	700	0	204	0	204	0
Unproductive Forest	29478	9	29478	9	29478	9
Non Forest	17612	6	17612	6	17612	6
Total	314,435	100	315,817	100	313,245	100

MANAGEMENT PRESCRIPTIONS

Table B.4 summarizes the management prescriptions by type for the next ten years in the Orr Area. Table B.5 summarizes regeneration plans for the next ten years.

Table B.4 Management Prescriptions By Cover Type - Orr Area

COVER TYPE	CLEAR CUT		THINNING		ALL-AGED		SALVAGE		REGEN		TOTAL	
	STD	ACRES	STD	ACRES	STD	ACRES	STD	ACRES	STD	ACRES	STD	ACRES
ASH	58	809	0	0	30	590	17	270	10	201	115	1870
LOW HW	8	84	0	0	26	723	2	27	5	113	41	947
ASPEN	1136	28333	0	0	10	209	111	2713	129	2772	1386	34027
PBIRCH	111	2804	0	0	8	238	41	1081	43	1055	203	5178
BALM	80	1611	0	0	0	0	13	180	14	286	107	2077
NOR HW	2	66	0	0	0	0	0	0	4	75	6	141
OAK	0	0	0	0	1	17	0	0	0	0	1	17
W PINE	23	393	9	287	2	60	34	654	4	41	72	1435
N PINE	57	635	58	669	0	0	29	727	3	26	147	2057
J PINE	230	3594	0	0	8	79	20	282	19	235	277	4190
WH SPR	29	376	0	0	0	0	12	248	4	175	45	799
BALSAM	128	1969	0	0	0	0	36	484	84	1569	248	4022
BL SPR	215	3386	0	0	0	0	66	1056	75	1402	356	5844
TMRACK	19	199	0	0	0	0	15	190	24	560	58	949
WCEDAR	80	950	31	622	10	211	21	414	26	429	168	2626
UPBSPR	62	999	0	0	3	36	10	171	5	112	80	1318
CUT	0	0	0	0	0	0	0	0	241	3693	241	3693
LOGRAS	0	0	0	0	0	0	1	11	2	32	3	43
UPGRAS	0	0	0	0	0	0	0	0	29	526	29	526
LOBRSH	0	0	0	0	0	0	4	103	66	1968	70	2071
UPBRSH	0	0	0	0	0	0	0	0	33	496	33	496
TOTAL	2238	46208	98	1578	98	2163	432	8611	820	15766	3686	74326

Table B.5 Summary of Artificial Regeneration Needs - Orr Area
 (Acres by Species and Regeneration Method)

SPECIES	PLANT	SEED
ASH	143	0
WH SPR	3330	0
N PINE	4811	105
WCEDAR	1000	914
J PINE	2103	4993
PBIRCH	755	0
TMRACK	1872	963
BL SPR	583	5941
W PINE	219	0
BALSAM	22	0
YBIRCH	9	0
TOTAL	14847	12916

PEARL LAKE RMU 1

EXISTING CONDITION

Table B.6 Pearl Lake RMU Timber Summary

Type	Acres	% Of RMU	Avg Site Index	Avg % Updated Age	% Over Rot. Age	% At High Risk
Ash	1304	2	42	97	73	1
Lowland Hardwoods	960	2	50	101	63	13
Aspen	23835	41	71	40	51	7
Birch	864	1	52	68	76	2
Balm of Gilead	2996	5	66	46	63	2
White Pine	537	1	44	80	53	26
Red Pine	869	1	53	51	14	1
Jack Pine	985	2	52	47	43	1
White Spruce	1212	2	59	37	24	1
Balsam Fir	2278	4	50	54	69	6
Black Spr. Lowland	7351	13	33	74	30	3
Tamarack	652	1	44	64	29	4
N. White Cedar	4829	8	27	105	23	3
Black Spr. Upland	467	1	39	52	24	0
Cutover Area	1100	2	--	--	--	--
Lowland Grass	158	0	--	--	--	--
Upland Grass	328	1	--	--	--	--
Lowland Brush	2900	5	--	--	--	--
Upland Brush	66	0	--	--	--	--
Unproductive Forest	2809	5	--	--	--	--
Non Forest	1982	3	--	--	--	--
Total	58,482	100				

COVER TYPE COMPOSITION GOALS

Based on existing cover type conditions, timber markets, wildlife concerns, land administration proposals, and economic and biologic limitations and potentials, the following composition goals have been established for this unit.

Table B.7 Pearl Lake RMU Cover Type Composition Goals

Cover Type	Present		Ten Year		Long-term	
	Acres	%	Acres	%	Acres	%
Ash	1304	2	1332	2	1332	2
Lowland Hardwoods	960	2	960	2	960	2
Aspen	23835	41	23905	41	24312	42
Birch	864	1	480	1	348	1
Balm of Gilead	2996	5	2682	5	1796	3
White Pine	537	1	299	1	151	0
Norway Pine	869	1	1502	3	2151	4
Jack Pine	985	2	1810	3	1810	3
White Spruce	1212	2	2218	4	3345	6
Balsam Fir	2278	4	1078	2	442	1
Black Spruce Lowland	7351	13	7691	13	6653	11
Tamarack	652	1	1496	3	2699	5
N. White Cedar	4829	8	4815	8	4815	8
Black Spruce Upland	467	1	453	1	179	0
Cutover Area	1100	2	272	0	0	0
Lowland Grass	158	0	126	0	126	0
Upland Grass	328	1	17	0	17	0
Lowland Brush	2900	5	2550	4	2550	4
Upland Brush	66	0	5	0	5	0
Unproductive Forest	2809	5	2809	5	2809	5
Non Forest	1982	3	1982	3	1982	3
Total	58,482	100	58,482	100	58,482	100

MANAGEMENT PRESCRIPTIONS

Table B.8 summarizes the management prescriptions by type for the next ten years in the Pearl Lake RMU. Tables B.9 and B.10 outline regeneration plans for the next ten years. Table B.11 projects harvest levels by type in the future. These tables are followed by detailed lists of stands in each cover type to receive treatment in the next ten years.

Table B.8 Management Prescriptions By Cover Type - Pearl Lake RMU

COVER TYPE	CLEAR CUT		THINNING		ALL-AGED		SALVAGE		REGEN		TOTAL	
	STD	ACRES	STD	ACRES	STD	ACRES	STD	ACRES	STD	ACRES	STD	ACRES
ASH	10	114	0	0	15	354	5	74			30	542
LOW HW	3	32	0	0	25	711	0	0	2	45	30	788
ASPEN	252	5793	0	0	0	0	13	321	17	303	282	6417
PBIRCH	7	113	0	0	0	0	9	202	7	158	23	473
BALM	39	717	0	0	0	0	5	36	5	76	49	829
W PINE	2	40	0	0	0	0	6	123	2	18	10	181
N PINE	6	70	4	66	0	0	7	172	0	0	17	308
J PINE	11	153	0	0	0	0	12	185	1	7	24	345
WH SPR	11	154	0	0	0	0	6	39	1	78	18	271
BALSAM	30	390	0	0	0	0	11	150	37	680	78	1220
BL SPR	39	663	0	0	0	0	12	190	35	767	86	1620
TMRACK	3	50	0	0	0	0	9	115	7	121	19	286
WCEDAR	27	318	18	498	0	0	14	248	13	240	72	1304
UPBSPR	4	47	0	0	0	0	1	61	0	0	5	108
CUT	0	0	0	0	0	0	0	0	59	845	59	845
LOGRAS	0	0	0	0	0	0	0	0	2	32	2	32
UPGRAS	0	0	0	0	0	0	0	0	16	311	16	311
LOBRSH	0	0	0	0	0	0	0	0	14	350	14	350
UPBRSH	0	0	0	0	0	0	0	0	7	61	7	61
TOTAL	444	8654	22	564	40	1065	111	1916	225	4092	842	16291

Table B.9 Regeneration Plans for Lands Harvested, Salvaged, and Regenerated without Harvest by Type
 Pearl Lake RMU
 (Acres)

Regen. Method & Spp.	Current Cover Type																			Tot.
	Ash	LH	Asp	Bi	BG	WP	NP	JP	WS	BF	BSL	Tam	Ced	BSU	COA	LG	UG	LB	UB	
<u>Natural</u>																				
Ash	159	32		8	4										24					227
Asp			5768	7	140				83	143			127		146					6414
Bi				37																37
BG					546					6			4							556
NP															37		89			126
JP															84				8	92
WS			16												53		172		12	253
BS									172	103	66				148	7				496
Tam												26								26
<u>Plant</u>																				
Ash	29	45																		74
Bi				52																52
NP			153	274		30	66			29					125					677
JP				61		32	10			45				38	24		29		8	247
WS			316	12	128				169	236					128		5		20	1014
BS										145			10		8	25				188
Tam										333	62	106	185		8		16		13	723
Ced			91		11					111			90							303
<u>Art. Seed</u>																				
NP							8								10					18
JP			73	4		119	158	345	19	21				70	11					820
BS										1101	7				24			350		1482
Tam										333	81									414
Ced				18									390		15					423
Total	188	77	6417	473	829	181	242	345	271	1220	1620	286	806	108	845	32	311	350	61	14662

Table B.10 Summary of Artificial Regeneration Needs - Pearl Lake
 (Acres by Species and Regeneration Method)

SPECIES	PLANT	SEED
ASH	74	0
WH SPR	1014	0
N PINE	677	18
WCEDAR	303	423
J PINE	247	820
PBIRCH	52	0
TMRACK	723	414
BL SPR	188	1482
TOTAL	3278	3157

Table B.11 Projected Harvest Levels by Type, 1986 - 2036
and Estimated Sustained Yield with Year of Regulation

Type	Clearcut Acres by 10 year Period					Sustain yield	
	1986-95	1996-05	2006-15	2016-25	2026-35	Acres	Year
Ash	114	115	115	115	115	115	1985
Low Hwd	32	32	32	32	32	32	1985
Aspen	5300	4752	4770	4789	4807	4807	2035
Birch	113	86	79	73	67	62	2035
Balm G.	577	683	707	436	390	400	2035
W Pine	40	31	28	25	23	13	2065
N Pine	70	50	50	70	70	215	2065
J Pine	145	150	150	222	327	327	2025
Wh Spr	154	62	70	70	288	476	2055
Balsam	390	400	400	93	76	88	2035
Bl Spr Lo	663	766	752	739	725	662	2075
Tam	50	95	96	0	0	300	2055
W Cedar	318	318	318	330	350	350	2035
Bl Spr Up	47	50	55	48	41	26	2075
Total	8013	7590	7622	7042	7311	7873	

Ash

Rotation Age (years) - 90
 Current Clearcut Base (acres) - 848
 Ten Year Allowable Cut (acres) - 94
 Ten Yr. Proposed Clearcut (acres) - 114

Of the 1,304 acres in this type, 354 acres are located in the bottomlands of the Ash and Black Duck rivers. These stands have been identified as a unique community and will be managed under special guidelines to enhance wildlife habitat.

LISTING OF ALL STANDS TO BE REGENERATED AFTER SALVAGE

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS		
													SPECIES	METHOD	
05-00	27	067	22-W	000	30	141	1	005	ASH	4.5	41	5	0	ASH	UNDERS
12-00	17	068	22-W	000	42	101	1	011	ASH	4.7	00	0	0	ASH	UNDERS
04-00	21	068	21-W	000	33	096	1	018	ASH	5.4	00	0	0	ASH	NAT SD
20-00	36	067	22-W	000	46	094	1	016	ASH	3.5	00	0	0	ASH	UNDERS
16-00	23	067	22-W	000	44	069	1	024	ASH	1.4	00	0	0	ASH	UNDERS
TOTAL STANDS		5	TOTAL ACRES		74										

LISTING OF ALL STANDS TO BE RESERVED

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M
16-00	35	067	22-W	000	29	093	1	013	ASH	5.3	00	0	0
16-00	07	068	22-W	000	32	090	1	015	ASH	3.0	00	0	0
TOTAL STANDS		2		TOTAL ACRES		28							

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	REGEN PLANS	
														SPECIES	METHOD
02-00	27	067	22-W	000	41	154	3	010	ASH	9.5	00	0	0	ASH	UNDERS
18-00	27	067	22-W	000	43	149	6	010	ASH	16.3	28	4	0	ASH	SPROUT
10-00	23	068	20-W	000	46	149	6	010	ASH	22.2	00	0	0	ASH	SPROUT
09-00	11	066	22-W	000	35	145	4	017	ASH	12.4	00	0	0	ASH	SPROUT
10-00	34	067	22-W	000	37	138	3	017	ASH	12.2	00	0	0	ASH	SPROUT
05-00	09	066	21-W	000	49	137	5	009	ASH	9.0	00	0	0	ASH	PLANT
07-00	27	068	21-W	000	53	135	6	012	ASH	20.8	00	0	0	ASH	PLANT
10-00	20	067	20-W	000	48	131	4	008	ASH	5.3	00	0	0	ASH	PLANT
13-00	21	067	22-W	000	43	124	4	009	ASH	17.3	00	0	0	ASH	SPROUT
02-00	25	067	22-W	000	39	121	3	012	ASH	9.2	00	0	0	ASH	SPROUT
TOTAL STANDS		10		TOTAL ACRES		114									

LISTING OF ALL STANDS TO BE MANAGED ON AN ALL-AGED BASIS

* - Special wildlife guidelines apply

SIZE CLASS: 1

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	BASAL AREA
*08-00	20	068	20-W	000	44	020	6	010	ASH	0.0	00	0	0	037
*06-00	23	068	20-W	000	42	040	2	013	ASH	0.0	00	0	0	044
*01-00	28	068	20-W	000	32	030	1	009	ASH	0.0	00	0	0	020

SIZE CLASS: 4

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	BASAL AREA
*13-00	20	068	20-W	000	40	104	6	020	ASH	15.5	00	0	0	150
*03-00	23	068	20-W	000	45	124	4	008	ASH	13.3	00	0	0	060
*08-00	33	068	20-W	000	38	096	2	016	ASH	02.0	40	2	0	022

SIZE CLASS: 5

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	BASAL AREA
*03-00	03	067	20-W	000	44	117	4	086	ASH	17.0	00	0	0	098
*14-00	20	068	20-W	000	47	099	9	010	ASH	26.3	00	0	0	203
*04-00	21	068	20-W	000	39	190	5	015	ASH	10.2	00	0	0	120
*03-00	28	068	20-W	000	40	095	6	003	ASH	19.7	00	0	0	123
*05-00	29	068	20-W	000	42	100	4	018	ASH	11.0	40	2	0	093
*03-00	32	068	20-W	000	42	073	4	007	ASH	11.5	00	0	0	105
*04-00	32	068	20-W	000	42	073	4	005	ASH	11.5	00	0	0	105
*23-00	33	068	20-W	000	45	106	3	028	ASH	10.3	40	2	0	063
*05-00	33	068	20-W	000	45	106	3	106	ASH	10.3	40	2	0	063
TOTAL STANDS		15		TOTAL ACRES		354								

Lowland Hardwoods

Rotation Age (years) - 90
 Current Clearcut Base (acres) - 204
 Ten Year Allowable Cut (acres) - 23
 Ten Yr. Proposed Clearcut (acres) - 32

Lowland hardwood stands in the bottomlands of the Ash and Black Duck rivers will be managed on an all aged basis to enhance wildlife habitat.

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	REGEN PLANS SPECIES METHOD
04-00	14	067	22-W	000	56	064	4	032	ELM	15.8	29	2	2	ASH PLANT
09-00	17	068	22-W	000	46	124	2	013	ELM	01.4	00	0	0	ASH PLANT
TOTAL STANDS		2		TOTAL ACRES		45								

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	REGEN PLANS SPECIES METHOD
20-00	17	068	21-W	000	46	153	6	012	ASH	17.5	00	0	0	ASH SPROUT
08-00	17	068	21-W	000	46	138	4	010	ASH	10.1	00	0	0	ASH SPROUT
05-00	36	067	22-W	000	41	126	4	010	ASH	12.3	00	0	0	ASH SPROUT
TOTAL STANDS		3		TOTAL ACRES		32								

LISTING OF ALL STANDS TO BE MANAGED ON AN ALL-AGED BASIS

* - Special wildlife guidelines apply

SIZE CLASS: 2

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	BASAL AREA
*02-00	23	068	20-W	000	49	035	3	004	LOW HW	0.0	00	0	0	053

SIZE CLASS: 4

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	BASAL AREA
*22-00	20	068	20-W	000	48	095	4	007	ASH	3.6	40	2	0	090
*03-00	04	067	20-W	000	44	081	3	041	ASH	5.4	00	0	0	078
*05-00	15	067	20-W	000	45	101	3	134	ASH	6.7	00	0	0	073

SIZE CLASS: 5

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	BASAL AREA
*01-00	20	068	20-W	000	48	120	6	057	SVMAPL	9.5	40	2	0	152
*01-00	21	068	20-W	000	55	138	5	047	SVMAPL	6.3	40	2	0	125
*05-00	23	068	20-W	000	51	078	5	006	SVMAPL	10.7	40	2	0	132
*22-00	21	068	20-W	000	55	138	5	023	SVMAPL	6.3	40	2	0	125
*23-00	21	068	20-W	000	55	138	5	005	SVMAPL	6.3	40	2	0	125
*24-00	21	068	20-W	000	55	138	5	015	SVMAPL	6.3	40	2	0	125
*25-00	21	068	20-W	000	55	138	5	003	SVMAPL	6.3	40	2	0	125
*06-00	22	068	20-W	000	55	138	5	029	SVMAPL	6.3	40	2	0	125
*01-00	22	068	20-W	000	51	078	5	004	SVMAPL	9.5	40	2	0	132
*01-00	23	068	20-W	000	51	078	5	056	SVMAPL	9.5	40	2	0	132
*09-00	23	068	20-W	000	51	078	5	016	SVMAPL	9.5	40	2	0	132
*03-00	24	068	20-W	000	49	108	3	017	ASH	5.5	40	2	0	087
*02-00	28	068	20-W	000	49	138	4	062	ELM	7.2	40	4	0	118
*20-00	28	068	20-W	000	49	138	3	006	ELM	11.6	40	4	0	118
19-00	19	068	21-W	000	47	115	5	028	ASH	10.1	99	2	0	105
05-00	20	068	22-W	000	50	038	4	007	ELM	11.3	00	0	0	097
02-00	11	067	21-W	000	81	056	4	032	ASH	7.6	00	0	0	082
*06-00	29	068	20-W	000	48	120	5	012	ASH	9.5	40	2	0	152
*06-00	05	067	20-W	000	48	054	2	078	ELM	4.0	00	0	0	044

SIZE CLASS: 6

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	BASAL AREA
10-00	20	068	22-W	000	55	124	7	019	ELM	30.6	28	3	1	105
20-00	20	068	22-W	000	55	124	7	003	ELM	30.6	28	3	1	105

TOTAL STANDS 25 TOTAL ACRES 711
 =====

Aspen

Rotation Age (years) - 50
 Current Clearcut Base (acres) - 23,154
 Ten Year Allowable Cut (acres) - 4,630
 Ten Yr. Proposed Clearcut (acres) - 5,300 (plus 493 acres in active sales)

The regulation of the aspen cover type age class distribution is critical if the type is to be maintained. A well regulated aspen type will provide a sustained yield of forest products, desirable wildlife habitat, and will reduce losses to insects and diseases. The harvest planned for this 10 year period exceeds the allowable cut to reduce the acreage in older age classes and to move toward regulation. In the absence of adequate market demand to reach harvest goals, an aspen recycling program will be instituted to help achieve regulation. Recycling projects will be accomplished as need, policy, and funding permit.

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	M	REGEN PLANS		
													SPECIES	METHOD	
08-00	20	067	22-W	000	53	064	2	083	ASPEN	3.8	27	3	1	WCEDAR	PLANT
03-00	36	067	22-W	000	70	064	2	024	ASPEN	3.0	00	0	0	WH SPR	PLANT
02-00	05	068	22-W	000	48	063	2	007	ASPEN	6.7	27	1	1	WH SPR	PLANT
07-00	24	067	22-W	000	60	062	2	011	ASPEN	7.0	27	3	1	ASPEN	SPROUT
05-00	26	068	22-W	000	56	060	1	007	ASPEN	5.4	27	4	1	J PINE	ART SD
11-00	36	068	21-W	000	73	060	2	009	ASPEN	3.3	00	0	0	ASPEN	SPROUT
03-00	36	067	20-W	000	65	059	3	025	ASPEN	8.0	00	0	0	ASPEN	SPROUT
08-00	17	066	21-W	000	64	057	2	010	ASPEN	3.6	40	2	0	N PINE	PLANT
01-00	18	066	21-W	000	64	057	2	006	ASPEN	3.6	40	2	0	N PINE	PLANT
25-00	34	067	22-W	000	51	055	2	004	ASPEN	3.6	00	0	0	N PINE	PLANT
21-00	18	068	21-W	000	79	055	2	007	ASPEN	8.3	40	2	0	ASPEN	SPROUT
24-00	18	068	21-W	000	82	055	2	010	ASPEN	7.0	40	2	0	ASPEN	SPROUT
01-00	27	068	21-W	000	50	050	2	027	ASPEN	4.0	40	4	0	J PINE	ART SD
07-00	03	066	21-W	000	74	043	1	021	ASPEN	2.1	00	0	0	WH SPR	PLANT
03-00	18	066	21-W	000	59	034	1	012	ASPEN	4.0	40	2	0	WH SPR	PLANT
01-00	28	067	20-W	000	44	020	1	024	ASPEN	0.0	00	0	0	J PINE	ART SD
29-00	19	068	21-W	000	75	008	3	016	ASPEN	1.5	00	0	0	WH SPR	UNDERS
TOTAL STANDS		17	TOTAL ACRES		303										
====			=====												

LISTING OF ALL STANDS TO BE REGENERATED AFTER SALVAGE

* - One stand with two regeneration plans

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS		
													SPECIES	METHOD	
09-00	10	067	22-W	000	59	088	3	025	ASPEN	7.2	25	1	0	WH SPR	PLANT
21-00	24	066	22-W	000	51	075	5	006	ASPEN	7.0	25	1	1	WH SPR	PLANT
02-00	10	067	22-W	000	44	074	4	043	ASPEN	4.5	25	3	0	WH SPR	PLANT
*16-00	16	067	22-W	000	60	070	5	069	ASPEN	10.0	51	2	0	ASPEN	SPROUT
*16-00	16	067	22-W	000	60	070	5	069	ASPEN	10.0	51	2	0	WH SPR	PLANT
19-00	10	068	22-W	000	54	068	3	013	ASPEN	11.8	26	4	0	WH SPR	PLANT
05-00	03	068	22-W	000	54	068	3	009	ASPEN	11.8	26	4	0	N PINE	PLANT
24-00	08	068	22-W	000	60	065	2	010	ASPEN	6.0	27	4	0	WH SPR	PLANT
02-00	26	068	21-W	000	48	063	4	007	ASPEN	12.8	40	2	0	N PINE	PLANT
06-00	35	067	22-W	000	53	062	3	017	ASPEN	5.0	26	2	0	WH SPR	PLANT
04-00	32	067	20-W	000	61	058	4	015	ASPEN	9.5	00	0	0	J PINE	ART SD
05-00	10	066	21-W	000	61	055	3	013	ASPEN	8.0	40	2	0	ASPEN	SPROUT
04-00	12	067	22-W	000	57	045	2	005	ASPEN	10.0	25	3	1	WH SPR	PLANT
04-00	03	067	22-W	000	60	044	3	020	ASPEN	6.6	25	5	0	WH SPR	PLANT

TOTAL STANDS 13 TOTAL ACRES 321
 =====

LISTING OF ALL STANDS TO BE RESERVED

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	
09-00	36	067	20-W	000	50	060	1	023	ASPEN	4.4	40	2	0
09-00	05	068	21-W	000	37	058	1	006	LT ASP	3.0	00	0	0
25-00	36	067	21-W	000	60	052	2	006	ASPEN	5.5	26	1	0
03-00	33	068	21-W	000	43	012	4	022	ASPEN	0.0	00	0	0

TOTAL STANDS 4 TOTAL ACRES 57
 =====

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

* - Acreage listed is for part of stand (usually 50%) to be harvested
 x - Stands are part of active sales sold prior to FY 1986

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS		
													SPECIES	METHOD	
04-00	01	067	22-W	000	69	099	7	015	ASPEN	25.0	26	5	1	ASPEN	SPROUT
17-00	16	066	21-W	000	60	095	4	008	ASPEN	12.3	40	2	0	ASPEN	SPROUT
10-00	16	066	21-W	000	58	091	7	059	ASPEN	8.3	40	2	0	ASPEN	SPROUT
09-00	27	066	21-W	000	55	090	8	010	ASPEN	14.0	40	4	0	ASPEN	SPROUT
05-00	05	067	22-W	000	74	087	6	032	ASPEN	28.5	27	3	2	ASPEN	SPROUT
05-00	04	067	22-W	000	74	087	6	120	ASPEN	28.5	27	3	2	ASPEN	SPROUT
17-00	17	066	22-W	000	67	086	4	004	ASPEN	12.7	26	3	1	ASPEN	SPROUT
06-00	24	068	22-W	000	68	085	9	025	ASPEN	42.8	27	2	1	ASPEN	SPROUT

06-00	10	067	22-W	000	60	084	5	020	ASPEN	11.7	00	0	0	ASPEN	SPROUT
08-00	13	068	22-W	000	65	082	9	009	ASPEN	25.8	26	3	1	ASPEN	SPROUT
X04-00	29	067	21-W	000	78	080	6	035	ASPEN	6.6	40	2	0	ASPEN	SPROUT
04-00	22	067	21-W	000	75	080	4	008	ASPEN	15.9	40	4	0	ASPEN	SPROUT
10-00	34	068	22-W	000	64	079	8	026	ASPEN	24.2	26	2	1	ASPEN	SPROUT
11-00	21	067	22-W	000	62	079	6	059	ASPEN	13.6	27	2	1	ASPEN	SPROUT
07-00	23	067	22-W	000	62	079	9	009	ASPEN	18.0	26	1	0	ASPEN	SPROUT
04-00	24	068	22-W	000	70	077	5	010	ASPEN	13.3	26	2	1	ASPEN	SPROUT
08-00	09	067	22-W	000	70	078	9	021	ASPEN	51.4	27	2	1	ASPEN	SPROUT
X17-00	20	068	20-W	000	70	078	9	003	ASPEN	73.3	40	2	0	ASPEN	SPROUT
04-00	28	066	22-W	000	58	077	5	009	ASPEN	15.7	00	0	0	ASPEN	SPROUT
07-00	14	067	22-W	000	70	076	5	016	ASPEN	20.3	27	3	0	ASPEN	SPROUT
07-00	22	066	21-W	000	65	077	8	037	ASPEN	20.4	40	4	0	ASPEN	SPROUT
09-00	13	068	22-W	000	78	074	9	012	ASPEN	44.8	26	2	0	ASPEN	SPROUT
20-00	13	068	22-W	000	78	074	9	016	ASPEN	44.8	26	2	0	ASPEN	SPROUT
07-00	20	066	22-W	000	58	073	3	003	ASPEN	10.0	25	2	2	ASPEN	SPROUT
*01-00	32	068	22-W	000	73	073	8	085	ASPEN	37.6	26	2	0	ASPEN	SPROUT
X01-00	30	068	22-W	000	71	074	8	034	ASPEN	33.4	27	2	1	ASPEN	SPROUT
05-00	34	068	22-W	000	63	073	7	018	ASPEN	21.6	25	1	1	ASPEN	SPROUT
*13-00	33	068	22-W	000	73	073	8	027	ASPEN	37.6	26	2	0	ASPEN	SPROUT
12-00	33	068	22-W	000	84	073	9	006	ASPEN	66.6	27	2	2	ASPEN	SPROUT
18-00	18	068	21-W	000	79	074	7	038	ASPEN	27.2	40	2	0	ASPEN	SPROUT
10-00	09	067	22-W	000	70	073	6	006	ASPEN	24.0	27	3	3	ASPEN	SPROUT
02-00	24	068	22-W	000	68	072	3	016	ASPEN	6.5	27	1	1	ASPEN	SPROUT
01-00	24	068	22-W	000	70	072	6	015	ASPEN	20.2	27	2	1	ASPEN	SPROUT
10-00	22	067	22-W	000	58	073	9	005	ASPEN	49.0	26	1	1	ASPEN	SPROUT
19-00	21	067	22-W	000	58	072	6	004	ASPEN	13.6	27	1	0	ASPEN	SPROUT
16-00	21	067	22-W	000	58	072	6	040	ASPEN	13.6	27	1	0	ASPEN	SPROUT
14-00	22	067	22-W	000	63	072	6	016	ASPEN	15.7	26	1	0	ASPEN	SPROUT
19-00	16	067	22-W	000	72	072	7	036	ASPEN	30.6	26	3	0	ASPEN	SPROUT
*24-00	13	068	22-W	000	67	071	9	031	ASPEN	26.8	27	2	1	ASPEN	SPROUT
*22-00	13	068	22-W	000	67	071	9	009	ASPEN	26.8	27	2	1	ASPEN	SPROUT
*02-00	13	068	22-W	000	76	071	8	007	ASPEN	32.0	26	2	0	ASPEN	SPROUT
03-00	10	068	22-W	000	65	071	7	030	ASPEN	27.8	26	3	0	ASPEN	SPROUT
*09-00	24	068	22-W	000	69	071	7	054	ASPEN	29.8	27	2	1	ASPEN	SPROUT
*04-00	13	068	22-W	000	67	071	9	033	ASPEN	26.8	27	2	1	ASPEN	SPROUT
*10-00	18	068	21-W	000	77	072	9	012	ASPEN	44.4	40	4	0	ASPEN	SPROUT
05-00	25	068	22-W	000	58	071	4	026	ASPEN	13.8	26	2	1	ASPEN	SPROUT
08-00	33	068	22-W	000	71	071	9	016	ASPEN	39.5	27	2	0	ASPEN	SPROUT
*13-00	24	068	22-W	000	88	070	9	030	ASPEN	41.0	27	2	1	ASPEN	SPROUT
*14-00	32	068	22-W	000	72	070	9	080	ASPEN	50.3	27	2	0	ASPEN	SPROUT
17-00	34	067	22-W	000	53	071	6	004	ASPEN	14.7	00	0	0	ASPEN	SPROUT
*11-00	19	067	22-W	000	74	071	8	009	ASPEN	22.9	27	2	1	ASPEN	SPROUT
X20-00	20	068	20-W	000	64	071	9	013	ASPEN	54.0	40	2	0	ASPEN	SPROUT
15-00	23	067	22-W	000	68	070	2	011	ASPEN	6.0	27	3	0	ASPEN	SPROUT
08-00	18	068	21-W	000	81	070	9	009	ASPEN	35.5	40	2	0	ASPEN	SPROUT
09-00	07	068	22-W	000	65	070	8	012	ASPEN	34.7	26	3	1	ASPEN	SPROUT
07-00	21	068	22-W	000	74	069	9	006	ASPEN	51.0	21	1	0	ASPEN	SPROUT
01-00	14	067	22-W	000	61	069	5	011	ASPEN	16.0	27	3	0	ASPEN	SPROUT
*09-00	19	067	22-W	000	70	069	8	051	ASPEN	14.0	26	4	1	ASPEN	SPROUT
20-00	16	067	22-W	000	70	069	7	025	ASPEN	29.0	26	4	1	ASPEN	SPROUT
09-00	36	067	22-W	000	63	069	7	036	ASPEN	23.7	26	2	1	ASPEN	SPROUT
17-00	09	067	22-W	000	78	069	6	013	ASPEN	25.7	27	2	1	ASPEN	SPROUT
*11-00	28	068	22-W	000	75	068	8	009	ASPEN	27.2	27	1	0	ASPEN	SPROUT
*16-00	33	068	22-W	000	75	068	8	032	ASPEN	27.2	27	1	0	ASPEN	SPROUT

03-00	28	068	22-W	000	75	068	8	005	ASPEN	27.2	10	1	0	ASPEN	SPROUT
*08-00	28	068	22-W	000	75	068	8	025	ASPEN	27.2	27	1	0	ASPEN	SPROUT
*05-00	33	068	22-W	000	75	068	8	047	ASPEN	27.2	27	1	0	ASPEN	SPROUT
08-00	35	068	22-W	000	73	068	7	008	ASPEN	24.0	27	2	5	ASPEN	SPROUT
07-00	31	068	22-W	000	69	068	7	021	ASPEN	34.3	00	0	0	ASPEN	SPROUT
02-00	21	067	20-W	000	67	069	8	011	ASPEN	19.5	26	2	0	ASPEN	SPROUT
*04-00	25	068	22-W	000	72	067	5	039	ASPEN	20.6	26	2	1	ASPEN	SPROUT
10-00	32	068	22-W	000	64	067	3	036	ASPEN	8.0	26	1	0	ASPEN	SPROUT
*01-00	31	068	22-W	000	75	067	8	039	ASPEN	37.7	27	2	0	ASPEN	SPROUT
09-00	32	068	22-W	000	88	067	9	023	ASPEN	28.8	26	1	0	ASPEN	SPROUT
*10-00	29	068	22-W	000	65	067	9	059	ASPEN	45.0	26	2	0	ASPEN	SPROUT
10-00	33	068	22-W	000	64	067	3	015	ASPEN	8.0	26	1	0	ASPEN	SPROUT
06-00	21	067	21-W	000	70	068	4	007	ASPEN	15.8	40	2	0	ASPEN	SPROUT
*06-00	22	067	21-W	000	70	068	4	048	ASPEN	15.8	40	2	0	ASPEN	SPROUT
21-00	22	067	21-W	000	70	068	4	013	ASPEN	15.8	40	2	0	ASPEN	SPROUT
02-00	21	068	20-W	000	80	068	9	007	ASPEN	67.0	40	2	0	ASPEN	SPROUT
11-00	22	068	22-W	000	83	067	8	042	ASPEN	39.7	27	4	1	ASPEN	SPROUT
08-00	10	068	22-W	000	75	067	4	012	ASPEN	16.4	26	3	0	ASPEN	SPROUT
12-00	07	068	22-W	000	75	067	9	035	ASPEN	56.0	26	3	1	ASPEN	SPROUT
11-00	31	068	22-W	000	78	066	7	012	ASPEN	29.1	26	1	0	ASPEN	SPROUT
08-00	25	068	22-W	000	63	066	6	006	ASPEN	52.6	26	1	1	ASPEN	SPROUT
13-00	27	068	22-W	000	60	066	7	011	ASPEN	36.0	25	2	2	ASPEN	SPROUT
10-00	35	068	22-W	000	75	066	9	012	ASPEN	21.4	27	3	1	ASPEN	SPROUT
14-00	27	068	22-W	000	60	066	7	003	ASPEN	36.0	25	2	2	ASPEN	SPROUT
06-00	23	067	22-W	000	65	067	4	005	ASPEN	22.0	26	1	1	ASPEN	SPROUT
*09-00	16	067	22-W	000	75	067	5	067	ASPEN	20.7	26	3	1	ASPEN	SPROUT
07-00	25	067	22-W	000	66	066	4	004	ASPEN	15.7	26	2	0	ASPEN	SPROUT
*11-00	33	068	22-W	000	71	065	5	017	ASPEN	8.8	26	1	0	ASPEN	SPROUT
X11-00	36	067	22-W	000	65	066	8	008	ASPEN	35.3	27	3	1	N PINE	PLANT
11-00	20	068	22-W	000	78	065	8	007	ASPEN	36.7	27	3	1	ASPEN	SPROUT
08-00	16	068	22-W	000	75	065	8	023	ASPEN	38.5	27	3	1	ASPEN	SPROUT
07-00	17	068	22-W	000	78	065	8	045	ASPEN	36.7	27	3	1	ASPEN	SPROUT
*01-00	25	068	22-W	000	69	065	4	027	ASPEN	18.0	26	2	1	ASPEN	SPROUT
03-00	01	067	22-W	000	69	066	7	007	ASPEN	29.1	27	2	0	ASPEN	SPROUT
03-00	09	067	22-W	000	72	065	9	005	ASPEN	19.7	27	1	1	ASPEN	SPROUT
03-00	32	067	21-W	000	70	065	7	030	ASPEN	33.6	40	2	0	ASPEN	SPROUT
16-00	12	068	22-W	000	59	064	6	014	ASPEN	21.0	26	2	0	ASPEN	SPROUT
*15-00	17	068	22-W	000	71	064	9	028	ASPEN	43.7	27	2	1	ASPEN	SPROUT
*02-00	16	068	22-W	000	77	064	9	081	ASPEN	45.8	27	3	1	ASPEN	SPROUT
*13-00	17	068	22-W	000	71	064	8	012	ASPEN	37.2	27	2	1	ASPEN	SPROUT
19-00	14	068	22-W	000	74	064	9	019	ASPEN	50.3	27	3	1	ASPEN	SPROUT
02-00	06	068	22-W	000	56	064	3	007	ASPEN	12.4	27	2	1	ASPEN	SPROUT
27-00	17	068	22-W	000	77	064	9	006	ASPEN	44.8	27	3	1	ASPEN	SPROUT
*24-00	17	068	22-W	000	71	064	8	016	ASPEN	34.8	27	2	1	ASPEN	SPROUT
12-00	36	068	20-W	000	80	065	9	062	ASPEN	35.0	40	2	0	ASPEN	SPROUT
15-00	36	068	20-W	000	79	065	9	004	ASPEN	38.3	40	2	0	ASPEN	SPROUT
*17-00	19	068	20-W	000	83	065	7	043	ASPEN	20.7	40	2	0	ASPEN	SPROUT
*12-00	31	068	22-W	000	61	064	6	016	ASPEN	23.8	26	2	0	ASPEN	SPROUT
*17-00	35	068	22-W	000	80	064	6	021	ASPEN	23.1	27	3	1	ASPEN	SPROUT
*09-00	31	068	22-W	000	80	064	9	031	ASPEN	43.1	26	2	0	ASPEN	SPROUT
*15-00	16	067	22-W	000	72	065	9	021	ASPEN	47.6	26	4	1	ASPEN	SPROUT
*08-00	29	067	20-W	000	76	065	7	054	ASPEN	29.8	25	2	0	ASPEN	SPROUT
*09-00	18	068	21-W	000	79	065	8	030	ASPEN	37.6	40	2	0	ASPEN	SPROUT
13-00	19	068	21-W	000	81	064	6	037	ASPEN	25.4	27	4	0	ASPEN	SPROUT
03-00	18	068	21-W	000	81	064	6	005	ASPEN	20.3	40	4	0	ASPEN	SPROUT

40-00	26	067	22-W	000	73	064	3	009	ASPEN	5.3	28	3	3	ASPEN	SPROUT
15-00	36	068	22-W	000	68	063	6	120	ASPEN	21.8	27	2	1	ASPEN	SPROUT
X06-00	21	068	20-W	000	76	064	9	009	ASPEN	47.0	40	2	0	ASPEN	SPROUT
*04-00	25	068	20-W	000	80	064	7	087	ASPEN	31.7	40	2	0	ASPEN	SPROUT
08-00	29	068	20-W	000	74	064	8	006	ASPEN	32.0	40	2	0	ASPEN	SPROUT
12-00	01	068	22-W	000	68	063	8	028	ASPEN	34.0	26	4	1	ASPEN	SPROUT
06-00	22	068	22-W	000	75	063	8	041	ASPEN	35.0	27	3	1	ASPEN	SPROUT
03-00	17	067	21-W	000	81	064	8	006	ASPEN	28.5	40	4	0	ASPEN	SPROUT
*16-00	10	067	21-W	000	74	062	7	021	ASPEN	30.0	27	2	0	ASPEN	SPROUT
12-00	09	066	21-W	000	77	065	6	027	ASPEN	20.6	40	2	0	ASPEN	SPROUT
09-00	17	066	21-W	000	70	064	5	015	ASPEN	16.0	40	2	0	ASPEN	SPROUT
02-00	28	067	21-W	000	78	063	5	015	ASPEN	20.4	40	2	0	ASPEN	SPROUT
05-00	23	068	22-W	000	78	062	9	010	ASPEN	58.0	26	3	1	ASPEN	SPROUT
*15-00	14	068	22-W	000	77	062	9	015	ASPEN	43.0	27	2	1	ASPEN	SPROUT
*02-00	14	068	22-W	000	75	062	8	007	ASPEN	36.8	26	3	1	ASPEN	SPROUT
12-00	26	068	20-W	000	78	063	8	007	ASPEN	36.7	40	2	0	ASPEN	SPROUT
*08-00	36	068	22-W	000	69	062	7	009	ASPEN	34.0	26	2	1	ASPEN	SPROUT
*11-00	25	067	22-W	000	55	063	5	026	ASPEN	8.9	26	2	2	ASPEN	SPROUT
*17-00	25	067	22-W	000	55	062	5	014	ASPEN	8.9	26	2	2	ASPEN	SPROUT
*04-00	36	067	22-W	000	66	063	6	044	ASPEN	19.3	27	3	1	ASPEN	SPROUT
12-00	14	067	22-W	000	70	063	4	053	ASPEN	10.1	26	2	0	ASPEN	SPROUT
11-00	21	068	21-W	000	75	063	5	016	ASPEN	24.3	99	3	0	ASPEN	SPROUT
02-00	25	068	21-W	000	80	063	9	011	ASPEN	52.0	40	2	0	ASPEN	SPROUT
06-00	20	067	20-W	000	63	063	4	008	ASPEN	9.5	25	2	0	ASPEN	SPROUT
03-00	34	067	20-W	000	73	062	9	014	ASPEN	24.7	40	2	0	ASPEN	SPROUT
*01-00	30	068	21-W	000	80	062	7	025	ASPEN	23.7	40	2	0	ASPEN	SPROUT
11-00	18	068	21-W	000	87	062	9	009	ASPEN	48.1	40	2	0	ASPEN	SPROUT
*24-00	19	068	21-W	000	74	062	6	009	ASPEN	28.0	27	2	0	ASPEN	SPROUT
*28-00	19	068	21-W	000	80	062	7	010	ASPEN	23.7	27	2	0	ASPEN	SPROUT
*03-00	17	067	22-W	000	75	062	5	030	ASPEN	21.0	26	3	0	ASPEN	SPROUT
04-00	15	067	22-W	000	72	062	9	006	ASPEN	54.0	26	2	0	ASPEN	SPROUT
09-00	23	067	22-W	000	63	062	3	003	ASPEN	11.0	00	0	0	ASPEN	SPROUT
15-00	35	068	22-W	000	77	061	5	014	ASPEN	20.0	27	3	5	ASPEN	SPROUT
21-00	25	068	20-W	000	80	062	9	006	ASPEN	41.7	40	2	0	ASPEN	SPROUT
09-00	25	068	20-W	000	77	062	7	024	ASPEN	27.8	40	2	0	ASPEN	SPROUT
11-00	33	068	20-W	000	55	062	4	016	ASPEN	13.7	40	2	0	N PINE	PLANT
17-00	16	068	22-W	000	61	061	7	018	ASPEN	25.2	27	2	1	ASPEN	SPROUT
12-00	08	068	22-W	000	64	061	4	023	ASPEN	19.5	26	3	1	ASPEN	SPROUT
16-00	36	068	21-W	000	78	062	5	010	ASPEN	19.0	27	4	0	ASPEN	SPROUT
*07-00	23	068	22-W	000	83	061	9	082	ASPEN	43.6	27	3	1	ASPEN	SPROUT
*02-00	08	068	22-W	000	74	061	9	021	ASPEN	46.3	27	3	1	ASPEN	SPROUT
19-00	36	068	21-W	000	71	062	3	005	ASPEN	6.5	25	4	0	ASPEN	SPROUT
02-00	36	068	21-W	000	76	062	9	011	ASPEN	47.0	27	2	0	ASPEN	SPROUT
*01-00	35	068	21-W	000	74	062	9	024	ASPEN	42.4	40	4	0	ASPEN	SPROUT
08-00	28	067	21-W	000	72	062	5	014	ASPEN	13.6	00	0	0	ASPEN	SPROUT
05-00	16	066	21-W	000	70	063	6	013	ASPEN	26.3	40	2	0	ASPEN	SPROUT
*17-00	15	067	21-W	000	74	062	6	021	ASPEN	16.0	00	0	0	ASPEN	SPROUT
13-00	16	067	21-W	000	73	061	6	012	ASPEN	11.6	40	2	0	ASPEN	SPROUT
01-00	11	067	21-W	000	86	061	7	018	ASPEN	18.0	25	2	0	ASPEN	SPROUT
04-00	08	067	22-W	000	77	061	3	009	ASPEN	12.0	27	3	2	ASPEN	SPROUT
*03-00	26	068	22-W	000	86	060	8	033	ASPEN	35.8	27	2	1	ASPEN	SPROUT
*02-00	18	068	22-W	000	75	061	7	026	ASPEN	30.6	26	1	0	ASPEN	SPROUT
08-00	27	068	22-W	000	82	060	9	013	ASPEN	37.2	25	2	1	ASPEN	SPROUT
18-00	17	068	22-W	000	78	060	8	002	ASPEN	36.5	27	3	1	ASPEN	SPROUT
07-00	25	068	22-W	000	67	060	8	040	ASPEN	32.8	26	2	1	ASPEN	SPROUT

19-00	17	068	22-W	000	78	060	8	003	ASPEN	36.5	27	3	1	ASPEN	SPROUT
06-00	08	068	22-W	000	78	060	8	021	ASPEN	36.5	27	3	1	ASPEN	SPROUT
*7-00	25	068	22-W	000	67	060	8	013	ASPEN	32.8	26	2	1	ASPEN	SPROUT
*12-00	36	068	22-W	000	64	060	6	103	ASPEN	22.3	27	2	2	ASPEN	SPROUT
15-00	21	067	22-W	000	63	060	3	063	ASPEN	5.7	27	1	0	ASPEN	SPROUT
05-00	21	068	21-W	000	80	061	9	010	ASPEN	68.3	40	2	0	ASPEN	SPROUT
*25-00	19	068	21-W	000	80	061	9	007	ASPEN	50.3	27	2	0	ASPEN	SPROUT
05-00	25	068	21-W	000	68	061	4	016	ASPEN	9.7	00	0	0	ASPEN	SPROUT
*14-00	19	068	21-W	000	77	061	9	013	ASPEN	42.4	27	2	0	ASPEN	SPROUT
01-00	21	068	21-W	000	64	061	4	028	ASPEN	8.9	40	2	0	N PINE	PLANT
06-00	22	068	21-W	000	85	060	9	015	ASPEN	43.0	40	4	0	ASPEN	SPROUT
06-00	05	068	21-W	000	79	060	8	019	ASPEN	23.2	40	4	0	ASPEN	SPROUT
*17-00	19	068	21-W	000	86	060	7	005	ASPEN	24.0	27	2	0	ASPEN	SPROUT
10-00	34	068	21-W	000	72	060	6	006	ASPEN	26.7	40	2	0	ASPEN	SPROUT
*20-00	19	068	21-W	000	87	060	9	028	ASPEN	40.7	27	4	0	ASPEN	SPROUT
*21-00	35	067	22-W	000	65	059	6	013	ASPEN	25.7	26	3	0	ASPEN	SPROUT
06-00	36	068	21-W	000	73	060	2	004	ASPEN	6.3	26	2	0	ASPEN	SPROUT
*13-00	12	068	22-W	000	75	059	9	013	ASPEN	38.0	27	2	1	ASPEN	SPROUT
*02-00	22	068	22-W	000	77	059	9	027	ASPEN	41.0	26	3	2	ASPEN	SPROUT
13-00	14	067	21-W	000	66	060	6	054	ASPEN	14.4	25	2	0	ASPEN	SPROUT
*12-00	16	066	21-W	000	71	061	8	034	ASPEN	18.2	00	0	0	ASPEN	SPROUT
01-00	34	067	20-W	000	73	060	8	029	ASPEN	26.5	27	2	0	ASPEN	SPROUT
*08-00	36	067	20-W	000	72	060	5	124	ASPEN	22.0	40	2	0	ASPEN	SPROUT
10-00	36	067	20-W	000	65	060	6	010	ASPEN	27.0	40	4	0	ASPEN	SPROUT
01-00	36	067	20-W	000	67	059	4	012	ASPEN	11.0	40	2	0	ASPEN	SPROUT
05-00	36	067	20-W	000	68	059	2	015	ASPEN	9.7	40	2	0	ASPEN	SPROUT
*02-00	36	067	20-W	000	68	059	6	022	ASPEN	22.1	40	2	0	ASPEN	SPROUT
*05-00	28	067	20-W	000	78	059	9	020	ASPEN	51.5	25	2	0	ASPEN	SPROUT
*04-00	36	067	20-W	000	72	059	7	018	ASPEN	29.8	40	2	0	ASPEN	SPROUT
*04-00	24	068	20-W	000	78	059	7	020	ASPEN	21.4	40	2	0	ASPEN	SPROUT
*03-00	11	067	21-W	000	81	059	8	048	ASPEN	29.7	40	2	0	ASPEN	SPROUT
21-00	34	068	21-W	000	82	059	7	004	ASPEN	25.3	40	2	0	ASPEN	SPROUT
15-00	16	068	22-W	000	61	058	4	034	ASPEN	16.5	27	2	1	ASPEN	SPROUT
X02-00	19	067	22-W	000	64	059	5	034	ASPEN	14.2	26	4	1	ASPEN	SPROUT
X06-00	20	067	22-W	000	65	059	5	010	ASPEN	12.0	26	3	0	ASPEN	SPROUT
X04-00	20	067	22-W	000	65	059	4	022	ASPEN	9.0	27	3	1	WH SPR	PLANT
15-00	28	068	21-W	000	78	059	9	014	ASPEN	56.0	40	2	0	ASPEN	SPROUT
01-00	22	068	21-W	000	84	059	9	016	ASPEN	40.0	40	4	0	ASPEN	SPROUT
*18-00	30	068	21-W	000	81	058	8	018	ASPEN	38.6	40	2	0	ASPEN	SPROUT
*31-00	30	068	21-W	000	80	058	8	029	ASPEN	30.2	40	2	0	ASPEN	SPROUT
04-00	25	068	21-W	000	74	058	7	007	ASPEN	17.7	40	2	0	ASPEN	SPROUT
*01-00	24	068	21-W	000	71	058	4	028	ASPEN	12.8	40	2	0	ASPEN	SPROUT
04-00	29	068	21-W	000	80	058	8	007	ASPEN	30.2	27	2	0	ASPEN	SPROUT
04-00	19	067	22-W	000	60	058	3	005	ASPEN	10.8	26	4	1	N PINE	PLANT
08-00	22	068	22-W	000	81	057	8	015	ASPEN	35.7	27	4	2	ASPEN	SPROUT
01-00	24	067	21-W	000	76	058	7	024	ASPEN	30.4	40	2	0	ASPEN	SPROUT
06-00	20	068	20-W	000	71	058	8	006	ASPEN	30.1	40	2	0	ASPEN	SPROUT
18-00	36	068	20-W	000	63	058	3	013	ASPEN	11.7	40	2	0	ASPEN	SPROUT
01-00	26	066	21-W	000	75	059	4	007	ASPEN	17.0	40	2	0	ASPEN	SPROUT
13-00	30	068	22-W	000	73	058	6	016	ASPEN	25.6	27	1	1	ASPEN	SPROUT
12-00	17	066	21-W	000	72	058	7	018	ASPEN	23.9	40	2	0	ASPEN	SPROUT
06-00	15	066	21-W	000	70	058	7	011	ASPEN	21.3	40	4	0	ASPEN	SPROUT
15-00	09	066	21-W	000	67	058	4	003	ASPEN	13.5	00	0	0	ASPEN	SPROUT
*06-00	26	068	22-W	000	88	056	9	041	ASPEN	44.0	27	3	1	ASPEN	SPROUT
*08-00	12	068	22-W	000	72	056	7	050	ASPEN	23.6	27	2	1	ASPEN	SPROUT

37-00	26	067	22-W	000	63	057	3	008	ASPEN	11.0	28	4	2	WH	SPR	PLANT
04-00	35	067	22-W	000	63	057	3	004	ASPEN	11.0	28	4	2	WH	SPR	PLANT
26-00	19	068	21-W	000	53	057	3	010	ASPEN	11.7	27	2	0	WH	SPR	PLANT
*01-00	06	068	21-W	000	81	057	8	017	ASPEN	35.4	40	4	0	ASPEN		SPROUT
*08-00	06	068	21-W	000	79	056	8	019	ASPEN	26.4	40	2	0	ASPEN		SPROUT
01-00	30	067	22-W	000	81	056	7	079	ASPEN	22.8	26	4	1	ASPEN		SPROUT
05-00	16	067	21-W	000	64	056	5	040	ASPEN	22.4	40	2	0	NPINR		PLANT
15-00	09	067	21-W	000	76	055	6	016	ASPEN	27.0	40	2	0	ASPEN		SPROUT
01-00	08	067	21-W	000	76	055	6	020	ASPEN	27.0	40	2	0	ASPEN		SPROUT
*03-00	36	067	21-W	000	77	054	9	088	ASPEN	31.3	00	0	0	ASPEN		SPROUT
12-00	33	068	21-W	000	65	054	5	011	ASPEN	18.1	40	2	0	ASPEN		SPROUT
14-00	33	068	21-W	000	62	054	6	013	ASPEN	22.0	40	2	0	ASPEN		SPROUT
14-00	31	068	20-W	000	63	053	7	058	ASPEN	30.0	27	2	0	ASPEN		SPROUT
*03-00	16	068	20-W	000	78	045	6	086	ASPEN	17.0	40	2	0	ASPEN		SPROUT
X15-00	36	068	22-W	000	68	063	6	046	ASPEN	21.8				ASPEN		SPROUT
X07-00	25	068	22-W	000	67	060	8	030	ASPEN	32.8				ASPEN		SPROUT
X12-00	36	068	22-W	000	64	060	6	038	ASPEN	22.3				ASPEN		SPROUT
X01-00	30	067	22-W	000	81	056	7	008	ASPEN	22.8				CEDAR		PLANT
X08-00	36	067	22-W	000	64	067	6	020	ASPEN	18.1				NPINE		PLANT
X11-00	16	067	21-W	000	77	055	7	033	ASPEN	31.0				ASPEN		SPROUT
X03-00	29	067	21-W	000	69	055	6	041	ASPEN	23.3				ASPEN		SPROUT
X03-00	36	067	21-W	000	77	054	9	043	ASPEN	31.3				ASPEN		SPROUT
X22-00	19	068	20-W	000	74	053	8	005	ASPEN	27.0				ASPEN		SPROUT
X28-00	30	068	20-W	000	74	058	8	009	ASPEN	27.0				ASPEN		SPROUT
X06-00	30	068	20-W	000	74	058	8	014	ASPEN	27.0				ASPEN		SPROUT
X12-00	30	068	20-W	000	60	049	3	002	ASPEN	12.4				ASPEN		SPROUT

TOTAL STANDS 252 TOTAL ACRES 5793

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Birch

Rotation Age (years) - 55
 Current Clearcut Base (acres) - 498
 Ten Year Allowable Cut (acres) - 90
 Ten Yr. Proposed Clearcut (acres) - 113

The majority of birch stands in this RMU occur on xeromesic sites and thus have limited potential for fiber production. Fuelwood will be the main product.

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	REGEN PLANS		
														SPECIES	METHOD	
01-00	20	066	21-W	000	46	085	1	048	PBIRCH	2.8	00	0	0	N	PINE	PLANT
02-00	21	066	21-W	000	46	085	1	023	PBIRCH	4.3	00	0	0	J	PINE	PLANT
12-00	20	067	20-W	000	47	061	1	008	PBIRCH	1.8	00	0	0	WH	SPR	PLANT

17-00	35	067	22-W	000	50	057	2	053	PBIRCH	3.0	00	0	0	N PINE	PLANT
16-00	36	067	22-W	000	57	053	1	008	PBIRCH	3.0	30	5	4	ASH	UNDERS
21-00	21	068	20-W	000	46	051	2	009	PBIRCH	4.7	40	2	0	W CEDAR	ART SD
07-00	04	068	21-W	000	48	037	1	009	PBIRCH	3.3	00	0	0	W CEDAR	ART SD

TOTAL STANDS 7 TOTAL ACRES 158
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LISTING OF ALL STANDS TO BE REGENERATED AFTER SALVAGE

													REGEN PLANS		
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD
42-00	26	067	22-W	000	50	159	2	010	PBIRCH	6.3	28	4	2	N PINE	PLANT
10-00	16	066	22-W	000	50	104	2	104	PBIRCH	6.1	51	5	2	N PINE	PLANT
07-00	11	066	22-W	000	38	105	4	029	PBIRCH	12.2	00	0	0	J PINE	PLANT
08-00	21	066	21-W	000	46	085	2	012	PBIRCH	7.7	99	2	0	N PINE	PLANT
09-00	08	066	21-W	000	47	081	3	008	PBIRCH	7.3	40	4	0	N PINE	PLANT
07-00	28	068	22-W	000	63	057	2	004	PBIRCH	4.7	00	0	0	WH SPR	PLANT
05-00	11	067	22-W	000	48	055	2	006	PBIRCH	7.0	30	2	0	N PINE	PLANT
06-00	11	067	21-W	000	59	049	2	025	PBIRCH	6.6	00	0	0	PBIRCH	PLANT
04-00	30	068	20-W	000	49	048	2	004	PBIRCH	6.2	00	0	0	J PINE	ART SD

TOTAL STANDS 9 TOTAL ACRES 202
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LISTING OF ALL STANDS TO BE RESERVED

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M
15-00	31	068	20-W	000	30	054	1	006	PBIRCH	0.0	00	0	0

TOTAL STANDS 1 TOTAL ACRES 6
 =====

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

													REGEN PLANS		
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD
04-00	26	066	22-W	000	55	104	3	013	PBIRCH	5.2	00	0	0	PBIRCH	SPROUT
05-00	08	066	21-W	000	51	106	3	027	PBIRCH	3.2	00	0	0	PBIRCH	PLANT
25-00	26	067	22-W	000	55	087	3	007	PBIRCH	7.2	00	0	0	ASPEN	SPROUT
01-00	29	066	22-W	000	55	079	6	024	PBIRCH	20.8	52	1	1	PBIRCH	SPROUT
07-00	08	066	21-W	000	47	077	4	028	PBIRCH	9.8	00	0	0	N PINE	PLANT
22-00	09	066	21-W	000	47	077	4	005	PBIRCH	9.8	40	2	0	N PINE	PLANT
08-00	08	066	21-W	000	49	074	4	009	PBIRCH	10.3	00	0	0	J PINE	PLANT

TOTAL STANDS 7 TOTAL ACRES 113
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Balm of Gilead

Rotation Age (years) - 50

Current Clearcut Base (acres) - 2,853

Ten Year Allowable Cut (acres) - 570

Ten Yr. Proposed Clearcut (acres) - 577 (plus 140 acres in active sales)

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS			
													SPECIES	METHOD		
22-00	36	068	21-W	000	73	059	2	010	BALM	5.7	40	2	0	BALM	SPROUT	
13-00	36	068	20-W	000	67	053	1	009	BALM	3.0	00	0	0	BALM	SPROUT	
01-00	01	066	22-W	000	43	051	3	004	BALM	4.9	00	0	0	ASH	UNDERS	
02-00	05	067	20-W	000	65	013	2	034	BALM	0.0	00	0	0	WH SPR	PLANT	
13-10	28	068	20-W	000	68	003	3	019	BALM	1.2	00	0	0	WH SPR	PLANT	
TOTAL STANDS				5	TOTAL ACRES				76							

LISTING OF ALL STANDS TO BE REGENERATED AFTER SALVAGE

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS			
													SPECIES	METHOD		
06-00	03	068	22-W	000	55	067	2	005	BALM	5.0	00	0	0	WH SPR	PLANT	
24-00	36	068	21-W	000	54	064	2	009	BALM	6.3	00	0	0	BALM	SPROUT	
15-00	33	068	22-W	000	57	052	3	005	BALM	4.3	00	0	0	WH SPR	PLANT	
14-00	33	068	22-W	000	57	052	3	011	BALM	4.3	00	0	0	WH SPR	PLANT	
01-00	36	068	21-W	000	50	035	2	006	BALM	8.0	00	0	0	WH SPR	PLANT	
TOTAL STANDS				5	TOTAL ACRES				36							

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

* - Acres listed are for part of stand (usually 50%) to be harvested

X - Stands in active sales sold prior to FY 1986

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS		
													SPECIES	METHOD	
08-00	10	067	22-W	000	58	084	5	016	BALM	15.0	00	0	0	BALM	SPROUT
12-00	29	068	22-W	000	41	076	6	035	BALM	10.8	00	0	0	WH SPR	PLANT
09-00	11	067	22-W	000	52	072	3	013	BALM	10.3	25	1	0	WH SPR	PLANT
14-00	30	068	22-W	000	58	072	6	011	BALM	20.7	00	0	0	BALM	SPROUT
14-00	10	068	22-W	000	69	070	5	017	BALM	14.3	00	0	0	BALM	SPROUT
03-00	21	067	21-W	000	69	071	6	004	BALM	15.7	00	0	0	BALM	SPROUT
*15-00	22	067	21-W	000	69	071	6	025	BALM	15.7	00	0	0	BALM	SPROUT

17-00	25	068	20-W	000	78	070	9	007	BALM	51.3	00	0	0	BALM	SPROUT
05-00	09	067	22-W	000	70	069	7	022	BALM	21.2	28	1	1	BALM	SPROUT
12-00	32	068	22-W	000	62	068	7	006	BALM	11.6	00	0	0	BALM	SPROUT
15-00	16	067	20-W	000	70	069	5	018	BALM	20.3	00	0	0	BALM	SPROUT
07-00	28	068	21-W	000	68	067	9	006	BALM	21.0	40	2	0	BALM	SPROUT
26-00	11	068	22-W	000	65	065	2	003	BALM	3.6	00	0	0	BALM	SPROUT
05-00	31	068	22-W	000	73	066	7	011	BALM	17.5	00	0	0	BALM	SPROUT
17-00	32	068	22-W	000	73	066	7	006	BALM	17.5	00	0	0	BALM	SPROUT
02-00	29	067	20-W	000	62	067	4	013	BALM	10.7	00	0	0	BALM	SPROUT
06-00	23	068	22-W	000	66	065	5	012	BALM	20.6	00	0	0	BALM	SPROUT
02-00	20	068	20-W	000	68	066	7	054	BALM	13.0	00	0	0	ASPEN	SPROUT
X16-00	20	068	20-W	000	66	065	9	033	BALM	20.7	40	2	0	ASPEN	SPROUT
*02-00	30	068	21-W	000	66	064	9	009	BALM	19.7	40	2	0	BALM	SPROUT
05-00	28	068	20-W	000	62	064	7	026	BALM	16.5	00	0	0	BALM	SPROUT
13-00	36	068	21-W	000	62	063	4	037	BALM	11.3	40	4	0	BALM	SPROUT
X10-00	19	068	20-W	000	66	062	8	026	BALM	22.0	00	0	0	BALM	SPROUT
01-00	25	068	21-W	000	72	062	5	053	BALM	12.4	40	2	0	ASPEN	SPROUT
14-00	32	068	20-W	000	72	062	8	006	BALM	31.0	00	0	0	BALM	SPROUT
14-00	08	068	22-W	000	62	060	6	018	BALM	17.8	00	0	0	BALM	SPROUT
*11-00	26	068	20-W	000	76	061	9	019	BALM	17.2	40	2	0	BALM	SPROUT
29-00	36	068	21-W	000	74	061	6	037	BALM	25.6	00	0	0	BALM	SPROUT
03-00	25	068	21-W	000	69	061	6	017	BALM	14.5	00	0	0	BALM	SPROUT
01-00	17	067	20-W	000	56	061	6	017	BALM	19.0	00	0	0	BALM	SPROUT
11-00	36	067	20-W	000	65	060	3	011	BALM	15.3	00	0	0	BALM	SPROUT
01-00	15	067	20-W	000	73	060	6	012	BALM	19.3	00	0	0	BALM	SPROUT
09-00	21	068	21-W	000	69	060	8	025	BALM	18.4	40	2	0	BALM	SPROUT
12-00	19	068	20-W	000	60	060	6	011	BALM	24.6	00	0	0	WCED	PLANT
X06-00	19	068	20-W	000	69	060	4	036	BALM	8.2	00	0	0	BALM	SPROUT
X21-00	36	067	21-W	000	65	057	5	007	BALM	10.7	00	0	0	BALM	SPROUT
X07-00	21	068	20-W	000	65	057	7	020	BALM	24.9	00	0	0	BALM	SPROUT
X09-00	30	068	20-W	000	75	053	7	006	BALM	23.0	00	0	0	BALM	SPROUT
X02-00	19	068	20-W	000	75	053	7	012	BALM	23.0	00	0	0	BALM	SPROUT

TOTAL STANDS 39 TOTAL ACRES 717
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White Pine

Rotation Age (years) - 90
 Current Clearcut Base (acres) - 361
 Ten Year Allowable Cut (acres) - 40
 Ten Yr. Proposed Clearcut (acres) - 40

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	REGEN PLANS	
														SPECIES	METHOD
09-00	21	066	21-W	000	44	112	2	008	W PINE	5.8	60	2	0	N PINE	PLANT
15-00	27	067	22-W	000	56	060	1	010	W PINE	2.0	16	3	0	N PINE	PLANT
TOTAL STANDS		2		TOTAL ACRES		18									

LISTING OF ALL STANDS TO BE REGENERATED AFTER SALVAGE

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	REGEN PLANS	
														SPECIES	METHOD
22-00	16	066	21-W	000	34	103	4	008	W PINE	6.3	40	4	0	J PINE	ART SD
01-00	09	068	22-W	000	54	101	3	012	W PINE	5.2	16	1	0	N PINE	PLANT
03-00	20	067	22-W	000	44	097	2	009	W PINE	5.3	16	4	1	J PINE	ART SD
06-00	31	068	22-W	000	38	076	3	016	W PINE	6.5	16	5	2	J PINE	ART SD
23-00	27	067	22-W	000	38	076	1	008	W PINE	2.7	16	4	0	J PINE	ART SD
13-00	35	067	22-W	000	43	064	2	070	W PINE	3.4	51	1	0	J PINE	ART SD
TOTAL STANDS		6		TOTAL ACRES		123									

LISTING OF ALL STANDS TO BE RESERVED

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M
09-00	35	067	22-W	000	28	094	1	007	W PINE	4.0	16	3	0
05-00	26	068	21-W	000	42	064	1	007	W PINE	4.6	40	2	0
24-00	34	067	22-W	000	30	063	1	013	W PINE	1.5	00	0	0
11-00	32	068	22-W	000	39	057	1	008	W PINE	3.3	16	1	0
TOTAL STANDS		4		TOTAL ACRES		35							

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

* - Acres listed is for portion of stand to be harvested

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	REGEN PLANS	
														SPECIES	METHOD
*18-00	16	066	21-W	000	47	134	6	032	W PINE	11.8	40	2	0	J PINE	PLANT
06-00	01	067	22-W	000	43	102	4	008	W PINE	5.6	16	5	0	J PINE	ART SD
TOTAL STANDS		2		TOTAL ACRES		40									

Norway Pine

Rotation Age (years) - 100
 Current Clearcut Base (acres) - 661
 Ten Year Allowable Cut (acres) - 66
 Ten Yr. Proposed Clearcut (acres) - 70

Plantations account for 343 acres of this type. Plantation acres will increase over the next 50 to 70 years as low site aspen and birch sites are converted. By the year 2035 most of the Norway pine stands will be plantations. A significant amount of these plantations will require commercial thinning beginning in 2015.

The remaining 526 acres of Norway pine are natural stands, mostly on xeromesic sites with shallow rocky soils better suited to jack pine.

LISTING OF ALL STANDS TO BE REGENERATED AFTER SALVAGE

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS			
													SPECIES	METHOD		
41-00	26	067	22-W	000	42	144	2	006	N PINE	5.6	00	0	0	N PINE	PLANT	
48-00	26	067	22-W	000	38	105	2	013	N PINE	5.0	00	0	0	J PINE	ART SD	
27-00	36	067	22-W	000	48	068	2	044	N PINE	4.5	00	0	0	J PINE	ART SD	
12-00	36	067	21-W	000	39	068	3	021	N PINE	3.9	00	0	0	N PINE	PLANT	
14-00	16	067	21-W	000	43	052	1	012	N PINE	4.0	40	2	0	J PINE	ART SD	
04-00	32	068	22-W	000	49	041	1	022	N PINE	4.0	00	0	0	J PINE	ART SD	
06-00	25	068	20-W	000	49	038	1	054	N PINE	4.3	40	2	0	J PINE	ART SD	
TOTAL STANDS				7	TOTAL ACRES				172							
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LISTING OF ALL STANDS TO BE RESERVED

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M		
05-00	17	066	21-W	000	35	069	1	009	N PINE	1.7	40	2	0	
05-00	30	068	20-W	000	39	054	1	027	N PINE	4.0	00	0	0	
TOTAL STANDS				2	TOTAL ACRES				36					
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LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS		
													SPECIES	METHOD	
04-00	17	066	21-W	000	39	122	4	010	N PINE	9.7	00	0	0	J PINE	PLANT
05-00	35	068	22-W	000	49	119	4	008	N PINE	11.2	00	0	0	N PINE	ART SD

07-00	04	066	21-W	000	59	116	5	005	N PINE	13.8	00	0	0	N PINE	PLANT
05-00	04	066	21-W	000	53	114	2	026	N PINE	4.1	40	4	0	N PINE	PLANT
07-00	01	067	22-W	000	43	111	9	013	N PINE	22.5	00	0	0	J PINE	ART SD
06-00	11	066	22-W	000	42	110	9	008	N PINE	15.7	00	0	0	N PINE	PLANT

TOTAL STANDS 6 TOTAL ACRES 70
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LISTING OF ALL STANDS TO BE THINNED

SIZE CLASS: 4

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	BASAL AREA
18-00	36	068	22-W	000	51	062	5	016	N PINE	17.0	00	0	0	153
08-00	22	066	21-W	000	48	066	7	010	N PINE	21.3	00	0	0	147

SIZE CLASS: 5

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	BASAL AREA
11-00	26	068	21-W	000	48	054	6	009	N PINE	12.2	40	2	0	125

SIZE CLASS: 6

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	BASAL AREA
05-00	09	068	22-W	000	52	085	4	031	N PINE	7.0	00	0	0	118

TOTAL STANDS 4 TOTAL ACRES 66
 =====

Jack Pine

Rotation Age (years) - 55
 Current Clearcut Base (acres) - 782
 Ten Year Allowable Cut (acres) - 142
 Ten Yr. Proposed Clearcut (acres) - 97 (plus 56 acres in active sales)

Jack pine is the most prevalent and commercially productive type on the ridgetops with shallow rocky soils in this RMU. Much of the Norway pine, white pine, and upland black spruce occurring on these sites will be converted to jack pine.

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

													REGEN PLANS	
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	SPECIES	METHOD
04-00	09	067	21-W	000	42	065	1	007	J PINE	4.0	00	0 0	J PINE	ART SD
TOTAL STANDS		1		TOTAL ACRES		7								
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LISTING OF ALL STANDS TO BE REGENERATED AFTER SALVAGE

													REGEN PLANS	
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	SPECIES	METHOD
13-00	22	068	22-W	000	49	065	1	006	J PINE	3.3	00	0 0	J PINE	ART SD
16-00	25	068	20-W	000	46	062	1	004	J PINE	4.7	00	0 0	J PINE	ART SD
10-00	16	067	21-W	000	48	054	2	008	J PINE	8.2	00	0 0	J PINE	ART SD
09-00	09	067	21-W	000	49	054	1	026	J PINE	2.6	00	0 0	J PINE	ART SD
15-00	25	068	20-W	000	44	052	1	004	J PINE	4.3	00	0 0	J PINE	ART SD
06-00	09	067	21-W	000	54	051	2	002	J PINE	6.7	00	0 0	J PINE	ART SD
04-00	10	067	21-W	000	45	051	1	029	J PINE	6.1	00	0 0	J PINE	ART SD
07-00	10	067	21-W	000	48	050	1	010	J PINE	4.3	00	0 0	J PINE	ART SD
14-00	36	068	22-W	000	49	046	2	068	J PINE	6.8	00	0 1	J PINE	ART SD
13-00	36	068	22-W	000	50	038	1	012	J PINE	6.3	00	0 1	J PINE	ART SD
17-00	36	068	22-W	000	60	038	1	008	J PINE	2.3	42	1 1	J PINE	ART SD
06-00	10	066	21-W	000	65	035	1	008	J PINE	3.4	00	0 0	J PINE	ART SD
TOTAL STANDS		12		TOTAL ACRES		185								
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LISTING OF ALL STANDS TO BE RESERVED

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M
03-00	30	068	22-W	000	47	066	1	008	J PINE	2.3	00	0 0
07-00	21	067	20-W	000	46	052	1	003	J PINE	4.0	00	0 0
TOTAL STANDS		2		TOTAL ACRES		11						
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LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

X - Stands in active sales sold prior to FY 1986

													REGEN PLANS	
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	SPECIES	METHOD
02-00	20	067	22-W	000	45	080	3	033	J PINE	12.0	18	3 0	J PINE	ART SD
01-00	16	067	22-W	000	55	065	4	005	J PINE	7.0	00	0 0	J PINE	ART SD
09-00	20	067	22-W	000	51	064	5	028	J PINE	25.6	00	0 0	J PINE	ART SD

15-00	16	067	21-W	000	45	064	2	005	J PINE	10.0	00	0	0	J PINE	ART	SD
X02-00	10	067	21-W	000	48	064	2	018	J PINE	12.5	00	0	0	J PINE	ART	SD
01-00	36	068	22-W	000	62	062	5	008	J PINE	14.9	00	0	0	J PINE	ART	SD
20-00	36	068	22-W	000	56	062	4	007	J PINE	18.0	00	0	0	J PINE	ART	SD
20-00	25	068	20-W	000	46	062	3	013	J PINE	3.9	00	0	0	J PINE	ART	SD
08-00	14	067	22-W	000	52	060	3	006	J PINE	12.3	28	1	0	J PINE	ART	SD
X02-00	20	067	22-W	000	45	080	3	008	J PINE	12.0	18	3	0	J PINE	ART	SD
X01-00	19	067	22-W	000	55	056	6	030	J PINE	23.0	00	0	0	J PINE	ART	SD

TOTAL STANDS 11 TOTAL ACRES 153
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White Spruce

Rotation Age (years) - 70
 Current Clearcut Base (acres) - 1,086
 Ten Year Allowable Cut (acres) - 155
 Ten Yr. Proposed Clearcut (acres) - 154

Plantations account for 804 acres of this type. Plantation acreage will increase over the next 40 to 60 years through conversion of aspen, Balm of Gilead, and balsam fir types. By 2055 most white spruce stands will be plantations. The main product will be pulpwood. As plantations develop the possibility of commercial thinning and lower rotation ages should be considered.

The remaining 408 acres of natural origin white spruce are mixed stands located mostly in the south half of township 67-22. These stands will be harvested at age 70 and regenerated to white spruce. Non-merchantable stands will be salvaged or regenerated without harvest to white spruce and aspen on the mesic sites and jack pine on xeromesic sites.

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

													REGEN PLANS			
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD	

16-00	27	067	22-W	000	43	088	1	078	WH SPR	1.7	00	0	0	ASPEN	UNDERS	
TOTAL STANDS				1				TOTAL ACRES								78
=====																

LISTING OF ALL STANDS TO BE REGENERATED AFTER SALVAGE

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS		
													SPECIES	METHOD	
32-00	26	067	22-W	000	60	165	2	005	WH SPR	6.0	00	0	0	WH SPR	PLANT
10-00	23	067	22-W	000	65	077	4	004	WH SPR	9.9	51	3	3	WH SPR	PLANT
06-00	34	068	20-W	000	58	054	1	006	WH SPR	2.3	00	0	0	WH SPR	PLANT
03-00	30	068	21-W	000	63	053	2	005	WH SPR	4.0	00	0	0	ASPEN	SPROUT
21-00	30	068	21-W	000	70	053	1	008	WH SPR	3.7	40	2	0	J PINE	ART SD
16-00	36	068	22-W	000	52	045	1	011	WH SPR	2.5	00	0	0	J PINE	ART SD
TOTAL STANDS		6	TOTAL ACRES		39										

LISTING OF ALL STANDS TO BE RESERVED

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	
01-00	16	068	22-W	000	55	057	1	005	WH SPR	3.7	00	0	0
02-00	26	068	20-W	000	62	025	1	004	WH SPR	0.0	99	2	0
TOTAL STANDS		2	TOTAL ACRES		9								

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS		
													SPECIES	METHOD	
27-00	26	067	22-W	000	47	115	9	004	WH SPR	20.5	00	0	0	WH SPR	PLANT
14-00	25	068	20-W	000	60	105	8	010	WH SPR	24.7	99	3	0	WH SPR	PLANT
12-00	34	067	22-W	000	56	104	7	011	WH SPR	10.2	00	0	0	WH SPR	PLANT
52-00	26	067	22-W	000	44	101	3	004	WH SPR	6.0	00	0	0	WH SPR	PLANT
05-00	26	067	22-W	000	44	101	3	043	WH SPR	6.0	00	0	0	WH SPR	PLANT
51-00	26	067	22-W	000	44	101	3	021	WH SPR	6.0	00	0	0	WH SPR	PLANT
34-00	26	067	22-W	000	47	091	6	006	WH SPR	13.0	51	1	0	WH SPR	PLANT
46-00	26	067	22-W	000	44	090	4	014	WH SPR	6.6	00	0	0	WH SPR	PLANT
33-00	26	067	22-W	000	47	088	5	007	WH SPR	11.3	00	0	0	WH SPR	PLANT
44-00	26	067	22-W	000	43	088	3	008	WH SPR	5.6	00	0	0	WH SPR	PLANT
20-00	26	067	22-W	000	52	075	5	026	WH SPR	12.3	00	0	0	WH SPR	PLANT
TOTAL STANDS		11	TOTAL ACRES		154										

Balsam Fir

Rotation Age (years) - 50
 Current Clearcut Base (acres) - 1,448
 Ten Year Allowable Cut (acres) - 290
 Ten Yr. Proposed Clearcut (acres) - 390

Most of the balsam fir cover type is mixed stands. A large portion of the type is mature or over mature. For the next 30 years the harvest level will have to be above the long-term allowable cut in order to utilize the timber before wind throw, insects, and disease take their toll.

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS		
													SPECIES	METHOD	
16-00	16	068	21-W	000	36	082	1	018	BALSAM	1.2	00	0	0	TMRACK	PLANT
05-00	34	067	22-W	000	47	070	2	004	BALSAM	5.7	00	0	0	ASPEN	UNDERS
12-00	35	068	22-W	000	50	065	2	013	BALSAM	4.6	00	0	0	ASPEN	UNDERS
19-00	34	067	22-W	000	42	066	1	016	BALSAM	1.4	00	0	0	BL SPR	UNDERS
12-00	17	068	21-W	000	34	065	1	008	BALSAM	3.0	99	2	0	BL SPR	PLANT
16-00	32	068	20-W	000	47	061	1	010	BALSAM	2.3	00	0	0	TMRACK	PLANT
24-00	27	067	22-W	000	59	060	1	012	BALSAM	3.5	06	3	3	WH SPR	PLANT
01-00	34	067	22-W	000	49	058	1	016	BALSAM	2.8	00	0	0	ASPEN	UNDERS
14-00	03	066	21-W	000	50	058	1	020	BALSAM	1.4	00	0	0	N PINE	PLANT
35-00	15	067	21-W	000	60	056	2	006	BALSAM	3.2	00	0	0	ASPEN	UNDERS
10-00	08	066	22-W	000	44	054	2	008	BALSAM	3.7	00	0	0	WH SPR	PLANT
13-00	27	067	22-W	000	50	055	2	017	BALSAM	4.6	00	0	0	TMRACK	PLANT
04-00	10	066	21-W	000	53	054	2	008	BALSAM	3.2	00	0	0	WCEDAR	PLANT
01-00	03	066	21-W	000	53	054	2	022	BALSAM	2.8	00	0	0	J PINE	PLANT
17-00	13	068	22-W	000	42	051	1	011	BALSAM	2.3	00	0	0	WCEDAR	PLANT
02-00	16	068	21-W	000	46	048	2	010	BALSAM	6.2	40	2	0	TMRACK	PLANT
06-00	21	067	20-W	000	58	043	1	010	BALSAM	2.9	00	0	0	ASPEN	UNDERS
11-00	16	066	22-W	000	35	030	2	038	BALSAM	0.4	00	0	0	TMRACK	PLANT
01-00	22	066	21-W	000	23	031	2	057	BALSAM	0.0	00	0	0	WCEDAR	PLANT
05-00	21	066	21-W	000	23	031	2	019	BALSAM	0.0	00	0	0	TMRACK	PLANT
04-00	18	066	22-W	000	23	028	4	010	BALSAM	1.5	00	0	0	TMRACK	PLANT
18-00	35	067	22-W	000	15	028	2	026	BALSAM	0.6	00	0	0	BL SPR	PLANT
18-00	24	066	22-W	000	30	027	6	012	BALSAM	2.3	00	0	0	BL SPR	UNDERS
16-00	23	066	22-W	000	34	027	9	066	BALSAM	3.9	00	0	0	WCEDAR	UNDERS
10-00	23	066	22-W	000	34	027	9	013	BALSAM	3.9	00	0	0	BL SPR	UNDERS
05-00	24	066	22-W	000	30	026	6	033	BALSAM	3.9	00	0	0	BL SPR	UNDERS
11-00	24	066	22-W	000	35	023	9	017	BALSAM	2.8	00	0	0	BL SPR	UNDERS
03-00	18	066	22-W	000	23	022	1	007	BALSAM	0.4	00	0	0	TMRACK	PLANT
13-00	30	067	22-W	000	26	021	5	015	BALSAM	1.8	00	0	0	BL SPR	UNDERS
08-00	18	066	22-W	000	25	018	3	018	BALSAM	1.5	00	0	0	TMRACK	PLANT
01-00	30	066	22-W	000	26	016	1	018	BALSAM	0.2	00	0	0	BL SPR	PLANT
08-00	16	066	21-W	000	30	015	1	042	BALSAM	0.0	00	0	0	BL SPR	PLANT
02-00	15	066	22-W	000	58	013	1	011	BALSAM	0.3	00	0	0	TMRACK	PLANT

13-00	16	066	21-W	000	27	014	3	012	BALSAM	0.0	00	0	0	WCEDAR	PLANT
13-00	27	068	21-W	000	33	012	1	021	BALSAM	0.0	00	0	0	TMRACK	PLANT
04-00	21	066	22-W	000	27	009	3	014	BALSAM	0.7	00	0	0	BL SPR	PLANT
15-00	16	068	21-W	000	25	006	1	022	BALSAM	0.0	40	2	0	TMRACK	PLANT

TOTAL STANDS 37 TOTAL ACRES 680
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LISTING OF ALL STANDS TO BE REGENERATED AFTER SALVAGE

														REGEN PLANS	
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD
02-00	31	068	22-W	000	37	081	5	006	BALSAM	7.0	00	0	0	BALM	SPROUT
07-00	09	068	21-W	000	46	074	2	005	BALSAM	4.3	60	2	0	WCEDAR	PLANT
10-00	26	068	21-W	000	38	071	2	026	BALSAM	2.2	00	0	0	BL SPR	PLANT
02-00	03	066	21-W	000	48	071	2	023	BALSAM	2.7	00	0	0	J PINE	PLANT
17-00	07	068	21-W	000	51	066	2	012	BALSAM	2.5	00	0	0	TMRACK	PLANT
14-00	36	068	21-W	000	40	063	2	006	BALSAM	6.7	00	0	0	BL SPR	PLANT
04-00	23	066	22-W	000	38	062	3	011	BALSAM	6.0	00	0	0	WH SPR	PLANT
07-00	19	066	22-W	000	48	058	1	016	BALSAM	1.8	00	0	0	TMRACK	PLANT
13-00	25	067	22-W	000	40	053	3	006	BALSAM	11.3	00	0	0	TMRACK	PLANT
06-00	23	066	22-W	000	40	045	2	019	BALSAM	6.0	00	0	0	WH SPR	PLANT
25-00	17	068	22-W	000	56	064	5	007	BALSAM	11.2	06	1	1	WH SPR	PLANT
10-00	17	068	22-W	000	44	058	3	013	BALSAM	8.2	06	3	3	WH SPR	PLANT

TOTAL STANDS 12 TOTAL ACRES 150
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LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

														REGEN PLANS	
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD
13-00	19	068	22-W	000	55	110	3	018	BALSAM	7.8	51	1	0	WCEDAR	PLANT
08-00	20	067	20-W	000	42	100	3	013	BALSAM	5.1	51	2	1	WH SPR	PLANT
15-00	24	068	22-W	000	68	081	7	014	BALSAM	13.8	00	0	0	ASPEN	SPROUT
07-00	24	068	22-W	000	52	080	3	017	BALSAM	5.2	00	0	0	WH SPR	PLANT
15-00	16	066	22-W	000	52	079	6	020	BALSAM	19.0	00	0	0	WH SPR	PLANT
04-00	35	068	22-W	000	58	078	5	009	BALSAM	16.6	32	1	0	N PINE	PLANT
05-00	27	068	21-W	000	52	078	4	005	BALSAM	13.3	99	2	0	TMRACK	PLANT
13-00	34	067	22-W	000	41	077	3	013	BALSAM	7.0	99	1	1	WH SPR	PLANT
12-00	12	068	22-W	000	53	074	4	013	BALSAM	13.8	00	0	0	WH SPR	PLANT
05-00	03	066	21-W	000	44	076	3	012	BALSAM	7.9	40	2	0	ASPEN	SPROUT
23-00	08	068	21-W	000	53	075	6	009	BALSAM	11.4	60	2	0	WH SPR	PLANT
10-00	36	068	21-W	000	50	074	3	011	BALSAM	9.5	51	2	0	TMRACK	PLANT
02-00	19	067	21-W	000	44	074	2	010	BALSAM	3.7	00	0	0	WH SPR	PLANT
08-00	27	068	21-W	000	60	073	5	005	BALSAM	12.7	99	2	0	TMRACK	PLANT
28-00	26	067	22-W	000	48	073	2	006	BALSAM	8.3	00	0	0	WH SPR	PLANT
09-00	16	068	21-W	000	45	072	3	005	BALSAM	8.0	99	2	0	BL SPR	PLANT
01-00	19	066	21-W	000	47	073	4	040	BALSAM	7.7	00	0	0	ASPEN	SPROUT
11-00	32	068	20-W	000	64	071	5	009	BALSAM	13.3	60	2	0	TMRACK	PLANT
09-00	15	067	22-W	000	60	071	4	010	BALSAM	6.7	00	0	0	ASPEN	SPROUT

07-00	19	067	22-W	000	60	070	6	020	BALSAM	17.3	51	1	1	WH	SPR	PLANT
34-00	18	068	21-W	000	58	070	6	007	BALSAM	15.5	60	2	0	WH	SPR	PLANT
16-00	28	068	21-W	000	65	070	9	010	BALSAM	30.2	00	0	0	WH	SPR	PLANT
07-00	33	068	21-W	000	45	070	2	007	BALSAM	5.2	99	2	0	TMRACK		PLANT
18-00	04	068	21-W	000	52	069	4	008	BALSAM	10.0	00	0	0	WH	SPR	PLANT
08-00	19	067	22-W	000	48	069	3	020	BALSAM	7.0	00	0	0	TMRACK		PLANT
03-00	15	067	22-W	000	55	068	5	022	BALSAM	7.6	00	0	0	TMRACK		PLANT
14-00	18	068	21-W	000	45	067	3	019	BALSAM	9.8	60	2	0	TMRACK		PLANT
10-00	14	067	22-W	000	60	067	2	018	BALSAM	3.0	00	0	0	ASPEN		SPROUT
11-00	05	066	21-W	000	52	067	5	011	BALSAM	6.5	00	0	0	WH	SPR	PLANT
11-00	09	066	21-W	000	57	066	3	009	BALSAM	9.7	00	0	0	WH	SPR	PLANT

TOTAL STANDS 30 TOTAL ACRES 390

Lowland Black Spruce

Rotation Age (years) - 100

Current Clearcut Base (acres) - 6346

Ten Year Allowable Cut (acres) - 634

Ten Yr. Proposed Clearcut (acres) - 663

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS		
													SPECIES	METHOD	
10-00	26	068	22-W	000	27	122	1	013	BL SPR	3.3	00	0	0	BL SPR	ART SD
05-00	17	068	22-W	000	28	119	1	062	BL SPR	5.5	51	2	2	BL SPR	ART SD
04-00	17	068	22-W	000	26	119	1	047	BL SPR	4.0	00	0	0	BL SPR	UNDERS
04-00	04	067	22-W	000	27	118	1	009	BL SPR	4.8	00	0	0	BL SPR	UNDERS
03-00	05	067	22-W	000	27	118	1	041	BL SPR	4.8	00	0	0	BL SPR	UNDERS
12-00	27	067	22-W	000	29	117	2	006	BL SPR	8.6	00	0	0	BL SPR	UNDERS
19-00	11	068	22-W	000	30	104	2	005	BL SPR	8.8	00	0	0	BL SPR	ART SD
16-00	11	068	22-W	000	30	104	2	014	BL SPR	8.8	00	0	0	BL SPR	ART SD
03-00	28	066	22-W	000	24	104	1	064	BL SPR	2.4	00	0	0	BL SPR	ART SD
14-00	12	068	22-W	000	28	100	1	062	BL SPR	5.3	00	0	0	BL SPR	ART SD
22-00	08	068	22-W	000	41	099	1	019	BL SPR	2.0	51	1	3	BL SPR	ART SD
12-00	28	068	21-W	000	32	100	1	013	BL SPR	4.0	00	0	0	BL SPR	ART SD
06-00	21	068	21-W	000	27	100	2	005	BL SPR	6.7	00	0	0	BL SPR	ART SD
08-00	35	068	21-W	000	44	095	2	015	BL SPR	5.3	99	2	0	BL SPR	ART SD
19-00	36	068	22-W	000	40	094	1	006	BL SPR	2.3	28	2	1	TMRACK	PLANT
17-00	26	067	22-W	000	36	094	2	005	BL SPR	8.3	51	4	0	BL SPR	ART SD
10-00	23	068	22-W	000	34	092	1	007	BL SPR	4.0	23	3	3	BL SPR	ART SD
08-00	34	068	22-W	000	27	089	1	063	BL SPR	4.3	00	0	0	BL SPR	ART SD
03-00	19	068	21-W	000	38	090	2	004	BL SPR	6.7	60	2	0	TMRACK	ART SD
16-00	13	068	22-W	000	32	088	2	013	BL SPR	3.7	00	0	0	BL SPR	ART SD
07-00	21	068	21-W	000	21	088	1	033	BL SPR	2.4	00	0	0	TMRACK	ART SD
02-00	22	068	21-W	000	21	088	1	014	BL SPR	2.4	00	0	0	TMRACK	ART SD
04-00	03	066	21-W	000	38	085	1	013	BL SPR	2.2	00	0	0	TMRACK	PLANT

19-00	09	068	21-W	000	31	078	1	006	BL SPR	4.7	40	2	0	TMRACK	PLANT
02-00	24	066	21-W	000	27	075	2	012	BL SPR	4.7	00	0	0	TMRACK	ART SD
08-00	20	068	22-W	000	55	067	2	005	BL SPR	5.0	00	0	0	TMRACK	ART SD
18-00	09	068	21-W	000	28	066	1	013	BL SPR	2.6	40	2	0	TMRACK	PLANT
05-00	15	066	21-W	000	27	061	1	050	BL SPR	2.9	00	0	0	BL SPR	ART SD
05-00	17	067	22-W	000	40	060	1	015	BL SPR	4.3	51	1	0	TMRACK	ART SD
07-00	22	067	22-W	000	31	035	1	027	BL SPR	0.3	00	0	0	BL SPR	ART SD
12-00	03	066	21-W	000	36	030	1	030	BL SPR	0.0	00	0	0	BL SPR	ART SD
08-00	24	068	22-W	000	39	024	2	021	BL SPR	0.5	00	0	0	J PINE	ART SD
04-00	17	066	22-W	000	30	022	1	023	BL SPR	0.3	00	0	0	TMRACK	ART SD
07-00	21	066	22-W	000	42	014	1	018	BL SPR	0.6	00	0	0	BL SPR	ART SD
03-00	04	067	22-W	000	27	014	1	014	BL SPR	0.3	00	0	0	TMRACK	ART SD

TOTAL STANDS 35 TOTAL ACRES 767
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LISTING OF ALL STANDS TO BE REGENERATED AFTER SALVAGE

													REGEN PLANS		
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	* M	SPECIES	METHOD	
07-00	06	068	21-W	000	31	170	2	011	BL SPR	5.4	00	0	0	TMRACK	PLANT
25-00	35	067	22-W	000	22	164	2	005	BL SPR	6.7	00	0	0	TMRACK	PLANT
04-00	16	068	22-W	000	28	114	4	009	BL SPR	16.7	51	2	3	BL SPR	ART SD
10-00	27	067	22-W	000	38	102	6	007	BL SPR	30.1	51	2	2	BL SPR	ART SD
02-00	27	068	22-W	000	37	097	2	013	BL SPR	10.0	51	2	2	BL SPR	ART SD
08-00	24	066	22-W	000	26	090	2	016	BL SPR	12.3	51	2	2	BL SPR	ART SD
09-00	24	066	22-W	000	26	090	2	005	BL SPR	12.3	51	2	2	BL SPR	ART SD
01-00	23	066	22-W	000	26	090	2	007	BL SPR	12.3	51	2	2	BL SPR	ART SD
02-00	29	066	22-W	000	35	085	3	072	BL SPR	9.5	23	4	3	TMRACK	ART SD
04-00	22	068	22-W	000	33	079	3	005	BL SPR	11.0	23	4	2	TMRACK	ART SD
03-00	22	068	22-W	000	33	079	3	010	BL SPR	11.0	23	4	2	TMRACK	ART SD
09-00	20	066	22-W	000	42	065	3	030	BL SPR	15.3	51	3	2	BL SPR	ART SD

TOTAL STANDS 12 TOTAL ACRES 190
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LISTING OF ALL STANDS TO BE RESERVED

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	* M	
05-00	21	068	22-W	000	22	132	3	030	BL SPR	1.5	00	0	0

TOTAL STANDS 1 TOTAL ACRES 30
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LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

* - Acres listed is for portion of stand to be harvested

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS	
													SPECIES	METHOD
19-00	35	067	22-W	000	25	174	3	008	BL SPR	8.7	00	0 0	BL SPR	ART SD
10-00	08	068	21-W	000	29	167	5	022	BL SPR	14.6	00	0 0	BL SPR	ART SD
03-00	12	068	22-W	000	29	155	4	041	BL SPR	19.6	00	0 0	BL SPR	ART SD
09-00	08	068	22-W	000	29	144	3	026	BL SPR	13.9	51	1 1	BL SPR	ART SD
*01-00	20	067	21-W	000	31	142	6	024	BL SPR	12.8	00	0 0	BL SPR	ART SD
15-00	34	067	22-W	000	30	140	5	004	BL SPR	10.3	51	2 2	BL SPR	ART SD
22-00	17	068	22-W	000	28	134	5	004	BL SPR	23.0	51	1 1	BL SPR	ART SD
04-00	05	067	20-W	000	28	133	4	019	BL SPR	10.1	00	0 0	BL SPR	ART SD
06-00	22	066	21-W	000	32	130	6	010	BL SPR	25.3	00	0 0	BL SPR	ART SD
02-00	11	066	22-W	000	35	128	9	014	BL SPR	45.5	00	0 0	BL SPR	ART SD
02-00	36	068	22-W	000	39	126	5	007	BL SPR	24.7	00	0 0	BL SPR	ART SD
04-00	21	068	22-W	000	30	125	4	008	BL SPR	10.0	23	2 1	TMRACK	ART SD
06-00	16	068	22-W	000	30	124	3	016	BL SPR	14.0	99	1 1	BL SPR	ART SD
09-00	21	067	21-W	000	44	124	4	022	BL SPR	14.0	00	0 0	BL SPR	ART SD
10-00	05	068	22-W	000	31	121	4	018	BL SPR	19.5	00	0 0	BL SPR	ART SD
09-00	17	068	21-W	000	32	120	4	032	BL SPR	18.2	00	0 0	BL SPR	ART SD
06-00	18	068	21-W	000	31	120	4	009	BL SPR	20.0	00	0 0	BL SPR	ART SD
15-00	08	068	21-W	000	29	120	5	010	BL SPR	24.0	00	0 0	BL SPR	ART SD
17-00	11	068	22-W	000	40	117	3	014	BL SPR	10.6	00	0 0	BL SPR	ART SD
21-00	08	068	22-W	000	41	117	7	009	BL SPR	18.0	51	3 1	BL SPR	ART SD
13-00	17	067	21-W	000	23	118	2	025	BL SPR	0.0	00	0 0	BL SPR	ART SD
13-00	21	068	20-W	000	25	118	2	026	BL SPR	7.4	99	2 0	BL SPR	ART SD
07-00	18	068	21-W	000	27	116	3	020	BL SPR	15.2	00	0 0	BL SPR	ART SD
07-00	33	068	22-W	000	35	115	2	055	BL SPR	5.0	00	0 0	TMRACK	ART SD
01-00	15	068	22-W	000	32	114	3	009	BL SPR	9.3	00	0 0	BL SPR	ART SD
05-00	14	068	22-W	000	33	114	3	005	BL SPR	17.0	00	0 0	BL SPR	ART SD
12-00	08	068	21-W	000	35	115	2	005	BL SPR	11.0	00	0 0	BL SPR	ART SD
11-00	07	068	21-W	000	29	115	3	030	BL SPR	16.0	00	0 0	BL SPR	ART SD
14-00	36	067	22-W	000	35	115	6	013	BL SPR	28.0	51	2 0	BL SPR	ART SD
04-00	22	066	21-W	000	35	113	2	019	BL SPR	8.8	60	2 0	BL SPR	ART SD
15-00	36	068	21-W	000	38	111	4	008	BL SPR	11.2	51	1 0	TMRACK	PLANT
08-00	02	068	22-W	000	27	109	3	021	BL SPR	13.5	00	0 0	BL SPR	ART SD
20-00	30	068	21-W	000	34	110	2	013	BL SPR	4.1	40	2 0	BL SPR	ART SD
08-00	11	067	21-W	000	46	110	3	012	BL SPR	12.0	00	0 0	BL SPR	ART SD
15-00	18	068	21-W	000	37	108	3	011	BL SPR	11.8	00	0 0	BL SPR	ART SD
08-00	07	068	22-W	000	31	108	4	028	BL SPR	20.8	23	1 1	TMRACK	ART SD
11-00	32	067	22-W	000	30	108	4	009	BL SPR	22.3	23	2 1	TMRACK	ART SD
02-00	16	066	22-W	000	40	106	6	011	BL SPR	32.0	00	0 0	BL SPR	ART SD
09-00	17	066	22-W	000	34	104	5	026	BL SPR	23.0	00	0 0	TMRACK	ART SD

TOTAL STANDS 39 TOTAL ACRES 663
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Tamarack

Rotation Age (years) - 90
Current Clearcut Base (acres) - 416
Ten Year Allowable Cut (acres) - 46
Ten Yr. Proposed Clearcut (acres) - 50

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	M	REGEN PLANS		
													SPECIES	METHOD	
13-00	17	066	22-W	000	35	099	1	043	TMRACK	2.5	00	0	0	BL SPR	UNDERS
10-00	04	066	21-W	000	39	091	1	018	TMRACK	2.4	00	0	0	BL SPR	UNDERS
23-00	09	066	21-W	000	39	091	1	005	TMRACK	2.4	00	0	0	BL SPR	UNDERS
13-00	09	067	22-W	000	41	075	1	008	TMRACK	3.0	00	0	0	TMRACK	PLANT
02-00	23	067	22-W	000	44	068	1	026	TMRACK	3.0	00	0	0	TMRACK	UNDERS
09-00	20	068	21-W	000	52	050	1	007	TMRACK	2.2	00	0	0	TMRACK	PLANT
03-00	34	068	21-W	000	50	017	1	014	TMRACK	0.0	00	0	0	TMRACK	PLANT
TOTAL STANDS		7	TOTAL ACRES		121										

LISTING OF ALL STANDS TO BE REGENERATED AFTER SALVAGE

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	M	REGEN PLANS		
													SPECIES	METHOD	
01-00	17	067	22-W	000	37	105	1	020	TMRACK	3.0	00	0	0	TMRACK	PLANT
15-00	07	068	22-W	000	37	105	1	011	TMRACK	7.3	00	0	0	TMRACK	PLANT
05-00	07	066	22-W	000	48	097	2	019	TMRACK	3.5	28	5	2	TMRACK	ART SD
01-00	18	066	22-W	000	44	094	1	007	TMRACK	6.3	51	4	0	TMRACK	PLANT
04-00	35	068	21-W	000	39	095	2	007	TMRACK	4.7	00	0	0	TMRACK	PLANT
21-00	13	068	22-W	000	42	079	2	011	TMRACK	6.0	99	1	0	TMRACK	PLANT
11-00	08	068	21-W	000	44	075	1	007	TMRACK	1.3	00	0	0	BL SPR	ART SD
05-00	01	067	21-W	000	55	048	1	011	TMRACK	3.3	00	0	0	TMRACK	ART SD
07-00	01	067	21-W	000	55	048	1	022	TMRACK	2.0	00	0	0	TMRACK	ART SD
TOTAL STANDS		9	TOTAL ACRES		115										

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	M	REGEN PLANS		
													SPECIES	METHOD	
10-00	18	066	22-W	000	37	104	2	012	TMRACK	10.0	51	1	0	TMRACK	PLANT
02-00	26	067	22-W	000	41	096	2	009	TMRACK	10.0	00	0	0	TMRACK	PLANT
09-00	26	067	22-W	000	39	095	3	029	TMRACK	14.0	00	0	0	TMRACK	ART SD
TOTAL STANDS		3	TOTAL ACRES		50										

Northern White Cedar

Rotation Age (years) - 125

Current Clearcut Base (acres) - 4,176

Ten Year Allowable Cut (acres) - 334

Ten Yr. Proposed Clearcut (acres) - 271 (plus 47 acres in active sales)

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS		
													SPECIES	METHOD	
05-00	17	066	22-W	000	19	139	1	006	WCEDAR	4.3	00	0	0	TMRACK	PLANT
13-00	22	066	22-W	000	26	135	2	050	WCEDAR	6.0	00	0	0	TMRACK	PLANT
03-00	19	066	22-W	000	25	134	2	005	WCEDAR	3.0	00	0	0	BL SPR	PLANT
21-00	09	068	21-W	000	23	122	2	011	WCEDAR	4.9	40	2	0	TMRACK	PLANT
01-00	10	067	22-W	000	32	115	2	005	WCEDAR	3.6	28	1	0	WCEDAR	ART SD
11-00	19	068	20-W	000	28	111	1	006	WCEDAR	3.0	00	0	0	TMRACK	PLANT
13-00	20	068	22-W	000	19	107	1	011	WCEDAR	4.5	00	0	0	TMRACK	PLANT
03-00	08	066	22-W	000	28	103	1	017	WCEDAR	4.3	00	0	0	TMRACK	PLANT
05-00	18	066	22-W	000	25	099	1	018	WCEDAR	2.3	00	0	0	TMRACK	PLANT
05-00	28	066	22-W	000	62	095	1	070	WCEDAR	2.9	00	0	0	ASPEN	UNDERS
04-00	30	067	21-W	000	31	089	1	030	WCEDAR	2.7	00	0	0	WCEDAR	ART SD
17-00	20	068	22-W	000	28	084	1	006	WCEDAR	3.0	00	0	0	TMRACK	PLANT
03-00	13	066	22-W	000	37	066	1	005	WCEDAR	6.0	00	0	0	ASPEN	UNDERS
TOTAL STANDS		13	TOTAL ACRES		240										

LISTING OF ALL STANDS TO BE REGENERATED AFTER SALVAGE

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS		
													SPECIES	METHOD	
06-00	27	066	22-W	000	28	150	3	019	WCEDAR	14.2	60	3	2	WCEDAR	ART SD
05-00	27	066	22-W	000	29	135	4	014	WCEDAR	17.0	51	2	2	WCEDAR	PLANT
03-00	22	066	22-W	000	29	135	4	004	WCEDAR	17.0	51	2	2	WCEDAR	PLANT
09-00	28	068	20-W	000	24	125	2	016	WCEDAR	7.2	00	0	0	WCEDAR	ART SD
11-00	35	068	22-W	000	27	120	1	008	WCEDAR	5.6	00	0	0	WCEDAR	ART SD
15-00	20	067	20-W	000	20	105	3	011	WCEDAR	3.7	00	0	0	WCEDAR	ART SD
13-00	19	067	22-W	000	33	105	5	018	WCEDAR	10.8	51	5	5	WCEDAR	ART SD
05-00	19	067	22-W	000	33	105	5	033	WCEDAR	10.8	51	5	5	WCEDAR	ART SD
18-00	34	068	20-W	000	24	104	2	050	WCEDAR	5.3	99	2	0	TMRACK	PLANT
07-00	29	067	22-W	000	29	098	1	033	WCEDAR	4.2	28	2	2	ASPEN	SPROUT
39-00	15	067	21-W	000	30	095	1	007	WCEDAR	7.0	00	0	0	WCEDAR	ART SD
28-00	30	068	21-W	000	27	093	2	007	WCEDAR	4.7	00	0	0	WCEDAR	ART SD
17-00	33	068	20-W	000	32	090	2	009	WCEDAR	4.0	60	2	0	WCEDAR	ART SD
02-00	13	066	22-W	000	37	066	5	019	WCEDAR	7.3	00	0	0	ASPEN	SPROUT
TOTAL STANDS		14	TOTAL ACRES		248										

LISTING OF ALL STANDS TO BE RESERVED

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M
02-00	17	066	22-W	000	19	128	2	025	WCEDAR	6.7	00	0	0
17-00	24	066	22-W	000	26	112	8	024	WCEDAR	29.6	00	0	0
03-00	15	066	22-W	000	20	110	1	006	WCEDAR	4.6	51	1	1
06-00	01	068	22-W	000	24	110	6	003	WCEDAR	28.6	28	3	1
11-00	23	066	22-W	000	29	105	7	006	WCEDAR	29.6	51	1	0
05-00	24	066	21-W	000	18	093	1	006	WCEDAR	4.6	00	0	0
01-00	25	066	21-W	000	18	093	2	030	WCEDAR	4.6	00	0	0
09-00	34	068	22-W	000	18	091	3	006	WCEDAR	14.3	00	0	0
03-00	23	066	22-W	000	29	071	4	043	WCEDAR	11.3	44	1	0
02-00	20	067	21-W	000	23	059	1	016	WCEDAR	3.0	00	0	0

TOTAL STANDS 10 TOTAL ACRES 165

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

- * - Acres listed are for portion of stand (50%) to be harvested
- X - Stands in sales sold prior to FY 1985
- + - Stand sold after 1985 not reached

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	REGEN PLANS	
														SPECIES	METHOD
02-00	20	066	21-W	000	28	182	4	020	WCEDAR	14.2	60	2	0	WCEDAR	PLANT
X04-00	28	067	21-W	000	29	162	3	042	WCEDAR	7.8	00	0	0	WCEDAR	ART SD
06-00	20	068	22-W	000	30	156	5	010	WCEDAR	22.0	00	0	0	WCEDAR	ART SD
09-00	34	067	22-W	000	29	157	4	017	WCEDAR	5.7	00	0	0	WCEDAR	PLANT
05-00	10	066	22-W	000	30	155	8	008	WCEDAR	25.2	28	3	0	WCEDAR	PLANT
08-00	03	066	22-W	000	25	155	5	017	WCEDAR	17.8	28	3	0	WCEDAR	ART SD
09-00	28	068	22-W	000	26	149	3	005	WCEDAR	6.3	00	0	0	BL SPR	PLANT
16-00	19	068	20-W	000	28	143	3	010	WCEDAR	13.0	00	0	0	TMRACK	PLANT
02-00	24	068	21-W	000	27	142	3	004	WCEDAR	6.0	40	2	0	BALM	SPROUT
03-00	19	066	21-W	000	28	143	4	015	WCEDAR	8.4	00	0	0	WCEDAR	ART SD
14-00	19	068	20-W	000	24	141	5	008	WCEDAR	25.3	00	0	0	WCEDAR	ART SD
03-00	31	068	22-W	000	25	139	3	008	WCEDAR	11.9	00	0	0	WCEDAR	ART SD
15-00	32	068	22-W	000	25	139	3	030	WCEDAR	11.9	00	0	0	WCEDAR	ART SD
31-00	18	068	21-W	000	26	139	4	014	WCEDAR	5.8	99	2	0	WCEDAR	PLANT
16-00	35	068	22-W	000	27	137	4	022	WCEDAR	17.1	00	0	0	WCEDAR	ART SD
04-00	24	066	22-W	000	31	137	8	003	WCEDAR	32.7	51	1	1	WCEDAR	PLANT
10-00	22	066	22-W	000	33	135	4	012	WCEDAR	12.2	00	0	0	WCEDAR	ART SD
*07-00	16	066	21-W	000	26	135	5	027	WCEDAR	13.3	00	0	0	WCEDAR	ART SD
14-00	35	068	22-W	000	29	132	2	016	WCEDAR	7.6	57	3	0	WCEDAR	ART SD
18-00	14	067	22-W	000	28	132	3	005	WCEDAR	13.2	00	0	0	WCEDAR	ART SD
07-00	15	067	22-W	000	28	132	3	008	WCEDAR	13.2	00	0	0	WCEDAR	ART SD
08-00	28	068	20-W	000	31	131	2	008	WCEDAR	10.0	99	2	0	WCEDAR	ART SD
05-00	22	068	21-W	000	27	130	5	004	WCEDAR	13.0	00	0	0	WCEDAR	ART SD

26-00	16	066	21-W	000	29	129	5	006	WCEDAR	15.7	00	0	0	WCEDAR	ART	SD
13-00	23	066	22-W	000	30	127	9	024	WCEDAR	39.3	51	1	0	WCEDAR	ART	SD
08-00	11	066	22-W	000	27	125	8	005	WCEDAR	29.3	00	0	0	WCEDAR	PLANT	
11-00	11	066	22-W	000	27	125	8	007	WCEDAR	29.3	00	0	0	WCEDAR	ART	SD
+16-00	09	068	21-W	000	23	116	6	005	WCEDAR	29.3	00	0	0	WCEDAR	PLANT	

TOTAL STANDS 27 TOTAL ACRES 318
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LISTING OF ALL STANDS TO BE THINNED

SIZE CLASS: 4

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	BASAL	AREA
09-00	23	066	22-W	000	30	091	9	028	WCEDAR	28.2	00	0	0	290	
08-00	23	066	22-W	000	28	099	9	051	WCEDAR	26.0	51	1	0	250	
23-00	04	068	21-W	000	30	105	8	017	WCEDAR	25.4	40	2	0	243	
02-00	08	066	22-W	000	29	098	7	015	WCEDAR	29.0	51	1	1	220	
23-00	08	068	22-W	000	30	092	5	012	WCEDAR	22.3	28	3	0	217	
13-00	32	068	22-W	000	26	114	5	011	WCEDAR	25.0	00	0	0	212	
04-00	05	068	21-W	000	32	091	6	013	WCEDAR	19.8	40	2	0	207	
06-00	30	067	22-W	000	34	093	7	047	WCEDAR	18.0	00	0	0	203	

SIZE CLASS: 5

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	BASAL	AREA
18-00	20	068	20-W	000	30	115	9	013	WCEDAR	35.7	00	0	0	260	
04-00	28	068	20-W	000	27	098	7	037	WCEDAR	32.3	40	2	0	205	
09-00	22	068	20-W	000	27	081	6	064	WCEDAR	24.6	40	2	0	200	
05-00	21	068	20-W	000	27	081	6	040	WCEDAR	24.0	40	2	0	188	
08-00	31	068	22-W	000	35	104	6	015	WCEDAR	22.0	00	0	0	180	
01-00	26	066	22-W	000	39	083	7	040	WCEDAR	27.0	00	0	0	180	
07-00	20	067	22-W	000	33	104	5	030	WCEDAR	16.2	28	3	0	172	
10-00	21	067	22-W	000	30	104	6	028	WCEDAR	22.5	00	0	0	170	
13-00	21	067	21-W	000	26	088	5	020	WCEDAR	23.1	00	0	0	160	
11-00	34	068	20-W	000	27	103	6	017	WCEDAR	29.0	99	2	0	154	

TOTAL STANDS 18 TOTAL ACRES 498
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Upland Black Spruce

Rotation Age (years) - 70
 Current Clearcut Base (acres) - 388
 Ten Year Allowable Cut (acres) - 55
 Ten Yr. Proposed Clearcut (acres) - 47

LISTING OF ALL STANDS TO BE REGENERATED AFTER SALVAGE

													REGEN PLANS		
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD
06-00	27	067	22-W	000	35	086	3	061	BL SPR	6.9	00	0	0	J PINE	ART SD
TOTAL STANDS		1		TOTAL ACRES		61									

LISTING OF ALL STANDS TO BE RESERVED

													REGEN PLANS		
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M		
10-00	05	068	21-W	000	35	088	3	009	BL SPR	4.4	40	2	0		
08-00	05	068	21-W	000	39	060	1	009	BL SPR	1.8	00	0	0		
TOTAL STANDS		2		TOTAL ACRES		18									

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

													REGEN PLANS		
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD
01-00	12	066	22-W	000	37	078	6	028	BL SPR	12.6	28	1	1	J PINE	PLANT
03-00	17	066	21-W	000	39	070	3	010	BL SPR	8.2	00	0	0	J PINE	PLANT
21-00	16	067	22-W	000	39	065	4	006	BL SPR	6.0	00	0	0	J PINE	ART SD
08-00	23	067	22-W	000	45	061	3	003	BL SPR	6.0	00	0	0	J PINE	ART SD
TOTAL STANDS		4		TOTAL ACRES		47									

Cut Over Area

Regeneration plans for the majority of these acres have already been made or carried out. Some stands are awaiting evaluation for success of natural regeneration.

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

													REGEN PLANS		
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD
07-10	29	068	21-W	000	72	004	0	012	NONE	0.0	00	0	0	ASPEN	UNDERS
16-00	03	066	21-W	000	76	005	0	024	NONE	0.0	00	0	0	ASPEN	UNDERS
17-00	03	066	21-W	000	55	005	0	035	NONE	0.0	00	0	0	ASPEN	UNDERS
01-00	05	066	21-W	000	00	002	0	041	NONE	0.0	00	0	0	N PINE	PLANT

05-00	05	066	21-W	000	00	002	0	028	NONE	0.0	00	0	0	J PINE	UNDERS
12-10	09	066	21-W	000	00	005	0	026	NONE	0.0	00	0	0	ASPEN	UNDERS
05-10	20	067	20-W	000	00	004	0	011	NONE	0.0	00	0	0	N PINE	PLANT
10-10	22	066	21-W	000	00	002	0	023	NONE	0.0	00	0	0	N PINE	PLANT
09-10	22	066	21-W	000	00	002	0	018	NONE	0.0	00	0	0	N PINE	PLANT
05-00	20	068	21-W	000	00	003	0	014	NONE	0.0	00	0	0	ASPEN	UNDERS
16-10	17	068	21-W	000	70	004	0	009	NONE	0.0	00	0	0	ASPEN	UNDERS
07-00	34	068	22-W	000	00	002	0	010	NONE	0.0	00	0	0	N PINE	ART SD
01-10	35	068	22-W	000	00	004	0	004	NONE	0.0	00	0	0	BL SPR	ART SD
11-00	14	067	21-W	000	00	005	0	005	NONE	0.0	00	0	0	N PINE	UNDERS
21-00	14	067	21-W	000	60	004	0	009	NONE	0.0	00	0	0	J PINE	UNDERS
13-10	14	067	21-W	000	66	004	0	004	NONE	0.0	00	0	0	ASH	UNDERS
03-00	31	067	21-W	000	00	002	0	021	NONE	0.0	00	0	0	N PINE	PLANT
02-00	31	067	21-W	000	00	002	0	014	NONE	0.0	00	0	0	J PINE	UNDERS
13-00	36	067	21-W	000	35	004	0	006	NONE	0.0	00	0	0	BL SPR	UNDERS
11-00	36	067	21-W	000	48	004	0	015	NONE	0.0	00	0	0	ASH	UNDERS
09-10	20	067	22-W	000	00	003	0	012	NONE	0.0	00	0	0	J PINE	UNDERS
06-10	30	067	22-W	000	00	002	0	010	NONE	0.0	00	0	0	WH SPR	PLANT
22-00	20	067	22-W	000	00	003	0	004	NONE	0.0	00	0	0	J PINE	UNDERS
16-00	20	067	22-W	000	00	003	0	037	NONE	0.0	00	0	0	WH SPR	PLANT
05-10	30	067	22-W	000	00	003	0	007	NONE	0.0	00	0	0	ASPEN	UNDERS
17-00	20	067	22-W	000	00	003	0	004	NONE	0.0	00	0	0	BL SPR	PLANT
18-00	20	067	22-W	000	28	003	0	004	NONE	0.0	00	0	0	BL SPR	PLANT
07-10	19	067	22-W	000	00	002	0	005	NONE	0.0	00	0	0	W CEDAR	ART SD
10-00	20	067	22-W	000	53	003	0	025	NONE	0.0	00	0	0	N PINE	UNDERS
01-10	30	067	22-W	000	81	002	0	006	NONE	0.0	00	0	0	WH SPR	PLANT
17-00	36	067	22-W	000	36	003	0	009	NONE	0.0	00	0	0	BL SPR	UNDERS
10-00	32	067	22-W	000	37	002	0	007	NONE	0.0	00	0	0	BL SPR	ART SD
14-10	36	067	22-W	000	00	003	0	004	NONE	0.0	00	0	0	BL SPR	UNDERS
22-00	34	067	22-W	000	24	002	0	013	NONE	0.0	00	0	0	BL SPR	ART SD
15-10	19	068	20-W	000	26	003	0	010	NONE	0.0	00	0	0	W CEDAR	ART SD
04-20	30	068	20-W	000	49	003	0	006	NONE	0.0	00	0	0	J PINE	ART SD
01-00	35	067	22-W	000	00	005	0	009	NONE	0.0	00	0	0	WH SPR	UNDERS
08-00	25	067	22-W	000	00	005	0	019	NONE	0.0	00	0	0	WH SPR	UNDERS
30-00	26	067	22-W	000	00	005	0	010	NONE	0.0	00	0	0	WH SPR	UNDERS
13-00	16	067	22-W	000	00	005	0	025	NONE	0.0	00	0	0	WH SPR	UNDERS
49-00	26	067	22-W	000	00	005	0	007	NONE	0.0	00	0	0	N PINE	UNDERS
05-00	30	068	22-W	000	40	003	0	005	NONE	0.0	00	0	0	ASH	UNDERS
18-00	35	068	22-W	000	00	004	0	004	NONE	0.0	00	0	0	WH SPR	PLANT
12-00	26	068	22-W	000	00	004	0	071	NONE	0.0	00	0	0	WH SPR	PLANT
24-00	17	068	21-W	000	43	004	0	008	NONE	0.0	00	0	0	TMRACK	PLANT
03-00	27	068	21-W	000	00	003	0	019	NONE	0.0	00	0	0	J PINE	PLANT
05-10	20	068	21-W	000	00	004	0	004	NONE	0.0	00	0	0	ASPEN	UNDERS
02-10	26	068	21-W	000	00	003	0	005	NONE	0.0	00	0	0	J PINE	PLANT
02-10	11	067	20-W	000	46	004	0	005	NONE	0.0	00	0	0	J PINE	ART SD
06-10	20	067	20-W	000	00	004	0	011	NONE	0.0	00	0	0	N PINE	PLANT
02-00	21	066	22-W	000	75	004	0	068	NONE	0.0	00	0	0	BL SPR	UNDERS
10-00	17	066	22-W	000	34	004	0	036	NONE	0.0	00	0	0	BL SPR	UNDERS
15-00	11	068	22-W	000	90	004	0	011	NONE	0.0	00	0	0	ASPEN	UNDERS
06-00	14	068	22-W	000	00	004	0	005	NONE	0.0	00	0	0	BL SPR	UNDERS
13-10	36	068	21-W	000	00	003	0	004	NONE	0.0	00	0	0	ASPEN	UNDERS
03-00	11	068	22-W	000	00	004	0	006	NONE	0.0	00	0	0	BL SPR	UNDERS
18-00	11	068	22-W	000	40	004	0	004	NONE	0.0	00	0	0	BL SPR	NAT SD

10-00	19	067	22-W	000	00	002	0	010	NONE	0.0	00	0	0	J PINE	UNDERS
04-00	30	067	22-W	000	00	002	0	007	NONE	0.0	00	0	0	J PINE	UNDERS

TOTAL STANDS	59	TOTAL ACRES	845
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Lowland Grass

Most of this type is hydric sites along flowages. It has little commercial potential.

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	REGEN PLANS	
														SPECIES	METHOD
01-00	09	068	21-W	000	00	005	0	025	NONE	0.0	00	0	0	BL SPR	PLANT
20-00	36	067	21-W	000	00	005	0	007	NONE	0.0	00	0	0	BL SPR	UNDERS

TOTAL STANDS	2	TOTAL ACRES	32
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Upland Grass

Most of the stands coded upland grass are site prep areas which have already been regenerated or will be in the near future. The remaining 17 acres are managed as permanent wildlife openings.

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	REGEN PLANS	
														SPECIES	METHOD
08-00	14	067	21-W	000	00	002	0	029	NONE	0.0	00	0	0	WH SPR	UNDERS
43-00	15	067	21-W	000	00	002	0	027	NONE	0.0	00	0	0	N PINE	UNDERS
13-20	14	067	21-W	000	00	003	0	014	NONE	0.0	00	0	0	N PINE	UNDERS
22-00	21	067	22-W	000	00	002	0	042	NONE	0.0	00	0	0	N PINE	UNDERS
25-00	34	068	20-W	000	00	002	0	021	NONE	0.0	00	0	0	WH SPR	UNDERS
26-00	33	068	20-W	000	00	002	0	013	NONE	0.0	00	0	0	WH SPR	UNDERS
24-00	33	068	20-W	000	00	002	0	030	NONE	0.0	00	0	0	WH SPR	UNDERS
25-00	33	068	20-W	000	00	002	0	009	NONE	0.0	00	0	0	WH SPR	UNDERS
23-00	34	068	20-W	000	00	002	0	012	NONE	0.0	00	0	0	WH SPR	UNDERS
07-00	31	068	20-W	000	00	002	0	029	NONE	0.0	00	0	0	N PINE	PLANT
01-00	32	068	20-W	000	00	002	0	018	NONE	0.0	00	0	0	WH SPR	UNDERS
29-00	31	068	20-W	000	00	002	0	006	NONE	0.0	00	0	0	N PINE	UNDERS
18-00	31	068	20-W	000	00	002	0	030	NONE	0.0	00	0	0	WH SPR	UNDERS
30-00	09	068	21-W	000	00	005	0	005	NONE	0.0	00	0	0	WH SPR	PLANT

05-00	29	068	22-W	000	00	001	0	016	NONE	0.0	00	0	0	TMRACK	PLANT
07-10	36	068	21-W	000	00	003	0	010	NONE	0.0	00	0	0	WH SPR	UNDERS

TOTAL STANDS	16	TOTAL ACRES	311
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Lowland Brush

Most of the lowland brush type in the RMU is too wet to be commercially productive. However, there are some sites which have been productive in the past. The following criteria will be used to select stands for further analysis: 1) over 10 acres in size, 2) physiographic class 4, 3) presence of indicator species, and 4) documented evidence that the site was productive in the past or has productive timber on adjacent similar sites. Sites that meet the criteria will be field checked to determine if they can be restocked with black spruce or tamarack.

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

ST-NBR	SCIN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	REGEN PLANS	
														SPECIES	METHOD
11-00	16	068	22-W	000	00	004	0	028	NONE	0.0	00	0	0	BL SPR	ART SD
13-00	02	068	22-W	000	00	004	0	030	NONE	0.0	00	0	0	BL SPR	ART SD
13-00	25	068	22-W	000	00	004	0	019	NONE	0.0	00	0	0	BL SPR	ART SD
09-00	27	068	22-W	000	00	004	0	041	NONE	0.0	00	0	0	BL SPR	ART SD
01-00	22	067	22-W	000	00	005	0	012	NONE	0.0	00	0	0	BL SPR	ART SD
04-00	09	068	21-W	000	00	005	0	039	NONE	0.0	00	0	0	BL SPR	ART SD
18-00	33	068	20-W	000	53	005	0	038	NONE	0.0	00	0	0	BL SPR	ART SD
08-00	36	067	21-W	000	00	005	0	017	NONE	0.0	00	0	0	BL SPR	ART SD
02-00	14	067	21-W	000	00	005	0	011	NONE	0.0	00	0	0	BL SPR	ART SD
02-00	03	067	21-W	000	00	005	0	010	NONE	0.0	00	0	0	BL SPR	ART SD
07-00	15	067	20-W	000	00	005	0	014	NONE	0.0	00	0	0	BL SPR	ART SD
02-00	26	066	22-W	000	00	004	0	044	NONE	0.0	00	0	0	BL SPR	ART SD
02-00	15	067	20-W	000	00	005	0	032	NONE	0.0	00	0	0	BL SPR	ART SD
04-00	20	066	22-W	000	00	004	0	015	NONE	0.0	00	0	0	BL SPR	ART SD

TOTAL STANDS	14	TOTAL ACRES	350
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Upland Brush

Most of the sites coded as upland brush on the Phase II inventory have been or will be restocked to commercial types.

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	REGEN PLANS		
														SPECIES	METHOD	
11-00	20	067	20-W	000	00	005	0	010	NONE	0.0	00	0	0	WH	SPR	PLANT
15-00	22	066	22-W	000	00	004	0	008	NONE	0.0	00	0	0	J	PINE	PLANT
11-00	22	066	22-W	000	00	005	0	006	NONE	0.0	00	0	0	WH	SPR	PLANT
03-00	28	067	21-W	000	00	005	0	008	NONE	0.0	00	0	0	J	PINE	UNDERS
04-00	26	068	20-W	000	00	005	0	013	NONE	0.0	00	0	0	TM	RACK	PLANT
14-00	06	068	21-W	000	00	005	0	004	NONE	0.0	00	0	0	WH	SPR	PLANT
04-00	03	067	21-W	000	00	005	0	012	NONE	0.0	00	0	0	WH	SPR	UNDERS

TOTAL STANDS 7 TOTAL ACRES 61

Long Lake RMU 3

EXISTING CONDITION

Table B.12 Long Lake RMU Timber Summary

Type	Acres	% Of RMU	Avg Site Index	Avg % Over Updated Age	Rot. Age	% At High Risk
Ash	815	3	44	97	54	0
Lowland Hardwoods	114	0	51	82	28	0
Aspen	13068	44	71	49	68	11
Birch	390	1	54	64	66	0
Balm of Gilead	1259	4	67	49	74	0
Northern Hwds.	132	0	41	52	71	0
Oak	17	0	45	15	0	0
White Pine	2010	7	44	89	28	1
Red Pine	1111	4	46	74	16	0
Jack Pine	1674	5	53	63	83	4
White Spruce	515	2	55	59	38	5
Balsam Fir	1172	4	52	57	77	1
Black Spr. Lowland	1106	4	31	80	28	5
Tamarack	139	0	42	77	6	0
N. White Cedar	2043	7	27	114	33	2
Black Spr. Upland	152	1	43	65	44	0
Cutover Area	417	1	--	--	--	--
Lowland Grass	250	1	--	--	--	--
Upland Grass	68	0	--	--	--	--
Lowland Brush	1471	5	--	--	--	--
Upland Brush	212	1	--	--	--	--
Unproductive Forest	297	1	--	--	--	--
Non Forest	1475	5	--	--	--	--
Total	29,907	100				

COVER TYPE COMPOSITION GOALS

Based on existing cover type conditions, timber markets, wildlife concerns, land administration proposals, and economic and biologic limitations and potentials, the following composition goals have been established for this unit.

Table B.13 Long Lake RMU Cover Type Composition Goals

Cover Type	Present		Ten Year		Long-term	
	Acres	%	Acres	%	Acres	%
Ash	815	3	815	3	815	3
Lowland Hardwoods	114	0	96	0	96	0
Aspen	13068	44	13146	44	13167	44
Birch	390	1	248	1	86	0
Balm of Gilead	1259	4	1160	4	902	3
Northern Hardwoods	132	0	24	0	24	0
Oak	17	0	17	0	17	0
White Pine	2010	7	1523	5	787	3
Norway Pine	1111	4	1556	5	2224	7
Jack Pine	1674	5	2648	9	3199	11
White Spruce	515	2	824	3	1298	4
Balsam Fir	1172	4	809	3	187	1
Black Spruce Lowland	1106	4	1141	4	1226	4
Tamarack	139	0	493	1	556	2
N. White Cedar	2043	7	1990	7	1990	7
Black Spruce Upland	152	1	87	0	3	0
Cutover Area	417	1	12	0	0	0
Lowland Grass	250	1	229	1	229	1
Upland Grass	68	0	52	0	52	0
Lowland Brush	1471	5	1265	4	1265	4
Upland Brush	212	1	0	0	0	0
Unproductive Forest	297	1	297	1	297	1
Non Forest	1475	5	1475	5	1475	5
Total	29,907	100	29,907	100	29,895	100

MANAGEMENT PRESCRIPTIONS

Table B.14 summarizes the management prescriptions by type for the next ten years in the Long Lake RMU. Tables B.15 and B.16 outline regeneration plans for the next ten years. These tables are followed by detailed lists of stands in each cover type to receive various treatments in the next ten years.

Table B.14 Management Prescriptions By Cover Type - Long Lake RMU

COVER TYPE	CLEAR CUT		THINNING		ALL-AGED		SALVAGE		REGEN		TOTAL	
	STD	ACRES	STD	ACRES	STD	ACRES	STD	ACRES	STD	ACRES	STD	ACRES
ASH	7	96	0	0	4	79	2	42	0	0	13	217
LOW HW	0	0	0	0	1	12	0	0	1	18	2	30
ASPEN	146	2699	0	0	0	0	14	279	18	319	178	3297
PBIRCH	4	57	0	0	0	0	3	39	4	51	11	147
BALM	16	308	0	0	0	0	2	15	1	4	19	327
NOR HW	1	58	0	0	0	0	0	0	2	50	3	108
OAK	0	0	0	0	1	17	0	0	0	0	1	17
W PINE	7	129	9	287	0	0	22	462	1	6	39	884
N PINE	6	78	8	62	0	0	17	332	0	0	31	472
J PINE	15	350	0	0	0	0	3	41	10	115	28	506
WH SPR	5	71	0	0	0	0	2	30	0	0	7	101
BALSAM	14	176	0	0	0	0	4	44	12	192	30	412
BL SPR	8	149	0	0	0	0	5	76	3	44	16	269
TMRACK	1	9	0	0	0	0	0	0	1	6	2	15
WCEDAR	15	154	13	124	0	0	5	137	4	64	37	479
UPBSPR	2	27	0	0	0	0	2	14	1	24	5	65
CUT	0	0	0	0	0	0	0	0	30	405	30	405
LOGRAS	0	0	0	0	0	0	1	11	0	0	1	11
UPGRAS	0	0	0	0	0	0	0	0	1	16	1	16
LOBRSH	0	0	0	0	0	0	4	103	6	103	10	206
UPBRSH	0	0	0	0	0	0	0	0	6	212	6	212
TOTAL	247	4361	30	473	6	108	86	1625	101	1629	470	8196

Table B.15 Regeneration Plans for Lands Harvested, Salvaged, and Regenerated without Harvest by Type
 Long Lake RMU
 (Acres)

Regen. Method & Spp.	Current Cover Type																				Tot
	Ash	LH	Bi	Asp	BG	NH	WP	NP	JP	WS	BF	BSL	Tam	Ced	BSU	COA	LG	UG	LB	UB	
<u>Natural</u>																					
Ash	105																				105
Asp		18	58	2973	92	58					41						11		27		3278
Bi			5																		5
BG					224																224
<u>Understory</u>																					
Ash	33																				33
Asp										16						81					97
BG					4																4
WP							76														76
NP																				140	140
JP																31					31
BF				13															36		49
WS																16		16			32
BS																7					7
<u>Plant</u>																					
WP							6				18										24
NP				99			241	83	41	7	20				14	139				8	652
JP				49																	49
WS			10	86							94	121				67					378
BS											8					3					11
Tam													103	15	153					22	293
Ced											72				114		19				205
<u>Art. Seed</u>																					
NP									9								42				12 63
JP			74	68		50	274	318	465		48					51					52 1400
BS					7						54	166								59	286
Tam											14									62	76
Ced				9										85		3					97
Total	138	18	147	3297	327	108	597	410	506	101	412	269	15	355	65	405	11	16	206	212	7615

Table B.16 Summary of Artificial Regeneration Needs - Long Lake
(Acres by Species and Regeneration Method)

SPECIES	PLANT	SEED
WH SPR	378	0
N PINE	652	63
J PINE	49	1400
WCEDAR	205	97
BL SPR	11	286
W PINE	24	0
TMRACK	293	76
TOTAL	1612	1922

Table B.17 Projected Harvest Levels by Type, 1986 - 2036
and Estimated Sustained Yield with Year of Regulation

Type	Clearcut Acres by 10 year Period					Sustain yield	
	1986-95	1996-05	2006-15	2016-25	2026-35	Acres	Year
Ash	96	76	76	76	76	76	1995
Low Hwd	0	9	5	21	10	7	--
Aspen	2699	2523	2652	2525	2525	2528	2035
Birch	57	41	52	60	61	14	2045
Balm G.	308	300	198	198	202	174	2055
N Hwd	58	--	--	--	--	--	--
W Pine	129	135	124	115	105	61	2085
N Pine	78	150	116	116	60	217	2065
J Pine	350	456	249	249	73	556	2035
Wh Spr	71	65	48	58	58	182	2055
Balsam	176	209	223	165	84	30	2075
Bl Spr Lo	149	114	115	116	117	123	2085
Tam	9	50	64	10	--	62	2045
W Cedar	154	157	157	157	157	157	1995
Bl Spr Up	27	26	20	21	17	--	2035
Total	4,361	4,311	4,099	3,887	3,545	4,187	

Ash

Rotation Age (years) - 90
Current Clearcut Base (acres) - 640
Ten Year Allowable Cut (acres) - 71
Ten Yr. Proposed Clearcut (acres) - 96

LISTING OF ALL STANDS TO BE REGENERATED AFTER SALVAGE

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS		
													SPECIES	METHOD	
04-00	27	068	19-W	000	40	108	2	033	ASH	5.8	00	0	0	ASH	UNDERS
03-00	36	067	17-W	000	36	085	2	009	ASH	6.6	00	0	0	ASH	SPROUT
TOTAL STANDS		2	TOTAL ACRES		42										
=====			=====												

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

* - Active sales sold prior to 1986

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS		
													SPECIES	METHOD	
*04-00	07	069	21-W	000	50	175	8	012	ASH	16.3	00	0	0	ASH	SPROUT
06-00	18	069	21-W	000	49	150	9	015	ASH	17.5	00	0	0	ASH	SPROUT
08-00	17	069	21-W	000	51	148	6	013	ASH	12.1	00	0	0	ASH	SPROUT
16-00	36	066	17-W	000	42	148	2	023	ASH	10.8	00	0	0	ASH	SPROUT
*04-00	32	069	21-W	000	42	142	7	003	ASH	26.1	00	0	0	ASH	SPROUT
11-00	18	069	21-W	000	47	139	5	010	ASH	19.0	00	0	0	ASH	SPROUT
09-00	16	067	19-W	000	55	137	6	020	ASH	17.4	00	0	0	ASH	SPROUT
TOTAL STANDS		7	TOTAL ACRES		96										
=====			=====												

LISTING OF ALL STANDS TO BE MANAGED ON AN ALL-AGED BASIS

* - Ash River Bottomland; Special wildlife guidelines apply

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	BASAL	
													AREA	
*08-00	13	068	20-W	000	34	085	2	027	ASH	0.0	00	0	0	017
*12-00	14	068	20-W	000		101	4	014	ASH					
*13-00	14	068	20-W	000		070	1	021	ASH					
TOTAL STANDS		4	TOTAL ACRES		79									
=====			=====											

Lowland Hardwoods

Rotation Age (years) - 90
 Current Clearcut Base (acres) - 67
 Ten Year Allowable Cut (acres) - 7
 Ten Yr. Proposed Clearcut (acres) - 0

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS		
													SPECIES	METHOD	
25-00	16	066	17-W	000	35	086	2	018	ASH	4.0	40	2	0	ASPEN	SPROUT
TOTAL STANDS				1	TOTAL ACRES				18						

LISTING OF ALL STANDS TO BE MANAGED ON AN ALL-AGED BASIS

* - Ash River Bottomland; Special wildlife guidelines apply

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	BASAL AREA		
*07-00	13	068	20-W	000	49	108	3	012	ASH	5.5	40	2	0	087	
TOTAL STANDS				1	TOTAL ACRES				12						

Aspen

Rotation Age (years) - 50
 Current Clearcut Base (acres) - 11942
 Ten Year Allowable Cut (acres) - 2388
 Ten Yr. Proposed Clearcut (acres) - 2569 (plus 130 acres in active sales)

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS	
													SPECIES	METHOD
08-00	35	068	19-W	000	76	083	1	013	ASPEN	8.0	40	2	0	BALSAM UNDERS
24-00	36	067	17-W	000	75	068	3	007	ASPEN	5.3	40	4	0	ASPEN SPROUT
02-00	03	068	20-W	000	66	067	2	058	ASPEN	3.6	00	0	0	ASPEN SPROUT
03-00	30	067	17-W	000	72	065	3	020	ASPEN	8.6	40	4	0	ASPEN SPROUT
15-00	16	066	17-W	000	72	061	2	045	ASPEN	2.7	40	4	0	J PINE PLANT
20-00	11	068	21-W	000	47	060	1	010	LT ASP	3.8	27	2	0	J PINE ART SD
05-00	30	067	17-W	000	70	060	1	012	ASPEN	4.0	40	2	0	N PINE PLANT
08-00	27	069	21-W	000	75	056	2	012	ASPEN	6.8	27	3	1	ASPEN SPROUT
05-00	36	067	17-W	000	61	057	2	042	ASPEN	7.0	40	4	0	ASPEN SPROUT
04-00	12	067	17-W	000	70	054	2	009	ASPEN	4.8	40	2	0	ASPEN SPROUT

13-00	22	066	17-W	000	71	051	2	004	ASPEN	3.9	40	2	0	J	PINE	PLANT
02-00	30	067	17-W	243	68	050	1	005	ASPEN	2.7	40	2	0	N	PINE	PLANT
22-00	01	068	20-W	000	63	046	2	010	ASPEN	4.6	27	2	0	ASPEN	SPROUT	
31-00	01	068	20-W	000	59	041	2	012	ASPEN	3.3	25	2	0	WH	SPR	PLANT
04-00	30	067	19-W	000	50	039	1	014	ASPEN	1.9	40	2	0	J	PINE	ART SD
11-00	13	068	20-W	000	45	015	3	030	ASPEN	0.0	40	2	0	J	PINE	ART SD
12-00	16	066	18-W	000	55	015	2	007	ASPEN	0.0	00	0	0	J	PINE	ART SD
08-00	26	068	19-W	000	55	007	2	009	ASPEN	0.0	00	0	0	WCEDAR	ART SD	

TOTAL STANDS 18 TOTAL ACRES 319
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LISTING OF ALL STANDS TO BE REGENERATED AFTER SALVAGE

													REGEN PLANS			
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD	
07-00	29	068	18-W	000	45	075	6	023	ASPEN	15.5	40	2	0	WH	SPR	PLANT
07-00	16	068	18-W	000	56	071	4	016	PBIRCH	4.8	00	0	0	N	PINE	PLANT
01-00	16	068	18-W	000	55	071	4	066	ASPEN	5.5	00	0	0	N	PINE	PLANT
07-00	14	068	19-W	000	53	060	4	015	ASPEN	7.4	00	0	0	ASPEN	SPROUT	
02-00	29	068	19-W	000	79	059	9	021	ASPEN	45.0	40	4	0	ASPEN	SPROUT	
03-00	23	068	19-W	000	82	057	6	006	ASPEN	23.4	40	4	0	ASPEN	SPROUT	
24-00	12	068	19-W	000	61	052	3	015	ASPEN	7.0	25	3	1	ASPEN	SPROUT	
06-00	29	068	18-W	000	57	056	3	017	ASPEN	12.5	40	2	0	ASPEN	SPROUT	
01-00	19	068	18-W	000	55	055	3	040	ASPEN	5.8	00	0	0	WH	SPR	PLANT
27-00	33	069	21-W	000	55	051	3	011	ASPEN	6.0	27	2	1	WH	SPR	PLANT
21-00	23	068	19-W	000	58	051	4	011	ASPEN	11.3	00	0	0	ASPEN	SPROUT	
14-00	13	068	19-W	000	60	051	5	023	ASPEN	16.7	40	2	0	ASPEN	SPROUT	
13-00	12	068	20-W	000	60	051	4	007	ASPEN	8.3	40	2	0	J	PINE	ART SD
07-00	27	069	21-W	000	76	048	4	008	ASPEN	9.7	25	3	0	ASPEN	SPROUT	

TOTAL STANDS 14 TOTAL ACRES 279
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LISTING OF ALL STANDS TO BE RESERVED

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	
08-00	05	068	19-W	000	65	067	7	004	ASPEN	26.2	40	4	0	Recreation
07-00	05	068	19-W	000	65	067	7	010	ASPEN	26.2	40	4	0	Recreation
05-00	21	069	21-W	000	60	065	3	008	ASPEN	6.3	00	0	0	Recreation
01-00	32	069	19-W	000	76	059	9	039	ASPEN	33.7	40	4	0	Recreation
12-00	10	068	20-W	000	45	055	1	007	ASPEN	1.7	00	0	0	Rock
17-00	12	068	20-W	000	52	052	1	008	LT ASP	3.7	40	4	0	Rock

TOTAL STANDS 6 TOTAL ACRES 76
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LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

* - Acreage listed is for part of stand to be harvested

x - Stands are part of active sales sold prior to 1986

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS		
													SPECIES	METHOD	
03-00	07	067	18-W	000	70	095	5	009	ASPEN	12.8	40	2	0	ASPEN	SPROUT
42-00	26	068	19-W	000	73	089	7	018	ASPEN	16.4	40	4	0	ASPEN	SPROUT
37-00	26	068	19-W	000	73	089	7	016	ASPEN	16.4	40	4	0	ASPEN	SPROUT
07-00	15	067	18-W	000	64	087	9	013	ASPEN	33.1	40	4	0	ASPEN	SPROUT
12-00	36	067	17-W	000	72	087	2	018	ASPEN	6.4	40	2	0	ASPEN	SPROUT
05-00	35	068	19-W	000	76	083	8	013	ASPEN	26.8	40	2	0	ASPEN	SPROUT
03-00	33	068	19-W	000	67	083	6	015	ASPEN	8.4	40	4	0	ASPEN	SPROUT
11-00	36	068	18-W	000	69	083	9	026	ASPEN	21.0	40	4	0	ASPEN	SPROUT
13-00	36	068	18-W	000	78	081	9	018	ASPEN	22.0	40	4	0	ASPEN	SPROUT
04-00	36	067	18-W	000	66	080	6	034	ASPEN	21.2	40	4	0	ASPEN	SPROUT
11-00	28	068	19-W	000	76	080	8	014	ASPEN	26.0	40	2	0	ASPEN	SPROUT
04-00	34	068	19-W	000	69	079	5	033	ASPEN	12.4	40	4	0	ASPEN	SPROUT
01-00	35	068	19-W	000	66	077	6	047	ASPEN	8.3	40	2	0	ASPEN	SPROUT
19-00	25	068	19-W	000	67	077	5	013	ASPEN	13.7	40	2	0	ASPEN	SPROUT
17-00	26	068	19-W	000	70	076	8	024	ASPEN	28.6	40	2	0	ASPEN	SPROUT
04-00	22	068	19-W	000	73	076	7	005	ASPEN	18.0	40	4	0	ASPEN	SPROUT
07-00	36	067	19-W	000	71	076	6	013	ASPEN	14.5	40	4	0	ASPEN	SPROUT
05-00	22	068	19-W	000	73	076	5	017	ASPEN	11.2	40	4	0	ASPEN	SPROUT
08-00	14	067	17-W	000	64	075	8	007	ASPEN	22.0	40	2	0	ASPEN	SPROUT
14-00	02	068	21-W	000	70	075	7	010	ASPEN	23.3	40	2	0	ASPEN	SPROUT
04-00	29	068	18-W	000	58	074	5	010	ASPEN	10.6	40	2	0	ASPEN	SPROUT
01-00	34	068	18-W	000	67	073	8	016	ASPEN	32.5	40	4	0	ASPEN	SPROUT
15-00	13	068	19-W	000	73	073	9	010	ASPEN	18.5	40	2	0	ASPEN	SPROUT
05-00	27	068	19-W	000	73	073	6	015	ASPEN	10.5	40	4	0	ASPEN	SPROUT
04-00	10	068	20-W	000	69	072	9	015	ASPEN	24.6	40	4	0	ASPEN	SPROUT
*03-00	34	068	18-W	000	62	072	7	017	ASPEN	16.1	40	4	0	ASPEN	SPROUT
02-00	20	068	18-W	000	48	072	5	016	ASPEN	19.2	00	0	0	ASPEN	SPROUT
05-00	14	067	17-W	000	69	072	9	012	ASPEN	38.7	40	2	0	ASPEN	SPROUT
04-00	17	068	19-W	000	78	071	9	003	ASPEN	55.7	40	2	0	ASPEN	SPROUT
06-00	23	068	19-W	000	57	071	4	005	ASPEN	10.6	40	2	0	ASPEN	SPROUT
*13-00	03	068	21-W	000	67	070	6	012	ASPEN	9.2	40	4	0	ASPEN	SPROUT
09-00	18	068	20-W	000	75	070	9	007	ASPEN	25.3	40	4	0	ASPEN	SPROUT
02-00	03	068	21-W	000	70	070	9	015	ASPEN	24.0	40	2	0	ASPEN	SPROUT
*01-00	13	066	18-W	000	72	070	6	021	ASPEN	23.2	40	2	0	ASPEN	SPROUT
*03-00	05	066	18-W	000	75	070	4	033	ASPEN	10.7	40	2	0	ASPEN	SPROUT
06-00	16	067	17-W	000	72	069	3	026	ASPEN	10.1	40	2	0	ASPEN	SPROUT
05-00	16	068	19-W	000	63	069	4	009	ASPEN	6.1	99	2	0	ASPEN	SPROUT
08-00	31	068	19-W	000	77	069	9	014	ASPEN	31.3	40	2	0	ASPEN	SPROUT
*08-00	36	068	18-W	000	68	068	9	015	ASPEN	29.8	40	4	0	ASPEN	SPROUT
11-00	36	067	17-W	000	76	069	6	006	ASPEN	21.6	40	4	0	ASPEN	SPROUT
01-00	11	066	18-W	000	80	068	9	010	ASPEN	23.0	40	2	0	ASPEN	SPROUT
23-00	36	067	17-W	000	81	068	5	011	ASPEN	11.3	40	2	0	ASPEN	SPROUT
17-00	16	068	18-W	000	75	067	5	071	ASPEN	12.9	00	0	0	ASPEN	SPROUT
01-00	36	068	18-W	000	65	067	8	023	ASPEN	23.2	40	2	0	ASPEN	SPROUT
17-00	36	068	18-W	000	65	067	8	007	ASPEN	23.2	40	2	0	ASPEN	SPROUT
03-00	08	068	20-W	000	76	067	7	036	ASPEN	12.0	40	2	0	ASPEN	SPROUT

06-00	31	069	21-W	000	71	067	9	038	ASPEN	54.8	27	4	1	ASPEN	SPROUT
16-00	01	068	20-W	000	74	064	7	009	ASPEN	21.3	00	0	0	ASPEN	SPROUT
05-00	17	068	19-W	000	73	066	6	009	ASPEN	26.6	40	2	0	ASPEN	SPROUT
07-00	36	067	17-W	000	68	067	8	016	ASPEN	18.8	40	2	0	ASPEN	SPROUT
*04-00	03	066	18-W	000	78	066	9	010	ASPEN	45.5	40	4	0	ASPEN	SPROUT
14-00	34	069	21-W	000	81	066	7	020	ASPEN	12.3	26	3	1	ASPEN	SPROUT
02-00	34	066	18-W	000	67	065	3	011	ASPEN	7.4	99	2	0	ASPEN	SPROUT
15-00	10	068	19-W	000	58	065	5	052	ASPEN	15.8	00	0	0	ASPEN	SPROUT
07-00	23	068	19-W	000	75	065	8	007	ASPEN	36.0	40	2	0	ASPEN	SPROUT
27-00	10	068	19-W	000	58	065	5	006	ASPEN	15.8	00	0	0	ASPEN	SPROUT
07-00	20	068	19-W	000	78	065	7	011	ASPEN	29.8	40	2	0	ASPEN	SPROUT
02-00	20	068	19-W	000	73	065	7	018	ASPEN	27.3	40	2	0	ASPEN	SPROUT
02-00	07	068	20-W	000	61	065	7	004	ASPEN	26.0	40	2	0	ASPEN	SPROUT
04-00	16	068	20-W	000	73	064	7	011	ASPEN	27.3	40	2	0	ASPEN	SPROUT
12-00	17	069	21-W	000	77	064	6	027	ASPEN	18.4	27	3	1	ASPEN	SPROUT
*09-00	16	068	20-W	000	69	064	9	018	ASPEN	20.5	40	2	0	ASPEN	SPROUT
04-00	03	068	20-W	000	74	064	9	039	ASPEN	37.7	40	2	0	ASPEN	SPROUT
12-00	11	068	20-W	000	76	064	8	017	ASPEN	30.3	40	4	0	ASPEN	SPROUT
18-00	11	068	20-W	000	70	064	7	018	ASPEN	19.4	40	2	0	ASPEN	SPROUT
09-00	25	068	19-W	000	72	064	5	044	ASPEN	15.1	40	2	0	ASPEN	SPROUT
06-00	17	068	19-W	000	83	064	9	004	ASPEN	50.5	40	2	0	ASPEN	SPROUT
02-00	17	068	19-W	000	75	064	8	010	ASPEN	38.8	40	2	0	ASPEN	SPROUT
01-00	05	067	18-W	000	66	064	4	013	ASPEN	10.9	40	2	0	ASPEN	SPROUT
*08-00	36	067	17-W	000	61	064	4	050	ASPEN	10.7	40	4	0	ASPEN	SPROUT
*05-00	30	067	19-W	000	65	063	7	009	ASPEN	10.5	00	0	0	ASPEN	SPROUT
03-00	36	068	17-W	000	73	063	8	007	ASPEN	33.3	40	2	0	ASPEN	SPROUT
05-00	16	067	17-W	000	62	063	6	042	ASPEN	16.8	40	2	0	ASPEN	SPROUT
08-00	23	068	19-W	000	72	063	8	014	ASPEN	23.2	40	4	0	ASPEN	SPROUT
08-00	24	068	19-W	000	80	063	9	007	ASPEN	47.0	40	2	0	ASPEN	SPROUT
03-00	14	068	19-W	000	61	063	3	010	ASPEN	11.2	00	0	0	ASPEN	SPROUT
01-00	33	068	19-W	000	71	063	6	005	ASPEN	10.7	40	2	0	ASPEN	SPROUT
*18-00	01	068	20-W	000	78	063	5	007	ASPEN	15.8	26	4	0	ASPEN	SPROUT
13-00	02	068	21-W	000	69	063	7	022	ASPEN	12.8	40	2	0	ASPEN	SPROUT
07-00	11	068	21-W	000	69	063	3	008	ASPEN	8.3	40	2	0	ASPEN	SPROUT
26-00	11	068	21-W	000	68	061	5	013	ASPEN	7.7	26	3	1	ASPEN	SPROUT
06-00	18	068	20-W	000	78	063	4	015	ASPEN	9.3	40	2	0	ASPEN	SPROUT
04-00	31	069	21-W	000	69	063	9	021	ASPEN	42.5	25	1	0	ASPEN	SPROUT
18-00	31	069	21-W	000	79	063	9	022	ASPEN	39.5	26	2	1	ASPEN	SPROUT
01-00	18	068	20-W	000	64	063	6	016	ASPEN	14.9	99	2	0	ASPEN	SPROUT
28-00	11	068	21-W	000	69	063	5	013	ASPEN	17.0	27	2	0	ASPEN	SPROUT
12-00	18	069	21-W	000	77	063	8	009	ASPEN	17.0	25	4	1	ASPEN	SPROUT
04-00	19	066	18-W	000	73	063	7	006	ASPEN	25.0	40	4	0	ASPEN	SPROUT
13-00	01	068	21-W	000	72	062	7	010	ASPEN	16.8	40	2	0	ASPEN	SPROUT
*18-00	18	068	20-W	000	80	062	9	017	ASPEN	20.0	40	2	0	ASPEN	SPROUT
14-00	17	068	20-W	000	69	062	9	007	ASPEN	24.7	40	2	0	ASPEN	SPROUT
18-00	12	068	21-W	000	75	062	5	012	ASPEN	11.2	27	2	0	ASPEN	SPROUT
13-00	20	069	21-W	000	72	062	4	020	ASPEN	10.5	27	1	0	ASPEN	SPROUT
19-00	11	068	21-W	000	71	062	6	011	ASPEN	20.0	27	2	0	ASPEN	SPROUT
04-00	30	068	19-W	000	70	062	6	006	ASPEN	14.7	40	2	0	ASPEN	SPROUT
*02-00	32	068	19-W	000	82	062	9	054	ASPEN	25.5	40	2	0	ASPEN	SPROUT
14-00	03	068	20-W	000	80	062	4	010	ASPEN	4.0	40	2	0	ASPEN	SPROUT
*05-00	29	067	19-W	000	79	062	9	017	ASPEN	35.4	40	2	0	ASPEN	SPROUT
*01-00	16	067	17-W	000	67	062	5	011	ASPEN	13.6	40	2	0	ASPEN	SPROUT
01-00	07	067	18-W	000	74	061	7	009	ASPEN	21.7	00	0	0	ASPEN	SPROUT

*11-00	16	067	17-W	000	80	061	6	011	ASPEN	17.0	40	2	0	ASPEN	SPROUT
14-00	25	068	19-W	000	63	061	4	023	ASPEN	13.1	40	2	0	ASPEN	SPROUT
29-00	13	068	19-W	000	71	057	6	020	ASPEN	14.2	24	1	1	ASPEN	SPROUT
*01-00	34	068	19-W	000	66	061	5	015	ASPEN	7.7	40	2	0	ASPEN	SPROUT
10-00	01	068	20-W	000	81	061	7	008	ASPEN	23.3	27	2	0	ASPEN	SPROUT
26-00	01	068	20-W	000	79	061	6	019	ASPEN	17.3	27	4	0	ASPEN	SPROUT
09-00	11	068	20-W	000	74	061	8	020	ASPEN	17.7	40	4	0	ASPEN	SPROUT
*08-00	36	068	19-W	000	78	061	8	024	ASPEN	26.9	40	2	0	ASPEN	SPROUT
13-00	10	068	20-W	000	80	061	9	006	ASPEN	49.7	40	2	0	ASPEN	SPROUT
16-00	31	069	21-W	000	65	061	8	027	ASPEN	38.6	27	2	1	ASPEN	SPROUT
22-00	12	068	21-W	000	73	061	6	007	ASPEN	15.5	27	2	0	ASPEN	SPROUT
*01-00	02	068	21-W	000	73	061	6	024	ASPEN	15.5	40	2	0	ASPEN	SPROUT
*21-00	13	068	21-W	000	75	061	6	029	ASPEN	26.4	40	2	0	ASPEN	SPROUT
05-00	34	066	18-W	000	66	061	6	015	ASPEN	26.0	40	2	0	ASPEN	SPROUT
*01-00	16	066	17-W	000	73	062	4	040	ASPEN	8.7	40	4	0	ASPEN	SPROUT
01-00	17	066	17-W	000	73	061	4	004	ASPEN	8.6	40	4	0	ASPEN	SPROUT
03-00	17	066	17-W	000	72	061	4	010	ASPEN	9.6	40	4	0	ASPEN	SPROUT
22-00	16	066	17-W	000	71	061	5	019	ASPEN	11.6	40	4	0	ASPEN	SPROUT
06-00	01	068	21-W	000	77	060	9	030	ASPEN	55.2	40	2	0	ASPEN	SPROUT
11-00	14	068	21-W	000	75	060	6	020	ASPEN	25.6	40	2	0	ASPEN	SPROUT
19-00	13	068	21-W	000	68	060	7	005	ASPEN	18.3	40	2	0	ASPEN	SPROUT
*07-00	02	068	20-W	000	73	060	9	045	ASPEN	44.3	40	2	0	ASPEN	SPROUT
*19-00	16	068	20-W	000	74	060	7	041	ASPEN	20.6	40	2	0	ASPEN	SPROUT
20-00	11	068	20-W	000	79	060	8	025	ASPEN	26.3	40	4	0	ASPEN	SPROUT
04-00	16	066	17-W	000	70	060	5	091	ASPEN	17.9	40	4	0	ASPEN	SPROUT
01-00	05	066	17-W	000	79	060	7	020	ASPEN	21.2	40	4	0	ASPEN	SPROUT
16-00	12	068	20-W	000	80	058	7	095	ASPEN	20.9	40	4	0	ASPEN	SPROUT
*10-00	16	068	20-W	000	73	058	9	011	ASPEN	38.7	40	4	0	ASPEN	SPROUT
11-00	16	068	19-W	000	74	058	9	012	ASPEN	16.2	40	4	0	ASPEN	SPROUT
30-00	36	067	17-W	000	69	058	7	022	ASPEN	26.6	40	4	0	ASPEN	SPROUT
15-00	36	067	17-W	000	69	058	7	018	ASPEN	26.6	40	4	0	ASPEN	SPROUT
*19-00	01	068	20-W	000	73	057	9	018	ASPEN	40.0	27	4	0	ASPEN	SPROUT
21-00	01	068	20-W	000	73	057	8	017	ASPEN	35.2	27	4	0	ASPEN	SPROUT
*10-00	16	066	18-W	000	81	056	5	086	ASPEN	15.8	40	4	0	ASPEN	SPROUT
03-00	31	067	19-W	000	80	056	7	014	ASPEN	29.3	40	4	0	ASPEN	SPROUT
*12-00	16	068	20-W	000	72	053	9	010	ASPEN	44.7	40	4	0	ASPEN	SPROUT
02-00	20	067	19-W	000	73	053	6	016	ASPEN	24.6	40	4	0	ASPEN	SPROUT
x18-00	01	068	20-W		063		007	ASPEN						ASPEN	SPROUT
x11-00	02	068	20-W		060		044	ASPEN						ASPEN	SPROUT
x11-00	14	068	20-W		060		018	ASPEN						ASPEN	SPROUT
x11-00	14	068	21-W		060		020	ASPEN						ASPEN	SPROUT
x09-00	14	068	21-W		058		003	ASPEN						ASPEN	SPROUT
x06-00	14	068	21-W		058		005	ASPEN						ASPEN	SPROUT
x19-00	14	068	21-W		057		010	ASPEN						ASPEN	SPROUT
x19-00	01	068	21-W		057		018	ASPEN						ASPEN	SPROUT
x17-00	14	068	21-W		054		005	ASPEN						ASPEN	SPROUT

TOTAL STANDS 146 TOTAL ACRES 2699

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Birch

Rotation Age (years) - 60
Current Clearcut Base (acres) - 300
Ten Year Allowable Cut (acres) - 50
Ten Yr. Proposed Clearcut (acres) - 57

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

													REGEN PLANS		
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD
18-00	16	067	19-W	000	59	095	2	006	PBIRCH	3.7	00	0	0	ASPEN	UNDERS
03-00	24	068	19-W	000	51	063	2	027	PBIRCH	4.2	00	0	0	J PINE	ART SD
23-00	01	068	21-W	000	00	062	3	006	PBIRCH	8.5	00	0	0	J PINE	ART SD
17-00	25	068	19-W	000	46	058	3	012	PBIRCH	4.0	99	2	0	J PINE	ART SD
TOTAL STANDS		4		TOTAL ACRES		51									
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LISTING OF ALL STANDS TO BE REGENERATED AFTER SALVAGE

													REGEN PLANS		
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD
04-00	17	069	21-W	000	52	074	4	023	PBIRCH	4.3	30	1	1	J PINE	ART SD
21-00	24	068	19-W	000	42	071	2	006	PBIRCH	3.0	00	0	0	J PINE	ART SD
16-00	17	068	20-W	000	57	050	2	010	PBIRCH	4.0	00	0	0	BALSAM	PLANT
TOTAL STANDS		3		TOTAL ACRES		39									
=====		=====		=====		=====									

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

* - Acreage listed is for part of stand to be harvested

													REGEN PLANS		
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD
07-00	16	067	19-W	000	59	095	4	005	PBIRCH	9.3	00	0	0	PBIRCH	SPROUT
08-00	02	068	21-W	000	58	064	7	013	PBIRCH	13.5	40	2	0	ASPEN	SPROUT
*03-00	36	067	19-W	000	60	063	6	017	PBIRCH	15.3	00	0	0	ASPEN	SPROUT
05-00	25	068	19-W	000	50	062	4	022	PBIRCH	11.7	40	2	0	ASPEN	SPROUT
TOTAL STANDS		4		TOTAL ACRES		57									
=====		=====		=====		=====									

Balm of Gilead

Rotation Age (years) - 50
 Current Clearcut Base (acres) - 1206
 Ten Year Allowable Cut (acres) - 241
 Ten Yr. Proposed Clearcut (acres) - 308

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

													REGEN PLANS			
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD	
17-00	16	068	20-W	000	56	050	1	004	BALM	6.3	00	0	0	BALM	UNDERS	
TOTAL STANDS				1	TOTAL ACRES				4							

LISTING OF ALL STANDS TO BE REGENERATED AFTER SALVAGE

													REGEN PLANS			
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD	
12-00	34	069	21-W	000	60	077	2	008	BALM	4.0	00	0	0	BALM	SPROUT	
09-00	13	068	19-W	000	56	056	3	007	BALM	5.8	99	2	0	BL SPR	ART SD	
TOTAL STANDS				2	TOTAL ACRES				15							

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

* - Acreage listed is for part of stand to be harvested

													REGEN PLANS			
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD	
03-00	11	068	21-W	000	77	084	6	008	BALM	14.7	00	0	0	BALM	SPROUT	
15-00	18	069	21-W	000	61	067	7	013	ASPEN	19.5	00	0	0	ASPEN	SPROUT	
07-00	29	067	19-W	000	71	065	8	030	BALM	21.0	00	0	0	BALM	SPROUT	
14-00	11	068	21-W	000	68	063	9	031	BALM	26.8	27	2	0	ASPEN	SPROUT	
10-00	12	068	21-W	000	70	063	9	013	BALM	40.0	40	2	0	ASPEN	SPROUT	
04-00	07	068	20-W	000	71	062	6	008	BALM	18.7	00	0	0	BALM	SPROUT	
*03-00	18	068	20-W	000	77	061	9	038	BALM	22.3	40	2	0	BALM	SPROUT	
*01-00	16	068	20-W	000	66	061	7	035	BALM	18.3	40	2	0	BALM	SPROUT	
05-00	12	068	21-W	000	71	061	6	014	BALM	28.6	51	2	0	BALM	SPROUT	
*04-00	18	068	20-W	000	69	060	8	013	BALM	19.0	40	2	0	ASPEN	SPROUT	
14-00	08	068	20-W	000	72	059	6	015	BALM	25.4	40	2	0	BALM	SPROUT	
06-00	13	068	21-W	000	78	059	9	011	BALM	30.7	40	2	0	BALM	SPROUT	
15-00	12	068	21-W	000	74	059	9	015	BALM	35.0	28	2	0	BALM	SPROUT	
*16-00	18	068	20-W	000	73	057	8	022	BALM	19.7	40	2	0	ASPEN	SPROUT	
17-00	12	068	21-W	000	69	056	8	018	BALM	19.5	00	0	0	BALM	SPROUT	
*11-00	17	068	20-W	000	66	055	7	024	BALM	27.2	00	0	0	BALM	SPROUT	
TOTAL STANDS				16	TOTAL ACRES				308							

Northern Hardwoods

Rotation Age (years) - 60
 Current Clearcut Base (acres) - 58
 Ten Year Allowable Cut (acres) - 9
 Ten Yr. Proposed Clearcut (acres) - 58

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS		
													SPECIES	METHOD	
08-00	01	067	19-W	000	39	065	2	018	RMAPLE	3.8	00	0	0	J PINE	ART SD
26-00	16	066	17-W	000	45	016	2	032	NOR HW	0.0	00	0	0	J PINE	ART SD
TOTAL STANDS		2		TOTAL ACRES		50									
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LISTING OF ALL STANDS TO BE RESERVED

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	
11-00	23	068	19-W	000	35	084	3	013	RMAPLE	6.2	00	0	0
02-00	31	067	17-W	000	45	066	1	005	RMAPLE	5.0	00	0	0
25-00	01	068	20-W	000	30	015	2	006	RMAPLE	0.9	00	0	0
TOTAL STANDS		3		TOTAL ACRES		24							
		=====				=====							

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS		
													SPECIES	METHOD	
21-00	16	068	18-W	000	52	070	5	058	ASPEN	6.9	40	2	0	ASPEN	SPROUT
TOTAL STANDS		1		TOTAL ACRES		58									
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Oak

LISTING OF ALL STANDS TO BE MANAGED ON AN ALL-AGED BASIS

SIZE CLASS: 1

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	BASAL AREA	
05-00	12	068	20-W	000	45	015	6	017	RD OAK	0.0	00	0	0	010
TOTAL STANDS		1		TOTAL ACRES		17								
		=====				=====								

White Pine

Rotation Age (years) - 100
 Current Clearcut Base (acres) - 1380
 Ten Year Allowable Cut (acres) - 138
 Ten Yr. Proposed Clearcut (acres) - 129

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

													REGEN PLANS	
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	SPECIES	METHOD
08-00	16	067	17-W	000	51	074	1	006	W PINE	1.0	00	0 0	W PINE	PLANT
TOTAL STANDS		1		TOTAL ACRES		6								

LISTING OF ALL STANDS TO BE REGENERATED AFTER SALVAGE

													REGEN PLANS	
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	SPECIES	METHOD
22-00	14	068	20-W	000	34	125	1	010	W PINE	1.6	40	2 0	J PINE	ART SD
06-00	14	068	20-W	000	34	125	1	017	W PINE	1.6	40	2 0	J PINE	ART SD
08-00	16	067	19-W	000	44	110	4	024	W PINE	8.2	40	4 0	W PINE	UNDERS
22-00	16	067	19-W	000	46	110	2	052	W PINE	4.8	40	2 0	W PINE	UNDERS
06-00	03	068	20-W	000	36	101	2	008	W PINE	5.8	40	4 0	J PINE	ART SD
28-00	16	067	18-W	000	37	099	2	004	N PINE	2.7	40	4 0	J PINE	ART SD
07-00	16	066	18-W	000	58	095	1	014	W PINE	6.1	00	0 0	N PINE	PLANT
11-00	12	068	19-W	000	35	095	3	017	W PINE	4.8	40	2 0	J PINE	ART SD
18-00	12	068	19-W	000	38	091	2	007	W PINE	3.6	16	3 1	J PINE	ART SD
19-00	24	068	19-W	000	42	093	2	019	W PINE	8.6	40	4 0	J PINE	ART SD
17-00	13	068	19-W	000	42	092	4	006	W PINE	15.4	40	4 0	J PINE	ART SD
22-00	32	069	21-W	000	36	090	1	008	W PINE	2.0	16	3 2	J PINE	ART SD
10-00	16	068	18-W	000	37	088	2	012	W PINE	9.6	40	2 0	J PINE	ART SD
13-00	13	068	19-W	000	45	087	4	032	W PINE	11.2	40	4 0	J PINE	ART SD
07-00	22	068	19-W	000	35	085	4	020	W PINE	8.5	40	4 0	J PINE	ART SD
11-00	14	068	19-W	000	46	082	3	043	W PINE	6.1	40	4 0	N PINE	PLANT
06-00	31	067	17-W	000	53	083	2	034	W PINE	8.7	00	0 0	N PINE	PLANT
01-00	25	068	19-W	000	32	077	1	077	W PINE	3.6	40	4 0	J PINE	ART SD
19-00	16	068	18-W	000	42	067	1	017	W PINE	5.6	40	4 0	J PINE	ART SD
20-00	16	068	20-W	000	47	066	1	027	W PINE	4.2	40	2 0	N PINE	PLANT
04-00	25	068	19-W	000	39	064	2	009	W PINE	3.0	40	2 0	J PINE	ART SD
18-00	13	068	21-W	000	55	058	1	005	W PINE	2.7	40	2 0	N PINE	PLANT
TOTAL STANDS		22		TOTAL ACRES		462								

LISTING OF ALL STANDS TO BE RESERVED

* - Recreation restricted stands; treat as timber status 2 or 3.

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M
*11-00	17	069	21-W	000	48	112	3	008	W PINE	4.6	16	3	0 Recreation
07-00	15	068	20-W	000	32	095	1	010	W PINE	2.5	16	2	0 Rock
*04-00	21	069	21-W	000	41	092	3	005	W PINE	12.1	16	2	1 Recreation
*15-00	27	069	21-W	000	44	083	1	015	W PINE	2.2	16	3	1 Recreation
*01-00	08	069	21-W	000	42	081	7	006	W PINE	22.0	16	2	0 Recreation
TOTAL STANDS		5		TOTAL ACRES		44							

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

* - Acreage listed is for part of stand to be harvested

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	REGEN PLANS	
														SPECIES	METHOD
12-00	36	068	19-W	000	67	136	8	024	W PINE	25.6	40	2	0	N PINE PLANT	
18-00	16	068	18-W	000	49	120	3	011	W PINE	4.6	40	2	0	N PINE PLANT	
26-00	16	067	19-W	000	49	114	3	008	W PINE	5.8	40	2	0	N PINE PLANT	
04-00	07	067	18-W	000	38	113	3	006	W PINE	6.1	00	0	0	J PINE ART SD	
15-00	03	068	20-W	000	46	112	3	005	W PINE	6.4	00	0	0	J PINE ART SD	
08-00	16	068	18-W	242	46	110	5	049	W PINE	13.5	40	2	0	N PINE PLANT	
*15-00	36	067	18-W	000	51	108	7	026	W PINE	18.6	40	4	0	N PINE PLANT	
TOTAL STANDS		7		TOTAL ACRES		129									

LISTING OF ALL STANDS TO BE THINNED

SIZE CLASS: 5

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	BASAL AREA
04-00	06	066	17-W	000	53	078	8	032	W PINE	30.0	00	0	0	150
10-00	23	068	19-W	000	43	090	6	117	W PINE	17.0	40	4	0	144
05-00	23	068	19-W	000	43	090	6	040	W PINE	17.0	40	4	0	144
06-00	36	068	19-W	000	47	085	6	022	W PINE	21.6	40	2	0	142
15-00	13	068	21-W	000	59	058	4	032	W PINE	7.3	40	2	0	127
22-00	16	067	18-W	000	48	083	7	012	N PINE	12.2	00	0	0	120
07-00	25	068	19-W	000	38	083	5	017	W PINE	13.2	40	4	0	118

SIZE CLASS: 6

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	BASAL AREA
13-00	16	066	18-W	000	51	080	9	009	W PINE	22.6	40	2	0	190
05-00	04	066	18-W	000	47	087	3	006	W PINE	4.9	00	0	0	107
TOTAL STANDS		9		TOTAL ACRES		287								

Norway Pine

Rotation Age (years) - 100
 Current Clearcut Base (acres) - 724
 Ten Year Allowable Cut (acres) - 72
 Ten Yr. Proposed Clearcut (acres) - 78

LISTING OF ALL STANDS TO BE REGENERATED AFTER SALVAGE

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	REGEN PLANS SPECIES	METHOD
05-00	14	068	20-W	000	35	123	4	027	N PINE	7.4	40	2	0	J PINE	ART SD
21-00	14	068	20-W	000	35	123	4	007	N PINE	7.4	40	2	0	J PINE	ART SD
04-00	10	068	19-W	000	32	096	3	026	N PINE	5.9	40	4	0	J PINE	ART SD
06-00	36	067	17-W	000	30	084	1	006	N PINE	3.3	00	0	0	J PINE	ART SD
02-00	32	067	17-W	000	52	077	2	006	N PINE	4.1	00	0	0	J PINE	ART SD
38-00	11	068	20-W	000	33	073	2	007	N PINE	6.1	40	2	0	J PINE	ART SD
16-00	11	068	20-W	000	33	073	2	029	N PINE	6.1	40	2	0	J PINE	ART SD
02-00	02	068	21-W	000	43	072	2	005	N PINE	7.2	40	2	0	J PINE	ART SD
25-00	11	068	21-W	000	38	065	1	041	N PINE	4.9	00	0	0	J PINE	ART SD
15-00	02	068	21-W	000	38	065	1	020	N PINE	4.9	00	0	0	J PINE	ART SD
06-00	02	068	21-W	000	38	065	1	060	N PINE	4.9	00	0	0	J PINE	ART SD
29-00	01	068	20-W	000	40	064	1	006	N PINE	7.0	42	2	0	J PINE	ART SD
06-00	14	068	19-W	000	50	060	2	012	N PINE	3.7	00	0	0	J PINE	ART SD
08-00	36	066	18-W	000	54	060	2	023	N PINE	2.8	40	2	0	N PINE	PLANT
05-00	31	068	19-W	000	41	054	2	016	N PINE	6.5	00	0	0	J PINE	ART SD
27-00	01	068	20-W	000	37	044	1	018	N PINE	2.5	40	4	0	J PINE	ART SD
14-00	01	068	21-W	000	45	041	1	023	N PINE	4.0	40	2	0	J PINE	ART SD
TOTAL STANDS		17		TOTAL ACRES		332									

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	REGEN PLANS SPECIES	METHOD
03-00	21	068	18-W	000	44	150	4	005	N PINE	12.0	99	2	0	J PINE	ART SD
13-00	16	068	19-W	000	50	140	8	042	N PINE	18.0	40	2	0	N PINE	PLANT
14-00	29	068	18-W	000	39	137	7	004	N PINE	18.3	00	0	0	J PINE	ART SD

16-00	16	067	19-W	000	38	108	6	009	N PINE	21.5	40	2	0	N PINE	ART SD
26-00	26	068	19-W	000	44	103	9	003	N PINE	28.5	40	4	0	N PINE	PLANT
09-00	26	068	19-W	000	44	103	9	015	N PINE	28.5	40	4	0	N PINE	PLANT

TOTAL STANDS	6	TOTAL ACRES	78
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LISTING OF ALL STANDS TO BE THINNED

SIZE CLASS: 5

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	BASAL AREA
27-00	11	068	20-W	000	46	083	8	014	N PINE	22.0	40	2	0	208
35-00	11	068	20-W	000	46	083	8	006	N PINE	12.8	40	2	0	208
06-00	35	068	19-W	000	55	082	9	007	N PINE	27.5	40	4	0	197
09-00	14	067	17-W	000	49	089	9	009	N PINE	34.7	00	0	0	172
13-00	17	068	19-W	000	56	051	8	005	N PINE	31.3	00	0	0	170
01-00	14	067	17-W	000	56	071	9	006	N PINE	38.0	00	0	0	150
18-00	16	066	17-W	000	56	068	7	008	N PINE	28.5	00	0	0	127

SIZE CLASS: 6

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	BASAL AREA
12-00	31	067	17-W	000	62	083	6	007	N PINE	21.3	00	0	0	120

TOTAL STANDS	8	TOTAL ACRES	62
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Jack Pine

Rotation Age (years) - 55
 Current Clearcut Base (acres) - 1377
 Ten Year Allowable Cut (acres) - 250
 Ten Yr. Proposed Clearcut (acres) - 350

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	REGEN PLANS SPECIES METHOD
18-00	36	067	17-W	000	38	083	1	020	J PINE	3.6	00	0	0	J PINE ART SD
04-00	36	067	17-W	000	50	066	2	009	J PINE	4.3	00	0	0	J PINE ART SD
20-00	12	068	21-W	000	47	062	1	013	J PINE	3.4	00	0	0	J PINE ART SD
30-00	13	068	19-W	000	41	058	2	014	J PINE	4.4	00	0	0	J PINE ART SD
02-00	30	068	19-W	000	53	057	1	010	J PINE	6.0	00	0	0	J PINE ART SD
13-00	29	068	18-W	000	46	057	1	020	J PINE	2.9	40	2	0	J PINE ART SD
16-00	11	068	19-W	000	41	057	1	010	J PINE	2.0	00	0	0	J PINE ART SD
21-00	10	068	19-W	000	49	055	2	007	J PINE	3.2	00	0	0	J PINE ART SD

04-00	36	066	17-W	000	38	052	1	007	J PINE	3.7	00	0	0	J PINE	ART	SD
03-00	36	066	17-W	000	46	049	1	005	J PINE	3.0	00	0	0	J PINE	ART	SD

TOTAL STANDS	10	TOTAL ACRES	115
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LISTING OF ALL STANDS TO BE REGENERATED AFTER SALVAGE

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	REGEN PLANS		
														SPECIES	METHOD	
21-00	02	068	20-W	000	44	089	1	009	J PINE	4.9	00	0	0	J PINE	ART	SD
03-00	29	068	19-W	000	56	077	2	026	J PINE	4.9	99	2	0	J PINE	ART	SD
02-00	16	068	19-W	000	57	053	2	006	J PINE	9.7	40	2	0	J PINE	ART	SD
TOTAL STANDS	3	TOTAL ACRES	41													
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LISTING OF ALL STANDS TO BE RESERVED

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M
23-00	16	067	17-W	000	40	067	1	013	J PINE	3.3	00	0	0
08-00	04	068	19-W	000	39	054	1	050	J PINE	3.2	40	2	0
07-00	04	068	19-W	000	39	053	1	006	J PINE	5.3	00	0	0
TOTAL STANDS	3	TOTAL ACRES	69										
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LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	REGEN PLANS		
														SPECIES	METHOD	
17-00	16	067	18-W	000	46	102	4	020	J PINE	15.5	00	0	0	J PINE	ART	SD
08-00	25	068	19-W	000	45	102	3	035	J PINE	8.5	99	2	0	J PINE	ART	SD
05-00	09	066	18-W	000	60	100	8	054	J PINE	15.7	00	0	0	J PINE	ART	SD
06-00	09	066	18-W	000	59	097	7	009	J PINE	15.3	00	0	0	J PINE	ART	SD
02-00	36	068	18-W	000	55	097	9	020	J PINE	35.6	00	0	0	J PINE	ART	SD
18-00	16	067	18-W	000	36	096	2	007	J PINE	7.0	00	0	0	J PINE	ART	SD
09-00	16	066	17-W	000	60	097	4	018	J PINE	11.8	40	4	0	J PINE	ART	SD
26-00	36	067	17-W	000	46	095	4	005	J PINE	12.7	00	0	0	J PINE	ART	SD
03-00	36	067	18-W	000	53	090	6	037	J PINE	12.8	00	0	0	N PINE	PLANT	
07-00	14	067	17-W	000	63	084	9	004	J PINE	38.0	00	0	0	N PINE	PLANT	
18-00	03	068	20-W	000	62	083	6	008	J PINE	15.0	00	0	0	J PINE	ART	SD
05-00	20	069	21-W	000	42	083	4	020	J PINE	20.1	99	1	1	J PINE	ART	SD
19-00	11	068	20-W	000	54	077	5	082	J PINE	20.7	00	0	0	J PINE	ART	SD
07-00	16	067	17-W	000	58	076	9	016	J PINE	36.5	00	0	0	J PINE	ART	SD
06-00	16	068	19-W	000	47	073	2	015	J PINE	7.8	40	2	0	J PINE	ART	SD
TOTAL STANDS	15	TOTAL ACRES	350													
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White Spruce

Rotation Age (years) - 70
Current Clearcut Base (acres) - 462
Ten Year Allowable Cut (acres) - 66
Ten Yr. Proposed Clearcut (acres) - 71

LISTING OF ALL STANDS TO BE REGENERATED AFTER SALVAGE

													REGEN PLANS		
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD
12-00	12	068	19-W	000	40	095	3	019	WH SPR	4.0	99	2	0	WH SPR	PLANT
04-00	12	068	19-W	000	40	085	3	011	WH SPR	8.0	00	0	0	WH SPR	PLANT
TOTAL STANDS		2		TOTAL ACRES		30									
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LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

													REGEN PLANS		
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD
10-00	16	068	19-W	000	44	137	2	027	WH SPR	5.0	99	2	0	WH SPR	PLANT
08-00	12	068	19-W	000	49	097	1	004	WH SPR	6.0	99	2	0	WH SPR	PLANT
17-00	02	068	20-W	000	47	095	4	018	WH SPR	3.4	00	0	0	WH SPR	PLANT
02-00	36	068	17-W	000	49	090	6	015	ASPEN	9.6	15	2	0	WH SPR	PLANT
20-00	28	068	19-W	000	55	083	3	007	WH SPR	8.0	00	0	0	N PINE	PLANT
TOTAL STANDS		5		TOTAL ACRES		71									
=====		=====		=====		=====									

Balsam Fir

Rotation Age (years) - 50
Current Clearcut Base (acres) - 929
Ten Year Allowable Cut (acres) - 186
Ten Yr. Proposed Clearcut (acres) - 176

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

													REGEN PLANS		
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD
09-00	14	068	20-W	000	43	078	1	004	BALSAM	3.0	00	0	0	J PINE	ART SD
03-00	21	068	19-W	000	35	071	1	004	BALSAM	1.7	99	2	0	BL SPR	ART SD
22-00	11	068	21-W	000	39	067	2	005	BALSAM	4.3	99	2	0	BL SPR	ART SD
19-00	16	067	17-W	000	55	065	2	009	BALSAM	2.3	99	2	0	WH SPR	PLANT
31-00	16	067	17-W	000	44	058	1	050	BALSAM	2.3	00	0	0	WCEDAR	PLANT
27-00	36	067	17-W	000	54	051	1	016	BALSAM	2.0	00	0	0	ASPEN	UNDERS

09-00	08	068	20-W	000	40	017	2	007	BALSAM	0.0	00	0	0	W CEDAR	PLANT
03-00	29	066	17-W	000	44	016	1	015	BALSAM	0.0	00	0	0	W CEDAR	PLANT
08-00	29	066	17-W	000	44	016	1	014	BALSAM	0.0	00	0	0	TMRACK	ART SD
02-00	28	066	17-W	000	41	016	1	045	BALSAM	0.0	40	2	0	BL SPR	ART SD
24-00	16	066	17-W	000	50	012	2	015	BALSAM	0.0	00	0	0	J PINE	ART SD
17-00	14	068	20-W	000	40	011	1	008	BALSAM	0.0	00	0	0	BL SPR	PLANT

TOTAL STANDS 12 TOTAL ACRES 192
 =====

LISTING OF ALL STANDS TO BE REGENERATED AFTER SALVAGE

													REGEN PLANS		
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD
06-00	17	069	21-W	000	57	066	4	008	BALSAM	5.7	06	2	1	WH SPR	PLANT
10-00	09	068	20-W	000	65	060	1	007	BALSAM	3.3	00	0	0	WH SPR	PLANT
17-00	16	066	17-W	000	50	015	1	010	BALSAM	0.0	00	0	0	J PINE	ART SD
19-00	16	066	17-W	000	50	012	1	019	BALSAM	0.0	00	0	0	J PINE	ART SD

TOTAL STANDS 4 TOTAL ACRES 44
 =====

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

													REGEN PLANS		
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD
02-00	06	066	17-W	000	48	098	5	018	BALSAM	3.0	40	2	0	WH SPR	PLANT
04-00	14	068	19-W	000	44	086	3	009	BALSAM	2.8	99	2	0	WH SPR	PLANT
03-00	26	068	19-W	000	54	084	6	008	BALSAM	11.0	40	2	0	WH SPR	PLANT
02-00	14	068	20-W	000	57	084	2	007	BALSAM	4.8	00	0	0	WH SPR	PLANT
02-00	22	066	18-W	000	49	081	5	018	BALSAM	9.5	00	0	0	W PINE	PLANT
05-00	19	066	18-W	000	54	080	5	011	ASPEN	8.7	40	2	0	ASPEN	SPROUT
15-00	16	067	19-W	000	54	080	6	033	BALSAM	11.6	40	2	0	WH SPR	PLANT
20-00	16	067	19-W	000	51	080	5	007	BALSAM	8.7	40	2	0	WH SPR	PLANT
19-00	23	068	19-W	000	54	078	3	006	BALSAM	3.0	40	4	0	WH SPR	PLANT
10-00	32	069	21-W	000	55	078	7	009	BALSAM	11.0	00	0	0	WH SPR	PLANT
36-00	11	068	21-W	000	56	074	6	007	BALSAM	11.3	51	1	1	ASPEN	SPROUT
27-00	16	067	19-W	000	50	075	6	011	BALSAM	11.3	40	2	0	ASPEN	SPROUT
02-00	21	068	18-W	000	58	074	6	012	ASPEN	13.8	00	0	0	ASPEN	SPROUT
06-00	02	068	20-W	000	58	073	5	020	BALSAM	12.2	99	2	0	N PINE	PLANT

TOTAL STANDS 14 TOTAL ACRES 176
 =====

Lowland Black Spruce

Rotation Age (years) - 100

Current Clearcut Base (acres) - 986

Ten Year Allowable Cut (acres) - 99

Ten Yr. Proposed Clearcut (acres) - 143 (plus 6 acres in active sales)

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

													REGEN PLANS	
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	SPECIES	METHOD
04-00	28	066	17-W	000	24	144	1	006	BL SPR	4.0	00	0 0	BL SPR	ART SD
40-00	11	068	20-W	000	29	092	1	011	BL SPR	6.2	40	4 0	TMRACK	PLANT
39-00	11	068	20-W	000	29	092	1	027	BL SPR	6.2	00	0 0	TMRACK	PLANT
TOTAL STANDS		3		TOTAL ACRES		44								

LISTING OF ALL STANDS TO BE REGENERATED AFTER SALVAGE

													REGEN PLANS	
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	SPECIES	METHOD
03-00	01	068	20-W	000	39	101	2	004	BL SPR	6.3	60	2 0	BL SPR	ART SD
32-00	10	068	20-W	000	30	099	4	047	BL SPR	10.4	23	3 1	TMRACK	PLANT
34-00	11	068	20-W	000	34	090	2	005	BL SPR	8.5	40	4 0	TMRACK	PLANT
29-00	11	068	20-W	000	34	090	2	013	BL SPR	8.5	40	4 0	TMRACK	PLANT
11-00	20	068	19-W	000	47	079	2	007	BL SPR	6.7	00	0 0	BL SPR	ART SD
TOTAL STANDS		5		TOTAL ACRES		76								

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

x- stand is part of active sale sold before 1986

													REGEN PLANS	
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	SPECIES	METHOD
03-00	28	066	17-W	000	24	144	4	050	BL SPR	20.4	40	2 0	BL SPR	ART SD
05-00	29	068	18-W	000	32	141	3	029	BL SPR	11.2	60	2 0	BL SPR	ART SD
02-00	15	068	21-W	000	28	136	3	020	BL SPR	10.8	00	0 0	BL SPR	ART SD
17-00	03	068	20-W	000	32	121	5	019	BL SPR	23.8	00	0 0	BL SPR	ART SD
26-00	28	068	19-W	000	35	115	3	006	BL SPR	13.0	60	2 0	BL SPR	ART SD
10-00	02	068	20-W	000	29	115	2	015	BL SPR	4.0	00	0 0	BL SPR	ART SD
18-00	28	068	19-W	000	35	115	3	004	BL SPR	13.0	60	2 0	BL SPR	ART SD
x05-00	14	068	21-W	000		083		006	BL SPR				BL SPR	ART SD
TOTAL STANDS		8		TOTAL ACRES		149								

Tamarack

Rotation Age (years) - 90
Current Clearcut Base (acres) - 133
Ten Year Allowable Cut (acres) - 15
Ten Yr. Proposed Clearcut (acres) - 9

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

													REGEN PLANS		
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD
19-00	36	066	17-W	000	38	054	1	006	TMRACK	3.7	00	0	0	TMRACK	PLANT
TOTAL STANDS		1	TOTAL ACRES		6										

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

													REGEN PLANS		
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD
28-00	33	069	21-W	000	44	111	3	009	TMRACK	9.3	00	0	0	TMRACK	PLANT
TOTAL STANDS		1	TOTAL ACRES		9										

Northern White Cedar

Rotation Age (years) - 125
Current Clearcut Base (acres) - 1812
Ten Year Allowable Cut (acres) - 145
Ten Yr. Proposed Clearcut (acres) - 144 (plus 10 acres in active sales)

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

													REGEN PLANS		
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD
12-00	14	068	21-W	000	23	109	1	011	WCEDAR	3.2	00	0	0	TMRACK	PLANT
21-00	12	068	20-W	000	18	099	1	019	WCEDAR	3.5	50	2	0	TMRACK	PLANT
08-00	01	068	20-W	000	20	097	1	023	WCEDAR	4.1	99	2	0	TMRACK	PLANT
01-00	10	068	20-W	000	25	010	1	011	WCEDAR	0.5	00	0	0	TMRACK	PLANT
TOTAL STANDS		4	TOTAL ACRES		64										

LISTING OF ALL STANDS TO BE REGENERATED AFTER SALVAGE

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	* M	REGEN PLANS	
													SPECIES	METHOD
26-00	12	068	20-W	000	18	126	3	018	WCEDAR	10.4	00	0 0	TMRACK	PLANT
25-00	12	068	20-W	000	18	126	2	014	WCEDAR	9.6	00	0 0	TMRACK	PLANT
01-00	28	068	19-W	000	26	103	2	035	WCEDAR	6.5	99	2 0	WCEDAR	ART SD
31-00	10	068	20-W	000	22	092	3	057	WCEDAR	8.3	51	2 1	TMRACK	PLANT
02-00	33	069	21-W	000	23	089	2	013	WCEDAR	4.2	00	0 0	WCEDAR	PLANT
TOTAL STANDS		5	TOTAL ACRES		137									

LISTING OF ALL STANDS TO BE RESERVED

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	* M
19-00	12	068	20-W	000	19	128	3	011	WCEDAR	12.5	99	2 0
20-00	12	068	20-W	000	18	126	3	013	WCEDAR	11.7	00	0 0
06-00	34	069	21-W	000	28	095	1	006	WCEDAR	3.7	28	1 0
TOTAL STANDS		3	TOTAL ACRES		30							

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

* - Acreage listed is for part of stand to be harvested
 x - Stands are part of active sales sold prior to 1986

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	* M	REGEN PLANS	
													SPECIES	METHOD
06-00	32	067	17-W	000	26	171	5	012	WCEDAR	16.2	40	2 0	WCEDAR	ART SD
*08-00	27	068	19-W	000	26	153	5	006	WCEDAR	17.2	40	4 0	WCEDAR	ART SD
13-00	34	069	21-W	000	40	149	7	015	WCEDAR	14.9	28	1 0	WCEDAR	PLANT
09-00	27	068	19-W	000	32	147	7	007	WCEDAR	31.4	00	0 0	WCEDAR	PLANT
*01-00	27	068	19-W	000	32	147	7	005	WCEDAR	27.1	00	0 0	WCEDAR	PLANT
*14-00	31	069	21-W	000	25	147	5	011	WCEDAR	14.8	28	1 0	WCEDAR	PLANT
x07-00	07	069	21-W	000	27	141	7	005	WCEDAR	24.1	28	3 0	WCEDAR	PLANT
08-00	08	068	20-W	000	25	139	2	029	WCEDAR	9.6	99	2 0	WCEDAR	PLANT
34-00	26	068	19-W	000	24	139	3	015	WCEDAR	14.5	40	2 0	WCEDAR	ART SD
03-00	01	068	21-W	000	66	135	6	016	WCEDAR	7.0	00	0 0	WCEDAR	PLANT
x15-00	20	069	21-W	000	28	133	6	009	WCEDAR	24.3	28	1 0	WCEDAR	ART SD
x06-00	07	069	21-W	000	26	129	6	006	WCEDAR	12.7	28	1 0	WCEDAR	PLANT
*05-00	16	067	18-W	000	22	129	3	008	WCEDAR	10.5	00	0 0	WCEDAR	ART SD
x17-00	32	069	21-W	000		103		003	WCEDAR				BL SER	PLANT
x03-00	07	069	21-W	000		095		007	WCEDAR				WCEDAR	PLANT
TOTAL STANDS		15	TOTAL ACRES		154									

LISTING OF ALL STANDS TO BE THINNED

SIZE CLASS: 4

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	BASAL AREA
03-00	03	068	20-W	000	30	107	9	008	WCEDAR	28.0	00	0	0	247
03-00	34	069	21-W	000	30	103	8	017	WCEDAR	29.2	28	1	0	235
12-00	33	069	21-W	000	30	101	8	013	WCEDAR	37.7	28	1	0	213

SIZE CLASS: 5

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	BASAL AREA
07-00	35	068	19-W	000	32	095	9	005	WCEDAR	31.3	00	0	0	220
09-00	11	068	21-W	000	35	100	7	006	WCEDAR	17.3	40	2	0	190
03-00	07	069	21-W	000	33	095	7	007	WCEDAR	22.2	28	3	0	180
01-00	32	068	19-W	000	34	100	9	007	WCEDAR	17.7	00	0	0	177
19-00	12	068	21-W	000	35	091	4	006	WCEDAR	7.7	28	2	0	167
17-00	32	069	21-W	000	31	103	6	006	WCEDAR	21.7	28	1	0	160
04-00	28	068	19-W	000	35	115	6	013	WCEDAR	27.4	00	0	0	156
24-00	28	068	19-W	000	35	115	6	008	WCEDAR	27.4	00	0	0	156
17-00	31	069	21-W	000	34	114	7	017	WCEDAR	14.0	28	2	2	156
02-00	16	068	20-W	000	34	107	8	011	WCEDAR	15.4	40	4	0	152

TOTAL STANDS 13 TOTAL ACRES 124
 =====

Upland Black Spruce

Rotation Age (years) - 70
 Current Clearcut Base (acres) - 111
 Ten Year Allowable Cut (acres) - 16
 Ten Yr. Proposed Clearcut (acres) - 27

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	REGEN PLANS SPECIES METHOD
03-00	05	068	19-W	000	28	088	2	024	BL SPR	2.6	00	0	0	J PINE ART SD

TOTAL STANDS 1 TOTAL ACRES 24
 =====

LISTING OF ALL STANDS TO BE REGENERATED AFTER SALVAGE

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS		
													SPECIES	METHOD	
18-00	14	068	19-W	000	58	061	2	009	BL SPR	3.6	00	0	0	N PINE	PLANT
15-00	14	068	19-W	000	42	056	2	005	BL SPR	3.7	00	0	0	N PINE	PLANT
TOTAL STANDS		2	TOTAL ACRES		14										

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS		
													SPECIES	METHOD	
09-00	29	068	18-W	000	47	083	4	013	BL SPR	8.5	40	2	0	J PINE	ART SD
10-00	14	068	19-W	000	42	078	3	014	BL SPR	6.7	99	2	0	J PINE	ART SD
TOTAL STANDS		2	TOTAL ACRES		27										

Cutover Area

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS		
													SPECIES	METHOD	
10-00	16	067	19-W	000	00	002	0	027	NONE	0.0	00	0	0	N PINE	ART SD
14-00	31	067	17-W	000	53	003	0	006	NONE	0.0	00	0	0	N PINE	PLANT
06-00	06	066	18-W	000	55	002	0	008	NONE	0.0	00	0	0	N PINE	PLANT
12-00	03	068	21-W	000	00	003	0	010	NONE	0.0	00	0	0	W CEDAR	PLANT
09-10	18	068	20-W	000	00	003	0	009	NONE	0.0	00	0	0	WH SPR	PLANT
08-00	03	068	21-W	000	00	003	0	009	NONE	0.0	00	0	0	W CEDAR	PLANT
13-00	18	068	20-W	000	55	003	0	018	NONE	0.0	00	0	0	WH SPR	PLANT
11-10	18	068	20-W	000	00	002	0	003	NONE	0.0	00	0	0	W CEDAR	ART SD
16-10	03	068	21-W	000	00	003	0	014	NONE	0.0	00	0	0	WH SPR	PLANT
15-00	18	068	20-W	000	78	003	0	008	NONE	0.0	00	0	0	ASPEN	UNDERS
13-10	03	068	21-W	000	00	003	0	004	NONE	0.0	00	0	0	WH SPR	PLANT
29-00	16	067	19-W	000	00	002	0	010	NONE	0.0	00	0	0	N PINE	ART SD
30-00	16	067	19-W	000	00	002	0	005	NONE	0.0	00	0	0	N PINE	ART SD
15-00	26	068	19-W	000	00	003	0	015	NONE	0.0	00	0	0	ASPEN	UNDERS
14-00	27	068	19-W	000	00	003	0	004	NONE	0.0	00	0	0	ASPEN	UNDERS
38-00	26	068	19-W	000	00	003	0	008	NONE	0.0	00	0	0	N PINE	PLANT
40-00	26	068	19-W	000	00	003	0	009	NONE	0.0	00	0	0	N PINE	PLANT
27-10	26	068	19-W	000	00	003	0	007	NONE	0.0	00	0	0	N PINE	PLANT
16-00	27	068	19-W	000	00	003	0	022	NONE	0.0	00	0	0	ASPEN	UNDERS
28-20	26	068	19-W	000	00	003	0	007	NONE	0.0	00	0	0	ASPEN	UNDERS
04-10	23	068	19-W	000	00	003	0	025	NONE	0.0	00	0	0	N PINE	PLANT
04-00	36	068	18-W	000	60	002	0	076	NONE	0.0	00	0	0	N PINE	PLANT

12-10	15	068	20-W	000	30	004	0	006	NONE	0.0	00	0	0	WH	SPR	UNDERS
24-00	12	068	21-W	000	00	003	0	010	NONE	0.0	00	0	0	WH	SPR	UNDERS
05-00	32	067	17-W	000	00	002	0	016	NONE	0.0	00	0	0	WH	SPR	PLANT
01-00	14	067	18-W	000	00	004	0	031	NONE	0.0	00	0	0	J	PINE	UNDERS
03-00	15	067	18-W	000	00	004	0	007	NONE	0.0	00	0	0	BL	SPR	NAT SD
04-00	15	067	18-W	000	00	004	0	012	NONE	0.0	00	0	0	ASPEN		UNDERS
02-00	15	067	18-W	000	00	004	0	013	NONE	0.0	00	0	0	ASPEN		UNDERS
07-00	32	067	17-W	000	00	004	0	006	NONE	0.0	00	0	0	WH	SPR	PLANT

TOTAL STANDS 30 TOTAL ACRES 405
 =====

Lowland Grass

LISTING OF ALL STANDS TO BE REGENERATED AFTER SALVAGE

													REGEN PLANS		
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD
06-00	19	068	18-W	000	00	005	0	011	NONE	0.0	00	0	0	ASPEN	SPROUT

TOTAL STANDS 1 TOTAL ACRES 11
 =====

Upland Grass

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

													REGEN PLANS			
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD	
04-00	34	069	21-W	000	00	001	0	016	NONE	0.0	00	0	0	WH	SPR	UNDERS

TOTAL STANDS 1 TOTAL ACRES 16
 =====

Lowland Brush

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

													REGEN PLANS			
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD	
05-00	06	066	17-W	000	00	006	0	014	NONE	0.0	00	0	0	BL	SPR	ART SD
03-00	13	068	19-W	000	00	005	0	031	NONE	0.0	00	0	0	BL	SPR	ART SD
33-00	26	068	19-W	000	00	005	0	014	NONE	0.0	00	0	0	BL	SPR	ART SD
09-00	30	069	21-W	000	00	005	0	022	NONE	0.0	00	0	0	TMRACK		ART SD

15-00	17	069	21-W	000	00	005	0	012	NONE	0.0	00	0	0	TMRACK	PLANT
07-00	13	068	21-W	000	00	005	0	010	NONE	0.0	00	0	0	TMRACK	PLANT

TOTAL STANDS	6	TOTAL ACRES	103
=====		=====	

LISTING OF ALL STANDS TO BE REGENERATED AFTER SALVAGE

													REGEN PLANS		
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD
01-00	35	068	18-W	000	00	005	0	017	NONE	0.0	00	0	0	ASPEN	SPROUT
02-00	22	068	19-W	000	00	005	0	036	NONE	0.0	00	0	0	BALSAM	NAT SD
02-00	19	068	19-W	000	00	005	0	040	NONE	0.0	00	0	0	TMRACK	ART SD
07-00	19	068	18-W	000	00	005	0	010	NONE	0.0	00	0	0	ASPEN	SPROUT

TOTAL STANDS	4	TOTAL ACRES	103
=====		=====	

Upland Brush

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

													REGEN PLANS		
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD
05-00	16	067	19-W	000	00	005	0	012	NONE	0.0	00	0	0	N PINE	ART SD
14-00	36	068	18-W	000	00	005	0	008	NONE	0.0	00	0	0	N PINE	PLANT
03-00	16	067	19-W	000	00	005	0	073	NONE	0.0	00	0	0	N PINE	UNDERS
28-00	16	067	19-W	000	00	005	0	052	NONE	0.0	00	0	0	J PINE	ART SD
21-00	16	067	19-W	000	00	005	0	055	NONE	0.0	00	0	0	N PINE	UNDERS
23-00	16	067	19-W	000	00	005	0	012	NONE	0.0	00	0	0	N PINE	UNDERS

TOTAL STANDS	6	TOTAL ACRES	212
=====		=====	

PELICAN LAKE RMU 5

EXISTING CONDITION

Table B.18 Pelican Lake RMU Timber Summary

Type	Acres	% Of Area	Avg Site Index	Avg Updated Age	% Over Rot. Age	% At High Risk
Ash	1296	2	43	100	53	2
Lowland Hardwoods	159	0	43	88	78	0
Aspen	30720	40	68	49	62	21
Birch	4323	6	52	71	73	12
Balm of Gilead	289	0	66	50	44	10
Northern Hwds.	82	0	51	33	35	0
White Pine	382	1	47	98	53	5
Red Pine	2998	4	52	57	14	1
Jack Pine	2536	3	55	51	37	17
White Spruce	623	1	54	42	1	0
Balsam Fir	4081	5	50	57	82	4
Black Spr. Lowland	9537	13	33	74	22	2
Tamarack	537	1	36	73	0	1
N. White Cedar	4203	6	27	113	33	3
Black Spr. Upland	290	0	43	89	78	19
Cutover Area	2103	3	--	--	--	--
Lowland Grass	448	1	--	--	--	--
Upland Grass	44	0	--	--	--	--
Lowland Brush	3930	5	--	--	--	--
Upland Brush	189	0	--	--	--	--
Unproductive Forest	3535	5	--	--	--	--
Non Forest	3933	5	--	--	--	--
Total	76,238	100				

COVER TYPE COMPOSITION GOALS

Based on existing cover type conditions, timber markets, wildlife concerns, land administration proposals, and economic and biologic limitations and potentials, the following composition goals have been established for this unit.

Table B.19 Pelican Lake RMU Cover Type Composition Goals

Cover Type	Present		Ten Year		Long-term	
	Acres	%	Acres	%	Acres	%
Ash	1296	2	1201	2	1500	2
Lowland Hardwoods	159	0	107	0	70	0
Aspen	30720	40	30750	40	30750	41
Birch	4323	6	3232	4	2300	3
Balm of Gilead	289	0	270	0	270	0
Northern Hardwoods	82	0	58	0	80	0
White Pine	382	1	375	0	750	1
Norway Pine	2998	4	5116	7	5538	7
Jack Pine	2536	3	3849	5	4000	5
White Spruce	623	1	1060	1	1600	2
Balsam Fir	4081	5	3152	4	2000	3
Black Spruce Lowland	9537	13	9703	12	9700	13
Tamarack	537	1	822	1	1200	2
N. White Cedar	4203	6	4277	6	4277	6
Black Spruce Upland	290	0	190	0	140	0
Cutover Area	2103	3	1870	2	0	0
Lowland Grass	448	1	448	1	448	1
Upland Grass	44	0	5	0	5	0
Lowland Brush	3930	5	3753	5	3000	4
Upland Brush	189	0	22	0	22	0
Unproductive Forest	3535	5	3535	5	3535	5
Non Forest	3933	5	3933	5	3933	5
Total	76,238	100	77,728	100	75,118	100

MANAGEMENT PRESCRIPTIONS

Table B.20 summarizes the management prescriptions by type for the next ten years in the Pelican Lake RMU. Tables B.21 and B.22 outline regeneration plans for the next ten years. Table B.23 projects harvest levels by type in the future. These tables are followed by detailed lists of stands in each cover type to receive various treatments in the next ten years.

Table B.20 Management Prescriptions By Cover Type - Pelican Lake RMU

COVER TYPE	CLEAR CUT		THINNING		ALL-AGED		SALVAGE		REGEN		TOTAL	
	STD	ACRES	STD	ACRES	STD	ACRES	STD	ACRES	STD	ACRES	STD	ACRES
ASH	13	149	0	0	0	0	0	0	7	127	20	276
LOW HW	3	18	0	0	0	0	1	13	1	21	5	52
ASPEN	319	9871	0	0	0	0	38	1032	36	738	393	11641
PBIRCH	34	757	0	0	0	0	9	228	16	352	59	1337
BALM	5	76	0	0	0	0	0	0	3	81	8	157
NOR HW	1	8	0	0	0	0	0	0	2	25	3	33
W PINE	2	29	0	0	0	0	6	69	0	0	8	98
N PINE	22	262	19	198	0	0	4	199	3	26	48	685
J PINE	37	450	0	0	0	0	1	18	3	32	41	500
WH SPR	4	32	0	0	0	0	4	179	0	0	8	211
BALSAM	35	799	0	0	0	0	2	18	8	134	45	951
BL SPR	47	688	0	0	0	0	18	403	17	339	82	1430
TMRACK	4	43	0	0	0	0	0	0	3	48	7	91
WCEDAR	27	343	0	0	9	206	0	0	8	120	44	669
UPBSPR	2	64	0	0	0	0	0	0	3	52	5	116
CUT	0	0	0	0	0	0	0	0	10	233	10	233
LOGRAS	0	0	0	0	0	0	0	0	0	0	0	0
UPGRAS	0	0	0	0	0	0	0	0	3	39	3	39
LOBRSH	0	0	0	0	0	0	0	0	6	177	6	177
UPBRSH	0	0	0	0	0	0	0	0	14	167	14	167
TOTAL	555	13589	19	198	09	206	83	2159	143	2711	809	18863

Table B.21 Regeneration Plans for Lands Harvested, Salvaged, and Regenerated without Harvest by Type
 Pelican Lake RMU
 (Acres)

Regen. Method & Spp.	Current Cover Type																			Tot
	Ash	LH	Bi	Asp	BG	NH	WP	NP	JP	WS	BF	BSL	Tam	Ced	BSU	COA	UG	LB	UB	
<u>Natural</u>																				
Ash	155																			155
Asp			150	10420							448	18			183					11219
Bi				9																9
BG		12			115						11									138
NP				20											16	17				53
WS				4											34					38
BS												20								20
<u>Plant</u>																				
Ash	13	13																		26
Bi			237																	237
NP			445	658			84	441	14	113	48								16	1819
JP			284	283		21		29	264	4					38				118	1041
WS			113	24						66	222						22		24	471
BS			33																	33
Tam	54	24		10						6	95		27	25					48	289
Ced	20										80			187					48	335
WP			52				14				25									91
BF											22									22
YBi																			9	9
<u>Art. Seed</u>																				
NP									11											11
JP			23	213		12		17	211	22					78					576
BS	34	3			42							1355	32	49					37	1552
Tam												37	32						44	113
Ced														202						202
Total	276	52	1337	11641	157	33	98	487	500	211	951	1430	91	463	116	233	39	177	167	18459

Table B.22 Summary of Artificial Regeneration Needs
Pelican Lake RMU
(Acres by Species and Regeneration Method)

SPECIES	PLANT	SEED
TMRACK	289	113
BL SPR	33	1552
ASH	26	0
WCEDAR	335	202
N PINE	1819	11
J PINE	1041	576
WH SPR	471	0
PBIRCH	237	0
W PINE	91	0
BALSAM	22	0
YBIRCH	9	0
TOTAL	4373	2454

Table B.23 Projected Harvest Levels by Type, 1986 - 2036
and Estimated Sustained Yield with Year of Regulation

Type	Clearcut Acres by 10 year Period					Sustain yield	
	1986-95	1996-05	2006-15	2016-25	2026-35	Acres	Year
Ash	149	129	134	138	142	166	2186
Low Hwd	18	15	13	12	11	10	2026
Aspen	9871	6017	6102	6150	6150	6150	2016
Birch	757	394	383	383	383	383	2006
Balm G.	76	54	54	24	54	54	2026
N Hwd	8	8	9	9	10	11	2146
W Pine	29	34	34	40	50	79	2086
N Pine	262	262	262	262	262	554	2076
J Pine	450	314	400	400	344	667	2106
Wh Spr	32	24	30	92	125	200	2086
Balsam	799	512	450	432	400	400	2026
Bl Spr Lo	688	774	867	923	923	923	2016
Tam	43	43	43	50	50	114	2166
W Cedar	343	356	356	356	356	356	1996
Bl Spr Up	64	44	32	23	21	20	2056
Total	13,589	8,980	9,169	9,294	9,281	10,087	

Ash

Rotation Age (years) - 90
Current Clearcut Base (acres) - 1133
Ten Year Allowable Cut (acres) - 125
Ten Yr. Proposed Clearcut (acres) - 149

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

											REGEN PLANS				
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD
06-00	30	064	19-W	000	47	133	2	010	ASH	7.3	00	0	0	TMRACK	PLANT
13-00	35	066	21-W	000	28	126	1	027	ASH	4.7	00	0	0	BL SPR	ART SD
08-00	25	065	20-W	000	37	121	2	022	ASH	5.0	00	0	0	TMRACK	PLANT
03-00	29	064	20-W	000	33	110	1	020	ASH	5.3	00	0	0	WCEDAR	PLANT
18-00	36	066	21-W	000	40	082	2	022	ASH	8.5	00	0	0	TMRACK	PLANT
15-00	07	065	20-W	000	37	073	1	007	ASH	3.3	00	0	0	BL SPR	ART SD
08-00	33	066	19-W	000	32	020	1	019	ASH	0.0	00	0	0	ASH	SPROUT

TOTAL STANDS 7 TOTAL ACRES 127
 =====

LISTING OF ALL STANDS TO BE RESERVED

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M
08-00	01	065	19-W	000	41	080	1	013	ASH	7.3	00	0	0

TOTAL STANDS 1 TOTAL ACRES 13
 =====

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

* - Acreage listed is for part of stand to be harvested
x - Stand to be selectively cut

											REGEN PLANS				
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD
05-00	30	064	19-W	000	43	185	2	006	ASH	8.7	00	0	0	ASH	SPROUT
17-00	23	065	21-W	000	44	173	2	008	ASH	6.0	00	0	0	ASH	SPROUT
18-00	22	064	20-W	000	45	168	4	006	ASH	13.7	99	2	0	ASH	SPROUT
04-00	24	065	21-W	000	44	164	4	007	ASH	19.9	99	2	0	ASH	SPROUT
06-00	10	066	19-W	000	45	158	5	020	ASH	21.2	00	0	0	ASH	SPROUT
04-00	32	064	19-W	000	43	149	4	008	ASH	20.3	00	0	0	ASH	SPROUT
05-00	19	063	18-W	000	50	128	4	019	ASH	8.6	00	0	0	ASH	SPROUT
05-00	27	065	21-W	000	50	126	4	011	ASH	7.5	40	2	0	ASH	SPROUT
*09-00	22	065	21-W	000	54	118	3	040	ASH	14.0	00	0	0	ASH	SPROUT
*01-00	27	065	20-W	000	57	114	8	013	ASH	21.0	00	0	0	ASH	PLANT
*05-00	13	064	19-W	000	38	112	4	028	GR ASH	13.0	00	0	0	ASH	SPROUT

10-00	22	064	20-W	000	44	109	4	015	ASH	9.7	40	4	0	ASH	SPROUT
29-00	36	066	21-W	000	48	109	3	012	ASH	8.5	00	0	0	ASH	SPROUT

TOTAL STANDS	13	TOTAL ACRES	159
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Lowland Hardwoods

Rotation Age (years) - 80
 Current Clearcut Base (acres) - 125
 Ten Year Allowable Cut (acres) - 15
 Ten Yr. Proposed Clearcut (acres) - 18

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

													REGEN PLANS			
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD	

10-00	07	065	20-W	000	40	096	1	021	ASH	3.0	00	0	0	TMRACK	PLANT	
TOTAL STANDS	1	TOTAL ACRES	21													
=====		=====														

LISTING OF ALL STANDS TO BE REGENERATED AFTER SALVAGE

													REGEN PLANS			
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD	

06-00	26	066	20-W	000	44	095	2	013	ASH	3.7	00	0	0	ASH	PLANT	
TOTAL STANDS	1	TOTAL ACRES	13													
=====		=====														

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

* - Acreage listed is for part of stand to be harvested

													REGEN PLANS			
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD	

*03-00	26	065	21-W	000	44	116	5	003	ASH	19.2	40	2	0	BL SPR	ART SD	
*03-00	35	065	21-W	000	44	116	5	003	ASH	19.2	40	2	0	TMRACK	PLANT	
05-00	30	063	18-W	000	42	071	3	012	BALM	4.7	00	0	0	BALM	SPROUT	
TOTAL STANDS	3	TOTAL ACRES	18													
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Aspen

Rotation Age (years) - 50
 Current Clearcut Base (acres) - 28,287
 Ten Year Allowable Cut (acres) - 5,657
 Ten Yr. Proposed Clearcut (acres) - 9,871

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	REGEN PLANS	
														SPECIES	METHOD
16-00	11	063	19-W	000	48	085	2	019	ASPEN	5.0	00	0	0	N PINE	PLANT
04-00	05	063	17-W	000	48	077	3	042	ASPEN	5.3	00	0	0	ASPEN	SPROUT
06-00	32	063	18-W	000	57	077	2	004	ASPEN	6.0	00	0	0	WH SPR	UNDERS
03-00	04	063	17-W	000	44	067	1	064	ASPEN	4.2	00	0	0	N PINE	PLANT
11-00	25	065	20-W	000	55	065	2	022	ASPEN	5.5	40	4	0	N PINE	PLANT
05-00	13	064	17-W	000	46	066	1	016	ASPEN	2.6	00	0	0	N PINE	PLANT
01-00	34	064	18-W	000	70	064	2	020	ASPEN	8.4	40	4	0	N PINE	UNDERS
07-00	33	066	19-W	000	59	057	1	007	ASPEN	3.0	00	0	0	J PINE	ART SD
03-00	32	066	19-W	000	59	057	1	014	ASPEN	3.0	00	0	0	J PINE	ART SD
08-00	27	066	19-W	000	69	057	1	028	ASPEN	3.6	00	0	0	ASPEN	SPROUT
05-00	22	065	20-W	000	61	056	1	010	ASPEN	2.0	99	2	0	ASPEN	UNDERS
14-00	20	065	20-W	000	75	055	2	008	ASPEN	4.2	99	2	0	ASPEN	SPROUT
03-00	22	064	18-W	000	50	057	2	015	ASPEN	4.5	40	2	0	J PINE	PLANT
04-00	35	066	19-W	000	76	055	2	012	ASPEN	3.5	00	0	0	ASPEN	UNDERS
04-00	15	064	18-W	000	65	056	2	009	ASPEN	7.3	60	2	0	ASPEN	SPROUT
03-00	22	065	20-W	000	45	052	2	019	ASPEN	8.0	40	2	0	N PINE	PLANT
02-00	23	065	20-W	000	45	052	2	030	ASPEN	8.0	40	2	0	J PINE	ART SD
16-00	36	065	17-W	000	70	051	2	015	ASPEN	8.2	40	2	0	ASPEN	UNDERS
02-00	08	064	18-W	000	67	052	2	017	ASPEN	3.0	60	2	0	J PINE	ART SD
11-00	36	064	18-W	000	55	052	2	027	ASPEN	4.2	40	4	0	J PINE	PLANT
13-00	36	064	18-W	000	55	052	3	025	ASPEN	4.0	99	2	0	ASPEN	SPROUT
08-00	06	063	18-W	000	75	053	2	015	ASPEN	5.5	40	4	0	ASPEN	SPROUT
04-00	14	063	19-W	000	69	053	2	028	ASPEN	5.4	00	0	0	ASPEN	UNDERS
06-00	33	064	17-W	000	63	052	2	010	ASPEN	5.0	40	4	0	ASPEN	SPROUT
04-00	36	063	18-W	000	66	051	2	007	BALSAM	1.0	00	0	0	ASPEN	SPROUT
01-00	01	064	18-W	000	65	047	1	046	BL SPR	1.6	60	2	0	J PINE	PLANT
17-00	36	064	18-W	000	64	047	1	064	ASPEN	5.1	40	2	0	ASPEN	SPROUT
09-00	35	064	18-W	000	58	047	1	018	ASPEN	4.0	00	0	0	ASPEN	UNDERS
04-00	18	063	17-W	000	70	048	1	055	ASPEN	2.0	40	2	0	ASPEN	SPROUT
09-00	28	066	19-W	000	55	046	1	011	ASPEN	3.8	00	0	0	N PINE	PLANT
02-00	16	065	17-W	000	66	045	1	010	ASPEN	3.0	00	0	0	TMRACK	PLANT
13-00	21	065	20-W	000	60	044	2	008	ASPEN	4.5	60	2	0	ASPEN	UNDERS
01-00	18	063	19-W	000	64	044	3	010	ASPEN	12.6	40	4	0	ASPEN	SPROUT
04-00	30	063	19-W	000	55	012	4	009	ASPEN	0.0	00	0	0	PBIRCH	UNDERS
09-00	36	066	21-W	000	75	009	1	013	ASPEN	0.0	00	0	0	WH SPR	PLANT
03-00	16	065	17-W	000	74	006	1	011	ASPEN	0.0	00	0	0	WH SPR	PLANT

TOTAL STANDS 36 TOTAL ACRES 738
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LISTING OF ALL STANDS TO BE REGENERATED AFTER SALVAGE

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS		
													SPECIES	METHOD	
08-00	26	065	19-W	000	68	092	1	016	ASPEN	2.7	40	2	0	ASPEN	SPROUT
04-00	06	064	18-W	000	56	089	2	084	ASPEN	6.7	40	4	0	ASPEN	SPROUT
07-00	19	064	18-W	000	55	086	5	018	ASPEN	13.2	40	4	0	ASPEN	SPROUT
11-00	06	063	18-W	000	51	085	3	018	ASPEN	10.0	40	2	0	N PINE	PLANT
06-00	20	064	19-W	000	62	083	3	042	ASPEN	6.3	40	4	0	ASPEN	SPROUT
02-00	20	063	19-W	000	54	083	3	029	ASPEN	8.5	40	2	0	N PINE	PLANT
02-00	31	063	19-W	000	55	081	3	012	ASPEN	5.0	40	2	0	ASPEN	SPROUT
07-00	25	065	21-W	000	57	080	4	008	ASPEN	5.3	40	4	0	ASPEN	SPROUT
12-00	04	063	17-W	000	63	078	2	027	ASPEN	5.0	40	4	0	J PINE	PLANT
01-00	32	063	19-W	000	72	077	2	032	ASPEN	4.3	40	2	0	ASPEN	SPROUT
01-00	36	064	18-W	000	58	077	4	015	ASPEN	10.7	26	4	1	ASPEN	SPROUT
02-00	29	064	19-W	000	55	076	2	022	ASPEN	4.0	40	4	0	N PINE	PLANT
01-00	11	063	18-W	000	48	078	4	027	ASPEN	12.2	40	4	0	N PINE	PLANT
04-00	20	063	17-W	000	53	077	2	016	LT ASP	8.5	40	2	0	N PINE	PLANT
18-00	09	063	17-W	000	50	069	3	005	ASPEN	9.5	27	2	1	J PINE	PLANT
02-00	10	063	18-W	000	48	072	2	005	ASPEN	7.3	40	4	0	N PINE	PLANT
06-00	20	065	17-W	000	60	068	2	034	ASPEN	7.2	40	4	0	ASPEN	SPROUT
02-00	21	065	17-W	000	60	068	2	003	ASPEN	7.2	40	4	0	ASPEN	SPROUT
03-00	21	065	17-W	000	60	068	2	007	ASPEN	7.2	40	4	0	ASPEN	SPROUT
02-00	36	064	19-W	000	59	067	3	010	ASPEN	7.2	40	4	0	ASPEN	SPROUT
07-00	36	064	18-W	000	50	068	2	045	ASPEN	6.4	40	4	0	N PINE	PLANT
04-00	23	065	19-W	000	72	066	2	040	ASPEN	4.6	40	4	0	ASPEN	SPROUT
06-00	02	064	17-W	000	57	067	3	008	ASPEN	8.8	40	4	0	ASPEN	SPROUT
03-00	03	064	17-W	000	49	067	3	007	ASPEN	8.0	40	2	0	J PINE	ART SD
11-00	13	064	18-W	000	51	064	2	026	ASPEN	7.9	40	2	0	J PINE	PLANT
08-00	19	064	18-W	000	59	062	2	026	ASPEN	3.1	40	2	0	ASPEN	SPROUT
02-00	24	064	18-W	000	58	062	3	006	ASPEN	9.6	40	4	0	ASPEN	SPROUT
01-00	29	063	18-W	000	80	063	5	005	ASPEN	11.0	60	2	0	ASPEN	SPROUT
02-00	26	064	19-W	000	59	058	3	013	ASPEN	7.3	40	4	0	ASPEN	SPROUT
08-00	16	065	19-W	000	62	054	3	018	ASPEN	11.2	40	4	0	ASPEN	SPROUT
06-00	01	066	20-W	000	70	053	2	022	ASPEN	8.2	40	4	0	ASPEN	SPROUT
01-00	33	064	19-W	000	67	053	3	010	ASPEN	8.3	40	4	0	ASPEN	UNDERS
02-00	06	063	17-W	000	54	052	1	155	LT ASP	3.8	40	2	0	ASPEN	SPROUT
11-00	32	064	19-W	000	66	047	3	023	ASPEN	6.0	40	4	0	ASPEN	SPROUT
16-00	25	065	20-W	000	83	038	3	049	ASPEN	9.4	40	4	0	ASPEN	SPROUT
02-00	30	065	20-W	000	70	037	5	106	ASPEN	9.2	40	4	0	ASPEN	SPROUT
13-00	19	065	20-W	000	70	037	5	026	ASPEN	9.2	40	4	0	ASPEN	SPROUT
14-00	30	065	20-W	000	70	037	5	017	ASPEN	9.2	40	4	0	ASPEN	SPROUT

TOTAL STANDS 38 TOTAL ACRES 1032
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LISTING OF ALL STANDS TO BE RESERVED

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M
18-00	36	063	17-W	000	58	090	3	012	ASPEN	10.3	40	4	0
19-00	36	063	17-W	000	58	090	3	004	ASPEN	10.3	40	4	0
01-00	36	065	21-W	000	62	086	2	022	ASPEN	5.0	40	4	0
07-00	12	064	17-W	000	51	073	2	059	ASPEN	6.6	40	4	0
02-00	05	063	18-W	000	64	072	3	018	ASPEN	9.0	40	4	0
09-00	24	063	17-W	000	52	071	4	003	LT ASP	10.7	40	4	0
05-00	19	064	19-W	000	47	065	1	019	ASPEN	2.0	99	3	0
10-00	02	064	17-W	000	64	064	4	003	ASPEN	11.2	40	4	0
14-00	36	064	17-W	000	62	056	5	002	ASPEN	10.4	40	4	0
15-00	13	064	17-W	000	52	056	2	063	ASPEN	6.4	40	4	0
10-00	04	064	17-W	000	55	055	3	011	ASPEN	4.0	00	0	0
04-00	19	064	17-W	000	65	053	0	011	ASPEN	2.0	60	2	0
12-00	02	064	17-W	000	60	053	1	035	ASPEN	3.4	60	2	0
01-00	04	063	19-W	000	70	049	1	013	ASPEN	4.0	40	2	0
08-00	05	064	17-W	000	65	049	1	005	ASPEN	5.3	00	0	0
13-00	25	064	17-W	000	71	042	1	006	ASPEN	2.3	00	0	0

TOTAL STANDS 16 TOTAL ACRES 286
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LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

* - Acreage listed is for part of stand to be harvested.

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	REGEN PLANS	
														SPECIES	METHOD
07-00	06	065	20-W	000	60	097	7	024	ASPEN	17.2	40	4	0	ASPEN	SPROUT
01-00	08	064	17-W	000	56	096	8	039	ASPEN	17.8	40	2	0	ASPEN	SPROUT
10-00	16	064	18-W	000	52	093	3	065	ASPEN	7.3	99	2	0	N PINE	PLANT
*12-00	22	066	19-W	000	53	091	6	023	ASPEN	10.0	40	2	0	ASPEN	SPROUT
12-00	25	065	19-W	000	75	089	7	008	ASPEN	31.0	40	4	0	ASPEN	SPROUT
05-00	26	065	19-W	000	69	088	7	016	ASPEN	26.2	40	2	0	ASPEN	SPROUT
*01-00	25	065	19-W	000	69	088	7	049	ASPEN	26.2	40	2	0	ASPEN	SPROUT
13-00	26	065	19-W	000	69	088	7	019	ASPEN	26.2	40	2	0	ASPEN	SPROUT
11-00	35	065	21-W	000	69	088	5	032	ASPEN	10.0	40	4	0	ASPEN	SPROUT
02-00	10	064	18-W	000	67	087	3	011	ASPEN	4.0	40	4	0	ASPEN	SPROUT
02-00	34	063	17-W	000	57	088	4	015	ASPEN	16.0	40	2	0	ASPEN	SPROUT
06-00	30	063	18-W	000	50	088	5	040	ASPEN	17.4	40	2	0	J PINE	ART SD
02-00	11	063	19-W	000	67	086	8	010	ASPEN	32.0	40	2	0	ASPEN	SPROUT
*04-00	01	063	19-W	000	68	086	4	018	ASPEN	13.4	40	2	0	ASPEN	SPROUT
15-00	36	066	21-W	000	60	084	5	009	ASPEN	22.3	40	4	0	ASPEN	SPROUT
13-00	36	066	21-W	000	63	084	3	023	ASPEN	6.6	40	2	0	ASPEN	SPROUT
01-00	15	063	19-W	000	57	084	4	040	ASPEN	14.9	00	0	0	ASPEN	SPROUT
*02-00	10	063	19-W	000	69	084	5	046	ASPEN	11.4	40	2	0	ASPEN	SPROUT
*02-00	27	065	20-W	000	70	083	6	016	ASPEN	11.5	40	4	0	ASPEN	SPROUT
03-00	05	064	17-W	000	66	084	3	014	ASPEN	10.3	40	2	0	ASPEN	SPROUT
07-00	26	066	20-W	000	61	082	4	011	ASPEN	16.0	40	4	0	ASPEN	SPROUT
03-00	18	064	18-W	000	55	081	4	007	ASPEN	14.0	40	4	0	ASPEN	SPROUT

09-00	18	063	18-W	000	65	083	3	038	ASPEN	8.6	60	2	0	ASPEN	SPROUT
02-00	09	063	19-W	000	60	082	4	018	ASPEN	11.8	40	2	0	ASPEN	SPROUT
05-00	04	063	18-W	000	64	082	3	036	ASPEN	6.0	40	2	0	ASPEN	SPROUT
07-00	35	064	18-W	000	58	081	2	008	ASPEN	5.7	40	2	0	J PINE	ART SD
03-00	27	065	21-W	000	74	080	5	008	ASPEN	8.0	40	4	0	ASPEN	SPROUT
26-00	15	066	19-W	000	78	079	9	008	ASPEN	20.7	00	0	0	ASPEN	SPROUT
*06-00	15	066	19-W	000	78	079	9	012	ASPEN	20.7	00	0	0	ASPEN	SPROUT
02-00	12	064	19-W	000	66	079	6	028	ASPEN	17.6	40	2	0	ASPEN	SPROUT
05-00	11	064	19-W	000	56	079	5	007	ASPEN	16.6	40	4	0	ASPEN	SPROUT
07-00	11	064	19-W	000	66	079	6	007	ASPEN	17.6	40	2	0	ASPEN	SPROUT
01-00	11	064	19-W	000	66	079	6	037	ASPEN	17.6	40	2	0	ASPEN	SPROUT
02-00	11	064	19-W	000	56	079	5	007	ASPEN	16.6	40	4	0	ASPEN	SPROUT
02-00	14	065	21-W	000	59	078	7	017	ASPEN	18.0	40	2	0	ASPEN	SPROUT
03-00	10	066	19-W	000	66	078	6	009	ASPEN	17.0	40	2	0	ASPEN	SPROUT
03-00	12	064	17-W	000	63	080	4	093	ASPEN	9.3	40	4	0	ASPEN	SPROUT
*14-00	16	064	18-W	000	55	079	2	041	ASPEN	6.0	40	2	0	ASPEN	SPROUT
04-00	32	064	18-W	000	60	079	5	027	ASPEN	14.5	99	3	0	N PINE	PLANT
14-00	27	066	20-W	000	64	078	5	013	ASPEN	8.5	40	4	0	ASPEN	SPROUT
01-00	26	066	20-W	000	64	078	5	125	ASPEN	8.5	40	4	0	ASPEN	SPROUT
17-00	10	066	19-W	000	64	077	8	030	ASPEN	12.5	00	0	0	ASPEN	SPROUT
*02-00	16	066	19-W	000	73	076	6	012	ASPEN	10.0	40	2	0	ASPEN	SPROUT
13-00	10	066	19-W	000	64	077	7	036	ASPEN	9.2	00	0	0	ASPEN	SPROUT
12-00	10	066	19-W	000	64	077	8	009	ASPEN	14.0	00	0	0	ASPEN	SPROUT
21-00	15	063	17-W	000	68	079	6	008	ASPEN	26.7	00	0	0	ASPEN	SPROUT
18-00	15	063	17-W	000	63	079	5	033	ASPEN	7.1	40	2	0	ASPEN	SPROUT
14-00	15	063	17-W	000	53	078	5	009	ASPEN	14.0	40	4	0	N PINE	PLANT
03-00	05	063	19-W	000	68	077	7	011	LT ASP	25.0	00	0	0	ASPEN	SPROUT
04-00	03	063	18-W	000	65	076	3	010	ASPEN	10.7	40	2	0	ASPEN	SPROUT
04-00	11	064	19-W	000	64	075	5	019	ASPEN	13.4	40	4	0	ASPEN	SPROUT
*16-00	10	063	17-W	000	60	077	3	030	ASPEN	10.3	40	2	0	ASPEN	SPROUT
*02-00	20	063	17-W	000	55	077	4	075	ASPEN	12.3	15	4	0	J PINE	ART SD
10-00	20	063	17-W	000	71	077	3	045	ASPEN	4.9	40	2	0	ASPEN	SPROUT
11-00	20	063	17-W	000	68	077	3	007	LT ASP	10.6	40	2	0	ASPEN	SPROUT
15-00	20	063	17-W	000	55	077	3	008	ASPEN	12.3	15	4	0	N PINE	PLANT
01-00	27	065	21-W	000	70	075	6	018	ASPEN	7.8	40	4	0	ASPEN	SPROUT
09-00	10	066	19-W	000	65	075	5	018	ASPEN	6.7	99	2	0	ASPEN	SPROUT
01-00	35	065	19-W	000	60	075	5	015	ASPEN	15.2	40	2	0	ASPEN	SPROUT
10-00	23	065	19-W	000	69	075	9	011	ASPEN	42.3	40	4	0	ASPEN	SPROUT
01-00	21	065	17-W	000	60	074	5	011	ASPEN	10.2	40	2	0	ASPEN	SPROUT
*05-00	02	063	17-W	000	76	076	3	061	ASPEN	9.4	99	3	0	ASPEN	SPROUT
02-00	15	064	19-W	000	63	074	4	034	ASPEN	17.8	40	4	0	ASPEN	SPROUT
01-00	19	063	18-W	000	63	076	3	020	ASPEN	10.0	40	2	0	ASPEN	SPROUT
*04-00	12	063	19-W	000	61	074	4	065	ASPEN	15.3	40	4	0	ASPEN	SPROUT
*01-00	03	063	19-W	000	49	074	3	036	ASPEN	8.5	00	0	0	N PINE	PLANT
*03-00	03	063	19-W	000	47	074	4	045	ASPEN	10.2	26	2	0	J PINE	PLANT
01-00	10	063	18-W	000	53	075	3	017	ASPEN	6.8	40	2	0	J PINE	PLANT
06-00	03	063	17-W	000	57	075	4	020	ASPEN	8.3	40	2	0	ASPEN	SPROUT
*07-00	04	063	17-W	000	50	075	3	030	ASPEN	6.1	40	2	0	ASPEN	SPROUT
09-00	36	064	17-W	000	51	075	4	012	ASPEN	6.5	40	4	0	N PINE	PLANT
05-00	19	064	17-W	000	65	075	3	014	ASPEN	8.3	00	0	0	ASPEN	SPROUT
03-00	04	064	17-W	000	56	074	3	009	ASPEN	9.2	40	4	0	ASPEN	SPROUT
07-00	16	063	19-W	000	63	073	6	037	ASPEN	21.8	40	2	0	ASPEN	SPROUT
04-00	10	063	18-W	000	43	074	3	015	ASPEN	10.5	99	2	0	J PINE	ART SD
07-00	25	063	19-W	000	63	073	5	030	ASPEN	16.7	40	4	0	ASPEN	SPROUT

09-00	36	064	19-W	000	64	072	5	016	ASPEN	22.7	40	4	0	ASPEN	SPROUT
*07-00	36	064	19-W	000	70	072	5	075	ASPEN	9.2	40	4	0	ASPEN	SPROUT
*01-00	27	064	19-W	000	64	071	7	026	ASPEN	10.8	40	4	0	ASPEN	SPROUT
04-00	27	064	19-W	000	68	071	3	009	ASPEN	9.0	40	4	0	ASPEN	SPROUT
05-00	27	064	19-W	000	68	071	3	020	ASPEN	9.0	40	4	0	ASPEN	SPROUT
*03-00	26	064	19-W	000	68	071	3	020	ASPEN	9.0	40	4	0	ASPEN	SPROUT
04-00	12	063	18-W	000	65	073	3	028	ASPEN	9.3	40	4	0	ASPEN	SPROUT
09-00	13	063	19-W	000	76	067	5	022	ASPEN	18.4	27	1	1	ASPEN	SPROUT
01-00	11	064	17-W	000	57	073	3	035	ASPEN	8.8	40	2	0	ASPEN	SPROUT
03-00	32	064	17-W	000	49	073	4	011	ASPEN	15.0	00	0	0	J PINE	PLANT
04-00	15	063	17-W	000	45	073	3	019	LT ASP	14.0	40	4	0	J PINE	PLANT
07-00	15	063	17-W	000	75	073	5	011	ASPEN	23.8	40	2	0	ASPEN	SPROUT
02-00	07	063	17-W	000	62	071	4	011	ASPEN	13.5	99	3	0	ASPEN	SPROUT
*07-00	33	064	18-W	000	62	071	2	017	ASPEN	7.6	60	2	0	ASPEN	SPROUT
19-00	15	066	19-W	000	74	070	9	012	ASPEN	27.7	40	2	0	ASPEN	SPROUT
14-00	22	066	19-W	000	68	069	7	014	ASPEN	29.7	40	2	0	ASPEN	SPROUT
05-00	21	066	20-W	000	62	070	5	010	ASPEN	15.7	00	0	0	ASPEN	SPROUT
14-00	05	065	20-W	000	62	070	5	027	ASPEN	7.0	00	0	0	ASPEN	SPROUT
04-00	25	064	19-W	000	60	069	4	032	ASPEN	8.0	40	4	0	ASPEN	SPROUT
03-00	22	064	19-W	000	74	069	9	005	ASPEN	37.6	40	2	0	ASPEN	SPROUT
04-00	15	063	19-W	000	68	070	4	019	ASPEN	16.0	40	2	0	ASPEN	SPROUT
07-00	12	063	18-W	000	58	071	4	030	ASPEN	13.8	00	0	0	ASPEN	SPROUT
04-00	25	064	17-W	000	70	071	4	029	ASPEN	10.2	40	4	0	ASPEN	SPROUT
07-00	24	063	17-W	000	52	071	4	050	LT ASP	10.7	40	4	0	ASPEN	SPROUT
10-00	19	063	17-W	000	57	070	3	030	ASPEN	7.3	15	2	0	ASPEN	SPROUT
15-00	04	063	17-W	000	61	070	3	005	ASPEN	13.0	00	0	0	ASPEN	SPROUT
*13-00	36	064	17-W	000	60	070	5	025	ASPEN	13.5	40	2	0	ASPEN	SPROUT
*06-00	03	063	19-W	000	60	069	4	025	ASPEN	14.4	40	2	0	ASPEN	SPROUT
03-00	01	063	18-W	000	60	069	4	008	ASPEN	16.0	40	2	0	ASPEN	SPROUT
04-00	22	064	19-W	000	62	068	7	021	ASPEN	21.0	40	2	0	ASPEN	SPROUT
02-00	14	064	19-W	000	60	070	6	032	LT ASP	28.0	40	2	0	ASPEN	SPROUT
01-00	16	064	19-W	000	58	067	5	054	ASPEN	22.0	40	2	0	ASPEN	SPROUT
04-00	02	063	19-W	000	62	068	4	037	ASPEN	16.3	40	2	0	ASPEN	SPROUT
02-00	34	063	18-W	000	83	069	6	013	ASPEN	20.8	40	2	0	ASPEN	SPROUT
*16-00	15	063	17-W	000	70	069	6	029	ASPEN	14.1	26	2	0	ASPEN	SPROUT
*03-00	27	065	20-W	000	79	067	6	026	ASPEN	16.8	40	4	0	ASPEN	SPROUT
*02-00	28	065	20-W	000	79	067	5	017	ASPEN	10.7	40	2	0	ASPEN	SPROUT
01-00	20	066	19-W	000	73	066	7	022	ASPEN	14.0	40	2	0	ASPEN	SPROUT
11-00	23	065	19-W	000	61	067	7	009	ASPEN	15.7	40	2	0	ASPEN	SPROUT
*05-00	09	066	19-W	000	78	066	6	072	ASPEN	26.5	40	2	0	ASPEN	SPROUT
*09-00	09	066	19-W	000	78	066	6	033	ASPEN	26.5	40	2	0	ASPEN	SPROUT
05-00	33	063	17-W	000	76	067	5	007	ASPEN	9.2	40	2	0	ASPEN	SPROUT
04-00	19	063	18-W	000	69	068	5	035	ASPEN	25.3	40	2	0	ASPEN	SPROUT
06-00	15	063	19-W	000	68	067	3	012	ASPEN	8.3	40	2	0	ASPEN	SPROUT
*14-00	16	063	19-W	000	60	067	5	033	ASPEN	15.2	40	2	0	ASPEN	SPROUT
*04-00	09	063	19-W	000	61	067	3	029	ASPEN	10.5	00	0	0	ASPEN	SPROUT
17-00	04	063	18-W	000	68	067	3	011	ASPEN	7.0	40	2	0	ASPEN	SPROUT
05-00	03	063	19-W	000	65	067	4	009	ASPEN	4.0	00	0	0	LT ASP	SPROUT
04-00	25	064	20-W	000	78	066	5	070	ASPEN	8.6	40	2	0	ASPEN	SPROUT
13-00	26	064	18-W	000	68	067	4	015	ASPEN	13.4	40	4	0	ASPEN	SPROUT
*15-00	16	063	19-W	000	68	066	4	017	ASPEN	15.0	40	2	0	ASPEN	SPROUT
03-00	22	063	19-W	000	73	066	5	019	ASPEN	17.6	40	2	0	ASPEN	SPROUT
23-00	15	063	17-W	000	68	067	4	019	ASPEN	16.8	40	4	0	ASPEN	SPROUT
11-00	15	065	21-W	000	80	065	9	057	ASPEN	27.2	40	4	0	ASPEN	SPROUT

01-00	36	065	19-W	000	75	065	7	040	ASPEN	27.6	40	4	0	ASPEN	SPROUT
01-00	12	063	17-W	000	58	066	4	155	LT ASP	14.3	40	2	0	LT ASP	SPROUT
17-00	10	063	17-W	000	63	066	5	024	ASPEN	10.6	40	2	0	J PINE	PLANT
06-00	04	063	19-W	000	69	065	4	017	ASPEN	9.3	40	2	0	ASPEN	SPROUT
07-00	34	063	18-W	000	87	066	5	012	ASPEN	18.0	40	2	0	ASPEN	SPROUT
*16-00	16	063	19-W	000	56	065	5	060	ASPEN	19.4	40	2	0	N PINE	PLANT
*03-00	15	063	19-W	000	70	065	4	049	ASPEN	15.0	40	2	0	ASPEN	SPROUT
08-00	15	063	19-W	000	69	065	5	039	ASPEN	20.7	40	2	0	ASPEN	SPROUT
*08-00	32	064	18-W	000	75	065	4	006	ASPEN	9.8	40	4	0	ASPEN	SPROUT
01-00	19	064	17-W	000	68	066	4	014	ASPEN	8.7	00	0	0	ASPEN	SPROUT
20-00	36	064	18-W	000	60	065	5	008	ASPEN	22.7	40	4	0	ASPEN	SPROUT
02-00	13	064	19-W	000	60	066	4	064	ASPEN	11.5	40	4	0	ASPEN	SPROUT
20-00	34	066	19-W	000	62	064	3	070	ASPEN	12.2	40	2	0	ASPEN	SPROUT
*18-00	28	066	19-W	000	62	064	3	029	ASPEN	12.2	40	2	0	ASPEN	SPROUT
*01-00	33	066	19-W	000	62	064	3	012	ASPEN	12.2	40	2	0	ASPEN	SPROUT
*02-00	28	066	19-W	000	62	064	3	039	ASPEN	12.2	40	2	0	ASPEN	SPROUT
*12-00	27	066	19-W	000	62	064	3	074	ASPEN	12.2	40	2	0	ASPEN	SPROUT
05-00	02	064	19-W	000	72	063	4	035	ASPEN	15.0	40	2	0	ASPEN	SPROUT
01-00	12	064	20-W	000	70	063	3	007	ASPEN	14.1	40	4	0	ASPEN	SPROUT
*02-00	16	064	18-W	000	63	064	6	028	ASPEN	28.1	99	2	0	ASPEN	SPROUT
06-00	10	063	18-W	000	50	065	3	031	ASPEN	9.4	99	2	0	N PINE	PLANT
*02-00	25	063	19-W	000	67	064	6	040	ASPEN	25.6	40	4	0	ASPEN	SPROUT
08-00	24	063	19-W	000	70	061	4	039	ASPEN	20.0	00	0	0	ASPEN	SPROUT
11-00	04	063	19-W	000	70	064	4	021	ASPEN	11.5	40	2	0	ASPEN	SPROUT
04-00	10	065	21-W	000	63	063	3	082	ASPEN	7.3	40	2	0	ASPEN	SPROUT
12-00	21	066	19-W	000	60	062	5	005	ASPEN	22.7	40	2	0	ASPEN	SPROUT
19-00	21	066	19-W	000	60	062	5	003	ASPEN	22.7	40	2	0	ASPEN	SPROUT
16-00	21	066	19-W	000	60	062	5	009	ASPEN	22.7	40	2	0	ASPEN	SPROUT
*02-00	13	066	19-W	000	79	062	7	064	ASPEN	30.2	40	2	0	ASPEN	SPROUT
07-00	24	066	19-W	000	76	062	6	034	ASPEN	21.5	00	0	0	ASPEN	SPROUT
03-00	14	066	19-W	000	79	062	7	026	ASPEN	30.2	40	2	0	ASPEN	SPROUT
02-00	12	066	19-W	000	79	062	7	042	ASPEN	30.2	40	2	0	ASPEN	SPROUT
01-00	12	066	19-W	000	79	062	7	024	ASPEN	30.2	40	2	0	ASPEN	SPROUT
02-00	14	066	19-W	000	79	062	7	166	ASPEN	30.2	40	2	0	ASPEN	SPROUT
02-00	02	064	17-W	000	64	064	4	035	ASPEN	11.2	40	2	0	ASPEN	SPROUT
02-00	12	064	18-W	000	62	063	4	012	LT ASP	13.0	99	2	0	ASPEN	SPROUT
09-00	13	064	18-W	000	62	063	3	015	ASPEN	9.4	40	2	0	ASPEN	SPROUT
05-00	10	064	17-W	000	58	064	5	019	ASPEN	12.0	40	2	0	ASPEN	SPROUT
01-00	10	064	17-W	000	58	064	5	010	ASPEN	12.0	40	2	0	ASPEN	SPROUT
16-00	22	064	20-W	000	65	062	5	037	ASPEN	10.4	40	4	0	ASPEN	SPROUT
03-00	36	064	19-W	000	70	062	5	047	ASPEN	16.8	40	4	0	ASPEN	SPROUT
06-00	20	066	20-W	000	61	062	3	036	LT ASP	9.7	40	2	0	ASPEN	SPROUT
04-00	21	066	20-W	000	61	062	3	004	LT ASP	9.7	40	2	0	ASPEN	SPROUT
*01-00	30	063	17-W	000	60	064	3	049	ASPEN	9.3	40	2	0	ASPEN	SPROUT
04-00	26	063	17-W	000	68	064	4	016	LT ASP	14.0	40	2	0	ASPEN	SPROUT
03-00	26	065	19-W	000	60	062	5	006	ASPEN	26.3	40	4	0	ASPEN	SPROUT
03-00	27	065	19-W	000	67	062	5	012	ASPEN	13.2	40	2	0	ASPEN	SPROUT
04-00	22	065	18-W	000	67	061	5	032	ASPEN	23.4	40	2	0	ASPEN	SPROUT
07-00	34	065	17-W	000	77	061	6	039	ASPEN	14.4	40	4	0	ASPEN	SPROUT
05-00	07	063	17-W	000	70	062	4	019	ASPEN	15.0	40	2	0	ASPEN	SPROUT
01-00	07	063	17-W	000	72	062	4	008	ASPEN	16.0	99	3	0	ASPEN	SPROUT
08-00	33	066	20-W	000	70	061	6	011	ASPEN	15.3	40	4	0	ASPEN	SPROUT
18-00	36	066	20-W	000	59	061	4	007	ASPEN	6.0	00	0	0	ASPEN	SPROUT
02-00	19	066	20-W	000	65	061	3	045	ASPEN	7.6	00	0	0	ASPEN	SPROUT

02-00	18	066	20-W	000	58	061	3	007	ASPEN	11.3	40	2	0	ASPEN	SPROUT
04-00	16	064	19-W	000	70	061	5	339	ASPEN	19.2	40	4	0	ASPEN	SPROUT
01-00	24	064	19-W	000	62	061	5	057	ASPEN	13.1	40	4	0	ASPEN	SPROUT
02-00	09	064	19-W	000	68	061	6	063	ASPEN	27.0	40	2	0	ASPEN	SPROUT
01-00	09	064	19-W	000	76	061	6	074	ASPEN	25.0	40	2	0	ASPEN	SPROUT
09-00	36	064	18-W	000	57	062	4	009	ASPEN	13.5	40	2	0	ASPEN	SPROUT
02-00	34	064	18-W	000	58	062	9	006	ASPEN	44.0	40	2	0	ASPEN	SPROUT
12-00	34	064	18-W	000	64	062	4	017	ASPEN	9.0	40	2	0	ASPEN	SPROUT
06-00	34	064	18-W	000	60	062	4	010	ASPEN	12.2	40	4	0	ASPEN	SPROUT
02-00	01	064	17-W	000	72	063	8	006	ASPEN	30.3	40	4	0	ASPEN	SPROUT
05-00	02	064	17-W	000	74	063	4	039	ASPEN	12.0	40	2	0	ASPEN	SPROUT
04-00	21	066	19-W	000	74	061	5	012	ASPEN	18.3	40	2	0	ASPEN	SPROUT
02-00	11	066	19-W	000	70	061	5	022	ASPEN	17.9	40	2	0	ASPEN	SPROUT
02-00	24	066	19-W	000	70	061	8	128	ASPEN	15.7	40	2	0	ASPEN	SPROUT
18-00	23	065	21-W	000	74	061	7	018	LT ASP	8.5	00	0	0	ASPEN	SPROUT
12-00	15	065	20-W	000	79	061	8	027	ASPEN	33.0	40	2	0	ASPEN	SPROUT
13-00	15	065	20-W	000	75	061	4	021	ASPEN	13.4	40	2	0	ASPEN	SPROUT
09-00	10	065	20-W	000	65	061	4	014	ASPEN	6.5	40	4	0	ASPEN	SPROUT
09-00	15	065	20-W	000	65	061	4	063	ASPEN	6.5	40	4	0	ASPEN	SPROUT
12-00	07	065	20-W	000	75	061	5	036	ASPEN	10.0	40	4	0	ASPEN	SPROUT
08-00	16	065	20-W	000	75	061	4	133	ASPEN	13.4	40	2	0	ASPEN	SPROUT
20-00	22	065	20-W	000	49	061	5	042	ASPEN	11.0	00	0	0	N PINE	PLANT
03-00	16	065	20-W	000	82	060	9	023	ASPEN	43.8	40	2	0	ASPEN	SPROUT
10-00	10	065	20-W	000	67	060	7	009	ASPEN	33.0	40	4	0	ASPEN	SPROUT
08-00	01	066	19-W	000	73	059	7	041	ASPEN	27.8	40	2	0	ASPEN	SPROUT
07-00	01	066	19-W	000	71	059	6	039	ASPEN	25.8	40	2	0	ASPEN	SPROUT
06-00	07	066	19-W	000	79	060	9	014	ASPEN	46.7	40	2	0	ASPEN	SPROUT
*08-00	33	064	18-W	000	65	061	7	014	ASPEN	28.8	40	2	0	ASPEN	SPROUT
04-00	27	064	17-W	000	58	062	6	012	ASPEN	19.0	40	2	0	ASPEN	SPROUT
*09-00	32	066	20-W	000	67	060	6	050	ASPEN	22.5	40	2	0	ASPEN	SPROUT
07-00	18	066	20-W	000	54	060	8	005	ASPEN	27.8	00	0	0	ASPEN	SPROUT
01-00	33	063	17-W	000	78	061	4	013	ASPEN	11.8	40	2	0	ASPEN	SPROUT
05-00	30	063	17-W	000	57	062	3	008	ASPEN	9.3	40	2	0	ASPEN	SPROUT
*03-00	01	063	17-W	000	64	062	5	026	ASPEN	16.6	40	2	0	ASPEN	SPROUT
05-00	01	063	17-W	000	45	062	3	033	ASPEN	11.0	40	2	0	ASPEN	SPROUT
10-00	03	065	20-W	000	70	060	8	033	ASPEN	36.5	00	0	0	ASPEN	SPROUT
*13-00	16	065	18-W	000	76	058	7	041	ASPEN	30.7	40	2	0	ASPEN	SPROUT
01-00	11	063	17-W	000	70	061	5	108	LT ASP	11.8	40	2	0	ASPEN	SPROUT
01-00	14	063	17-W	000	78	061	2	027	ASPEN	5.0	40	4	0	ASPEN	SPROUT
02-00	14	063	17-W	000	78	061	2	036	ASPEN	5.7	40	4	0	ASPEN	SPROUT
05-00	28	066	20-W	000	70	059	6	004	ASPEN	22.5	40	2	0	ASPEN	SPROUT
*01-00	13	066	20-W	000	75	059	5	008	ASPEN	22.6	40	2	0	ASPEN	SPROUT
03-00	13	066	20-W	000	75	059	5	008	ASPEN	22.6	40	2	0	ASPEN	SPROUT
07-00	21	066	20-W	000	70	059	6	013	ASPEN	22.5	40	2	0	ASPEN	SPROUT
02-00	03	066	19-W	000	75	058	6	018	ASPEN	20.8	40	2	0	ASPEN	SPROUT
02-00	08	066	19-W	000	81	058	7	036	ASPEN	20.7	40	2	0	ASPEN	SPROUT
*01-00	03	066	19-W	000	75	058	6	060	ASPEN	20.8	40	2	0	ASPEN	SPROUT
*03-00	19	066	19-W	000	78	058	6	066	ASPEN	27.1	40	2	0	ASPEN	SPROUT
03-00	01	066	19-W	000	76	058	8	033	ASPEN	29.8	40	2	0	ASPEN	SPROUT
03-00	19	065	20-W	000	68	059	6	027	ASPEN	9.0	00	0	0	ASPEN	SPROUT
25-00	04	065	20-W	000	63	059	3	025	ASPEN	8.0	40	2	0	ASPEN	SPROUT
*01-00	25	064	19-W	000	54	059	4	025	ASPEN	11.7	40	4	0	ASPEN	SPROUT
*05-00	36	064	19-W	000	73	059	6	056	ASPEN	19.4	40	2	0	ASPEN	SPROUT
01-00	16	065	17-W	000	60	059	3	004	ASPEN	6.7	40	4	0	ASPEN	SPROUT

11-00	07	065	17-W	000	79	059	8	015	ASPEN	33.7	40	2	0	ASPEN	SPROUT
04-00	08	065	17-W	000	74	058	6	005	ASPEN	24.7	40	4	0	ASPEN	SPROUT
03-00	20	065	20-W	000	68	058	4	053	ASPEN	9.1	40	4	0	ASPEN	SPROUT
03-00	14	065	21-W	000	86	058	9	016	ASPEN	26.4	40	4	0	ASPEN	SPROUT
16-00	04	065	20-W	000	68	058	6	009	ASPEN	14.6	40	2	0	ASPEN	SPROUT
*15-00	21	066	19-W	000	60	057	7	016	ASPEN	12.2	40	2	0	ASPEN	SPROUT
06-00	01	066	19-W	000	79	057	4	010	ASPEN	9.1	00	0	0	ASPEN	SPROUT
13-00	18	064	17-W	000	65	060	3	031	ASPEN	6.6	40	2	0	ASPEN	SPROUT
15-00	34	066	19-W	000	75	058	3	008	ASPEN	15.5	40	2	0	ASPEN	SPROUT
16-00	16	066	20-W	000	65	058	6	013	ASPEN	11.7	00	0	0	ASPEN	SPROUT
*12-00	03	065	20-W	000	70	058	4	016	ASPEN	18.2	00	0	0	ASPEN	SPROUT
08-00	04	063	18-W	000	75	059	7	004	ASPEN	23.6	40	2	0	ASPEN	SPROUT
*06-00	10	063	19-W	000	68	059	4	055	ASPEN	15.3	40	2	0	N PINE	PLANT
02-00	01	063	19-W	000	69	058	2	024	ASPEN	7.6	40	2	0	ASPEN	SPROUT
01-00	22	065	18-W	000	70	057	6	034	ASPEN	16.0	40	2	0	ASPEN	SPROUT
01-00	32	065	18-W	000	79	057	3	022	ASPEN	9.7	40	2	0	ASPEN	SPROUT
04-00	07	063	17-W	000	65	058	4	010	ASPEN	15.0	40	2	0	ASPEN	SPROUT
05-00	32	066	19-W	000	69	056	2	016	ASPEN	2.3	40	2	0	ASPEN	SPROUT
01-00	34	066	20-W	000	66	057	5	027	ASPEN	16.7	40	2	0	ASPEN	SPROUT
*03-00	36	066	19-W	000	81	057	7	029	ASPEN	18.3	00	0	0	ASPEN	SPROUT
06-00	35	064	17-W	000	66	059	2	031	ASPEN	5.8	40	2	0	ASPEN	SPROUT
06-00	33	064	18-W	000	64	058	4	012	ASPEN	13.3	60	2	0	ASPEN	SPROUT
01-00	21	066	19-W	000	69	057	5	026	ASPEN	19.0	40	2	0	ASPEN	SPROUT
02-00	23	066	19-W	000	69	057	5	015	ASPEN	15.0	00	0	0	ASPEN	SPROUT
05-00	21	066	19-W	000	69	057	5	015	ASPEN	19.0	40	2	0	ASPEN	SPROUT
06-00	10	065	20-W	000	67	057	4	021	ASPEN	13.5	40	2	0	J PINE	PLANT
03-00	15	065	20-W	000	70	057	6	010	ASPEN	21.7	00	0	0	ASPEN	SPROUT
24-00	36	064	18-W	000	65	057	2	009	ASPEN	7.4	99	2	0	ASPEN	SPROUT
28-00	36	064	18-W	000	57	057	3	009	ASPEN	13.0	40	2	0	ASPEN	SPROUT
15-00	16	065	20-W	000	80	056	5	040	ASPEN	16.2	00	0	0	ASPEN	SPROUT
*10-00	15	065	20-W	000	70	056	6	067	ASPEN	22.4	40	2	0	ASPEN	SPROUT
04-00	06	065	20-W	000	67	056	3	020	ASPEN	8.6	40	2	0	ASPEN	SPROUT
02-00	32	066	19-W	000	80	055	7	011	ASPEN	35.0	40	2	0	ASPEN	SPROUT
09-00	30	066	19-W	000	70	055	5	009	ASPEN	23.5	00	0	0	ASPEN	SPROUT
03-00	21	066	19-W	000	83	056	7	009	ASPEN	30.0	40	2	0	ASPEN	SPROUT
05-00	26	066	19-W	000	72	056	3	019	ASPEN	11.6	40	2	0	ASPEN	SPROUT
*07-00	30	066	19-W	000	70	055	5	036	ASPEN	23.5	00	0	0	ASPEN	SPROUT
01-00	04	066	19-W	000	81	055	9	040	ASPEN	35.9	00	0	0	ASPEN	SPROUT
08-00	31	066	19-W	000	80	055	4	054	ASPEN	15.8	40	2	0	ASPEN	SPROUT
10-00	36	064	17-W	000	60	058	5	013	BALSAM	5.5	40	2	0	ASPEN	SPROUT
01-00	30	064	18-W	000	70	057	4	013	ASPEN	13.6	40	2	0	ASPEN	SPROUT
05-00	12	064	18-W	000	67	057	3	030	ASPEN	5.5	40	2	0	ASPEN	SPROUT
04-00	35	064	17-W	000	62	058	5	012	ASPEN	18.5	00	0	0	ASPEN	SPROUT
06-00	11	066	20-W	000	82	056	6	045	ASPEN	16.4	00	0	0	ASPEN	SPROUT
*10-00	02	063	18-W	000	72	057	4	016	ASPEN	13.0	40	2	0	ASPEN	SPROUT
01-00	24	063	17-W	000	63	058	3	164	ASPEN	7.8	40	4	0	ASPEN	SPROUT
*05-00	04	063	17-W	000	58	052	2	051	ASPEN	7.0	27	1	1	ASPEN	SPROUT
*02-00	03	063	17-W	000	58	058	2	008	ASPEN	7.0	40	2	0	ASPEN	SPROUT
19-00	16	065	19-W	000	68	056	3	019	ASPEN	11.7	40	4	0	ASPEN	SPROUT
07-00	36	065	19-W	000	73	056	5	033	ASPEN	16.7	40	4	0	ASPEN	SPROUT
25-00	03	065	20-W	000	74	056	7	007	ASPEN	21.0	00	0	0	ASPEN	SPROUT
02-00	03	065	20-W	000	70	056	4	044	ASPEN	11.4	40	2	0	ASPEN	SPROUT
08-00	36	065	17-W	000	72	056	3	026	ASPEN	4.0	60	2	0	ASPEN	SPROUT

*19-00	36	065	19-W	000	78	056	7	019	ASPEN	24.8	40	2	0	ASPEN	SPROUT
30-00	03	065	20-W	000	74	056	7	005	ASPEN	21.0	00	0	0	ASPEN	SPROUT
*02-00	10	065	19-W	000	70	056	5	033	ASPEN	17.4	40	2	0	ASPEN	SPROUT
17-00	03	065	20-W	000	77	056	9	092	ASPEN	36.8	40	2	0	ASPEN	SPROUT
03-00	33	063	19-W	000	77	057	8	038	ASPEN	36.0	27	2	0	ASPEN	SPROUT
01-00	24	063	19-W	000	78	056	2	008	ASPEN	3.3	00	0	0	ASPEN	SPROUT
10-00	01	066	20-W	000	84	055	6	035	ASPEN	26.8	40	4	0	ASPEN	SPROUT
01-00	01	066	20-W	000	84	055	6	127	ASPEN	26.8	40	4	0	ASPEN	SPROUT
01-00	05	066	19-W	000	83	055	8	111	ASPEN	31.6	40	2	0	ASPEN	SPROUT
01-00	20	065	20-W	000	72	055	5	062	ASPEN	12.9	40	4	0	ASPEN	SPROUT
09-00	16	064	20-W	000	81	055	6	021	ASPEN	23.8	40	2	0	ASPEN	SPROUT
05-00	21	065	20-W	000	74	054	6	027	ASPEN	17.8	40	4	0	ASPEN	SPROUT
04-00	27	065	21-W	000	77	054	8	003	ASPEN	20.0	40	4	0	ASPEN	SPROUT
01-00	36	064	17-W	000	62	056	5	279	ASPEN	10.4	40	4	0	ASPEN	SPROUT
05-00	21	063	19-W	000	68	054	3	015	ASPEN	11.0	40	2	0	ASPEN	SPROUT
13-00	03	065	20-W	000	67	053	7	022	ASPEN	22.7	00	0	0	ASPEN	SPROUT
*08-00	36	065	18-W	000	76	053	9	021	ASPEN	36.0	40	2	0	ASPEN	SPROUT
03-00	20	066	20-W	000	70	053	4	033	ASPEN	10.4	40	2	0	ASPEN	SPROUT
04-00	20	066	20-W	000	87	053	7	010	ASPEN	27.3	00	0	0	ASPEN	SPROUT
08-00	34	064	18-W	000	68	054	3	014	ASPEN	7.3	40	2	0	ASPEN	SPROUT
05-00	13	065	20-W	000	61	053	3	006	ASPEN	10.3	40	4	0	ASPEN	SPROUT
*01-00	16	064	20-W	000	78	053	4	010	ASPEN	8.6	40	2	0	ASPEN	SPROUT
30-00	36	066	21-W	000	66	052	7	011	ASPEN	24.4	40	4	0	ASPEN	SPROUT
18-00	16	066	20-W	000	73	052	5	032	ASPEN	19.2	40	2	0	ASPEN	SPROUT
05-00	35	066	21-W	000	66	052	7	006	ASPEN	24.4	40	4	0	ASPEN	SPROUT
04-00	12	066	20-W	000	77	051	6	293	ASPEN	24.0	40	2	0	ASPEN	SPROUT
06-00	13	063	19-W	000	62	053	3	022	ASPEN	4.2	40	2	0	ASPEN	SPROUT
13-00	03	063	18-W	000	77	050	5	005	ASPEN	14.7	99	2	0	ASPEN	SPROUT

TOTAL STANDS 319 TOTAL ACRES 9,871
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Birch

Rotation Age (years) - 60
 Current Clearcut Base (acres) - 3587
 Ten Year Allowable Cut (acres) - 597
 Ten Yr. Proposed Clearcut (acres) - 757

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS		
													SPECIES	METHOD	
06-00	08	065	20-W	000	51	106	3	008	PBIRCH	6.7	40	2	0	ASPEN	SPROUT
02-00	25	065	19-W	000	36	090	2	020	PBIRCH	4.7	60	2	0	PBIRCH	PLANT
19-00	22	064	20-W	000	43	086	1	006	PBIRCH	3.0	40	2	0	WH SPR	PLANT
01-00	05	065	20-W	000	53	084	3	024	PBIRCH	5.2	40	2	0	J PINE	PLANT
03-00	04	065	18-W	000	50	075	2	013	PBIRCH	3.3	40	4	0	N PINE	PLANT
01-00	05	064	18-W	000	51	077	1	013	PBIRCH	3.7	00	0	0	N PINE	PLANT
08-00	06	064	18-W	000	51	077	1	018	PBIRCH	3.7	00	0	0	J PINE	PLANT
02-00	22	064	18-W	000	42	069	2	011	PBIRCH	5.0	00	0	0	N PINE	PLANT

06-00	24	063	19-W	000	55	065	2	091	PBIRCH	2.4	00	0	0	WH	SPR	PLANT
12-00	26	064	18-W	000	48	064	2	030	PBIRCH	3.4	99	2	0	J	PINE	PLANT
27-00	03	065	20-W	000	47	056	2	024	PBIRCH	6.0	00	0	0	W	PINE	PLANT
12-00	28	066	19-W	000	55	060	1	010	PBIRCH	3.1	00	0	0	PBIRCH		PLANT
04-00	34	064	18-W	000	50	061	1	005	PBIRCH	4.0	00	0	0	W	PINE	PLANT
18-00	03	065	20-W	000	43	057	2	004	PBIRCH	4.3	00	0	0	ASPEN		SPROUT
21-00	16	065	19-W	000	49	056	1	023	PBIRCH	3.2	00	0	0	W	PINE	PLANT
10-00	04	063	17-W	000	62	048	1	052	PBIRCH	2.7	00	0	0	J	PINE	PLANT

TOTAL STANDS 16 TOTAL ACRES 352
 =====

LISTING OF ALL STANDS TO BE REGENERATED AFTER SALVAGE

													REGEN PLANS			
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD	
12-00	14	063	19-W	246	40	110	2	033	PBIRCH	3.8	40	2	0	BL	SPR	PLANT
06-00	23	065	19-W	000	57	107	2	007	PBIRCH	6.3	99	2	0	PBIRCH		PLANT
10-00	13	063	19-W	000	55	090	2	008	PBIRCH	4.0	30	3	1	PBIRCH		PLANT
03-00	30	065	18-W	000	40	089	2	017	PBIRCH	4.7	99	2	0	N	PINE	PLANT
03-00	19	065	18-W	000	40	089	2	059	PBIRCH	4.7	99	2	0	J	PINE	PLANT
06-00	26	065	19-W	000	53	081	1	017	PBIRCH	3.2	60	2	0	PBIRCH		PLANT
01-00	18	063	18-W	000	46	073	2	028	PBIRCH	8.0	40	2	0	N	PINE	PLANT
10-00	20	065	20-W	000	53	063	2	045	PBIRCH	4.8	40	2	0	PBIRCH		PLANT
07-00	21	065	20-W	000	51	061	2	014	PBIRCH	4.0	60	2	0	N	PINE	PLANT

TOTAL STANDS 9 TOTAL ACRES 228
 =====

LISTING OF ALL STANDS TO BE RESERVED

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M
12-00	36	063	17-W	000	52	095	4	003	PBIRCH	9.0	40	4	0
09-00	36	063	17-W	000	52	095	4	006	PBIRCH	9.0	40	4	0
16-00	36	063	17-W	000	63	088	2	014	PBIRCH	6.5	40	2	0
15-00	36	063	17-W	000	63	088	2	005	PBIRCH	6.5	40	2	0
03-00	08	063	17-W	000	45	074	2	004	PBIRCH	6.0	00	0	0
13-00	25	064	20-W	000	57	066	5	004	PBIRCH	12.7	60	2	0
01-00	36	065	20-W	000	60	065	3	005	PBIRCH	12.0	00	0	0
03-00	23	063	17-W	000	55	064	4	004	PBIRCH	12.0	40	2	0
01-00	23	063	17-W	000	55	064	4	049	PBIRCH	12.0	40	2	0
03-00	34	064	18-W	000	47	062	1	008	PBIRCH	4.0	00	0	0
04-00	22	063	17-W	000	45	061	4	003	PBIRCH	11.3	40	2	0
15-00	36	064	18-W	000	47	057	1	013	PBIRCH	2.0	99	2	0
16-00	36	064	18-W	000	55	057	2	010	PBIRCH	4.6	99	2	0
04-00	28	065	20-W	000	58	056	3	005	PBIRCH	11.0	40	2	0

TOTAL STANDS 14 TOTAL ACRES 133
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LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

* - Acreage listed is for part of stand to be harvested.

													REGEN PLANS	
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM %	M	SPECIES	METHOD
05-00	30	063	19-W	000	47	137	3	025	PBIRCH	10.0	00	0	0	N PINE PLANT
23-00	25	065	21-W	000	62	114	5	023	PBIRCH	7.6	00	0	0	ASPEN SPROUT
*01-00	27	063	19-W	000	62	108	4	039	BALM	1.5	40	2	0	ASPEN SPROUT
13-00	14	063	19-W	000	50	105	3	009	PBIRCH	15.3	40	4	0	J PINE PLANT
*02-00	28	063	19-W	000	54	102	4	040	PBIRCH	11.0	40	2	0	N PINE PLANT
*03-00	07	063	19-W	000	46	101	4	017	PBIRCH	9.3	60	2	0	ASPEN SPROUT
13-00	16	066	19-W	000	49	096	4	012	PBIRCH	9.0	00	0	0	J PINE PLANT
01-00	34	063	19-W	000	49	097	5	105	PBIRCH	14.1	99	3	0	N PINE PLANT
07-00	25	065	19-W	000	60	095	2	012	PBIRCH	9.3	00	0	0	PBIRCH PLANT
02-00	33	065	18-W	000	45	094	3	023	PBIRCH	5.7	00	0	0	J PINE ART SD
01-00	30	063	19-W	000	47	094	3	016	PBIRCH	7.0	40	2	0	N PINE PLANT
*04-00	33	063	19-W	000	55	093	3	052	PBIRCH	5.8	99	3	0	N PINE PLANT
*03-00	21	063	19-W	000	50	092	3	017	PBIRCH	7.6	00	0	0	ASPEN SPROUT
02-00	22	064	20-W	000	50	090	6	016	PBIRCH	12.3	40	2	0	WH SPR PLANT
*02-00	23	066	20-W	000	54	090	5	018	PBIRCH	8.8	00	0	0	N PINE PLANT
15-00	25	065	19-W	000	55	085	3	040	PBIRCH	13.0	00	0	0	PBIRCH PLANT
02-00	27	063	19-W	000	49	090	4	040	PBIRCH	4.5	00	0	0	J PINE PLANT
12-00	22	065	21-W	000	54	087	6	022	PBIRCH	12.4	00	0	0	PBIRCH PLANT
20-00	35	065	21-W	000	51	086	3	006	PBIRCH	5.3	99	2	0	ASPEN SPROUT
02-00	30	063	19-W	000	48	086	2	025	PBIRCH	8.0	00	0	0	J PINE PLANT
*13-00	23	065	21-W	000	54	085	4	020	PBIRCH	5.2	00	0	0	N PINE PLANT
*13-00	25	065	19-W	000	49	085	3	012	PBIRCH	7.2	40	4	0	N PINE PLANT
*09-00	05	063	19-W	000	55	085	3	021	PBIRCH	4.9	00	0	0	ASPEN SPROUT
10-00	21	066	19-W	000	57	083	7	010	PBIRCH	19.7	40	2	0	PBIRCH PLANT
19-00	07	065	20-W	000	50	083	3	003	PBIRCH	5.3	40	2	0	N PINE PLANT
*11-00	25	065	19-W	000	59	082	4	011	PBIRCH	4.7	40	2	0	ASPEN SPROUT
*12-00	16	066	19-W	000	54	081	8	010	PBIRCH	31.8	40	2	0	PBIRCH PLANT
*05-00	20	064	19-W	000	58	081	3	020	PBIRCH	7.3	40	2	0	N PINE PLANT
*06-00	28	065	20-W	000	55	078	2	018	PBIRCH	2.7	00	0	0	N PINE PLANT
*06-00	16	064	19-W	000	53	077	5	006	PBIRCH	10.4	40	2	0	ASPEN SPROUT
06-00	14	063	19-W	000	57	078	5	036	PBIRCH	10.8	00	0	0	PBIRCH PLANT
*02-00	22	064	19-W	000	48	075	4	015	PBIRCH	10.0	40	2	0	J PINE PLANT
08-00	26	064	20-W	000	54	073	7	005	PBIRCH	20.7	40	4	0	N PINE PLANT
01-00	27	064	20-W	000	54	073	7	015	PBIRCH	20.7	40	4	0	N PINE PLANT

TOTAL STANDS 34 TOTAL ACRES 757

Balm of Gilead

Rotation Age (years) - 50
 Current Clearcut Base (acres) - 208
 Ten Year Allowable Cut (acres) - 41
 Ten Yr. Proposed Clearcut (acres) - 76

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS	
													SPECIES	METHOD
07-00	01	066	20-W	000	66	064	2	008	BALM	2.7	99	2 0	BALM	SPROUT
09-00	33	066	20-W	000	41	053	1	031	BALM	2.8	00	0 0	BALM	SPROUT
09-00	05	065	20-W	000	70	039	1	042	BALM	1.7	40	2 0	BL SPR	ART SD
TOTAL STANDS		3		TOTAL ACRES		81								

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS	
													SPECIES	METHOD
17-00	06	065	20-W	000	53	095	7	020	BALM	12.0	99	2 0	BALM	SPROUT
07-00	23	065	21-W	000	67	090	8	016	BALM	14.2	40	2 0	BALM	SPROUT
13-00	16	063	19-W	000	60	074	6	017	BALM	8.2	00	0 0	BALM	SPROUT
08-00	36	063	19-W	000	64	070	4	017	BALM	8.2	00	0 0	BALM	SPROUT
05-00	23	065	21-W	000	79	065	9	006	BALM	25.7	40	2 0	BALM	SPROUT
TOTAL STANDS		5		TOTAL ACRES		76								

Northern Hardwoods

Rotation Age (years) - 70
 Current Clearcut Base (acres) - 36
 Ten Year Allowable Cut (acres) - 5
 Ten Yr. Proposed Clearcut (acres) - 8

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS	
													SPECIES	METHOD
11-00	28	066	19-W	000	80	021	1	004	NOR HW	0.0	00	0 0	J PINE	ART SD
08-00	02	063	18-W	000	55	012	1	021	NOR HW	0.0	00	0 0	J PINE	PLANT
TOTAL STANDS		2		TOTAL ACRES		25								

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

													REGEN PLANS		
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD
07-00	17	065	20-W	000	50	076	2	008	RMAPLE	4.3	60	2	0	J PINE	ART SD
TOTAL STANDS		1		TOTAL ACRES		8									

White Pine

Rotation Age (years) - 95
 Current Clearcut Base (acres) - 258
 Ten Year Allowable Cut (acres) - 27
 Ten Yr. Proposed Clearcut (acres) - 29

LISTING OF ALL STANDS TO BE REGENERATED AFTER SALVAGE

													REGEN PLANS		
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD
20-00	36	066	20-W	000	39	137	1	006	W PINE	4.0	40	4	0	N PINE	PLANT
12-00	36	065	21-W	000	55	111	3	009	W PINE	9.0	40	4	0	N PINE	PLANT
02-00	12	063	18-W	000	52	093	2	036	ASPEN	3.8	00	0	0	N PINE	PLANT
03-00	34	063	19-W	000	47	085	4	006	W PINE	15.7	40	4	0	N PINE	PLANT
03-00	10	066	20-W	000	48	073	6	006	W PINE	8.5	40	4	0	N PINE	PLANT
03-00	24	064	20-W	000	55	073	6	006	W PINE	24.3	40	4	0	W PINE	PLANT
TOTAL STANDS		6		TOTAL ACRES		69									

LISTING OF ALL STANDS TO BE RESERVED

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M
12-00	09	063	17-W	000	39	142	3	002	W PINE	7.1	00	0	0
09-00	09	063	17-W	000	39	142	3	009	W PINE	7.1	00	0	0
11-00	09	063	17-W	000	39	142	3	003	W PINE	7.1	00	0	0
TOTAL STANDS		3		TOTAL ACRES		14							

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

													REGEN PLANS		
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD
22-00	25	065	21-W	000	51	111	9	008	W PINE	19.2	00	0	0	W PINE	PLANT
08-00	05	063	19-W	000	43	112	4	021	W PINE	10.0	00	0	0	N PINE	PLANT
TOTAL STANDS		2		TOTAL ACRES		29									

Norway Pine

Rotation Age (years) - 100
 Current Clearcut Base (acres) - 2618
 Ten Year Allowable Cut (acres) - 261
 Ten Yr. Proposed Clearcut (acres) - 262

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

													REGEN PLANS		
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD
02-00	17	064	19-W	000	52	095	1	011	N PINE	4.2	00	0	0	N PINE	PLANT
02-00	18	065	17-W	000	53	029	1	009	N PINE	0.0	00	0	0	N PINE	PLANT
08-00	07	065	20-W	000	65	024	1	006	N PINE	0.0	00	0	0	J PINE	PLANT
TOTAL STANDS		3		TOTAL ACRES		26									

LISTING OF ALL STANDS TO BE REGENERATED AFTER SALVAGE

													REGEN PLANS		
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD
07-00	07	065	20-W	000	50	111	1	075	N PINE	1.2	00	0	0	N PINE	PLANT
02-00	22	065	19-W	000	53	080	7	023	N PINE	14.0	40	4	0	N PINE	PLANT
10-00	25	065	21-W	000	00	046	3	084	N PINE	0.0	40	2	0	N PINE	PLANT
22-00	36	066	20-W	000	62	037	1	017	N PINE	2.0	00	0	0	J PINE	ART SD
TOTAL STANDS		4		TOTAL ACRES		199									

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

* - Acreage listed is for part of stand to be harvested.

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS	
													SPECIES	METHOD
14-00	15	065	21-W	000	45	190	9	005	N PINE	49.6	00	0 0	N PINE	PLANT
10-00	36	066	20-W	000	55	191	9	034	N PINE	40.8	60	2 0	N PINE	PLANT
*19-00	36	066	20-W	000	55	176	7	006	N PINE	12.4	60	2 0	N PINE	PLANT
11-00	10	065	21-W	000	52	171	9	011	N PINE	77.8	40	2 0	N PINE	PLANT
08-00	22	065	20-W	000	56	161	7	005	N PINE	30.2	00	0 0	N PINE	PLANT
12-00	06	065	20-W	000	55	146	6	024	N PINE	17.8	40	2 0	N PINE	PLANT
06-00	06	065	20-W	000	47	134	5	016	N PINE	11.8	40	2 0	N PINE	PLANT
19-00	22	065	20-W	000	52	128	6	010	N PINE	27.6	00	0 0	N PINE	PLANT
16-00	25	065	21-W	000	47	118	5	010	N PINE	16.7	00	0 0	N PINE	PLANT
18-00	15	066	19-W	000	50	114	5	009	N PINE	9.6	40	2 0	N PINE	PLANT
07-00	13	063	19-W	000	52	110	6	004	N PINE	26.4	00	0 0	N PINE	PLANT
06-00	36	064	17-W	000	53	116	6	006	N PINE	5.0	00	0 0	N PINE	PLANT
*03-00	36	064	17-W	000	52	111	9	016	N PINE	44.6	00	0 0	N PINE	PLANT
12-00	11	065	21-W	000	56	107	9	007	N PINE	36.7	00	0 0	N PINE	PLANT
13-00	21	066	19-W	000	36	105	6	005	N PINE	24.0	40	2 0	N PINE	PLANT
20-00	25	065	21-W	000	50	104	4	005	N PINE	21.1	15	2 0	N PINE	PLANT
10-00	22	066	19-W	000	41	102	5	008	N PINE	13.7	40	2 0	N PINE	PLANT
03-00	09	066	19-W	000	36	101	6	019	N PINE	14.5	40	2 0	N PINE	PLANT
09-00	11	063	19-W	000	55	102	6	029	N PINE	17.9	00	0 0	N PINE	PLANT
01-00	15	064	18-W	000	43	101	7	023	N PINE	20.0	40	2 0	J PINE	PLANT
11-00	22	066	19-W	000	44	099	7	006	N PINE	9.0	40	2 0	N PINE	PLANT
06-00	34	066	21-W	000	46	099	6	004	N PINE	14.2	00	0 0	N PINE	PLANT

TOTAL STANDS 22 TOTAL ACRES 262
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LISTING OF ALL STANDS TO BE THINNED

SIZE CLASS: 4

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	BASAL AREA
06-00	36	066	20-W	000	63	062	6	011	N PINE	21.3	40	2 0	230
09-00	17	065	19-W	000	68	032	6	006	N PINE	29.2	00	0 0	216
04-00	17	065	19-W	000	68	036	7	022	N PINE	33.9	00	0 0	170

SIZE CLASS: 5

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	BASAL AREA
07-00	33	063	19-W	000	57	085	9	009	N PINE	54.0	40	2 0	197
03-00	24	066	19-W	000	65	066	9	010	N PINE	49.7	00	0 0	187
03-00	19	065	19-W	000	69	061	9	008	N PINE	48.3	00	0 0	180
06-00	13	065	21-W	000	52	088	9	006	N PINE	17.7	00	0 0	176
15-00	05	065	20-W	000	53	090	9	012	N PINE	28.0	00	0 0	160
04-00	13	066	19-W	000	54	067	9	014	N PINE	32.8	40	2 0	160

10-00	25	066	19-W	000	61	067	8	006	N PINE	35.3	00	0	0	160
10-00	26	066	19-W	000	61	067	8	022	N PINE	35.3	00	0	0	160
01-00	10	065	19-W	000	68	041	4	008	N PINE	18.0	00	0	0	152
04-00	17	064	19-W	000	56	076	7	006	N PINE	16.8	40	2	0	143
06-00	13	066	19-W	000	53	068	8	008	N PINE	26.6	40	2	0	143
21-00	23	065	21-W	000	55	090	8	008	N PINE	18.9	00	0	0	140
16-00	11	063	18-W	000	56	090	9	006	N PINE	29.0	00	0	0	140
03-00	03	066	19-W	000	53	068	7	011	N PINE	27.3	40	2	0	140
12-00	36	065	17-W	000	62	056	7	017	N PINE	22.1	40	2	0	137

SIZE CLASS: 6

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	BASAL AREA
03-00	18	066	20-W	000	50	080	4	008	N PINE	14.0	00	0	0	130
TOTAL STANDS		19		TOTAL ACRES		198								

Jack Pine

Rotation Age (years) - 60
 Current Clearcut Base (acres) - 2,345
 Ten Year Allowable Cut (acres) - 390
 Ten Yr. Proposed Clearcut (acres) - 450

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	REGEN PLANS SPECIES METHOD
08-00	07	065	17-W	000	45	063	1	011	J PINE	4.7	40	2	0	N PINE ART SD
20-00	36	066	21-W	000	47	057	1	007	J PINE	1.7	00	0	0	J PINE ART SD
01-00	28	066	19-W	000	57	055	1	014	J PINE	2.2	00	0	0	J PINE ART SD
TOTAL STANDS		3		TOTAL ACRES		32								

LISTING OF ALL STANDS TO BE REGENERATED AFTER SALVAGE

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	REGEN PLANS SPECIES METHOD
05-00	34	066	20-W	000	29	095	2	018	J PINE	6.4	00	0	0	J PINE ART SD
TOTAL STANDS		1		TOTAL ACRES		18								

LISTING OF ALL STANDS TO BE RESERVED

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M
04-00	36	063	17-W	000	50	102	2	019	J PINE	3.3	40	2	0
03-00	36	063	17-W	000	56	102	7	008	J PINE	32.0	40	4	0
01-00	36	063	17-W	000	51	098	4	024	J PINE	10.6	40	4	0
03-00	25	066	19-W	000	41	061	1	008	J PINE	6.3	00	0	0
07-00	20	066	20-W	000	44	056	1	016	J PINE	2.7	00	0	0
24-00	03	065	20-W	000	40	055	2	008	J PINE	4.0	00	0	0

TOTAL STANDS 6 TOTAL ACRES 83

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

* - Acreage listed is for part of stand to be harvested.
 x - Stands are part of active sales sold prior to 1986.

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	REGEN PLANS	
														SPECIES	METHOD
11-00	10	066	19-W	000	48	123	3	016	J PINE	5.2	00	0	0	J PINE	ART SD
05-00	19	064	18-W	000	46	113	4	025	J PINE	6.9	99	2	0	J PINE	ART SD
02-00	34	066	20-W	000	47	110	2	004	J PINE	8.0	40	2	0	J PINE	ART SD
03-00	12	064	18-W	000	48	105	3	012	J PINE	5.5	99	2	0	J PINE	PLANT
24-00	20	063	17-W	000	57	099	6	011	J PINE	15.0	00	0	0	J PINE	PLANT
01-00	20	063	17-W	000	57	099	6	021	J PINE	15.0	00	0	0	J PINE	PLANT
07-00	07	064	18-W	000	41	097	3	007	J PINE	8.5	99	2	0	J PINE	ART SD
*01-00	10	065	18-W	000	50	095	7	028	J PINE	18.5	99	2	0	J PINE	ART SD
*05-00	10	065	18-W	000	52	094	9	019	J PINE	32.6	00	0	0	J PINE	ART SD
12-00	20	063	17-W	000	61	094	2	023	J PINE	8.0	00	0	0	J PINE	ART SD
07-00	03	063	17-W	000	56	092	8	006	J PINE	36.3	00	0	0	J PINE	ART SD
16-00	04	063	17-W	000	63	091	3	004	J PINE	12.0	00	0	0	J PINE	PLANT
*03-00	02	063	18-W	000	53	090	6	027	J PINE	6.9	00	0	0	J PINE	PLANT
06-00	23	064	18-W	000	56	090	9	006	J PINE	37.3	99	2	0	J PINE	ART SD
13-00	11	063	18-W	000	56	090	4	005	J PINE	15.0	00	0	0	J PINE	PLANT
*12-00	36	065	18-W	000	42	088	3	027	J PINE	6.0	40	2	0	J PINE	PLANT
01-00	17	064	19-W	000	53	087	4	003	J PINE	10.0	00	0	0	N PINE	PLANT
10-00	13	064	18-W	000	57	088	9	007	J PINE	40.3	00	0	0	J PINE	PLANT
14-00	36	066	21-W	000	60	087	6	011	J PINE	31.5	00	0	0	J PINE	ART SD
07-00	26	064	18-W	000	60	087	3	026	J PINE	7.6	00	0	0	J PINE	PLANT
05-00	26	064	18-W	000	60	087	6	011	J PINE	23.1	00	0	0	N PINE	PLANT
04-00	26	064	18-W	000	55	087	4	009	J PINE	11.2	00	0	0	J PINE	PLANT
03-00	12	063	18-W	000	51	088	2	010	N PINE	2.0	00	0	0	J PINE	PLANT
01-00	12	063	18-W	000	58	088	4	005	J PINE	13.5	00	0	0	J PINE	PLANT
04-00	34	065	17-W	000	60	086	7	011	J PINE	27.0	40	2	0	J PINE	PLANT
04-00	01	063	17-W	000	46	087	5	010	J PINE	9.5	99	2	0	J PINE	PLANT
05-00	20	063	17-W	000	62	087	5	005	J PINE	18.0	99	2	0	J PINE	PLANT
06-00	20	063	17-W	000	53	086	4	013	J PINE	9.0	40	4	0	J PINE	ART SD
07-00	36	064	17-W	000	47	086	6	009	J PINE	26.8	99	2	0	J PINE	PLANT
05-00	27	064	17-W	000	50	085	5	003	J PINE	20.5	99	2	0	J PINE	ART SD
04-00	23	064	19-W	000	54	081	4	011	J PINE	14.3	40	2	0	J PINE	ART SD
01-00	13	065	17-W	000	53	079	5	014	J PINE	13.6	99	2	0	J PINE	PLANT

06-00	35	064	18-W	000	51	079	6	008	J PINE	16.7	00	0	0	J PINE	PLANT
x07-00	10	065	20-W		58	058		006	J PINE					J PINE	PLANT
x05-00	10	065	20-W		56	058		016	J PINE					J PINE	PLANT
x02-00	08	065	17-W		55	055		006	J PINE					J PINE	PLANT
x10-00	16	066	20-W		70	053		015	J PINE					J PINE	PLANT

TOTAL STANDS 37 TOTAL ACRES 450

White Spruce

Rotation Age (years) - 80
 Current Clearcut Base (acres) - 427
 Ten Year Allowable Cut (acres) - 53
 Ten Yr. Proposed Clearcut (acres) - 32

LISTING OF ALL STANDS TO BE REGENERATED AFTER SALVAGE

													REGEN PLANS		
ST-NBR	SCIN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD
04-00	23	065	21-W	000	53	081	2	031	WH SPR	2.8	00	0	0	WH SPR	PLANT
07-00	05	064	18-W	000	45	081	2	013	WH SPR	3.2	00	0	0	WH SPR	PLANT
12-00	16	065	17-W	000	50	069	2	113	WH SPR	3.3	00	0	0	N PINE	PLANT
11-00	05	064	18-W	000	51	061	3	022	WH SPR	9.0	00	0	0	J PINE	ART SD

TOTAL STANDS 4 TOTAL ACRES 179

LISTING OF ALL STANDS TO BE RESERVED

ST-NBR	SCIN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M
06-00	36	063	17-W	000	53	076	4	017	WH SPR	13.5	60	2	0

TOTAL STANDS 1 TOTAL ACRES 17

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

													REGEN PLANS		
ST-NBR	SCIN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD
17-00	36	063	17-W	000	45	082	2	004	WH SPR	4.0	99	3	0	J PINE	PLANT
14-00	16	065	17-W	000	55	081	3	019	ASPEN	3.6	00	0	0	WH SPR	PLANT
02-00	03	064	19-W	000	66	081	6	003	WH SPR	18.0	00	0	0	WH SPR	PLANT
04-00	14	065	19-W	000	45	074	5	006	WH SPR	8.3	00	0	0	TMRACK	PLANT

TOTAL STANDS 4 TOTAL ACRES 32

Balsam Fir

Rotation Age (years) - 50
Current Clearcut Base (acres) - 3903
Ten Year Allowable Cut (acres) - 780
Ten Yr. Proposed Clearcut (acres) - 799

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

													REGEN PLANS		
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD
05-00	33	066	20-W	000	33	071	1	010	BALSAM	4.2	00	0	0	WCEDAR	PLANT
07-00	17	066	20-W	000	49	065	2	010	BALSAM	6.0	00	0	0	ASPEN	SPROUT
07-00	04	065	20-W	000	49	062	1	030	BALSAM	2.1	00	0	0	TMRACK	PLANT
06-00	12	064	18-W	000	56	056	1	011	BALSAM	3.7	60	2	0	WCEDAR	PLANT
05-00	10	063	18-W	000	49	052	1	006	BALSAM	3.0	00	0	0	WCEDAR	PLANT
05-00	20	066	20-W	000	40	040	1	006	BALSAM	3.3	00	0	0	N PINE	PLANT
03-00	12	065	21-W	000	45	011	1	049	BALSAM	0.0	00	0	0	TMRACK	PLANT
01-00	01	065	21-W	000	45	011	1	012	BALSAM	0.0	00	0	0	WCEDAR	PLANT
TOTAL STANDS		8	TOTAL ACRES		134										

LISTING OF ALL STANDS TO BE REGENERATED AFTER SALVAGE

													REGEN PLANS		
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD
04-00	31	063	18-W	000	62	081	3	012	WH SPR	6.4	40	4	0	WH SPR	PLANT
02-00	03	064	17-W	000	51	052	6	006	BALSAM	8.7	40	4	0	ASPEN	SPROUT
TOTAL STANDS		2	TOTAL ACRES		18										

LISTING OF ALL STANDS TO BE RESERVED

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M		
11-00	30	065	20-W	000	63	074	3	016	BALSAM	5.4	60	2	0		
TOTAL STANDS		1	TOTAL ACRES		16										

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

* - Acreage listed is for part of stand to be harvested.

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS		
													SPECIES	METHOD	
10-00	18	065	20-W	000	48	096	2	026	BALSAM	4.7	00	0	0	WH SPR	PLANT
18-00	22	065	21-W	000	39	096	3	018	BALSAM	7.7	00	0	0	WCEDAR	PLANT
01-00	18	065	18-W	000	41	091	3	010	ASPEN	4.4	00	0	0	ASPEN	SPROUT
*01-00	19	065	20-W	000	56	086	4	028	BALSAM	8.2	40	2	0	WH SPR	PLANT
*11-00	06	065	20-W	000	45	086	2	103	BALSAM	5.5	00	0	0	ASPEN	SPROUT
08-00	01	065	21-W	000	59	085	4	015	BALSAM	14.3	40	2	0	WH SPR	PLANT
*01-00	14	065	21-W	000	43	084	2	032	BALSAM	4.5	00	0	0	ASPEN	SPROUT
*04-00	01	065	21-W	000	47	080	3	060	BALSAM	8.3	40	2	0	ASPEN	SPROUT
15-00	02	065	21-W	000	50	078	3	006	BALSAM	6.8	00	0	0	N PINE	PLANT
*12-00	05	065	20-W	000	62	078	2	058	BALSAM	4.5	00	0	0	WH SPR	PLANT
04-00	26	065	21-W	000	58	077	4	011	BALSAM	11.7	00	0	0	TMRACK	PLANT
02-00	26	064	20-W	000	57	077	7	012	BALSAM	12.0	40	2	0	ASPEN	SPROUT
04-00	28	065	17-W	000	56	076	6	018	ASPEN	11.0	60	2	0	ASPEN	SPROUT
14-00	36	065	18-W	000	59	076	6	014	BALSAM	12.0	00	0	0	ASPEN	SPROUT
01-00	22	065	20-W	000	48	076	2	008	BALSAM	3.3	00	0	0	WH SPR	PLANT
06-00	14	065	19-W	000	62	076	5	019	BALSAM	11.2	40	4	0	ASPEN	SPROUT
*01-00	07	065	20-W	000	60	076	4	022	BALSAM	10.2	40	2	0	BALSAM	PLANT
06-00	27	065	21-W	000	54	074	7	011	BALSAM	8.5	40	2	0	BALM	SPROUT
11-00	27	064	19-W	000	53	074	2	005	BALSAM	4.3	60	2	0	TMRACK	PLANT
07-00	23	066	20-W	000	58	074	5	004	BALSAM	11.7	00	0	0	WH SPR	PLANT
21-00	22	065	20-W	000	55	073	4	016	BALSAM	9.7	00	0	0	N PINE	PLANT
*02-00	26	065	21-W	000	57	072	5	023	BALSAM	12.1	40	4	0	ASPEN	SPROUT
10-00	36	066	21-W	000	46	071	2	007	BALSAM	2.8	40	2	0	W PINE	PLANT
11-00	36	066	19-W	000	68	072	4	031	BALSAM	3.0	00	0	0	ASPEN	SPROUT
05-00	07	066	19-W	000	54	072	6	013	BALSAM	11.0	00	0	0	ASPEN	SPROUT
*03-00	16	064	19-W	000	52	072	2	056	BALSAM	4.7	60	2	0	WH SPR	PLANT
15-00	01	065	21-W	000	55	071	5	023	BALSAM	9.2	00	0	0	WCEDAR	PLANT
01-00	02	065	21-W	000	45	071	3	055	BALSAM	7.8	40	2	0	ASPEN	SPROUT
08-00	14	065	21-W	000	50	071	2	015	BALSAM	5.5	00	0	0	WH SPR	PLANT
18-00	05	065	20-W	000	62	071	5	022	BALSAM	10.0	40	4	0	ASPEN	SPROUT
20-00	06	065	20-W	000	62	071	5	002	BALSAM	10.0	40	4	0	ASPEN	SPROUT
19-00	06	065	20-W	000	62	071	5	006	BALSAM	10.0	40	4	0	ASPEN	SPROUT
19-00	05	065	20-W	000	55	070	5	018	BALSAM	15.8	40	2	0	W PINE	PLANT
02-00	08	065	20-W	000	55	070	5	012	BALSAM	15.8	40	2	0	ASPEN	SPROUT
*16-00	07	065	20-W	000	54	069	2	020	BALSAM	3.0	40	2	0	N PINE	PLANT

TOTAL STANDS 35 TOTAL ACRES 799

Lowland Black Spruce

Rotation Age (years) - 105
 Current Clearcut Base (acres) - 7222
 Ten Year Allowable Cut (acres) - 687
 Ten Yr. Proposed Clearcut (acres) - 688

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS		
													SPECIES	METHOD	
01-00	02	063	19-W	000	29	136	2	020	BL SPR	0.0	00	0	0	BL SPR	UNDERS
09-00	31	066	19-W	000	31	126	1	008	BL SPR	3.8	00	0	0	BL SPR	ART SD
04-00	20	064	19-W	000	24	125	1	007	BL SPR	5.3	40	4	0	BL SPR	ART SD
02-00	08	064	17-W	000	30	113	0	007	BL SPR	3.0	00	0	0	BL SPR	ART SD
08-00	26	065	20-W	000	31	107	1	014	BL SPR	3.3	40	4	0	BL SPR	ART SD
15-00	26	065	20-W	000	31	107	1	003	BL SPR	3.3	40	4	0	BL SPR	ART SD
06-00	25	065	19-W	000	35	093	2	018	BL SPR	3.2	40	2	0	ASPEN	SPROUT
14-00	34	066	19-W	000	33	091	1	005	BL SPR	4.7	00	0	0	BL SPR	ART SD
13-00	06	065	20-W	000	28	090	1	066	BL SPR	1.8	00	0	0	BL SPR	ART SD
04-00	18	063	19-W	000	29	090	1	014	BL SPR	3.6	00	0	0	BL SPR	ART SD
07-00	18	064	17-W	000	30	090	1	065	BL SPR	5.8	00	0	0	BL SPR	ART SD
03-00	03	063	18-W	000	40	088	1	020	BL SPR	4.0	00	0	0	BL SPR	ART SD
08-00	25	065	19-W	000	34	086	1	040	BL SPR	3.3	00	0	0	BL SPR	ART SD
03-00	04	063	19-W	000	46	086	1	008	BL SPR	3.0	00	0	0	BL SPR	ART SD
10-00	28	065	20-W	000	35	077	1	008	BL SPR	5.7	40	4	0	BL SPR	ART SD
11-00	22	065	20-W	000	27	074	1	019	BL SPR	4.0	40	4	0	BL SPR	ART SD
04-00	34	063	17-W	000	41	065	1	017	BL SPR	2.5	00	0	0	BL SPR	ART SD

TOTAL STANDS 17 TOTAL ACRES 339
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LISTING OF ALL STANDS TO BE REGENERATED AFTER SALVAGE

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS		
													SPECIES	METHOD	
12-00	16	064	18-W	000	29	152	2	018	BL SPR	9.8	40	2	0	BL SPR	ART SD
02-00	17	063	19-W	000	44	150	3	047	BL SPR	5.8	40	4	0	BL SPR	ART SD
03-00	33	064	18-W	000	27	131	2	057	BL SPR	5.7	40	4	0	BL SPR	ART SD
01-00	17	063	19-W	000	30	129	1	025	BL SPR	6.8	40	2	0	BL SPR	ART SD
03-00	03	065	21-W	000	40	126	3	004	BL SPR	6.0	40	4	0	BL SPR	ART SD
16-00	16	065	19-W	000	31	120	1	016	BL SPR	5.8	00	0	0	BL SPR	ART SD
05-00	32	064	18-W	000	32	117	2	019	BL SPR	8.0	40	4	0	BL SPR	ART SD
06-00	32	064	19-W	000	32	115	1	036	BL SPR	2.2	00	0	0	BL SPR	ART SD
04-00	33	064	18-W	000	37	116	2	008	BL SPR	5.3	40	4	0	BL SPR	ART SD
07-00	19	066	20-W	000	29	115	2	012	BL SPR	6.3	99	2	0	BL SPR	ART SD
02-00	13	065	20-W	000	32	115	2	007	BL SPR	7.8	40	2	0	BL SPR	ART SD
01-00	02	064	17-W	000	27	116	1	030	BL SPR	5.0	00	0	0	BL SPR	ART SD
04-00	16	064	18-W	000	36	112	2	008	BL SPR	7.8	00	0	0	BL SPR	ART SD
01-00	04	064	17-W	000	32	108	2	018	BL SPR	8.0	00	0	0	BL SPR	ART SD
05-00	18	063	18-W	000	33	108	2	035	BL SPR	4.8	00	0	0	BL SPR	ART SD
13-00	05	063	19-W	000	28	105	1	034	BL SPR	6.0	00	0	0	BL SPR	ART SD
12-00	16	063	19-W	000	35	084	1	018	BL SPR	6.0	40	2	0	BL SPR	ART SD
04-00	24	064	18-W	000	35	084	2	011	BL SPR	11.0	40	2	0	BL SPR	ART SD

TOTAL STANDS 18 TOTAL ACRES 403
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LISTING OF ALL STANDS TO BE RESERVED

* - Marginally commercial stands with low site index that may be managed as part of the clear cut base in the future

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M
06-00	19	063	17-W	000	23	168	1	018	BL SPR	2.7	00	0	0
03-00	12	064	19-W	000	24	166	3	016	BL SPR	14.1	40	2	0
07-00	05	064	17-W	000	44	158	0	005	BL SPR	1.7	00	0	0
03-00	08	064	17-W	000	28	149	2	018	BL SPR	8.4	00	0	0
11-00	11	064	17-W	000	31	138	2	021	BL SPR	0.0	00	0	0
15-00	05	063	19-W	000	25	117	1	005	BL SPR	4.8	00	0	0
13-00	02	064	17-W	000	30	113	0	005	BL SPR	0.0	00	0	0
17-00	35	065	21-W	000	18	107	1	004	BL SPR	3.0	00	0	0
08-00	36	064	19-W	000	25	107	1	035	BL SPR	4.4	40	2	0
05-00	16	063	19-W	000	27	106	2	031	BL SPR	5.7	40	2	0
01-00	13	064	17-W	000	47	103	2	006	BL SPR	5.6	00	0	0
10-00	36	065	21-W	000	21	099	1	011	BL SPR	2.5	00	0	0
09-00	32	064	18-W	000	24	098	6	011	BL SPR	0.0	40	4	0
04-00	13	063	19-W	000	25	099	2	084	BL SPR	0.0	00	0	0
15-00	12	063	19-W	000	26	097	1	015	BL SPR	0.0	40	4	0
02-00	06	064	18-W	000	25	097	5	017	BL SPR	0.0	00	0	0
02-00	25	064	18-W	000	30	092	5	025	BL SPR	0.0	00	0	0
05-00	09	063	17-W	000	27	091	4	028	BL SPR	0.0	00	0	0
13-00	14	064	17-W	000	28	091	4	008	BL SPR	0.0	00	0	0
02-00	18	064	18-W	000	34	087	1	005	BL SPR	3.3	99	2	0
02-00	29	063	18-W	000	16	088	3	051	BL SPR	0.0	00	0	0
06-00	12	063	19-W	000	25	086	4	023	BL SPR	0.0	40	2	0
08-00	23	064	18-W	000	24	086	2	009	BL SPR	7.7	40	2	0
10-00	13	064	17-W	000	28	086	2	003	BL SPR	8.0	40	2	0
03-00	13	064	17-W	000	28	086	2	011	BL SPR	8.0	40	2	0
04-00	17	063	19-W	000	26	083	4	046	BL SPR	0.0	00	0	0
13-00	09	063	17-W	000	30	083	2	008	BL SPR	0.0	00	0	0
12-00	23	064	18-W	000	27	081	7	011	BL SPR	0.0	00	0	0
05-00	32	065	17-W	000	31	080	1	014	BL SPR	3.7	00	0	0
22-00	14	064	17-W	000	30	080	2	012	BL SPR	0.0	00	0	0
14-00	02	063	18-W	000	28	078	3	007	BL SPR	0.0	00	0	0
02-00	29	065	17-W	000	23	077	5	014	BL SPR	0.0	00	0	0
11-00	16	063	17-W	000	39	078	2	067	BL SPR	0.0	00	0	0
06-00	17	063	19-W	000	26	077	2	085	BL SPR	0.0	00	0	0
11-00	12	063	19-W	000	32	077	3	023	BL SPR	0.0	40	4	0
04-00	29	064	19-W	000	32	076	3	033	BL SPR	0.0	40	4	0
05-00	35	064	18-W	000	28	077	4	007	BL SPR	2.0	00	0	0
01-00	14	064	19-W	000	28	078	1	011	BL SPR	0.0	00	0	0
15-00	10	063	17-W	000	28	076	0	010	BL SPR	0.0	00	0	0
15-00	09	063	17-W	000	32	075	3	038	BL SPR	0.0	40	2	0
05-00	17	063	19-W	000	27	072	3	193	BL SPR	0.0	00	0	0
02-00	36	063	18-W	000	26	070	1	013	J PINE	1.9	00	0	0
09-00	16	063	19-W	000	25	067	6	006	BL SPR	0.0	00	0	0
02-00	16	065	18-W	000	21	064	3	024	BL SPR	0.0	00	0	0
04-00	30	063	17-W	000	27	064	0	028	BL SPR	0.0	00	0	0
10-00	32	065	17-W	000	23	060	4	025	BL SPR	0.0	00	0	0
04-00	31	065	17-W	000	23	060	4	006	BL SPR	0.0	00	0	0

02-00	13	064	17-W	000	40	060	2	010	BL	SPR	4.5	40	4	0
11-00	16	065	18-W	000	25	056	3	007	BL	SPR	0.0	00	0	0
*04-00	33	064	17-W	000	25	063	0	017	BL	SPR	0.0	00	0	0
*01-00	03	064	17-W	000	24	124	4	018	BL	SPR	0.0	00	0	0
*08-00	28	065	20-W	000	24	069	2	025	BL	SPR	0.0	40	2	0
*05-00	13	064	20-W	000	23	133	3	006	BL	SPR	16.7	00	0	0
*03-00	02	064	17-W	000	26	108	1	009	BL	SPR	3.0	00	0	0
*04-00	04	065	18-W	000	25	121	1	009	BL	SPR	5.8	00	0	0
*01-00	12	064	17-W	000	27	122	1	060	BL	SPR	3.8	00	0	0
*15-00	25	064	20-W	000	24	119	2	020	BL	SPR	8.4	00	0	0
*02-00	23	064	20-W	000	24	119	2	027	BL	SPR	8.8	00	0	0
*05-00	26	064	20-W	000	24	119	2	010	BL	SPR	8.8	00	0	0
*17-00	34	066	19-W	000	26	148	1	006	BL	SPR	6.0	00	0	0
*23-00	16	065	18-W	000	22	105	1	017	BL	SPR	6.0	00	0	0
*08-00	15	065	18-W	000	22	105	1	015	BL	SPR	6.0	00	0	0
*01-00	19	065	18-W	000	24	108	2	014	BL	SPR	9.0	00	0	0
*02-00	20	065	18-W	000	24	108	1	017	BL	SPR	6.0	00	0	0
*01-00	31	064	19-W	000	26	098	1	056	BL	SPR	3.8	00	0	0
*10-00	30	065	17-W	000	24	089	1	008	BL	SPR	6.7	40	2	0
*02-00	05	064	18-W	000	24	116	1	024	BL	SPR	3.2	40	2	0

TOTAL STANDS 67 TOTAL ACRES 1521

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LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

* - Acreage listed is for part of stand to be harvested.

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	REGEN PLANS						
												%	M	SPECIES METHOD				
03-00	27	065	17-W	000	31	156	5	014	BL	SPR	25.8	40	2	0	BL	SPR	ART	SD
10-00	15	065	21-W	000	36	149	3	007	BL	SPR	14.3	00	0	0	BL	SPR	ART	SD
*05-00	34	066	19-W	000	30	148	3	010	BL	SPR	17.5	00	0	0	BL	SPR	ART	SD
*04-00	34	066	19-W	000	30	148	3	015	BL	SPR	17.5	00	0	0	BL	SPR	ART	SD
13-00	20	063	17-W	000	42	142	4	006	BL	SPR	18.3	00	0	0	BL	SPR	ART	SD
20-00	16	065	17-W	000	29	138	3	008	BL	SPR	17.0	00	0	0	BL	SPR	ART	SD
05-00	18	065	20-W	000	27	138	3	009	BL	SPR	12.7	00	0	0	BL	SPR	ART	SD
07-00	24	064	20-W	000	23	133	3	013	BL	SPR	16.7	00	0	0	BL	SPR	ART	SD
01-00	13	064	20-W	000	23	133	3	020	BL	SPR	16.7	00	0	0	BL	SPR	ART	SD
12-00	36	066	20-W	000	31	133	3	012	BL	SPR	16.7	00	0	0	BL	SPR	ART	SD
09-00	15	065	21-W	000	38	132	6	007	BL	SPR	10.2	50	2	0	BL	SPR	ART	SD
11-00	31	066	19-W	000	42	130	5	009	BL	SPR	27.3	00	0	0	BL	SPR	ART	SD
16-00	36	066	20-W	000	38	130	4	012	BL	SPR	21.7	00	0	0	BL	SPR	ART	SD
09-00	19	065	20-W	000	28	130	3	026	BL	SPR	14.5	40	2	0	BL	SPR	ART	SD
10-00	34	066	19-W	000	33	128	3	016	BL	SPR	15.0	00	0	0	BL	SPR	ART	SD
05-00	04	065	20-W	000	29	126	5	003	BL	SPR	25.7	00	0	0	BL	SPR	ART	SD
*05-00	03	065	21-W	000	40	126	6	022	BL	SPR	29.2	00	0	0	BL	SPR	ART	SD
12-00	30	065	19-W	000	38	124	3	021	BL	SPR	16.0	00	0	0	BL	SPR	ART	SD
*09-00	18	063	19-W	000	39	122	9	005	BL	SPR	42.6	00	0	0	BL	SPR	ART	SD
06-00	04	065	20-W	000	48	121	4	007	BL	SPR	11.0	00	0	0	BL	SPR	ART	SD
09-00	19	064	18-W	000	30	120	3	012	BL	SPR	11.2	00	0	0	BL	SPR	ART	SD
*01-00	35	065	21-W	000	28	120	3	020	BL	SPR	13.4	00	0	0	BL	SPR	ART	SD

12-00	34	066	19-W	000	34	120	5	012	BL SPR	18.3	00	0	0	BL SPR	ART	SD
16-00	34	066	19-W	000	33	120	3	022	BL SPR	14.8	00	0	0	BL SPR	ART	SD
03-00	34	066	19-W	000	43	118	6	009	BL SPR	27.7	00	0	0	BL SPR	ART	SD
01-00	18	064	19-W	000	34	120	3	017	BL SPR	15.8	00	0	0	BL SPR	ART	SD
05-00	25	064	19-W	000	29	118	3	009	BL SPR	14.7	40	2	0	TMRACK	ART	SD
01-00	19	064	19-W	000	34	119	3	005	BL SPR	15.7	00	0	0	BL SPR	ART	SD
*06-00	18	063	19-W	000	37	119	9	025	BL SPR	42.6	00	0	0	BL SPR	ART	SD
06-00	25	065	20-W	000	33	117	4	007	BL SPR	22.0	00	0	0	BL SPR	ART	SD
*10-00	35	065	21-W	000	25	116	2	015	BL SPR	10.3	00	0	0	BL SPR	ART	SD
04-00	34	065	21-W	000	25	116	2	011	BL SPR	10.3	00	0	0	BL SPR	ART	SD
07-00	32	064	19-W	000	29	115	2	017	BL SPR	9.2	00	0	0	BL SPR	ART	SD
14-00	04	063	17-W	000	32	117	2	014	BL SPR	2.5	00	0	0	BL SPR	ART	SD
09-00	25	065	19-W	000	34	114	5	013	BL SPR	24.7	00	0	0	BL SPR	ART	SD
18-00	35	065	21-W	000	31	113	2	004	BL SPR	10.0	00	0	0	BL SPR	ART	SD
05-00	15	065	21-W	000	34	112	9	024	BL SPR	43.8	00	0	0	BL SPR	ART	SD
02-00	26	065	20-W	000	28	112	5	004	BL SPR	23.0	00	0	0	BL SPR	ART	SD
09-00	30	065	20-W	000	35	112	4	031	BL SPR	22.3	00	0	0	BL SPR	ART	SD
*03-00	15	065	21-W	000	34	112	9	040	BL SPR	43.8	00	0	0	BL SPR	ART	SD
08-00	15	065	21-W	000	31	111	3	012	BL SPR	13.7	40	2	0	TMRACK	ART	SD
08-00	17	063	19-W	000	37	112	3	030	BL SPR	14.2	00	0	0	BL SPR	ART	SD
09-00	09	065	19-W	000	32	111	4	011	BL SPR	19.8	00	0	0	BL SPR	ART	SD
*19-00	16	065	17-W	000	28	110	1	025	BL SPR	5.2	00	0	0	BL SPR	ART	SD
05-00	15	064	18-W	000	30	110	2	016	BL SPR	9.0	40	2	0	TMRACK	ART	SD
07-00	32	066	20-W	000	44	109	2	010	BL SPR	3.8	00	0	0	BL SPR	ART	SD
*13-00	33	066	20-W	000	44	109	2	031	BL SPR	3.8	00	0	0	BL SPR	ART	SD

TOTAL STANDS 47 TOTAL ACRES 688

Tamarack

Rotation Age (years) - 105
 Current Clearcut Base (acres) - 457
 Ten Year Allowable Cut (acres) - 43
 Ten Yr. Proposed Clearcut (acres) - 43

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

ST-NBR	SCIN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	M	REGEN PLANS		
													SPECIES	METHOD	
07-00	30	063	17-W	000	24	096	1	032	TMRACK	5.7	00	0	0	BL SPR	ART SD
02-00	31	066	20-W	000	42	092	1	010	TMRACK	2.3	00	0	0	TMRACK	PLANT
18-00	10	066	19-W	000	36	070	1	006	TMRACK	3.7	40	2	0	TMRACK	ART SD

TOTAL STANDS 3 TOTAL ACRES 48

LISTING OF ALL STANDS TO BE RESERVED

* - Marginally commercial stand with low site index that may be managed as part of clear cut base in the future.

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M
04-00	02	065	20-W	000	35	059	1	012	TMRACK	5.3	00	0	0
*03-00	09	063	17-W	000	23	071	1	020	TMRACK	0.0	00	0	0
TOTAL STANDS		2		TOTAL ACRES		32							

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

* - Acreage listed is for part of stand to be harvested.

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	REGEN PLANS	
														SPECIES	METHOD
09-00	36	065	21-W	000	33	102	2	008	TMRACK	8.0	40	4	0	TMRACK	PLANT
10-00	32	064	19-W	000	43	102	2	009	TMRACK	5.0	00	0	0	TMRACK	PLANT
10-00	34	066	21-W	000	41	101	3	015	TMRACK	8.0	00	0	0	TMRACK	ART SD
*17-00	35	066	21-W	000	41	101	3	011	TMRACK	8.0	00	0	0	TMRACK	ART SD
TOTAL STANDS		4		TOTAL ACRES		43									

Northern White Cedar

Rotation Age (years) - 120
 Current Clearcut Base (acres) - 3628
 Ten Year Allowable Cut (acres) - 302
 Ten Yr. Proposed Clearcut (acres) - 343

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	REGEN PLANS	
														SPECIES	METHOD
07-00	19	065	20-W	000	22	142	1	018	WCEDAR	5.7	60	2	0	WCEDAR	ART SD
04-00	13	065	20-W	000	23	122	1	006	WCEDAR	4.3	40	2	0	BL SPR	ART SD
14-00	03	063	18-W	000	22	122	1	018	WCEDAR	2.7	99	2	0	WCEDAR	PLANT
10-00	16	063	19-W	000	26	109	1	010	WCEDAR	5.3	00	0	0	WCEDAR	PLANT
01-00	04	065	20-W	000	30	106	2	008	WCEDAR	4.0	00	0	0	TMRACK	PLANT

15-00	22	065	21-W	000	30	099	1	017	WCEDAR	3.2	40	2	0	TMRACK	PLANT
02-00	02	065	21-W	000	27	094	1	016	WCEDAR	3.2	00	0	0	BL SPR	ART SD
12-00	18	064	17-W	000	30	047	1	027	WCEDAR	3.0	00	0	0	BL SPR	ART SD

TOTAL STANDS 8 TOTAL ACRES 120
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LISTING OF ALL STANDS TO BE RESERVED

ST-NBR	SCIN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M		
04-00	19	066	19-W	000	24	177	8	011	WCEDAR	29.0	40	2	0		
07-00	31	066	19-W	000	25	161	4	015	WCEDAR	18.5	00	0	0		
07-00	11	063	19-W	000	27	121	1	025	WCEDAR	2.7	40	2	0		
07-00	16	066	19-W	000	24	106	4	012	WCEDAR	11.6	40	2	0		
01-00	16	063	19-W	000	22	103	1	015	WCEDAR	2.5	00	0	0		
02-00	04	064	19-W	000	23	101	1	006	WCEDAR	2.6	40	2	0		
12-00	22	064	20-W	000	22	098	2	007	WCEDAR	4.3	40	4	0		
27-00	16	066	19-W	000	31	093	9	015	WCEDAR	20.8	40	2	0		
28-00	16	066	19-W	000	31	093	9	018	WCEDAR	20.8	40	2	0		
01-00	14	066	19-W	000	33	093	8	017	WCEDAR	12.6	40	2	0		
04-00	30	065	20-W	000	23	092	2	024	WCEDAR	4.2	40	4	0		

TOTAL STANDS 11 TOTAL ACRES 165
 =====

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

* - Acreage listed is for part of stand to be harvested.

ST-NBR	SCIN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	REGEN PLANS	
														SPECIES	METHOD
*06-00	36	066	19-W	000	30	178	5	015	WCEDAR	21.0	00	0	0	WCEDAR	PLANT
21-00	22	065	21-W	000	25	176	6	015	WCEDAR	11.7	40	4	0	WCEDAR	PLANT
05-00	31	064	19-W	000	19	166	3	005	WCEDAR	11.0	00	0	0	WCEDAR	PLANT
*01-00	10	063	17-W	000	31	168	3	010	WCEDAR	9.0	00	0	0	WCEDAR	PLANT
06-00	34	066	20-W	000	25	166	4	005	WCEDAR	11.7	00	0	0	WCEDAR	PLANT
08-00	11	065	21-W	000	32	161	3	029	WCEDAR	11.4	40	2	0	WCEDAR	ART SD
08-00	13	063	19-W	000	29	155	3	003	WCEDAR	13.7	28	2	0	WCEDAR	PLANT
03-00	23	064	17-W	000	27	158	4	008	WCEDAR	16.7	00	0	0	WCEDAR	ART SD
05-00	09	063	19-W	000	26	157	3	018	WCEDAR	8.1	00	0	0	WCEDAR	PLANT
*07-00	36	066	19-W	000	30	153	2	009	WCEDAR	5.7	00	0	0	WCEDAR	ART SD
*01-00	20	064	19-W	000	26	151	4	030	WCEDAR	8.4	00	0	0	WCEDAR	ART SD
09-00	10	065	21-W	000	18	148	5	009	WCEDAR	22.3	00	0	0	WCEDAR	ART SD
10-00	25	064	20-W	000	28	148	5	009	WCEDAR	11.7	40	2	0	WCEDAR	ART SD
19-00	23	065	21-W	000	37	145	7	012	WCEDAR	13.6	00	0	0	WCEDAR	PLANT
04-00	31	066	19-W	000	25	142	3	010	WCEDAR	10.0	00	0	0	WCEDAR	ART SD
*01-00	22	065	19-W	000	26	139	2	014	WCEDAR	6.7	00	0	0	WCEDAR	ART SD
02-00	33	064	19-W	000	25	136	3	017	WCEDAR	11.2	00	0	0	WCEDAR	ART SD
*05-00	25	065	21-W	000	21	133	5	015	WCEDAR	8.4	00	0	0	WCEDAR	ART SD
06-00	19	066	19-W	000	22	132	6	008	WCEDAR	22.8	40	2	0	WCEDAR	PLANT

05-00	36	065	21-W	000	24	125	3	008	WCEDAR	6.0	00	0	0	WCEDAR	ART SD
*04-00	14	065	21-W	000	28	125	2	020	WCEDAR	7.8	40	2	0	WCEDAR	PLANT
03-00	25	065	21-W	000	22	124	5	017	WCEDAR	18.7	00	0	0	WCEDAR	PLANT
09-00	22	064	20-W	000	28	123	5	011	WCEDAR	19.7	40	2	0	WCEDAR	ART SD
*03-00	17	066	20-W	000	31	121	7	004	WCEDAR	12.7	00	0	0	WCEDAR	PLANT
23-00	15	066	19-W	000	29	118	7	012	WCEDAR	29.5	40	2	0	WCEDAR	PLANT
*03-00	15	066	19-W	000	24	116	5	015	WCEDAR	14.2	00	0	0	WCEDAR	PLANT
*08-00	19	066	20-W	000	24	113	4	015	WCEDAR	10.2	00	0	0	WCEDAR	ART SD

TOTAL STANDS 27 TOTAL ACRES 343
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LISTING OF ALL STANDS TO BE MANAGED ON AN ALL-AGED BASIS

SIZE CLASS: 5

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	BASAL AREA
01-00	15	065	21-W	000	26	122	9	082	WCEDAR	19.3	40	2	0	247
10-00	23	066	20-W	000	39	104	9	006	WCEDAR	40.9	99	2	0	220
12-00	10	065	21-W	000	37	181	6	011	WCEDAR	22.2	60	2	0	218
02-00	17	066	19-W	000	32	108	9	009	WCEDAR	35.7	40	2	0	210
02-00	03	065	21-W	000	29	106	4	017	WCEDAR	9.5	00	0	0	207
06-00	19	066	20-W	000	26	131	5	015	WCEDAR	22.2	00	0	0	198
06-00	18	066	20-W	000	26	131	5	044	WCEDAR	22.2	00	0	0	198
06-00	03	066	19-W	000	26	130	8	013	WCEDAR	23.0	40	2	0	190
08-00	15	063	17-W	000	27	113	5	009	WCEDAR	20.7	40	2	0	190

TOTAL STANDS 9 TOTAL ACRES 206
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Upland Black Spruce

Rotation Age (years) - 70

Current Clearcut Base (acres) - 238

Ten Year Allowable Cut (acres) - 34

Ten Yr. Proposed Clearcut (acres) - 64

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	REGEN PLANS SPECIES METHOD
07-00	16	065	20-W	000	41	086	1	024	BL SPR	2.8	60	2	0	J PINE ART SD
02-00	02	063	18-W	000	48	086	1	014	BL SPR	2.7	00	0	0	J PINE ART SD
06-00	16	064	18-W	000	39	082	2	014	BL SPR	3.2	60	2	0	J PINE PLANT

TOTAL STANDS 3 TOTAL ACRES 52
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LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS		
													SPECIES	METHOD	
02-00	13	065	17-W	000	33	136	3	010	BL SPR	5.0	40	2	0	J PINE	PLANT
14-00	16	065	20-W	000	45	100	3	054	BL SPR	7.2	00	0	0	J PINE	PLANT
TOTAL STANDS		2		TOTAL ACRES		64									

Cutover Area

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS		
													SPECIES	METHOD	
06-00	08	066	19-W	000	81	006	0	011	NONE	0.0	00	0	0	ASPEN	UNDERS
10-10	23	065	21-W	000	00	006	0	020	NONE	0.0	00	0	0	ASPEN	UNDERS
12-10	23	065	21-W	000	00	006	0	033	NONE	0.0	00	0	0	ASPEN	UNDERS
01-00	24	066	19-W	000	00	006	0	023	NONE	0.0	00	0	0	ASPEN	UNDERS
01-00	15	065	20-W	000	76	005	0	016	NONE	0.0	00	0	0	ASPEN	UNDERS
17-00	30	065	19-W	000	00	003	0	029	NONE	0.0	00	0	0	ASPEN	UNDERS
18-00	36	066	19-W	000	00	002	0	016	NONE	0.0	00	0	0	N PINE	UNDERS
01-10	26	063	19-W	000	70	005	0	034	NONE	0.0	00	0	0	WH SPR	UNDERS
04-00	33	063	18-W	000	72	003	0	025	NONE	0.0	00	0	0	ASPEN	UNDERS
06-10	03	063	19-W	000	60	003	0	026	NONE	0.0	00	0	0	ASPEN	UNDERS
TOTAL STANDS		10		TOTAL ACRES		233									

Upland Grass

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS		
													SPECIES	METHOD	
06-00	09	065	19-W	000	00	006	0	008	NONE	0.0	00	0	0	WH SPR	PLANT
09-00	04	063	19-W	000	00	007	0	017	NONE	0.0	00	0	0	N PINE	UNDERS
10-00	04	063	19-W	000	00	007	0	014	NONE	0.0	00	0	0	WH SPR	PLANT
TOTAL STANDS		3		TOTAL ACRES		39									

Lowland Brush

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS		
													SPECIES	METHOD	
12-00	22	065	20-W	000	00	006	0	048	NONE	0.0	00	00	0	TMRACK	PLANT
02-00	26	065	19-W	000	00	006	0	019	NONE	0.0	00	00	0	TMRACK	ART SD
10-00	01	065	21-W	000	00	006	0	025	NONE	0.0	00	00	0	TMRACK	ART SD
09-00	01	065	21-W	000	00	006	0	048	NONE	0.0	00	00	0	WCEDAR	PLANT
03-00	23	065	20-W	000	00	006	0	015	NONE	0.0	00	00	0	BL SPR	ART SD
11-00	26	065	19-W	000	00	006	0	022	NONE	0.0	00	00	0	BL SPR	ART SD
TOTAL STANDS		6	TOTAL ACRES		177										
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LISTING OF ALL STANDS TO BE RESERVED

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M
04-00	10	065	19-W	000	00	006	0	051	NONE	0.0	00	00
10-00	09	065	19-W	000	00	006	0	023	NONE	0.0	00	00
04-00	15	065	19-W	000	00	006	0	101	NONE	0.0	00	00
02-00	02	065	19-W	000	00	006	0	047	NONE	0.0	00	00
12-00	04	064	17-W	000	00	008	0	022	NONE	0.0	00	00
TOTAL STANDS		5	TOTAL ACRES		244							
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Upland Brush

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS		
													SPECIES	METHOD	
06-00	06	063	18-W	000	43	066	0	025	NONE	0.0	00	00	0	J PINE	PLANT
01-00	08	064	18-W	000	00	013	0	007	NONE	0.0	00	00	0	J PINE	PLANT
06-00	05	064	18-W	000	00	013	0	020	NONE	0.0	00	00	0	J PINE	PLANT
09-00	05	064	18-W	000	00	013	0	005	NONE	0.0	00	00	0	J PINE	PLANT
07-00	23	064	18-W	000	56	011	0	009	NONE	0.0	00	00	0	J PINE	PLANT
08-00	12	063	19-W	000	00	007	0	024	NONE	0.0	00	00	0	WH SPR	PLANT
01-00	08	063	18-W	000	00	008	0	009	NONE	0.0	00	00	0	YBIRCH	PLANT
05-00	16	064	17-W	000	00	008	0	011	NONE	0.0	00	00	0	J PINE	PLANT
08-00	26	064	18-W	000	00	007	0	010	NONE	0.0	00	00	0	J PINE	PLANT
02-00	26	064	18-W	000	00	007	0	009	NONE	0.0	00	00	0	J PINE	PLANT
03-00	25	063	19-W	000	00	007	0	009	NONE	0.0	00	00	0	J PINE	PLANT

LITTLE FORK RIVER RMU 6

EXISTING CONDITION

Table B.24 Little Fork River RMU Timber Summary

Type	Acres	% Of Area	Avg Site Index	Updated	Avg % Over Age	Rot. Age	% At High Risk
Ash	1239	2	43		87	48	5
Lowland Hardwoods	270	0	52		77	30	10
Aspen	14564	24	68		42	25	13
Birch	1990	3	54		79	99	5
Balm of Gilead	1849	3	62		53	64	16
Northern Hwds.	7	0	54		74	0	0
White Pine	60	0	45		78	0	70
Red Pine	192	0	54		68	0	0
Jack Pine	68	0	60		54	0	0
White Spruce	987	2	59		26	4	0
Balsam Fir	1598	3	52		51	56	8
Black Spr. Lowland	15512	25	33		69	12	1
Tamarack	1280	2	40		64	21	3
N. White Cedar	1126	2	26		110	56	21
Black Spr. Upland	12	0	45		91	0	0
Cutover Area	721	1					
Lowland Grass	190	0					
Upland Grass	81	0					
Lowland Brush	3476	6					
Upland Brush	53	0					
Unproductive Forest	14953	24					
Non Forest	1488	2					
Total	61716	100					

COVER TYPE COMPOSITION GOALS

Based on existing cover type conditions, timber markets, wildlife concerns, land administration proposals, and economic and biologic limitations and potentials, the following composition goals have been established for this unit.

Table B.25 Little Fork River RMU Cover Type Composition Goals

Cover Type	Present		Ten Year		Long-term	
	Acres	%	Acres	%	Acres	%
Ash	1239	02	1243	02	1273	02
Lowland Hardwoods	270	00	193	00	70	00
Aspen	14564	24	15237	25	15590	25
Birch	1990	03	1386	02	849	01
Balm of Gilead	1849	03	1807	03	1753	03
Northern Hardwoods	7	00	7	00	7	00
White Pine	60	00	82	00	90	00
Norway Pine	192	00	547	01	841	01
Jack Pine	68	00	153	00	375	01
White Spruce	987	02	1464	02	1784	03
Balsam Fir	1598	03	860	01	347	01
Black Spruce Lowland	15512	25	16102	26	16282	26
Tamarack	1280	02	2173	04	2223	04
N. White Cedar	1126	02	1129	02	1061	02
Black Spruce Upland	12	00	0	00	0	00
Japanese Larch	0	00	34	00	34	00
Cutover Area	721	01	86	00	86	00
Lowland Grass	190	00	190	00	190	00
Upland Grass	81	00	56	00	56	00
Lowland Brush	3476	06	2512	04	2350	04
Upland Brush	53	00	14	00	14	00
Unproductive Forest	14953	24	14953	24	14953	24
Non Forest	1488	02	1488	02	1488	02
Total	61,716	100	61,716	100	61,716	100

MANAGEMENT PRESCRIPTIONS

Table B.26 summarizes the management prescriptions by type for the next ten years in the Little Fork River RMU. Tables B.27 and B.28 outline regeneration plans for the next ten years. Table B.29 projects harvest levels by type in the future. These tables are followed by detailed lists of stands in each cover type to receive various treatments in the next ten years.

Table B.26 Management Prescriptions By Cover Type - Little Fork River

COVER TYPE	CLEAR CUT		THINNING		ALL-AGED		SALVAGE		REGEN		TOTAL	
	STD	ACRES	STD	ACRES	STD	ACRES	STD	ACRES	STD	ACRES	STD	ACRES
ASH	19	342	0	0	7	116	4	105	3	74	33	637
LOW HW	2	34	0	0	0	0	1	14	1	29	4	77
ASPEN	130	2630	0	0	0	0	1	25	29	483	160	3138
PBIRCH	11	248	0	0	0	0	14	513	5	340	30	1101
BALM	16	453	0	0	0	0	5	120	5	125	26	698
NOR HW	0	0	0	0	0	0	0	0	0	0	0	0
W PINE	2	46	0	0	0	0	0	0	0	0	2	46
N PINE	2	22	0	0	0	0	1	24	0	0	3	46
J PINE	2	14	0	0	0	0	0	0	1	11	3	25
WH SPR	6	65	0	0	0	0	0	0	3	97	9	162
BALSAM	23	276	0	0	0	0	5	85	17	377	45	738
BL SPR	55	1020	0	0	0	0	1	10	11	121	67	1151
TMRACK	6	55	0	0	0	0	3	48	10	329	19	432
WCEDAR	8	87	0	0	0	0	1	25	1	5	10	117
UPBSPR	2	12	0	0	0	0	0	0	0	0	2	12
CUT	0	0	0	0	0	0	0	0	64	635	64	635
LOGRAS	0	0	0	0	0	0	0	0	0	0	0	0
UPGRAS	0	0	0	0	0	0	0	0	3	25	3	25
LOBRSH	0	0	0	0	0	0	0	0	27	964	27	964
UPBRSH	0	0	0	0	0	0	0	0	3	39	3	39
TOTAL	284	5304	0	0	7	116	36	969	183	3654	510	10043

Table B.27 Regeneration Plans for Lands Harvested, Salvaged, and Regenerated without Harvest by Type
 Little Fork River RMU
 (Acres)

Regen. Method & Spp.	Current Cover Type																		Tot.
	Ash	LH	Bi	Asp	BG	WP	NP	JP	WS	BF	BSL	Tam	Ced	BSU	COA	UG	LB	UB	
<u>Natural</u>																			
Ash	436	18													28				482
Asp			314	2935	48					240					274				3811
Bi			31																31
BG		16	26		553					61									656
Tam										34	251	10			18		120		433
BS															200				200
NP															26				26
WS				57					97	37					28				219
<u>Plant</u>																			
Ash		43																	43
Bi			466																466
NP			221			46	46			34					28				375
JP				20				14		56				9					99
WS			43	107	16				65	122				3	19	25		20	420
BS				8											2		26		36
Tam	85				81					17			25				249	19	476
Ced				11						47			62						120
WP										68									68
<u>Art. Seed</u>																			
JP								11											11
BS										22	1151		10		12		310		1505
Tam													10				259		269
Ced												181							181
Total	521	77	1101	3138	698	46	46	25	162	738	1151	432	117	12	635	25	964	39	9927

Table B.28 Summary of Artificial Regeneration Needs
 Little Fork River RMU
 (Acres by Species and Regeneration Method)

SPECIES	PLANT	SEED
TMRACK	476	269
ASH	43	0
WH SPR	420	0
J PINE	99	11
BL SPR	36	1505
WCEDAR	120	181
PBIRCH	466	0
N PINE	375	0
W PINE	68	0
TOTAL	2103	1966

Table B.29 Projected Harvest Levels by Type, 1986 - 2036
 and Estimated Sustained Yield with Year of Regulation

Type	Clearcut Acres by 10 year Period					Sustain yield		
	1986-95	1996-05	2006-15	2016-25	2026-35	Acres	Year	
Ash	342	107	107	107	107	128	2066	
Low Hwd	34	20	17	15	14	7	2076	
Aspen	2630	2539	2544	2548	2552	2559	2096	
Birch	248	216	206	195	186	133	2096	
Balm G.	453	348	348	348	348	337	2056	
N Hwd	0	1	1	1	1	1	1996	
W Pine	46	7	7	0	0	9	2086	
N Pine	22	17	17	17	-	80	2086	
J Pine	14	7	7	7	7	62	2056	
Wh Spr	65	4	18	0	0	226	2096	
Balsam	276	163	140	120	100	69	2046	
Bl Spr Lo	1020	1164	1167	1168	1170	1173	2036	
Tam	55	60	60	60	60	195	2076	
W Cedar	87	62	52	51	51	52	2006	
Bl Spr Up	12	No sustained yield						
Total	5,304	4,715	4,691	4,637	4,596	5,031		

Ash

Rotation Age (years) - 90
 Current Clearcut Base (acres) - 944
 Ten Year Allowable Cut (acres) - 105
 Ten Yr. Proposed Clearcut (acres) - 342

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	REGEN PLANS	
														SPECIES	METHOD
15-00	36	064	21-W	000	40	072	2	033	ASH	2.2	00	0	0	TMRACK	PLANT
02-00	27	062	17-W	000	44	013	1	022	ASH	0.3	00	0	0	TMRACK	PLANT
16-00	27	062	17-W	000	44	013	1	019	ASH	0.3	00	0	0	TMRACK	PLANT
TOTAL STANDS		3	TOTAL ACRES		74										

LISTING OF ALL STANDS TO BE REGENERATED AFTER SALVAGE

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	REGEN PLANS	
														SPECIES	METHOD
09-00	26	062	17-W	000	46	137	3	027	ASH	9.1	41	3	3	ASH	SPROUT
03-00	20	062	17-W	000	34	110	3	012	ASH	12.6	55	1	1	ASH	SPROUT
16-00	26	062	17-W	000	42	080	2	016	ASH	7.2	55	1	1	ASH	SPROUT
04-00	05	061	19-W	000	42	068	2	050	ASH	5.9	55	1	1	ASH	SPROUT
TOTAL STANDS		4	TOTAL ACRES		105										

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

* - Acreage listed is for part of stand to be harvested.

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	REGEN PLANS	
														SPECIES	METHOD
11-00	26	063	21-W	000	56	180	5	009	ASH	26.5	00	0	0	ASH	SPROUT
09-00	02	061	17-W	000	43	174	3	010	ASH	12.7	40	1	1	ASH	SPROUT
19-00	16	062	17-W	000	42	132	3	009	ASH	6.7	28	1	0	ASH	SPROUT
*08-00	14	062	17-W	000	32	131	3	010	ASH	10.7	99	1	1	ASH	SPROUT
25-00	24	064	21-W	000	45	135	4	027	ASH	16.2	00	0	0	ASH	SPROUT
13-00	06	061	17-W	000	52	129	3	015	ASH	15.7	00	0	0	ASH	SPROUT
*09-00	04	061	17-W	000	36	134	5	015	ASH	15.7	40	2	0	ASH	SPROUT
*08-00	35	062	17-W	000	43	126	6	025	ASH	22.4	28	1	0	ASH	SPROUT
09-00	14	062	17-W	000	46	122	6	006	ASH	28.7	99	2	1	ASH	SPROUT
13-00	05	061	17-W	000	46	123	2	016	ASH	10.2	00	0	0	ASH	SPROUT
*10-00	36	064	21-W	000	44	127	3	020	ASH	13.2	00	0	0	ASH	SPROUT
05-00	24	064	21-W	000	50	125	4	011	ASH	10.0	00	0	0	ASH	SPROUT

03-00	27	062	17-W	000	44	119	4	019	ASH	12.6	40	1	0	ASH	SPROUT
23-00	22	063	20-W	000	47	121	3	019	ASH	14.3	00	0	0	ASH	SPROUT
02-00	14	063	20-W	000	38	119	3	020	ASH	8.9	00	0	0	ASH	SPROUT
06-00	06	061	18-W	000	33	113	1	011	ASH	3.0	00	0	0	TMRACK	PLANT
*03-00	36	062	19-W	000	40	105	6	006	ASH	16.3	00	0	0	ASH	SPROUT
20-00	23	064	21-W	000	47	108	5	012	ASH	16.4	00	0	0	ASH	SPROUT
13-00	23	064	21-W	000	47	108	5	082	ASH	16.4	00	0	0	ASH	SPROUT

TOTAL STANDS 19 TOTAL ACRES 342
 =====

LISTING OF ALL STANDS TO BE MANAGED ON AN ALL-AGED BASIS

SIZE CLASS: 2

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	BASAL AREA
06-00	27	062	17-W	000	37	056	1	006	ASH	0.3	00	0	0	047

SIZE CLASS: 4

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	BASAL AREA
12-00	10	063	20-W	000	38	090	2	013	ASH	8.0	00	0	0	077
12-00	02	061	17-W	000	30	069	1	014	ASH	3.8	00	0	0	074
10-00	04	063	20-W	000	38	055	2	016	ASH	4.0	40	2	0	067
03-00	08	061	19-W	000	38	080	1	025	ASH	7.0	00	0	0	058
06-00	20	062	17-W	000	25	096	1	029	ASH	3.6	00	0	0	054
02-00	36	062	17-W	000	32	068	1	013	ASH	1.2	28	1	0	035

TOTAL STANDS 7 TOTAL ACRES 116
 =====

Lowland Hardwoods

Rotation Age (years) - 90
 Current Clearcut Base (acres) - 227
 Ten Year Allowable Cut (acres) - 25
 Ten Yr. Proposed Clearcut (acres) - 34

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	REGEN PLANS SPECIES METHOD
15-00	24	064	21-W	000	65	011	1	029	ASH	0.0	00	0	0	ASH PLANT

TOTAL STANDS 1 TOTAL ACRES 29
 =====

LISTING OF ALL STANDS TO BE REGENERATED AFTER SALVAGE

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS		
													SPECIES	METHOD	
15-00	35	063	20-W	000	52	075	3	014	ASH	8.7	40	4	0	ASH	PLANT
TOTAL STANDS		1	TOTAL ACRES		14										

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

* - Acreage listed is for part of stand to be harvested.

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS		
													SPECIES	METHOD	
02-00	23	064	21-W	000	55	117	4	018	ASH	12.6	00	0	0	ASH	SPROUT
*28-00	24	064	21-W	000	46	110	4	016	ASH	11.4	00	0	0	BALM	SPROUT
TOTAL STANDS		2	TOTAL ACRES		34										

Aspen

Rotation Age (years) - 60
 Current Clearcut Base (acres) - 14056
 Ten Year Allowable Cut (acres) - 2343
 Ten Yr. Proposed Clearcut (acres) - 2630

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS		
													SPECIES	METHOD	
03-00	16	063	21-W	000	43	082	2	010	ASPEN	10.8	27	4	3	WH SPR	PLANT
02-00	26	062	21-W	000	69	071	2	059	ASPEN	7.4	27	3	2	ASPEN	SPROUT
13-00	36	062	19-W	000	52	068	3	013	ASPEN	7.8	27	3	1	ASPEN	SPROUT
01-00	33	062	17-W	000	58	066	3	011	ASPEN	8.3	27	3	2	ASPEN	SPROUT
02-00	21	062	21-W	000	45	063	2	008	ASPEN	6.3	27	5	2	BL SPR	PLANT
09-00	06	062	21-W	000	67	062	2	014	ASPEN	5.3	27	4	2	ASPEN	SPROUT
01-00	34	062	17-W	000	77	062	3	011	ASPEN	8.5	27	4	1	ASPEN	SPROUT
14-00	28	062	17-W	000	66	062	3	018	ASPEN	4.0	27	3	2	ASPEN	SPROUT
13-00	28	063	20-W	000	78	066	2	019	ASPEN	7.8	40	4	0	ASPEN	SPROUT
01-00	28	062	17-W	000	68	060	3	015	ASPEN	7.5	27	3	2	ASPEN	SPROUT
10-00	05	061	19-W	000	55	060	2	016	ASPEN	4.5	27	4	0	ASPEN	SPROUT
11-00	36	062	17-W	000	62	058	4	008	ASPEN	15.3	27	4	2	ASPEN	SPROUT
02-00	13	063	21-W	000	51	063	3	010	ASPEN	14.8	40	4	0	ASPEN	SPROUT
21-00	16	062	17-W	000	63	053	2	006	ASPEN	8.3	27	3	1	ASPEN	SPROUT
11-00	06	062	21-W	000	65	053	2	005	ASPEN	7.7	27	4	2	ASPEN	SPROUT
02-00	31	062	20-W	000	60	050	1	009	ASPEN	7.1	27	3	1	ASPEN	SPROUT

23-00	20	062	17-W	000	64	049	3	029	ASPEN	7.4	27	3	1	ASPEN	SPROUT
03-00	17	062	20-W	000	55	049	1	011	ASPEN	2.7	25	2	1	W CEDAR	PLANT
13-00	14	063	20-W	000	52	053	2	009	WH SPR	3.5	00	0	0	ASPEN	UNDERS
06-00	21	063	22-W	000	49	053	1	029	ASPEN	2.4	00	0	0	WH SPR	PLANT
12-00	20	062	20-W	000	56	046	2	015	ASPEN	5.4	25	3	2	ASPEN	SPROUT
07-00	25	062	21-W	000	59	045	2	027	ASPEN	9.5	27	3	2	ASPEN	SPROUT
05-00	19	062	21-W	000	71	042	1	024	ASPEN	3.2	27	3	2	ASPEN	SPROUT
04-00	33	063	20-W	000	70	027	1	019	ASPEN	0.0	00	0	0	WH SPR	PLANT
03-00	25	064	21-W	000	75	023	1	014	ASPEN	0.0	00	0	0	WH SPR	PLANT
10-00	16	062	18-W	000	50	018	2	008	ASPEN	0.9	00	0	0	ASPEN	UNDERS
04-00	04	062	17-W	000	62	007	1	051	ASPEN	0.5	61	5	5	WH SPR	UNDERS
03-00	04	062	17-W	000	62	007	1	006	ASPEN	0.5	61	5	5	WH SPR	UNDERS
15-00	22	063	20-W	000	58	010	1	009	ASPEN	0.0	00	0	0	WH SPR	PLANT

TOTAL STANDS 29 TOTAL ACRES 483
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LISTING OF ALL STANDS TO BE REGENERATED AFTER SALVAGE

													REGEN PLANS		
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	SPECIES	METHOD	
03-00	19	062	17-W	000	78	038	3	025	ASPEN	5.7	27	3	2	ASPEN	SPROUT

TOTAL STANDS 1 TOTAL ACRES 25
 =====

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

- * - Acreage listed is for part of stand to be harvested
- x - Indicates active sales before running of timber model.

													REGEN PLANS		
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	SPECIES	METHOD	
03-00	01	062	18-W	000	57	101	9	003	ASPEN	20.5	28	4	1	ASPEN	SPROUT
10-00	08	062	17-W	000	67	096	6	014	ASPEN	10.1	27	4	2	ASPEN	SPROUT
01-00	11	064	21-W	000	65	097	2	045	ASPEN	9.2	40	4	0	ASPEN	SPROUT
03-00	10	063	20-W	000	66	095	3	069	ASPEN	10.3	40	2	0	ASPEN	UNDERS
04-00	16	064	21-W	000	73	091	4	033	ASPEN	12.2	40	2	0	ASPEN	SPROUT
10-00	14	063	21-W	000	53	092	1	004	ASPEN	3.7	40	2	0	ASPEN	SPROUT
17-00	30	062	21-W	000	65	082	4	010	ASPEN	20.0	27	5	1	ASPEN	SPROUT
01-00	05	062	17-W	000	64	080	9	006	ASPEN	8.8	27	4	2	ASPEN	SPROUT
06-00	08	062	17-W	000	64	080	9	005	ASPEN	21.7	27	4	2	ASPEN	SPROUT
03-00	36	062	18-W	000	65	081	6	010	ASPEN	25.6	27	4	2	ASPEN	SPROUT
09-00	07	061	19-W	000	66	079	6	019	ASPEN	18.4	27	5	1	ASPEN	SPROUT
06-00	02	061	17-W	000	50	079	3	006	ASPEN	5.2	26	5	1	J PINE	PLANT
02-00	05	062	20-W	000	58	077	4	005	ASPEN	16.0	27	5	1	ASPEN	SPROUT
09-00	22	063	20-W	000	69	082	2	018	ASPEN	8.3	40	2	0	ASPEN	SPROUT
18-00	28	063	20-W	000	67	082	7	026	ASPEN	19.8	40	4	0	WH SPR	PLANT
10-00	28	063	20-W	000	77	082	3	128	ASPEN	10.3	40	2	0	ASPEN	SPROUT
*11-00	35	063	20-W	000	57	082	3	029	ASPEN	6.8	26	2	0	ASPEN	SPROUT
01-00	21	063	20-W	000	61	081	6	018	ASPEN	22.6	00	0	0	ASPEN	SPROUT
18-00	30	062	21-W	000	50	075	4	009	ASPEN	14.3	27	3	1	ASPEN	SPROUT

14-00	34	064	21-W	000	75	080	3	007	ASPEN	13.0	40	4	0	ASPEN	SPROUT
17-00	28	063	20-W	000	73	079	5	018	ASPEN	9.7	40	4	0	ASPEN	SPROUT
*05-00	15	062	21-W	000	70	073	5	008	ASPEN	17.7	27	3	1	ASPEN	SPROUT
*19-00	16	062	21-W	000	55	072	4	008	ASPEN	20.8	27	4	2	ASPEN	SPROUT
03-00	35	064	21-W	000	70	076	2	019	ASPEN	3.2	40	2	0	ASPEN	SPROUT
06-00	16	064	21-W	000	62	076	6	027	ASPEN	20.0	40	4	0	ASPEN	SPROUT
12-00	01	062	18-W	000	62	072	7	012	ASPEN	32.6	27	2	1	ASPEN	SPROUT
16-00	16	062	21-W	000	54	070	4	033	ASPEN	21.2	27	4	1	ASPEN	SPROUT
20-00	36	063	20-W	000	57	075	3	028	ASPEN	11.5	40	2	0	ASPEN	SPROUT
17-00	27	063	22-W	000	55	074	4	011	ASPEN	8.0	40	2	0	ASPEN	SPROUT
01-00	35	063	21-W	000	70	074	5	023	ASPEN	20.4	40	2	0	ASPEN	SPROUT
*04-00	28	062	21-W	000	61	069	4	036	ASPEN	15.7	27	4	1	ASPEN	SPROUT
10-00	21	063	21-W	000	58	068	2	015	ASPEN	11.0	27	2	2	ASPEN	SPROUT
05-00	28	062	20-W	000	69	068	6	010	ASPEN	17.7	27	5	2	ASPEN	SPROUT
07-00	36	063	22-W	000	71	073	8	016	ASPEN	13.7	40	4	0	ASPEN	SPROUT
*01-00	30	064	21-W	000	73	072	4	055	ASPEN	10.0	40	4	0	ASPEN	SPROUT
01-00	16	062	18-W	000	58	068	4	007	ASPEN	11.6	27	5	2	ASPEN	SPROUT
08-00	01	062	18-W	000	62	067	6	008	ASPEN	13.3	27	4	2	ASPEN	SPROUT
12-00	27	063	22-W	000	72	071	4	015	ASPEN	11.2	40	4	0	ASPEN	SPROUT
*06-00	36	063	20-W	000	64	071	4	045	ASPEN	12.6	40	2	0	ASPEN	SPROUT
11-00	15	063	21-W	000	61	066	6	010	ASPEN	28.5	27	3	1	ASPEN	SPROUT
05-00	25	063	21-W	000	66	071	3	014	ASPEN	14.5	40	2	0	ASPEN	SPROUT
*08-00	15	062	21-W	000	73	066	6	014	ASPEN	13.9	27	5	1	ASPEN	SPROUT
*20-00	16	062	21-W	000	67	066	7	010	ASPEN	17.6	27	4	1	ASPEN	SPROUT
09-00	30	062	21-W	000	67	066	5	005	ASPEN	15.3	26	4	0	ASPEN	SPROUT
04-00	36	064	22-W	000	64	071	6	031	ASPEN	22.5	40	2	0	ASPEN	SPROUT
01-00	25	063	20-W	000	68	070	4	028	ASPEN	10.4	40	4	0	ASPEN	SPROUT
11-00	23	063	20-W	000	60	070	3	011	ASPEN	14.7	40	2	0	ASPEN	SPROUT
06-00	05	062	20-W	000	58	065	5	008	ASPEN	23.5	27	2	0	ASPEN	SPROUT
07-00	02	061	17-W	000	53	067	6	011	ASPEN	20.3	26	3	0	ASPEN	SPROUT
08-00	02	061	17-W	000	53	067	6	004	ASPEN	20.3	26	3	0	ASPEN	SPROUT
01-00	02	061	17-W	000	65	066	4	015	ASPEN	12.2	27	4	1	ASPEN	SPROUT
03-00	11	064	21-W	000	53	069	4	007	ASPEN	9.3	40	2	0	ASPEN	SPROUT
07-00	12	063	21-W	000	60	064	6	009	ASPEN	20.6	51	1	0	ASPEN	SPROUT
07-00	20	062	20-W	000	53	064	3	014	ASPEN	12.6	27	3	1	J PINE	PLANT
15-00	16	062	21-W	000	62	064	5	016	ASPEN	15.8	27	5	2	ASPEN	SPROUT
19-00	34	062	17-W	000	78	064	6	007	ASPEN	11.7	27	2	1	ASPEN	SPROUT
10-00	01	062	18-W	000	58	065	2	013	ASPEN	5.0	27	2	1	ASPEN	SPROUT
01-00	29	062	17-W	000	71	063	7	009	ASPEN	21.2	26	1	1	ASPEN	SPROUT
05-00	05	062	21-W	000	64	063	5	002	ASPEN	13.7	26	2	0	ASPEN	SPROUT
*06-00	36	062	19-W	000	68	063	7	024	ASPEN	24.5	25	2	3	ASPEN	SPROUT
02-00	16	062	19-W	000	52	063	4	015	ASPEN	19.0	27	4	2	ASPEN	SPROUT
*13-00	26	062	20-W	000	68	062	5	015	ASPEN	16.6	27	3	1	ASPEN	SPROUT
10-00	34	062	17-W	000	62	062	4	030	ASPEN	10.0	27	3	1	ASPEN	SPROUT
07-00	25	063	21-W	000	68	067	3	009	ASPEN	12.0	40	2	0	ASPEN	SPROUT
04-00	20	063	22-W	000	60	067	4	010	ASPEN	19.0	40	2	0	ASPEN	SPROUT
05-00	36	064	21-W	000	70	067	1	034	ASPEN	2.8	00	0	0	ASPEN	SPROUT
03-00	34	064	21-W	000	84	067	1	015	ASPEN	3.3	00	0	0	ASPEN	SPROUT
14-00	05	061	17-W	000	64	063	4	035	ASPEN	15.8	26	2	1	ASPEN	SPROUT
05-00	09	062	17-W	000	67	062	9	004	ASPEN	39.0	27	3	2	ASPEN	SPROUT
01-00	07	061	19-W	000	71	062	5	009	ASPEN	26.6	27	4	1	ASPEN	SPROUT
08-00	06	061	19-W	000	65	062	5	033	ASPEN	19.0	27	4	1	ASPEN	SPROUT
14-00	36	064	22-W	000	63	066	4	010	ASPEN	17.6	40	2	0	ASPEN	SPROUT
09-00	08	063	20-W	000	75	065	9	005	ASPEN	63.0	40	4	0	ASPEN	SPROUT

15-00	14	062	17-W	000	71	061	7	011	ASPEN	31.0	27	3	1	ASPEN	SPROUT
11-00	31	062	17-W	000	70	060	5	011	ASPEN	16.5	26	2	0	ASPEN	SPROUT
*08-00	34	062	17-W	000	61	060	3	035	ASPEN	8.6	25	2	0	ASPEN	SPROUT
*21-00	22	063	20-W	000	71	065	3	020	ASPEN	7.0	40	2	0	ASPEN	SPROUT
07-00	26	064	22-W	000	62	065	3	011	ASPEN	14.9	40	2	0	ASPEN	SPROUT
01-00	06	061	17-W	000	72	061	6	009	ASPEN	14.3	26	1	1	ASPEN	SPROUT
01-00	18	063	22-W	000	66	065	3	006	ASPEN	11.6	40	2	0	ASPEN	SPROUT
27-00	16	062	21-W	000	69	059	6	016	ASPEN	27.2	27	4	1	ASPEN	SPROUT
04-00	06	062	17-W	000	78	059	6	030	ASPEN	14.4	27	3	1	ASPEN	SPROUT
*03-00	32	064	22-W	000	80	064	4	015	ASPEN	11.0	40	2	0	ASPEN	SPROUT
*03-00	08	063	20-W	000	80	063	8	028	ASPEN	34.4	40	2	0	ASPEN	SPROUT
13-00	07	063	20-W	000	80	063	8	021	ASPEN	34.4	40	2	0	ASPEN	SPROUT
10-00	31	062	17-W	000	66	059	2	020	ASPEN	4.8	26	2	0	ASPEN	SPROUT
02-00	35	064	21-W	000	70	063	4	030	ASPEN	15.8	40	2	0	ASPEN	SPROUT
15-00	27	064	21-W	000	66	058	4	004	ASPEN	16.0	00	0	0	ASPEN	SPROUT
09-00	27	062	17-W	000	74	058	4	016	ASPEN	16.3	27	2	1	ASPEN	SPROUT
12-00	06	061	17-W	000	74	059	9	021	ASPEN	44.3	27	2	1	ASPEN	SPROUT
*05-00	16	062	20-W	000	68	058	5	028	ASPEN	19.4	27	3	1	ASPEN	SPROUT
01-00	06	062	21-W	000	65	058	3	013	ASPEN	4.1	26	4	2	ASPEN	SPROUT
04-00	32	063	22-W	000	68	061	4	009	ASPEN	10.6	40	4	0	ASPEN	SPROUT
*12-00	16	062	21-W	000	71	057	4	045	ASPEN	11.6	27	5	1	ASPEN	SPROUT
09-00	15	062	21-W	000	63	057	3	012	ASPEN	15.0	27	5	2	ASPEN	SPROUT
*23-00	16	062	21-W	000	63	057	4	056	ASPEN	15.5	27	5	2	ASPEN	SPROUT
10-00	36	062	19-W	000	69	058	6	006	ASPEN	23.6	25	2	1	ASPEN	SPROUT
04-00	16	062	17-W	000	70	057	3	017	ASPEN	7.5	27	3	0	ASPEN	SPROUT
12-00	34	062	17-W	000	62	057	4	010	ASPEN	14.1	25	2	1	ASPEN	SPROUT
11-00	27	064	22-W	000	75	062	4	017	ASPEN	22.0	40	2	0	ASPEN	SPROUT
*01-00	30	064	22-W	000	61	061	5	020	ASPEN	16.9	40	2	0	ASPEN	SPROUT
*13-00	27	064	22-W	000	78	061	7	015	ASPEN	30.3	40	2	0	ASPEN	SPROUT
09-00	29	062	17-W	000	76	056	4	008	ASPEN	7.3	27	2	1	ASPEN	SPROUT
06-00	22	062	20-W	000	64	056	6	016	ASPEN	28.7	27	3	1	ASPEN	SPROUT
*03-00	29	064	21-W	000	74	061	4	030	ASPEN	9.3	40	4	0	ASPEN	SPROUT
03-00	13	063	20-W	000	65	060	4	012	ASPEN	11.5	26	4	0	ASPEN	SPROUT
01-00	23	062	21-W	000	68	055	6	014	ASPEN	8.5	26	4	2	ASPEN	SPROUT
08-00	10	062	21-W	000	72	055	7	003	ASPEN	27.3	27	4	1	ASPEN	SPROUT
04-00	14	063	21-W	000	58	059	2	011	ASPEN	6.2	40	2	0	ASPEN	SPROUT
09-00	23	062	21-W	000	58	054	2	008	ASPEN	8.7	27	2	1	ASPEN	SPROUT
09-00	33	064	20-W	000	68	058	3	005	ASPEN	6.0	40	4	0	ASPEN	SPROUT
12-00	27	064	21-W	000	68	059	6	015	ASPEN	19.0	40	2	0	ASPEN	SPROUT
10-00	34	064	20-W	000	69	058	3	040	ASPEN	7.2	40	4	0	ASPEN	SPROUT
*19-00	35	063	20-W	000	77	059	4	050	ASPEN	13.3	40	2	0	ASPEN	SPROUT
*16-00	33	063	20-W	000	67	059	4	030	ASPEN	7.9	40	2	0	ASPEN	SPROUT
03-00	28	062	21-W	000	64	058	5	011	ASPEN	22.0	27	5	1	ASPEN	SPROUT
x13-00	34	064	20-W	000	50	053			ASPEN					ASPEN	SPROUT
x11-00	28	064	21-W	000	29	032			ASPEN					ASPEN	SPROUT
x04-00	16	062	21-W	000	51	024			ASPEN					ASPEN	SPROUT
x01-00	16	062	21-W	000	35	015			ASPEN					ASPEN	SPROUT
x02-00	15	062	21-W	000	43	015			ASPEN					ASPEN	SPROUT
x15-00	16	062	17-W	000	51	020			ASPEN					ASPEN	SPROUT
x07-00	28	062	20-W	000	39	027			ASPEN					ASPEN	SPROUT
x02-00	2	063	20-W	000	41	017			ASPEN					ASPEN	SPROUT
x07-00	22	062	20-W	000	50	015			ASPEN					ASPEN	SPROUT
x02-00	7	063	20-W	000	43	022			ASPEN					ASPEN	SPROUT

x03-00	2	061	19-W	000	45	015		ASPEN		ASPEN	SPROUT
x04-00	2	061	19-W	000	48	010		ASPEN		ASPEN	SPROUT
x07-00	1	061	19-W	000	48	007		ASPEN		ASPEN	SPROUT
x01-00	12	064	21-W	000	63	001		ASPEN		ASPEN	SPROUT

TOTAL STANDS 130 TOTAL ACRES 2630

Birch

Rotation Age (years) - 64
 Current Clearcut Base (acres) - 1137
 Ten Year Allowable Cut (acres) - 178
 Ten Yr. Proposed Clearcut (acres) - 258

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

ST-NBR	SCIN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD
01-00	03	063	20-W	000	46	091	2	062	PBIRCH	3.8	60	2	0	N PINE	PLANT
11-00	14	064	21-W	000	52	082	1	119	PBIRCH	2.1	00	0	0	PBIRCH	PLANT
07-00	16	063	20-W	000	46	081	2	096	PBIRCH	4.6	00	0	0	ASPEN	SPROUT
01-00	13	064	21-W	000	71	077	2	051	PBIRCH	3.7	00	0	0	ASPEN	UNDERS
02-00	36	063	20-W	000	55	069	1	012	PBIRCH	2.7	00	0	0	WH SPR	PLANT
TOTAL STANDS		5						TOTAL ACRES		340					

LISTING OF ALL STANDS TO BE REGENERATED AFTER SALVAGE

ST-NBR	SCIN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD
06-00	12	064	21-W	000	51	127	2	038	PBIRCH	4.6	00	0	0	PBIRCH	PLANT
05-00	03	063	20-W	000	44	101	5	040	PBIRCH	12.1	40	2	0	ASPEN	SPROUT
09-00	15	064	21-W	000	54	091	2	040	PBIRCH	4.3	00	0	0	PBIRCH	PLANT
01-00	36	062	17-W	000	58	086	1	096	PBIRCH	2.3	30	1	0	N PINE	PLANT
01-00	13	063	20-W	000	43	089	2	020	PBIRCH	2.5	40	2	0	WH SPR	PLANT
14-00	36	064	21-W	000	46	087	2	053	PBIRCH	3.4	00	0	0	ASPEN	SPROUT
12-00	14	064	21-W	000	79	076	2	016	PBIRCH	4.0	40	2	0	PBIRCH	PLANT
07-00	23	064	21-W	000	79	077	2	090	PBIRCH	4.0	40	2	0	PBIRCH	PLANT
02-00	01	063	20-W	000	55	072	3	028	PBIRCH	6.8	40	2	0	PBIRCH	SPROUT
03-00	31	064	20-W	000	45	071	1	015	PBIRCH	4.0	40	4	0	N PINE	PLANT
12-00	36	064	20-W	000	62	069	4	006	PBIRCH	8.3	60	2	0	PBIRCH	PLANT
01-00	02	063	20-W	000	57	068	5	006	PBIRCH	13.3	60	2	0	N PINE	PLANT
07-00	19	063	22-W	000	50	064	1	011	PBIRCH	2.8	00	0	0	WH SPR	PLANT
11-00	16	062	21-W	000	47	054	2	054	PBIRCH	3.6	30	5	1	ASPEN	SPROUT
TOTAL STANDS		14						TOTAL ACRES		513					

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

* - Acreage listed is for part of stand to be harvested.

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS		
													SPECIES	METHOD	
06-00	04	064	21-W	000	47	123	2	030	PBIRCH	5.1	00	0	0	N PINE	PLANT
01-00	03	064	21-W	000	53	117	3	020	PBIRCH	5.2	40	2	0	ASPEN	SPROUT
01-00	15	064	21-W	000	66	102	3	033	PBIRCH	7.1	40	2	0	PBIRCH	PLANT
02-00	15	064	21-W	000	66	102	2	006	PBIRCH	7.1	40	2	0	PBIRCH	PLANT
18-00	36	064	21-W	000	57	101	3	040	PBIRCH	7.5	00	0	0	PBIRCH	PLANT
*05-00	23	064	21-W	000	59	099	5	015	PBIRCH	17.7	00	0	0	PBIRCH	PLANT
*10-00	14	064	21-W	000	59	098	5	023	PBIRCH	17.7	00	0	0	PBIRCH	PLANT
*11-00	36	063	22-W	000	52	094	3	026	PBIRCH	3.4	00	0	0	BALM	SPROUT
11-00	35	062	17-W	000	58	086	1	003	PBIRCH	2.3	30	1	0	PBIRCH	SPROUT
03-00	36	062	17-W	000	52	081	6	012	PBIRCH	12.2	30	2	1	N PINE	PLANT
*05-00	14	064	21-W	000	52	082	2	040	PBIRCH	7.4	00	0	0	PBIRCH	PLANT
TOTAL STANDS		11	TOTAL ACRES		248										

Balm of Gilead

Rotation Age (years) - 52
 Current Clearcut Base (acres) - 1604
 Ten Year Allowable Cut (acres) - 321
 Ten Yr. Proposed Clearcut (acres) - 453

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS		
													SPECIES	METHOD	
01-00	14	063	21-W	000	59	077	1	050	BALM	2.1	40	2	0	TMRACK	PLANT
12-00	26	063	21-W	000	63	072	1	028	BALM	2.6	99	2	0	ASPEN	UNDERS
17-00	36	062	19-W	000	57	054	2	010	BALM	3.3	00	0	0	TMRACK	PLANT
16-00	20	062	17-W	000	63	015	3	016	BALM	0.4	25	2	1	WH SPR	PLANT
11-00	26	064	22-W	000	64	014	1	021	BALM	0.0	00	0	0	TMRACK	PLANT
TOTAL STANDS		5	TOTAL ACRES		125										

LISTING OF ALL STANDS TO BE REGENERATED AFTER SALVAGE

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	REGEN PLANS			
												%	M	SPECIES	METHOD
07-00	28	062	17-W	000	52	082	4	049	BALM	5.7	28	2	1	BALM	SPROUT
07-00	09	063	20-W	000	75	076	3	031	BALM	5.9	40	4	0	BALM	SPROUT
10-00	16	062	19-W	000	50	067	2	007	BALM	11.2	00	0	0	BALM	SPROUT
09-00	17	062	17-W	000	50	066	3	006	BALM	8.3	28	2	1	BALM	SPROUT
07-00	26	063	21-W	000	63	060	2	027	BALM	4.5	00	0	0	BALM	SPROUT
TOTAL STANDS		5	TOTAL ACRES		120										

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

* - Acreage listed is for part of stand to be harvested.

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	REGEN PLANS			
												%	M	SPECIES	METHOD
03-00	12	064	21-W	000	57	100	6	012	BALM	9.6	00	0	0	BALM	SPROUT
*14-00	16	063	20-W	000	60	086	3	037	BALM	5.2	40	2	0	BALM	SPROUT
*01-00	17	063	20-W	000	60	086	3	066	BALM	5.2	40	2	0	BALM	SPROUT
*10-00	08	063	20-W	000	75	076	3	023	BALM	6.6	40	2	0	BALM	SPROUT
07-00	17	063	20-W	000	75	076	3	004	BALM	6.6	40	2	0	BALM	SPROUT
15-00	22	064	21-W	000	63	077	4	007	BALM	11.8	40	2	0	BALM	SPROUT
*13-00	22	064	21-W	000	64	076	3	060	BALM	10.8	40	2	0	BALM	SPROUT
08-00	23	063	21-W	000	62	076	4	011	BALM	10.9	40	2	0	BALM	SPROUT
05-00	20	063	20-W	000	64	073	3	020	BALM	9.0	40	2	0	ASPEN	SPROUT
11-00	22	062	17-W	000	66	068	6	015	BALM	10.6	28	1	1	BALM	SPROUT
08-00	33	062	17-W	000	55	068	3	020	BALM	7.5	25	3	1	BALM	SPROUT
07-00	27	062	17-W	000	64	067	4	014	BALM	10.0	28	1	1	BALM	SPROUT
*05-00	35	064	21-W	000	80	071	3	096	BALM	7.6	40	2	0	BALM	SPROUT
03-00	03	061	19-W	000	55	067	4	029	BALM	12.9	00	0	0	BALM	SPROUT
03-00	24	064	21-W	000	84	069	4	013	BALM	11.0	40	4	0	BALM	SPROUT
*05-00	16	064	21-W	000	54	064	2	016	BALM	8.1	40	4	0	BALM	SPROUT
TOTAL STANDS		16	TOTAL ACRES		453										

White Pine

Rotation Age (years) - 95
 Current Clearcut Base (acres) - 60
 Ten Year Allowable Cut (acres) - 6
 Ten Yr. Proposed Clearcut (acres) - 46

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

													REGEN PLANS		
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD
16-00	36	064	21-W	000	47	087	6	004	W PINE	26.3	00	0	0	N PINE	PLANT
13-00	16	063	20-W	000	48	080	3	042	W PINE	5.6	40	4	0	N PINE	PLANT
TOTAL STANDS		2		TOTAL ACRES		46									

Norway Pine

Rotation Age (years) - 105
 Current Clearcut Base (acres) - 168
 Ten Year Allowable Cut (acres) - 16
 Ten Yr. Proposed Clearcut (acres) - 22

LISTING OF ALL STANDS TO BE REGENERATED AFTER SALVAGE

													REGEN PLANS		
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD
07-00	14	063	20-W	000	48	110	1	024	N PINE	4.0	00	0	0	N PINE	PLANT
TOTAL STANDS		1		TOTAL ACRES		24									

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

* - Acreage listed is for part of stand to be harvested.

													REGEN PLANS		
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD
04-00	16	063	20-W	000	53	116	4	017	N PINE	9.4	40	2	0	N PINE	PLANT
15-00	33	063	20-W	000	52	115		005	N PINE					N PINE	PLANT
TOTAL STANDS		2		TOTAL ACRES		22									

Jack Pine

Rotation Age (years) - 60
 Current Clearcut Base (acres) - 57
 Ten Year Allowable Cut (acres) - 9.5
 Ten Yr. Proposed Clearcut (acres) - 14

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS		
													SPECIES	METHOD	
06-00	30	064	21-W	000	54	049	1	011	J PINE	2.7	99	2	0	J PINE	ART SD
TOTAL STANDS		1		TOTAL ACRES		11									

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS		
													SPECIES	METHOD	
06-00	35	062	21-W	000	50	086	3	006	J PINE	6.6	00	0	0	J PINE	PLANT
15-00	05	061	17-W	000	62	085	9	008	J PINE	30.0	00	0	0	J PINE	PLANT
TOTAL STANDS		2		TOTAL ACRES		14									

White Spruce

Rotation Age (years) - 79
 Current Clearcut Base (acres) - 890
 Ten Year Allowable Cut (acres) - 111
 Ten Yr. Proposed Clearcut (acres) - 65

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS		
													SPECIES	METHOD	
08-00	19	062	17-W	000	52	020	2	005	WH SPR	0.3	00	0	0	WH SPR	UNDERS
18-00	22	064	21-W	000	55	015	1	052	WH SPR	0.0	00	0	0	WH SPR	UNDERS
01-00	23	064	21-W	000	72	012	2	040	WH SPR	0.0	00	0	0	WH SPR	UNDERS
TOTAL STANDS		3		TOTAL ACRES		97									

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS		
													SPECIES	METHOD	
19-00	36	064	20-W	000	50	103	3	017	WH SPR	6.5	00	0	0	WH SPR	PLANT
08-00	22	063	20-W	000	60	097	4	021	ASPEN	6.4	00	0	0	WH SPR	PLANT

09-00	16	062	21-W	000	60	076	5	003	WH SPR	18.5	00	0	0	WH SPR	PLANT
14-00	13	063	21-W	000	65	077	6	008	BALSAM	10.0	00	0	0	WH SPR	PLANT
02-00	28	062	21-W	000	64	071	5	009	WH SPR	6.5	00	0	0	WH SPR	PLANT
14-00	33	063	20-W	000	65	070	3	007	WH SPR	4.3	00	0	0	WH SPR	PLANT

TOTAL STANDS 6 TOTAL ACRES 65
 =====

Balsam Fir

Rotation Age (years) - 50
 Current Clearcut Base (acres) - 1090
 Ten Year Allowable Cut (acres) - 218
 Ten Yr. Proposed Clearcut (acres) - 276

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

													REGEN PLANS		
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD
03-00	29	062	17-W	000	48	062	1	007	BALSAM	1.7	00	0	0	TMRACK	PLANT
12-00	07	062	17-W	000	44	061	2	007	BALSAM	4.0	00	0	0	J PINE	PLANT
09-00	36	062	17-W	000	50	059	2	015	BALSAM	5.2	57	1	0	W PINE	PLANT
01-00	36	064	20-W	000	44	063	1	009	BALSAM	3.0	00	0	0	W PINE	PLANT
09-00	34	062	17-W	000	46	055	2	006	BALSAM	7.7	06	2	2	WH SPR	PLANT
04-00	36	064	20-W	000	50	056	1	024	BALSAM	1.8	00	0	0	WH SPR	UNDERS
08-00	12	063	21-W	000	50	051	1	005	BALSAM	3.2	51	2	2	WH SPR	PLANT
03-00	12	063	21-W	000	50	051	1	015	BALSAM	3.2	51	2	0	WH SPR	PLANT
11-00	34	062	17-W	000	62	050	1	037	BALSAM	1.7	06	1	0	WH SPR	PLANT
14-00	36	064	20-W	000	60	045	2	130	BALSAM	5.1	40	2	0	ASPEN	UNDERS
21-00	20	062	17-W	000	37	031	2	008	BALSAM	0.9	00	0	0	WH SPR	PLANT
02-00	28	063	22-W	000	39	029	6	028	BALSAM	0.0	00	0	0	WCEDAR	PLANT
17-00	08	062	17-W	000	45	018	2	022	BALSAM	0.6	00	0	0	BL SPR	ART SD
05-00	36	064	20-W	000	60	019	2	013	BALSAM	0.0	00	0	0	WH SPR	UNDERS
01-00	02	061	18-W	000	41	013	1	010	BALSAM	0.3	00	0	0	TMRACK	PLANT
22-00	20	062	17-W	000	38	009	1	034	BALSAM	0.4	00	0	0	JP LAR	UNDERS
12-00	35	063	20-W	000	55	013	1	007	BALSAM	0.0	00	0	0	WCEDAR	PLANT

TOTAL STANDS 17 TOTAL ACRES 377
 =====

LISTING OF ALL STANDS TO BE RESERVED

* - Marginally commercial stand with low site index that may be managed as part of the clear cut base in the future

													BASAL	
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	AREA
*15-00	04	061	17-W	000	25	019	4	015	BALSAM	1.1	00	0	0	033
*17-00	19	062	17-W	000	38	005	2	021	BALSAM	0.6	00	0	0	030

*13-00 20 062 17-W 000 39 009 2 004 BALSAM 0.8 00 0 0 020
 *14-00 20 062 17-W 000 31 009 1 006 BALSAM 0.5 00 0 0 003

TOTAL STANDS 4 TOTAL ACRES 46
 =====

LISTING OF ALL STANDS TO BE REGENERATED AFTER SALVAGE

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS		
													SPECIES	METHOD	
08-00	04	063	20-W	000	34	091	3	006	BALSAM	4.3	99	2	0	WH SPR	PLANT
12-00	36	064	21-W	000	60	077	1	034	BALSAM	2.4	00	0	0	N PINE	PLANT
14-00	06	061	17-W	000	73	066	4	007	BALSAM	12.0	06	1	1	WH SPR	PLANT
07-00	14	064	21-W	000	47	059	2	010	BALSAM	3.6	60	2	0	WH SPR	PLANT
12-00	26	062	17-W	000	52	052	4	028	BALSAM	7.6	57	1	0	W PINE	PLANT

TOTAL STANDS 5 TOTAL ACRES 85
 =====

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

* - Acreage listed is for part of stand to be harvested.

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS		
													SPECIES	METHOD	
*02-00	16	064	21-W	000	58	088	8	020	BALSAM	19.0	99	2	0	BALM	SPROUT
*07-00	25	064	21-W	000	61	088	4	024	BALSAM	8.3	00	0	0	J PINE	PLANT
14-00	27	063	22-W	000	53	082	2	010	BALSAM	5.7	60	2	0	ASPEN	SPROUT
08-00	27	064	21-W	000	71	081	5	011	BALSAM	10.7	40	2	0	ASPEN	SPROUT
06-00	33	063	22-W	000	53	079	5	011	BALSAM	12.2	40	2	0	ASPEN	SPROUT
08-00	26	063	21-W	000	65	077	5	021	BALSAM	12.3	99	2	0	BALM	SPROUT
02-00	27	062	18-W	000	54	071	6	004	BALSAM	16.0	51	2	2	ASPEN	SPROUT
*02-00	36	062	19-W	000	52	071	3	010	BALSAM	4.3	00	0	0	WH SPR	PLANT
*22-00	24	064	21-W	000	52	072	3	010	BALSAM	6.8	00	0	0	J PINE	PLANT
13-00	19	062	17-W	000	50	066	3	012	BALSAM	6.2	57	2	0	WCEDAR	PLANT
*08-00	31	062	17-W	000	48	064	5	010	BALSAM	11.5	57	2	0	ASPEN	SPROUT
*05-00	20	063	22-W	000	59	069	5	015	BALSAM	11.2	40	2	0	ASPEN	SPROUT
11-00	28	062	17-W	000	58	062	6	011	BALSAM	10.0	57	1	0	BALM	SPROUT
*02-00	29	062	17-W	000	58	060	5	015	BALSAM	7.6	57	3	0	J PINE	PLANT
11-00	15	062	21-W	000	48	059	6	009	BALSAM	10.7	51	1	0	ASPEN	SPROUT
*03-00	15	062	21-W	000	48	059	6	010	BALSAM	10.7	51	1	0	ASPEN	SPROUT
03-00	22	062	17-W	000	60	056	4	007	BALSAM	8.5	51	1	1	BALM	SPROUT
15-00	26	062	17-W	000	51	056	2	016	BALSAM	9.0	00	0	0	W PINE	PLANT
*01-00	30	063	22-W	000	62	059	5	011	BALSAM	17.0	00	0	0	WH SPR	PLANT
*06-00	24	064	21-W	000	70	057	3	002	BALSAM	5.0	99	2	0	BALM	SPROUT
*02-00	02	061	19-W	000	57	052	5	012	BALSAM	13.6	57	2	0	ASPEN	SPROUT
09-00	28	063	22-W	000	63	056	3	018	BALSAM	4.8	60	2	0	ASPEN	SPROUT
11-00	27	062	17-W	000	50	050	3	007	BALSAM	8.0	06	1	1	WH SPR	PLANT

TOTAL STANDS 23 TOTAL ACRES 276
 =====

Lowland Black Spruce

Rotation Age (years) - 106
 Current Clearcut Base (acres) - 11710
 Ten Year Allowable Cut (acres) - 1105
 Ten Yr. Proposed Clearcut (acres) - 1020

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS		
													SPECIES	METHOD	
05-00	15	063	21-W	000	30	015	1	012	BL SPR	0.3	00	0	0	BL SPR	ART SD
05-00	33	063	20-W	000	32	019	1	009	BL SPR	0.0	00	0	0	BL SPR	ART SD
14-00	18	063	22-W	000	39	017	1	006	BL SPR	0.0	00	0	0	BL SPR	ART SD
07-00	10	062	21-W	000	34	012	1	004	BL SPR	0.6	00	0	0	BL SPR	ART SD
04-00	06	061	19-W	000	28	011	1	020	BL SPR	0.5	00	0	0	BL SPR	ART SD
03-00	10	062	21-W	000	34	008	1	005	BL SPR	0.3	00	0	0	BL SPR	ART SD
05-00	27	064	22-W	000	39	012	1	040	BL SPR	0.0	00	0	0	BL SPR	ART SD
03-00	26	063	21-W	000	44	011	1	006	BL SPR	0.0	00	0	0	BL SPR	ART SD
12-00	27	064	22-W	000	40	010	1	005	BL SPR	0.0	00	0	0	BL SPR	ART SD
02-00	19	063	22-W	000	38	009	1	005	BL SPR	0.0	00	0	0	BL SPR	ART SD
01-00	17	062	17-W	000	29	004	1	009	BL SPR	0.3	00	0	0	BL SPR	ART SD
TOTAL STANDS		11	TOTAL ACRES		121										

LISTING OF ALL STANDS TO BE RESERVED

* - Marginally commercial stand with low site index that may be managed as part of the clear cut base in the future

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	BASAL	
													AREA	
*03-00	30	062	17-W	000	25	024	6	003	BL SPR	2.8	00	0	0	078
*07-00	26	062	21-W	000	24	022	3	156	BL SPR	1.5	00	0	0	062
*07-00	22	063	22-W	000	24	029	5	078	BL SPR	0.0	00	0	0	045
*01-00	25	062	21-W	000	26	017	3	025	BL SPR	0.9	00	0	0	042
*08-00	14	063	21-W	000	26	037	4	125	BL SPR	0.0	00	0	0	038
*16-00	07	061	19-W	000	26	012	2	006	BL SPR	1.0	00	0	0	013
*05-00	26	062	20-W	000	25	050	4	060	BL SPR	2.1	99	1	1	115
*08-00	09	062	17-W	000	23	091	6	052	BL SPR	3.0	00	0	0	105
*22-00	08	062	17-W	000	23	091	6	071	BL SPR	3.0	00	0	0	105
*03-00	35	062	20-W	000	26	040	4	053	BL SPR	1.9	00	0	0	105
*10-00	20	062	21-W	000	19	061	4	004	BL SPR	1.8	00	0	0	087
*03-00	31	062	17-W	000	25	024	6	044	BL SPR	2.8	00	0	0	078
*04-00	35	062	21-W	000	24	066	6	019	BL SPR	3.0	23	1	0	072
*04-00	21	063	21-W	000	24	056	2	010	BL SPR	0.8	00	0	0	070
*04-00	19	062	20-W	000	24	052	3	068	BL SPR	1.6	55	1	1	066
*04-00	04	061	17-W	000	24	033	4	018	BL SPR	1.7	00	0	0	055

*08-00	36	062	21-W	000	24	039	5	037	BL	SPR	2.1	00	0	0	052
*10-00	14	063	20-W	000	26	057	9	097	BL	SPR	0.0	00	0	0	043
*03-00	29	063	22-W	000	26	054	2	016	BL	SPR	0.0	00	0	0	021
*14-00	07	062	17-W	000	24	032	9	008	BL	SPR	4.2	00	0	0	020
*04-00	29	063	22-W	000	35	022	1	049	BL	SPR	0.0	00	0	0	007
*06-00	22	063	22-W	000	25	072	7	008	BL	SPR	0.0	00	0	0	127
*04-00	28	062	20-W	000	26	078	2	036	BL	SPR	1.2	99	1	1	098
*06-00	16	062	19-W	000	24	078	3	019	BL	SPR	0.4	00	0	0	073
*01-00	23	063	20-W	000	26	104	2	078	BL	SPR	0.0	00	0	0	071
*04-00	13	063	21-W	000	26	098	6	103	BL	SPR	0.0	00	0	0	057
*04-00	02	063	20-W	000	31	061	5	039	BL	SPR	2.1	23	4	0	055
*05-00	34	062	17-W	000	27	022	1	064	BL	SPR	0.3	00	0	0	030
*15-00	27	062	17-W	000	27	022	1	052	BL	SPR	0.3	00	0	0	030
*01-00	26	062	17-W	000	27	022	1	036	BL	SPR	0.3	00	0	0	030
*04-00	35	062	17-W	000	27	022	1	026	BL	SPR	0.3	00	0	0	030
*08-00	15	063	21-W	000	26	117	1	015	BL	SPR	7.0	00	0	0	213
*06-00	34	063	22-W	000	24	107	2	025	BL	SPR	5.7	40	2	0	183
*03-00	22	063	21-W	000	26	113	1	045	BL	SPR	5.3	00	0	0	161
*05-00	27	062	18-W	000	25	109	2	015	BL	SPR	7.7	51	1	1	156
*04-00	15	063	22-W	000	29	128	1	081	BL	SPR	6.4	00	0	0	150
*07-00	06	062	21-W	000	25	139	3	057	BL	SPR	8.0	51	2	0	147
*05-00	31	063	22-W	000	26	102	1	006	BL	SPR	4.5	00	0	0	146
*06-00	31	063	22-W	000	26	102	1	039	BL	SPR	4.5	00	0	0	146
*03-00	31	063	22-W	000	26	102	1	023	BL	SPR	4.5	00	0	0	146
*06-00	35	062	20-W	000	26	109	2	019	BL	SPR	9.0	55	2	2	125
*07-00	31	063	22-W	000	23	102	1	016	BL	SPR	4.2	00	0	0	122
*13-00	16	063	22-W	000	33	108	2	013	BL	SPR	8.0	00	0	0	120
*03-00	30	063	20-W	000	25	131	2	008	BL	SPR	9.0	00	0	0	110
*03-00	27	062	18-W	000	31	112	1	017	BL	SPR	6.0	51	1	1	110
*05-00	19	063	20-W	000	25	112	2	042	BL	SPR	9.0	00	0	0	110
*01-00	13	062	17-W	000	26	092	1	030	BL	SPR	3.0	23	1	0	106
*02-00	24	062	17-W	000	26	092	1	017	BL	SPR	3.0	23	1	0	106
*10-00	23	062	17-W	000	25	121	1	015	BL	SPR	7.2	00	0	0	105
*04-00	27	062	18-W	000	24	082	1	005	BL	SPR	6.5	00	0	0	105
*01-00	25	063	21-W	000	29	143	1	045	BL	SPR	4.7	00	0	0	102
*04-00	22	063	22-W	000	33	108	2	007	BL	SPR	8.3	00	0	0	100
*03-00	21	063	21-W	000	24	064	1	029	BL	SPR	5.2	51	1	0	100
*01-00	22	063	21-W	000	25	112	1	026	BL	SPR	3.8	60	3	2	098
*07-00	32	063	22-W	000	25	122	1	018	BL	SPR	5.4	00	0	0	096
*04-00	13	062	17-W	000	24	180	1	011	BL	SPR	3.0	00	0	0	088
*02-00	35	062	21-W	000	25	078	1	007	BL	SPR	4.3	00	0	0	087
*02-00	36	062	21-W	000	25	078	1	066	BL	SPR	4.3	00	0	0	087
*04-00	09	062	17-W	000	25	155	1	008	BL	SPR	2.9	00	0	0	083
*04-00	22	062	20-W	000	35	061	2	012	BL	SPR	8.0	55	2	1	083
*12-00	27	062	20-W	000	35	061	2	009	BL	SPR	8.0	55	2	1	083
*01-00	05	061	17-W	000	27	084	1	042	BL	SPR	4.3	23	1	0	080
*07-00	35	062	20-W	000	27	115	1	027	BL	SPR	4.7	55	2	1	078
*03-00	26	062	20-W	000	27	115	1	044	BL	SPR	4.7	55	2	1	078
*10-00	27	062	17-W	000	33	057	1	005	BL	SPR	4.7	23	1	1	077
*07-00	18	063	22-W	000	27	117	1	008	BL	SPR	4.0	00	0	0	076
*05-00	10	062	20-W	000	26	106	1	011	BL	SPR	4.5	55	1	1	072
*08-00	03	062	20-W	000	26	106	1	062	BL	SPR	4.5	55	1	1	072
*02-00	08	062	18-W	000	24	111	1	005	BL	SPR	6.0	00	0	0	070
*05-00	16	063	21-W	000	26	069	1	015	BL	SPR	6.9	00	0	0	070

*04-00	01	061	18-W	000	24	090	1	020	BL	SPR	3.3	00	0	0	068
*10-00	35	062	20-W	000	26	094	1	068	BL	SPR	3.3	55	2	2	063
*17-00	25	062	21-W	000	26	083	1	052	BL	SPR	4.0	00	0	0	063
*06-00	09	062	17-W	000	28	200	1	010	BL	SPR	4.0	23	1	1	060
*21-00	08	062	17-W	000	28	200	1	009	BL	SPR	4.0	23	1	1	060
*04-00	34	062	17-W	000	25	152	2	040	BL	SPR	7.2	51	1	0	060
*06-00	34	062	17-W	000	24	114	1	086	BL	SPR	4.8	23	1	0	053
*09-00	22	062	20-W	000	25	087	1	022	BL	SPR	2.6	55	2	1	050
*06-00	05	061	19-W	000	29	067	2	013	BL	SPR	4.7	23	1	0	050
*13-00	01	061	19-W	000	25	074	1	028	BL	SPR	2.5	00	0	0	048
*03-00	14	062	17-W	000	23	140	1	045	BL	SPR	3.3	00	0	0	042
*08-00	13	062	17-W	000	23	140	1	012	BL	SPR	3.3	00	0	0	042
*15-00	06	062	21-W	000	27	110	1	009	BL	SPR	2.3	23	2	1	042
*15-00	01	061	19-W	000	24	092	1	026	BL	SPR	6.5	00	0	0	040
*11-00	14	062	17-W	000	26	094	1	033	BL	SPR	3.2	99	1	0	028
*21-00	34	062	17-W	000	36	076	1	007	BL	SPR	3.3	23	2	0	020
02-00	25	063	21-W	000	24	110	3	368	BL	SPR	0.0	00	0	0	
01-00	30	063	20-W	000	25	104	4	021	BL	SPR	0.0	00	0	0	
03-00	19	063	20-W	000	25	104	4	060	BL	SPR	0.0	00	0	0	
06-00	19	063	20-W	000	25	104	4	017	BL	SPR	0.0	00	0	0	
24-00	36	062	19-W	000	23	093	4	005	BL	SPR	1.1	00	0	0	
04-00	24	063	21-W	000	26	095	1	101	BL	SPR	0.0	00	0	0	
04-00	23	063	21-W	000	25	094	1	050	BL	SPR	0.0	00	0	0	
04-00	22	063	20-W	000	25	067	3	106	BL	SPR	0.0	00	0	0	
06-00	14	062	17-W	000	24	023	2	016	BL	SPR	0.7	00	0	0	
07-00	13	062	17-W	000	24	023	2	015	BL	SPR	0.7	00	0	0	
04-00	14	062	17-W	000	24	023	2	027	BL	SPR	0.7	00	0	0	

TOTAL STANDS 97 TOTAL ACRES 3671

LISTING OF ALL STANDS TO BE REGENERATED AFTER SALVAGE

													REGEN PLANS		
ST-NBR	SCIN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD
05-00	25	064	21-W	000	34	129	1	010	BL	SPR	6.0	99	2	0	BL SPR ART SD

TOTAL STANDS 1 TOTAL ACRES 10

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

* - Acreage listed is for part of stand to be harvested.

													REGEN PLANS		
ST-NBR	SCIN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD
13-00	16	062	17-W	000	31	168	4	007	BL	SPR	19.0	51	1	1	BL SPR ART SD
*04-00	23	062	17-W	000	30	154	4	026	BL	SPR	19.3	00	0	0	BL SPR ART SD
*20-00	33	062	17-W	000	31	142	4	002	BL	SPR	18.2	51	1	1	BL SPR ART SD
04-00	19	063	20-W	000	28	143	2	009	BL	SPR	12.3	60	2	0	BL SPR ART SD

09-00	20	063	20-W	000	28	143	2	015	BL SPR	12.3	60	2	0	BL SPR	ART	SD
*19-00	08	062	17-W	000	29	134	2	020	BL SPR	8.0	00	0	0	BL SPR	ART	SD
*03-00	17	062	17-W	000	29	134	2	020	BL SPR	8.0	00	0	0	BL SPR	ART	SD
*04-00	20	063	21-W	000	28	126	4	020	BL SPR	17.8	51	1	0	BL SPR	ART	SD
05-00	03	064	21-W	000	31	129	5	008	BL SPR	24.0	00	0	0	BL SPR	ART	SD
15-00	23	062	17-W	000	28	124	4	006	BL SPR	20.3	99	2	1	BL SPR	ART	SD
*04-00	28	063	20-W	000	32	128	2	050	BL SPR	9.1	00	0	0	BL SPR	ART	SD
02-10	08	062	17-W	000	36	121	6	006	BL SPR	30.6	00	0	0	BL SPR	ART	SD
*02-00	08	062	17-W	000	29	120	2	015	BL SPR	12.0	00	0	0	BL SPR	ART	SD
*03-00	07	062	17-W	000	29	120	2	020	BL SPR	12.0	00	0	0	BL SPR	ART	SD
11-00	14	063	20-W	000	27	123	2	012	BL SPR	9.0	00	0	0	BL SPR	ART	SD
04-00	04	064	21-W	000	38	123	3	012	BL SPR	13.5	00	0	0	BL SPR	ART	SD
13-00	13	063	21-W	000	28	122	2	021	BL SPR	5.5	60	2	0	BL SPR	ART	SD
02-00	22	063	20-W	000	26	122	1	006	BL SPR	5.3	00	0	0	BL SPR	ART	SD
*08-00	32	063	22-W	000	28	120	2	022	BL SPR	10.1	00	0	0	BL SPR	ART	SD
02-00	05	062	19-W	000	26	115	1	010	BL SPR	6.0	00	0	0	BL SPR	ART	SD
05-00	36	063	21-W	000	39	118	3	006	BL SPR	17.0	00	0	0	BL SPR	ART	SD
*04-00	14	063	20-W	000	29	117	2	015	BL SPR	9.7	00	0	0	BL SPR	ART	SD
09-00	04	062	20-W	000	28	112	2	009	BL SPR	10.6	00	0	0	BL SPR	ART	SD
03-00	09	062	20-W	000	28	112	2	024	BL SPR	10.6	00	0	0	BL SPR	ART	SD
02-00	05	061	17-W	000	29	113	3	016	BL SPR	15.0	23	1	1	BL SPR	ART	SD
08-00	06	062	20-W	000	29	110	5	008	BL SPR	23.5	00	0	0	BL SPR	ART	SD
06-00	21	063	21-W	000	38	110	2	025	BL SPR	11.8	51	1	0	BL SPR	ART	SD
26-00	16	062	21-W	000	30	109	4	005	BL SPR	19.3	00	0	0	BL SPR	ART	SD
*15-00	27	063	22-W	000	28	114	2	015	BL SPR	8.6	00	0	0	BL SPR	ART	SD
25-00	16	062	21-W	000	31	108	6	003	BL SPR	27.7	51	1	0	BL SPR	ART	SD
04-00	27	063	20-W	000	33	112	2	009	BL SPR	10.3	00	0	0	BL SPR	ART	SD
03-00	03	063	20-W	000	30	111	2	011	BL SPR	10.0	40	2	0	BL SPR	ART	SD
*08-00	22	063	22-W	000	31	112	4	057	BL SPR	17.6	00	0	0	BL SPR	ART	SD
14-00	32	063	22-W	000	29	112	2	037	BL SPR	9.2	00	0	0	BL SPR	ART	SD
07-00	34	064	20-W	000	27	111	2	037	BL SPR	11.6	00	0	0	BL SPR	ART	SD
11-00	01	061	19-W	000	28	107	2	015	BL SPR	10.1	00	0	0	BL SPR	ART	SD
03-00	14	063	21-W	000	42	110	3	003	BL SPR	16.0	00	0	0	BL SPR	ART	SD
15-00	08	062	17-W	000	38	104	2	044	BL SPR	8.4	23	2	0	BL SPR	ART	SD
06-00	11	062	21-W	000	35	104	5	040	BL SPR	23.2	51	1	1	BL SPR	ART	SD
13-00	15	063	21-W	000	34	103	2	020	BL SPR	8.7	51	1	0	BL SPR	ART	SD
04-00	28	063	22-W	000	32	108	3	012	BL SPR	9.0	00	0	0	BL SPR	ART	SD
17-00	27	064	22-W	000	43	108	4	031	BL SPR	16.0	60	2	0	BL SPR	ART	SD
03-00	17	063	22-W	000	35	107	4	026	BL SPR	20.4	51	1	0	BL SPR	ART	SD
09-00	18	063	22-W	000	34	107	2	030	BL SPR	12.2	60	2	0	BL SPR	ART	SD
03-00	33	064	20-W	000	42	106	6	004	BL SPR	31.3	40	2	0	BL SPR	ART	SD
09-00	36	062	19-W	000	35	103	5	019	BL SPR	21.0	00	0	0	BL SPR	ART	SD
05-00	23	063	21-W	000	31	106	3	031	BL SPR	14.0	00	0	0	BL SPR	ART	SD
01-00	20	063	22-W	000	35	104	5	004	BL SPR	23.6	00	0	0	BL SPR	ART	SD
*07-00	15	063	22-W	000	36	104	3	025	BL SPR	14.0	00	0	0	BL SPR	ART	SD
01-00	22	063	22-W	000	31	103	5	025	BL SPR	22.8	00	0	0	BL SPR	ART	SD
09-00	30	064	21-W	000	40	103	4	008	BL SPR	17.8	00	0	0	BL SPR	ART	SD
*04-00	13	064	21-W	000	34	101	4	018	BL SPR	20.5	00	0	0	BL SPR	ART	SD
08-00	27	063	22-W	000	33	101	2	046	BL SPR	11.2	00	0	0	BL SPR	ART	SD
*01-00	19	063	22-W	000	38	100	5	015	BL SPR	23.4	00	0	0	BL SPR	ART	SD
*12-00	28	063	22-W	000	35	100	4	010	BL SPR	20.1	00	0	0	BL SPR	ART	SD

TOTAL STANDS 55 TOTAL ACRES 1020

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Tamarack

Rotation Age (years) - 100
 Current Clearcut Base (acres) - 802
 Ten Year Allowable Cut (acres) - 80
 Ten Yr. Proposed Clearcut (acres) - 55

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS		
													SPECIES	METHOD	
12-00	22	062	17-W	000	38	122	1	039	TMRACK	2.8	99	3	2	TMRACK	NAT SD
03-00	35	062	17-W	000	28	112	1	023	TMRACK	3.0	57	1	0	TMRACK	NAT SD
15-00	34	062	17-W	000	26	108	1	016	TMRACK	2.3	42	3	3	TMRACK	NAT SD
07-00	28	063	22-W	000	44	112	1	085	TMRACK	4.6	00	0	0	TMRACK	NAT SD
03-00	06	062	21-W	000	45	105	1	029	TMRACK	3.0	28	2	0	TMRACK	NAT SD
02-00	32	063	22-W	000	40	102	1	011	TMRACK	1.6	00	0	0	TMRACK	NAT SD
10-00	15	063	21-W	000	24	062	2	004	TMRACK	0.8	00	0	0	TMRACK	NAT SD
06-00	28	064	21-W	000	50	018	1	038	TMRACK	0.0	00	0	0	TMRACK	ART SD
11-00	29	062	20-W	000	33	014	1	025	TMRACK	0.6	00	0	0	TMRACK	ART SD
04-00	20	062	20-W	000	29	013	2	059	TMRACK	0.5	00	0	0	TMRACK	ART SD
TOTAL STANDS		10	TOTAL ACRES		329										

LISTING OF ALL STANDS TO BE RESERVED

* - Marginally commercial stand with low site index that may be managed as part of the clear cut base in the future.

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	BASAL	
													AREA	
*04-00	14	064	21-W	000	23	026	2	031	TMRACK	0.0	00	0	0	047
*05-00	25	062	17-W	000	28	013	2	033	TMRACK	0.7	00	0	0	020
*14-00	26	062	17-W	000	28	013	2	029	TMRACK	0.7	00	0	0	020
*10-00	35	062	17-W	000	25	119	1	004	TMRACK	2.3	42	1	1	053
*07-00	36	062	17-W	000	25	119	1	004	TMRACK	2.3	42	1	1	053
TOTAL STANDS		5	TOTAL ACRES		101									

LISTING OF ALL STANDS TO BE REGENERATED AFTER SALVAGE

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS		
													SPECIES	METHOD	
03-00	26	064	22-W	000	38	101	2	017	TMRACK	7.3	60	2	0	TMRACK	ART SD
09-00	22	063	22-W	000	45	094	2	009	TMRACK	7.7	60	2	0	TMRACK	ART SD
07-00	27	063	22-W	000	42	093	2	022	TMRACK	7.0	60	2	0	TMRACK	ART SD
TOTAL STANDS		3		TOTAL ACRES		48									

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

* - Acreage listed is for part of stand to be harvested.

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS		
													SPECIES	METHOD	
09-00	15	063	22-W	000	34	117	3	014	TMRACK	15.1	00	0	0	TMRACK	NAT SD
01-00	21	063	21-W	000	48	111	3	007	TMRACK	14.0	51	2	0	TMRACK	NAT SD
04-00	28	064	21-W	000	47	112	3	007	TMRACK	14.7	00	0	0	TMRACK	NAT SD
03-00	23	064	21-W	000	60	110	4	006	TMRACK	10.3	99	2	0	TMRACK	NAT SD
08-00	30	064	21-W	000	56	102	6	011	TMRACK	27.5	40	2	0	TMRACK	ART SD
*09-00	27	064	22-W	000	39	096	2	010	TMRACK	8.0	00	0	0	TMRACK	NAT SD
TOTAL STANDS		6		TOTAL ACRES		55									

Northern White Cedar

Rotation Age (years) - 120
 Current Clearcut Base (acres) - 707
 Ten Year Allowable Cut (acres) - 59
 Ten Yr. Proposed Clearcut (acres) - 87

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS		
													SPECIES	METHOD	
02-00	03	061	19-W	000	26	075	2	005	WCEDAR	7.0	00	0	0	WCEDAR	PLANT
TOTAL STANDS		1		TOTAL ACRES		5									

LISTING OF ALL STANDS TO BE REGENERATED AFTER SALVAGE

													REGEN PLANS			
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD	
19-00	14	062	17-W	000	25	167	3	025	WCEDAR	9.3	28	3	0	TMRACK	PLANT	
TOTAL STANDS				1	TOTAL ACRES				25							

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

* - Acreage listed is for part of stand to be harvested.

													REGEN PLANS			
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD	
02-00	20	063	20-W	000	33	206	2	009	WCEDAR	5.0	00	0	0	WCEDAR	PLANT	
*03-00	03	064	21-W	000	30	207	3	015	WCEDAR	5.0	00	0	0	WCEDAR	PLANT	
*04-00	29	064	21-W	000	50	184	6	012	WCEDAR	11.8	00	0	0	WCEDAR	PLANT	
07-00	08	062	17-W	000	29	160	3	011	WCEDAR	6.0	28	3	0	WCEDAR	PLANT	
*10-00	32	063	22-W	000	24	153	3	010	WCEDAR	8.8	00	0	0	BL SPR	ART SD	
*01-00	01	062	18-W	000	25	148	2	010	WCEDAR	8.3	28	4	1	WCEDAR	PLANT	
*08-00	28	063	22-W	000	21	147	2	010	WCEDAR	7.8	00	0	0	TMRACK	NAT SD	
*02-00	02	061	17-W	000	25	149	2	010	WCEDAR	11.8	00	0	0	TMRACK	ART SD	
TOTAL STANDS				8	TOTAL ACRES				87							

LISTING OF ALL STANDS TO BE RESERVED

													BASAL			
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	AREA		
08-00	04	061	17-W	000	25	169	5	084	WCEDAR	17.1	40	4	0	190		
05-00	28	063	22-W	000	20	089	2	018	WCEDAR	4.8	00	0	0	135		
04-00	34	063	22-W	000	19	132	2	004	WCEDAR	5.3	00	0	0	120		
01-00	31	063	22-W	000	21	117	2	083	WCEDAR	8.1	00	0	0	105		
06-00	30	063	22-W	000	21	117	2	149	WCEDAR	8.1	00	0	0	105		
06-00	27	063	22-W	000	23	143	2	006	WCEDAR	7.3	40	4	0	093		
09-00	29	063	22-W	000	19	104	1	011	WCEDAR	5.0	00	0	0	093		
03-00	34	064	20-W	000	23	092	1	010	WCEDAR	3.3	40	2	0	053		
17-00	14	062	17-W	000	24	170	2	007	WCEDAR	7.7	28	2	0	147		
11-00	22	063	22-W	000	19	135	3	008	WCEDAR	5.8	00	0	0	117		
14-00	06	062	21-W	000	23	108	2	009	WCEDAR	3.1	28	3	0	053		
TOTAL STANDS				11	TOTAL ACRES				389							

Upland Black Spruce

Rotation Age (years) - 70
 Current Clearcut Base (acres) - 12
 Ten Year Allowable Cut (acres) - 1.7
 Ten Yr. Proposed Clearcut (acres) - 12

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

ST-NBR	SCIN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS		
													SPECIES	METHOD	
09-00	35	062	17-W	000	46	107	5	009	BL SPR	11.2	42	1	0	J PINE	PLANT
04-00	25	062	18-W	000	45	076	4	003	BL SPR	7.3	51	3	0	WH SPR	PLANT
TOTAL STANDS		2	TOTAL ACRES		12										

Cutover Area

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

ST-NBR	SCIN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS		
													SPECIES	METHOD	
20-00	34	064	20-W	000	48	006	0	014	NONE	0.0	00	0	0	ASPEN	UNDERS
07-00	19	063	20-W	000	25	006	0	004	NONE	0.0	00	0	0	BL SPR	UNDERS
03-10	13	063	20-W	000	65	006	0	004	NONE	0.0	00	0	0	ASPEN	UNDERS
05-10	36	063	21-W	000	39	006	0	004	NONE	0.0	00	0	0	BL SPR	UNDERS
02-10	33	063	20-W	000	64	005	0	004	NONE	0.0	00	0	0	N PINE	UNDERS
19-10	21	063	22-W	000	34	005	0	010	NONE	0.0	00	0	0	BL SPR	UNDERS
25-00	35	063	20-W	000	00	006	0	005	NONE	0.0	00	0	0	N PINE	UNDERS
06-10	35	063	20-W	000	51	003	0	015	NONE	0.0	00	0	0	N PINE	PLANT
04-10	20	063	21-W	000	28	002	0	006	NONE	0.0	00	0	0	BL SPR	UNDERS
07-00	23	063	21-W	000	47	002	0	005	NONE	0.0	00	0	0	WH SPR	PLANT
01-10	17	063	22-W	000	30	005	0	007	NONE	0.0	00	0	0	BL SPR	UNDERS
17-10	21	063	22-W	000	39	005	0	006	NONE	0.0	00	0	0	BL SPR	UNDERS
16-10	36	063	20-W	000	72	003	0	037	NONE	0.0	00	0	0	ASPEN	UNDERS
19-10	36	063	20-W	000	72	003	0	017	NONE	0.0	00	0	0	ASPEN	UNDERS
07-10	14	063	21-W	000	27	002	0	004	NONE	0.0	00	0	0	BL SPR	UNDERS
08-10	27	063	22-W	000	33	004	0	017	NONE	0.0	00	0	0	BL SPR	UNDERS
15-10	21	063	22-W	000	41	005	0	005	NONE	0.0	00	0	0	BL SPR	UNDERS
11-00	14	063	21-W	000	34	002	0	010	NONE	0.0	00	0	0	BL SPR	UNDERS
08-10	35	063	20-W	000	73	003	0	007	NONE	0.0	00	0	0	ASPEN	UNDERS
03-10	17	063	22-W	000	35	005	0	006	NONE	0.0	00	0	0	BL SPR	UNDERS
05-00	36	063	20-W	000	00	003	0	021	NONE	0.0	00	0	0	WH SPR	UNDERS
04-00	29	063	20-W	000	34	005	0	007	NONE	0.0	00	0	0	BL SPR	UNDERS
05-00	35	063	20-W	000	00	003	0	013	NONE	0.0	00	0	0	N PINE	PLANT
17-00	26	063	21-W	000	38	004	0	011	NONE	0.0	00	0	0	BL SPR	UNDERS
24-00	35	063	20-W	000	00	006	0	005	NONE	0.0	00	0	0	N PINE	UNDERS
23-00	35	063	20-W	000	00	006	0	005	NONE	0.0	00	0	0	N PINE	UNDERS
05-00	27	063	20-W	000	45	002	0	004	NONE	0.0	00	0	0	BL SPR	ART SD

02-00	25	063	20-W	000	41	003	0	014	NONE	0.0	00	0	0	ASH	UNDERS
04-00	10	064	21-W	000	58	005	0	008	NONE	0.0	00	0	0	TMRACK	UNDERS
10-00	10	064	21-W	000	00	003	0	011	NONE	0.0	00	0	0	WH SPR	PLANT
11-00	22	064	21-W	000	64	005	0	007	NONE	0.0	00	0	0	WH SPR	UNDERS
12-00	10	064	21-W	000	58	005	0	010	NONE	0.0	00	0	0	TMRACK	UNDERS
14-10	36	064	22-W	000	00	004	0	043	NONE	0.0	00	0	0	ASPEN	UNDERS
10-00	30	062	21-W	000	00	002	0	004	NONE	0.0	00	0	0	BL SPR	UNDERS
12-10	36	062	21-W	000	00	001	0	003	NONE	0.0	00	0	0	BL SPR	NAT SD
22-00	15	063	21-W	000	00	002	0	005	NONE	0.0	00	0	0	ASPEN	UNDERS
04-00	22	063	21-W	000	00	002	0	004	NONE	0.0	00	0	0	BL SPR	UNDERS
08-00	16	063	21-W	000	00	002	0	005	NONE	0.0	00	0	0	BL SPR	UNDERS
06-00	22	063	21-W	000	00	002	0	008	NONE	0.0	00	0	0	BL SPR	UNDERS
19-00	15	063	21-W	000	00	002	0	011	NONE	0.0	00	0	0	BL SPR	UNDERS
06-00	12	063	21-W	000	00	002	0	002	NONE	0.0	00	0	0	BL SPR	PLANT
05-00	25	062	18-W	000	00	001	0	005	NONE	0.0	00	0	0	ASPEN	UNDERS
17-00	22	062	20-W	000	00	001	0	003	NONE	0.0	00	0	0	WH SPR	PLANT
13-00	04	062	20-W	000	00	001	0	008	NONE	0.0	00	0	0	BL SPR	ART SD
01-00	34	062	20-W	000	00	002	0	016	NONE	0.0	00	0	0	BL SPR	UNDERS
02-00	16	062	20-W	000	00	001	0	011	NONE	0.0	00	0	0	ASPEN	UNDERS
02-00	10	062	20-W	000	00	002	0	009	NONE	0.0	00	0	0	BL SPR	UNDERS
08-00	16	062	20-W	000	00	002	0	009	NONE	0.0	00	0	0	ASPEN	UNDERS
15-00	22	062	20-W	000	00	001	0	003	NONE	0.0	00	0	0	ASPEN	UNDERS
11-00	10	062	21-W	000	00	002	0	007	NONE	0.0	00	0	0	BL SPR	UNDERS
02-10	36	062	18-W	000	00	001	0	002	NONE	0.0	00	0	0	ASPEN	UNDERS
09-10	10	062	21-W	000	00	001	0	004	NONE	0.0	00	0	0	BL SPR	UNDERS
03-00	25	062	18-W	000	00	001	0	017	NONE	0.0	00	0	0	ASPEN	UNDERS
16-00	06	062	21-W	000	00	001	0	007	NONE	0.0	00	0	0	BL SPR	NAT SD
12-00	36	062	18-W	000	00	002	0	019	NONE	0.0	00	0	0	ASPEN	UNDERS
06-00	16	062	20-W	000	00	002	0	013	NONE	0.0	00	0	0	ASPEN	UNDERS
03-10	36	062	18-W	000	00	001	0	016	NONE	0.0	00	0	0	ASPEN	UNDERS
04-10	19	062	17-W	000	00	001	0	052	NONE	0.0	00	0	0	ASPEN	UNDERS
02-00	06	061	18-W	000	35	002	0	006	NONE	0.0	00	0	0	BL SPR	UNDERS
04-00	17	062	17-W	000	00	002	0	012	NONE	0.0	00	0	0	BL SPR	UNDERS
06-00	22	062	17-W	000	00	002	0	007	NONE	0.0	00	0	0	BL SPR	NAT SD
10-00	19	062	17-W	000	00	002	0	007	NONE	0.0	00	0	0	N PINE	UNDERS
05-00	01	061	19-W	000	00	001	0	007	NONE	0.0	00	0	0	ASH	UNDERS
07-00	19	062	17-W	000	00	001	0	007	NONE	0.0	00	0	0	ASH	UNDERS

TOTAL STANDS 64 TOTAL ACRES 635

Upland Grass

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

											REGEN PLANS				
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD
21-00	24	064	21-W	000	00	007	0	013	NONE	0.0	00	0	0	WH SPR	PLANT
11-00	36	064	22-W	000	00	007	0	007	NONE	0.0	00	0	0	WH SPR	PLANT
05-00	18	063	22-W	000	00	007	0	005	NONE	0.0	00	0	0	WH SPR	PLANT

TOTAL STANDS 3 TOTAL ACRES 25

Lowland Brush

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS		
													SPECIES	METHOD	
12-00	23	062	17-W	000	36	008	0	023	BALSAM	0.3	00	0	0	TMRACK	NAT SD
24-00	34	062	17-W	000	00	002	0	019	NONE	0.0	00	0	0	TMRACK	NAT SD
16-00	28	062	17-W	000	00	002	0	070	NONE	0.0	00	0	0	TMRACK	ART SD
06-00	01	061	19-W	000	00	002	0	018	NONE	0.0	00	0	0	TMRACK	ART SD
06-00	27	062	20-W	000	00	002	0	016	NONE	0.0	00	0	0	TMRACK	ART SD
06-00	10	062	21-W	000	00	002	0	020	NONE	0.0	00	0	0	TMRACK	PLANT
09-00	26	062	20-W	000	00	002	0	017	NONE	0.0	00	0	0	TMRACK	PLANT
02-00	17	062	20-W	000	00	002	0	027	NONE	0.0	00	0	0	TMRACK	ART SD
14-00	15	063	21-W	000	00	002	0	082	NONE	0.0	00	0	0	TMRACK	PLANT
10-00	26	063	21-W	000	00	007	0	036	NONE	0.0	00	0	0	TMRACK	ART SD
03-00	32	063	22-W	000	00	007	0	011	NONE	0.0	00	0	0	TMRACK	ART SD
05-00	28	064	21-W	000	00	006	0	092	NONE	0.0	00	0	0	TMRACK	PLANT
08-00	35	064	20-W	000	00	006	0	011	NONE	0.0	00	0	0	BL SPR	ART SD
12-00	28	064	21-W	000	00	006	0	059	NONE	0.0	00	0	0	TMRACK	ART SD
11-00	23	064	21-W	000	00	007	0	090	NONE	0.0	00	0	0	BL SPR	ART SD
08-00	33	064	20-W	000	00	006	0	086	NONE	0.0	00	0	0	BL SPR	ART SD
14-00	33	062	20-W	000	00	002	0	026	NONE	0.0	00	0	0	TMRACK	PLANT
05-00	05	062	20-W	000	00	002	0	022	NONE	0.0	00	0	0	TMRACK	ART SD
03-00	33	063	20-W	000	00	007	0	021	NONE	0.0	00	0	0	TMRACK	NAT SD
02-00	04	062	20-W	000	00	002	0	023	NONE	0.0	00	0	0	TMRACK	NAT SD
11-00	33	063	20-W	000	00	007	0	012	NONE	0.0	00	0	0	TMRACK	PLANT
06-00	26	062	21-W	000	00	002	0	026	NONE	0.0	00	0	0	BL SPR	PLANT
07-00	30	062	21-W	000	00	002	0	048	NONE	0.0	00	0	0	BL SPR	ART SD
10-00	10	062	21-W	000	00	002	0	034	NONE	0.0	00	0	0	TMRACK	NAT SD
01-00	29	064	22-W	000	00	007	0	022	NONE	0.0	00	0	0	BL SPR	ART SD
04-00	28	064	22-W	000	00	007	0	010	NONE	0.0	00	0	0	BL SPR	ART SD
08-00	35	064	21-W	000	00	006	0	043	NONE	0.0	00	0	0	BL SPR	ART SD

TOTAL STANDS 27 TOTAL ACRES 964

Upland Brush

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS		
													SPECIES	METHOD	
08-00	28	063	20-W	000	00	007	0	008	NONE	0.0	00	0	0	WH SPR	PLANT
07-00	31	064	20-W	000	00	006	0	012	NONE	0.0	00	0	0	WH SPR	PLANT
24-00	24	064	21-W	000	00	007	0	019	NONE	0.0	00	0	0	TMRACK	PLANT

TOTAL STANDS 3 TOTAL ACRES 39

LISTING OF ALL STANDS TO BE RESERVED

ST-NBR SCTN TWN RNGE MGMT SI AGE DEN ACRES MA-SPEC VOL DAM % M

29-00 24 064 21-W 000 00 007 0 005 NONE 0.0 00 0 0

TOTAL STANDS 1 TOTAL ACRES 5
=====

EMBARRASS RMU 7

EXISTING CONDITION

Table B.30 Embarrass RMU Timber Summary

Type	Acres	% Of Area	Avg Site Index	Avg Updated Age	% Over Rot. Age	% At High Risk
Ash	615	3	40	97	56	1
Lowland Hardwoods	32	0	41	104	100	0
Aspen	7331	31	61	45	58	15
Birch	2200	9	51	67	80	10
Balm of Gilead	137	1	57	58	93	0
White Pine	36	0	47	115	50	0
Red Pine	869	4	54	58	4	0
Jack Pine	1115	5	58	54	64	7
White Spruce	113	0	53	22	0	0
Balsam Fir	674	3	49	54	70	3
Black Spr. Lowland	3632	15	33	64	14	1
Tamarack	588	2	40	76	10	0
N. White Cedar	565	2	27	115	39	5
Black Spr. Upland	81	0	48	76	58	0
Cutover Area	563	2				
Lowland Grass	69	0				
Upland Grass	11	0				
Lowland Brush	1777	7				
Upland Brush	21	0				
Unproductive Forest	2339	10				
Non Forest	1191	5				
Total	23,959	100				

COVER TYPE COMPOSITION GOALS

Based on existing cover type conditions, timber markets, wildlife concerns, land administration proposals, and economic and biologic limitations and potentials, the following composition goals have been established for this unit.

Table B.31 Embarrass RMU Cover Type Composition Goals

Cover Type	Present		Ten Year		Long-term	
	Acres	%	Acres	%	Acres	%
Ash	615	2	615	2	615	2
Lowland Hardwoods	32	0	32	0	32	0
Aspen	7331	31	7635	32	6735	28
Birch	2200	9	1508	6	1508	6
Balm of Gilead	137	1	119	0	119	0
White Pine	36	0	54	0	54	0
Norway Pine	869	4	1499	6	1769	7
Jack Pine	1115	5	1321	6	1501	6
White Spruce	113	0	394	2	844	4
Balsam Fir	674	3	475	2	475	2
Black Spruce Lowland	3632	15	3823	16	3823	16
Tamarack	588	2	700	3	700	3
N. White Cedar	565	2	565	2	565	2
Black Spruce Upland	81	0	38	0	38	0
Cutover Area	563	2	19	0	19	0
Lowland Grass	69	0	69	0	69	0
Upland Grass	11	0	11	0	11	0
Lowland Brush	1777	7	1543	6	1543	6
Upland Brush	21	0	9	0	9	0
Unproductive Forest	2339	10	2339	10	2339	10
Non Forest	1191	5	1191	5	1191	5
Total	23,959	100	23,959	100	23,959	100

MANAGEMENT PRESCRIPTIONS

Table B.32 summarizes the management prescriptions by type for the next ten years in the Embarrass RMU. Tables B.33 and B.34 outline regeneration plans for the next ten years. Table B.35 projects harvest levels by type in the future. These tables are followed by detailed lists of stands in each cover type to receive various treatments in the next ten years.

Table B.32 Management Prescriptions By Cover Type - Embarrass RMU

COVER TYPE	CLEAR CUT		THINNING		ALL-AGED		SALVAGE		REGEN		TOTAL	
	STD	ACRES	STD	ACRES	STD	ACRES	STD	ACRES	STD	ACRES	STD	ACRES
ASH	4	67	0	0	0	0	3	23	0	0	7	90
ASPEN	91	2207	0	0	0	0	13	233	4	31	108	2471
PBIRCH	23	700	0	0	0	0	2	37	2	23	27	760
BALM	4	57	0	0	0	0	1	9	0	0	5	66
W PINE	1	18	0	0	0	0	0	0	0	0	1	18
N PINE	5	62	22	256	0	0	0	0	0	0	27	318
J PINE	22	373	0	0	0	0	0	0	2	35	24	408
BALSAM	9	129	0	0	0	0	8	85	1	39	18	253
BL SPR	16	272	0	0	0	0	12	119	6	96	34	487
TMRACK	1	8	0	0	0	0	2	24	3	56	6	88
WCEDAR	1	30	0	0	0	0	0	0	0	0	1	30
UPBSPR	3	31	0	0	0	0	0	0	0	0	3	31
CUT	0	0	0	0	0	0	0	0	30	544	30	544
LOGRAS	0	0	0	0	0	0	0	0	0	0	0	0
UPGRAS	0	0	0	0	0	0	0	0	0	0	0	0
LOBRSH	0	0	0	0	0	0	0	0	10	234	10	234
UPBRSH	0	0	0	0	0	0	0	0	2	12	2	12
TOTAL	180	3954	22	256	0	0	41	530	60	1070	303	5810

Table B.33 Regeneration Plans for Lands Harvested, Salvaged, and Regenerated without Harvest by Type
Embarrass RMU
(Acres)

Regen. Method & Spp.	Current Cover Type														Tot.	
	Ash	Bi	Asp	BG	WP	NP	JP	BF	BSL	Tam	Ced	BSU	COA	LB		UB
<u>Natural</u>																
Ash	90															90
Asp		309	2112			24	17	93					163			2718
Bi		68														68
BG				48												48
WS													54			54
Tam									88					29		117
BSL									108			4	19			131
BF		7						5					30			42
JP							36						119			155
NP							35	8					96		5	144
<u>Plant</u>																
NP		180	223			26	187						22			638
JP		10	121										9		7	147
WS		6	15			12		147				15	32			227
BS														172		172
Tam														33		33
Ced												30				30
WP				18	18											36
<u>Art. Seed</u>																
NP		13														13
JP		167					133						12			312
BS									379							379
Total	90	760	2471	66	18	62	408	253	487	88	30	31	544	234	12	5554

Table B.34 Summary of Artificial Regeneration Needs
Embarrass RMU
(Acres by Species and Regeneration Method)

SPECIES	PLANT	SEED
N PINE	638	13
J PINE	147	312
WH SPR	227	0
W PINE	36	0
BL SPR	172	379
WCEDAR	30	0
TMRACK	33	0
TOTAL	1283	704

Table B.35 Projected Harvest Levels by Type, 1986 - 2036
and Estimated Sustained Yield with Year of Regulation

Type	Clearcut Acres by 10 year Period					Sustain yield	
	1986-95	1996-05	2006-15	2016-25	2026-35	Acres	Year
Ash	67	68	68	68	68	68	2006
Aspen	2207	1362	1362	802	1109	1362	2034
Birch	700	244	244	244	244	244	1996
Balm G	57	25	25	21	10	25	2036
W Pine	18	0	4	4	4	5	2076
N Pine	62	118	138	80	88	161	2076
J Pine	373	227	227	58	50	241	2036
Wh Spr	0	0	33	0	0	NA	NA
Balsam	129	95	95	95	95	95	1996
Bl Spr Lo	272	276	276	276	276	276	1996
Tam	8	60	60	60	60	60	1996
W Cedar	30	44	44	44	44	44	1996
Bl Spr Up	31	34	0	0	0	NA	NA
Total	3,954	2,553	2,576	1,752	2,048	2,581	

Ash

Rotation Age (years) - 90
Current Clearcut Base (acres) - 592
Ten Year Allowable Cut (acres) - 65
Ten Yr. Proposed Clearcut (acres) - 67

LISTING OF ALL STANDS TO BE REGENERATED AFTER SALVAGE

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	M	REGEN PLANS		
													SPECIES	METHOD	
02-00	30	061	17-W	000	50	098	5	007	ASH	27.3	55	4	1	ASH	SPROUT
01-00	07	061	17-W	000	38	080	1	011	ASH	7.0	55	5	3	ASH	UNDERS
11-00	20	061	19-W	000	51	075	2	005	ASH	10.0	55	4	4	ASH	SPROUT
TOTAL STANDS		3	TOTAL ACRES		23										
		====			=====										

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

*Acreage listed is for part of stand to be harvested.

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	M	REGEN PLANS		
													SPECIES	METHOD	
05-00	18	061	17-W	000	38	114	4	010	ASH	12.0	00	0	0	ASH	SPROUT
03-00	34	061	18-W	000	41	110	3	008	ASH	10.3	00	0	0	ASH	SPROUT
01-00	16	061	19-W	000	46	101	4	039	ASH	16.3	00	0	0	ASH	SPROUT
*01-00	21	061	19-W	000	60	071	2	010	ASH	11.2	99	1	1	ASH	SPROUT
TOTAL STANDS		4	TOTAL ACRES		67										
		====			=====										

Aspen

Rotation Age (years) - 51
Current Clearcut Base (acres) - 6870
Ten Year Allowable Cut (acres) - 1347
Ten Yr. Proposed Clearcut (acres) - 2207

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

*Acreage listed is for part of stand to be harvested.

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	M	REGEN PLANS		
													SPECIES	METHOD	
03-00	05	061	13-W	000	64	050	3	007	ASPEN	15.0	26	3	2	ASPEN	SPROUT
01-00	28	061	13-W	000	63	018	1	006	ASPEN	0.3	00	0	0	WH SPR	PLANT

19-00	16	061	15-W	000	53	016	3	005	ASPEN	1.1	25	1	0	N	PINE	PLANT
13-00	09	061	14-W	007	54	015	1	013	ASPEN	0.3	00	0	0	N	PINE	PLANT

TOTAL STANDS	4	TOTAL ACRES	31
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LISTING OF ALL STANDS TO BE REGENERATED AFTER SALVAGE

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	REGEN PLANS			
												%	M	SPECIES	METHOD
08-00	16	061	19-W	000	54	080	3	037	ASPEN	7.7	27	4	2	ASPEN	SPROUT
05-00	16	060	16-W	000	68	080	2	007	ASPEN	4.7	26	5	3	ASPEN	SPROUT
11-00	16	061	16-W	000	46	083	2	026	ASPEN	8.8	40	4	0	ASPEN	SPROUT
04-00	16	061	16-W	000	58	069	1	031	ASPEN	3.7	99	5	0	ASPEN	UNDERS
05-00	24	061	14-W	000	54	060	2	004	ASPEN	6.0	26	2	1	ASPEN	SPROUT
05-00	16	061	16-W	000	53	061	1	007	ASPEN	4.0	25	3	2	ASPEN	SPROUT
01-00	05	061	16-W	000	47	064	3	029	ASPEN	12.2	40	4	0	ASPEN	SPROUT
*04-00	04	061	13-W	000	48	058	3	044	ASPEN	11.1	26	3	2	N PINE	PLANT
10-00	36	061	13-W	000	48	054	5	010	ASPEN	23.3	25	5	2	N PINE	PLANT
11-00	16	061	17-W	000	41	046	2	017	ASPEN	5.3	27	4	2	ASPEN	SPROUT
03-00	13	061	13-W	000	60	047	4	005	ASPEN	16.3	27	4	2	ASPEN	SPROUT
17-00	36	061	13-W	000	47	046	1	007	ASPEN	5.7	25	5	2	ASPEN	SPROUT
05-00	28	061	13-W	000	61	031	2	009	ASPEN	0.8	00	0	0	WH SPR	PLANT
TOTAL STANDS	13	TOTAL ACRES	233												
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LISTING OF ALL STANDS TO BE RESERVED

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M
09-00	04	061	13-W	000	54	054	3	008	ASPEN	6.0	27	4	2
02-00	11	061	13-W	000	57	052	2	046	ASPEN	6.2	27	1	0
TOTAL STANDS	2	TOTAL ACRES	54										
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LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

* - Acreage listed is for part of stand to be harvested.
x - Stand is part of active sale prior to 1986.

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	REGEN PLANS			
												%	M	SPECIES	METHOD
07-00	35	061	19-W	000	64	090	6	020	ASPEN	23.5	27	4	0	ASPEN	SPROUT
15-00	16	060	16-W	000	68	087	5	005	ASPEN	18.0	27	5	2	ASPEN	SPROUT
02-00	16	060	16-W	000	69	085	2	006	ASPEN	2.0	26	5	3	ASPEN	SPROUT
10-00	16	061	19-W	000	70	082	8	005	ASPEN	27.0	26	1	0	ASPEN	SPROUT
02-00	09	061	14-W	007	54	079	8	034	ASPEN	30.4	26	3	1	ASPEN	SPROUT
02-00	30	061	14-W	007	58	084	5	025	ASPEN	22.5	00	0	0	ASPEN	SPROUT

07-00	16	060	16-W	000	68	080	6	006	ASPEN	24.7	26	4	2	ASPEN	SPROUT
08-00	16	060	16-W	000	68	080	3	039	ASPEN	8.4	26	4	2	ASPEN	SPROUT
*04-00	16	061	19-W	000	60	073	4	026	ASPEN	8.5	27	3	1	ASPEN	SPROUT
19-00	09	061	14-W	007	59	075	3	005	ASPEN	7.8	27	4	0	ASPEN	SPROUT
28-00	09	061	14-W	007	59	075	3	011	ASPEN	7.8	27	4	0	ASPEN	SPROUT
01-00	36	061	15-W	000	49	074	4	016	ASPEN	11.7	27	4	3	ASPEN	SPROUT
13-00	16	061	19-W	000	59	074	5	006	ASPEN	13.3	26	3	1	ASPEN	SPROUT
*05-00	36	061	16-W	000	60	079	5	010	ASPEN	20.4	28	2	0	ASPEN	SPROUT
06-00	35	061	19-W	000	72	072	5	016	ASPEN	17.0	27	4	1	ASPEN	SPROUT
*02-00	34	061	13-W	000	67	070	7	006	ASPEN	16.7	26	2	0	ASPEN	SPROUT
09-00	09	061	14-W	007	60	068	5	019	ASPEN	13.1	27	3	2	ASPEN	SPROUT
09-00	08	061	14-W	007	60	068	6	021	ASPEN	13.1	27	3	2	ASPEN	SPROUT
02-00	16	061	14-W	007	57	074	9	047	ASPEN	18.8	15	4	0	ASPEN	SPROUT
*18-00	16	061	15-W	000	53	068	6	024	ASPEN	24.0	27	4	1	N PINE	PLANT
06-10	36	060	15-W	000	66	068	1	041	ASPEN	4.5	00	0	0	ASPEN	SPROUT
02-00	36	060	15-W	000	60	073	4	008	ASPEN	5.8	00	0	0	ASPEN	SPROUT
01-00	09	061	13-W	000	53	068	2	097	ASPEN	3.7	26	2	1	N PINE	PLANT
01-00	35	061	16-W	000	58	073	4	030	ASPEN	9.6	26	4	1	ASPEN	SPROUT
09-00	33	061	13-W	000	58	067	6	008	ASPEN	18.0	00	0	0	ASPEN	SPROUT
*14-00	36	061	13-W	000	49	068	3	030	ASPEN	12.3	27	4	2	N PINE	PLANT
03-00	34	061	14-W	000	55	067	3	010	ASPEN	9.8	26	3	1	ASPEN	SPROUT
03-00	22	061	14-W	000	65	072	4	030	ASPEN	12.2	40	2	0	ASPEN	SPROUT
*15-00	27	061	14-W	000	62	066	4	054	ASPEN	14.8	27	2	1	ASPEN	SPROUT
*08-00	16	061	15-W	000	52	066	4	062	ASPEN	7.2	27	4	3	ASPEN	SPROUT
06-00	18	061	17-W	000	59	067	6	004	ASPEN	13.0	00	0	0	ASPEN	SPROUT
15-00	36	061	17-W	000	58	066	8	066	ASPEN	15.5	26	5	1	ASPEN	SPROUT
01-00	21	061	14-W	000	52	071	5	031	LT ASP	7.7	00	0	0	J PINE	ART SD
23-00	34	061	13-W	000	60	065	4	009	ASPEN	11.3	27	2	1	ASPEN	SPROUT
*09-00	27	061	13-W	000	57	065	4	006	ASPEN	14.5	27	1	0	ASPEN	SPROUT
06-00	26	061	14-W	000	57	064	4	023	ASPEN	20.0	00	0	0	J PINE	ART SD
19-00	16	061	19-W	000	60	065	4	031	ASPEN	10.3	26	2	1	ASPEN	SPROUT
*02-00	16	061	13-W	000	60	065	4	008	ASPEN	14.0	26	2	0	ASPEN	SPROUT
*02-00	21	061	13-W	000	65	064	5	040	ASPEN	21.8	27	3	1	ASPEN	SPROUT
06-00	36	060	15-W	000	50	069	7	013	ASPEN	28.4	00	0	0	ASPEN	SPROUT
01-00	16	061	18-W	000	68	062	5	029	ASPEN	14.3	27	3	0	ASPEN	SPROUT
09-00	36	061	17-W	000	73	063	6	083	ASPEN	13.3	27	4	1	ASPEN	SPROUT
17-00	32	061	13-W	000	75	064	5	018	ASPEN	15.7	55	2	1	ASPEN	SPROUT
01-00	08	061	14-W	007	55	069	5	028	ASPEN	17.3	40	2	0	ASPEN	SPROUT
01-00	35	061	19-W	000	74	062	5	008	ASPEN	24.7	27	4	0	ASPEN	SPROUT
*03-00	20	061	17-W	000	63	063	5	061	ASPEN	19.4	27	3	1	ASPEN	SPROUT
21-00	36	060	16-W	000	68	064	4	009	ASPEN	10.0	27	2	1	ASPEN	SPROUT
19-00	36	060	16-W	000	58	063	4	008	ASPEN	14.5	26	2	1	ASPEN	SPROUT
12-00	16	060	16-W	000	71	063	6	017	ASPEN	22.0	27	3	2	ASPEN	SPROUT
14-00	16	060	15-W	000	58	061	3	024	ASPEN	9.5	27	3	2	ASPEN	SPROUT
16-00	16	060	15-W	000	58	061	4	035	ASPEN	11.8	27	2	1	ASPEN	SPROUT
17-00	16	061	17-W	000	58	061	5	011	ASPEN	19.0	27	5	2	ASPEN	SPROUT
17-00	09	061	14-W	007	53	061	4	039	ASPEN	8.2	26	2	1	ASPEN	SPROUT
*01-00	23	061	14-W	000	52	061	3	012	ASPEN	8.0	00	0	0	J PINE	ART SD
02-00	30	061	19-W	000	73	060	6	019	ASPEN	25.3	26	2	1	ASPEN	SPROUT
06-00	31	061	19-W	000	73	060	5	004	ASPEN	21.9	26	2	1	ASPEN	SPROUT
14-00	27	061	19-W	000	67	059	4	012	ASPEN	10.3	27	4	0	ASPEN	SPROUT
07-00	21	061	14-W	000	57	066	3	139	ASPEN	5.0	00	0	0	ASPEN	SPROUT
03-00	03	061	14-W	007	71	060	7	012	ASPEN	22.0	27	5	0	ASPEN	SPROUT
*09-00	36	061	14-W	000	64	066	2	043	ASPEN	9.1	50	2	0	ASPEN	SPROUT

06-00	04	061	14-W	007	53	060	3	013	ASPEN	11.0	27	3	1	ASPEN	SPROUT
*01-00	26	061	14-W	000	55	060	3	012	ASPEN	13.5	27	2	0	ASPEN	SPROUT
15-00	28	061	13-W	000	80	060	6	019	ASPEN	29.3	27	1	1	ASPEN	SPROUT
*05-00	16	061	18-W	000	65	059	5	020	ASPEN	21.0	27	3	2	ASPEN	SPROUT
*10-00	16	061	16-W	000	55	066	4	060	ASPEN	13.1	26	2	0	ASPEN	SPROUT
17-00	36	060	16-W	000	58	060	6	010	ASPEN	17.3	25	1	1	ASPEN	SPROUT
26-00	36	060	16-W	000	58	060	2	012	ASPEN	8.2	27	3	1	ASPEN	SPROUT
*06-00	36	061	16-W	000	65	065	4	005	ASPEN	11.0	00	0	0	ASPEN	SPROUT
01-00	22	061	17-W	000	71	059	4	022	ASPEN	16.0	27	5	1	ASPEN	SPROUT
21-00	16	061	17-W	000	57	059	4	039	ASPEN	14.6	27	5	2	ASPEN	SPROUT
01-00	36	061	18-W	000	71	058	5	038	ASPEN	18.2	27	4	2	ASPEN	SPROUT
16-00	16	061	14-W	007	65	065	8	008	ASPEN	31.0	15	2	0	ASPEN	SPROUT
*06-00	23	061	14-W	000	60	059	4	022	ASPEN	14.8	00	0	0	ASPEN	SPROUT
05-00	36	061	14-W	000	54	064	2	020	ASPEN	7.0	00	0	0	ASPEN	SPROUT
*09-00	21	061	14-W	000	65	064	4	040	ASPEN	9.4	00	0	0	ASPEN	SPROUT
03-00	36	061	15-W	000	51	058	5	061	ASPEN	10.8	27	4	1	ASPEN	SPROUT
01-00	10	061	17-W	000	59	064	4	041	ASPEN	14.2	15	2	0	ASPEN	SPROUT
01-00	32	061	17-W	000	70	064	7	008	ASPEN	22.0	00	0	0	ASPEN	SPROUT
02-00	34	061	18-W	000	63	057	4	009	ASPEN	13.7	27	3	1	ASPEN	SPROUT
02-00	24	061	17-W	000	65	057	6	029	ASPEN	14.9	27	4	1	ASPEN	SPROUT
10-00	36	061	18-W	000	75	055	5	021	ASPEN	24.8	25	3	2	ASPEN	SPROUT
04-00	27	061	19-W	000	56	055	5	009	ASPEN	13.5	27	4	0	ASPEN	SPROUT
x07-00	09	061	13-W		51	053	3	030	ASPEN	10.8				JPINE	ART. SD
x04-00	36	061	13-W		62	056	2	015	ASPEN	9.2				ASPEN	SPROUT
x07-00	08	061	14-W		55	061	7	055	ASPEN	29.3				ASPEN	SPROUT
x03-00	13	061	14-W		55	056	5	050	ASPEN	14.0				ASPEN	SPROUT
x05-00	22	061	14-W		50	062	4	025	ASPEN	12.0				JPINE	ART. SD
x11-00	16	060	15-W		66	049	4	033	ASPEN	20.0				ASPEN	SPROUT
x03-00	36	060	15-W		50	047	3	008	ASPEN	9.0				ASPEN	SPROUT
x05-00	36	060	15-W		50	057	3	014	ASPEN	9.0				ASPEN	SPROUT
x05-00	20	061	17-W		67	055	6	019	ASPEN	22.6				ASPEN	SPROUT

TOTAL STANDS 91 TOTAL ACRES 2207

Birch

Rotation Age (years) - 61
 Current Clearcut Base (acres) - 2122
 Ten Year Allowable Cut (acres) - 347
 Ten Yr. Proposed Clearcut (acres) - 700

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

ST-NBR	SCIN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	M	REGEN PLANS		
													SPECIES	METHOD	
04-00	15	061	18-W	000	53	060	1	012	PBIRCH	2.6	30	4	3	N PINE	PLANT
17-00	36	061	19-W	000	36	015	3	011	PBIRCH	0.6	00	0	0	J PINE	ART SD

TOTAL STANDS 2 TOTAL ACRES 23

LISTING OF ALL STANDS TO BE REGENERATED AFTER SALVAGE

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	REGEN PLANS	
														SPECIES	METHOD
01-00	24	061	17-W	000	42	093	3	007	PBIRCH	9.7	00	0	0	BALSAM	UNDERS
18-00	36	061	19-W	000	36	053	1	030	PBIRCH	2.5	00	0	0	J PINE	ART SD
TOTAL STANDS		2	TOTAL ACRES		37										

LISTING OF ALL STANDS TO BE RESERVED

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M		
26-00	36	061	17-W	000	59	091	7	007	PBIRCH	15.2	28	5	1		
10-00	04	061	13-W	000	37	078	4	011	PBIRCH	8.5	30	3	1		
TOTAL STANDS		2	TOTAL ACRES		18										

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

- * - Acreage listed is for part of stand to be harvested.
- x - Stand is part of active sale prior to 1986.

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	REGEN PLANS	
														SPECIES	METHOD
16-00	24	061	17-W	000	49	123	2	026	PBIRCH	5.0	30	1	0	N PINE	PLANT
25-00	16	061	19-W	000	49	100	4	013	PBIRCH	10.5	00	0	0	PBIRCH	SPROUT
*23-00	36	061	17-W	000	59	091	7	035	PBIRCH	15.2	28	5	1	ASPEN	SPROUT
25-00	36	061	17-W	000	59	091	7	028	PBIRCH	15.2	28	5	1	ASPEN	SPROUT
04-00	16	060	16-W	000	53	088	3	010	ASPEN	10.3	00	0	0	ASPEN	SPROUT
09-00	36	061	19-W	000	45	085	3	010	PBIRCH	8.0	00	0	0	J PINE	PLANT
09-00	24	061	17-W	000	52	083	6	035	PBIRCH	17.8	30	3	0	N PINE	PLANT
*02-00	26	061	14-W	000	50	075	3	020	PBIRCH	10.3	00	0	0	J PINE	ART SD
03-00	26	061	14-W	000	51	075	3	021	PBIRCH	8.0	00	0	0	J PINE	ART SD
*07-00	14	061	14-W	000	55	073	4	096	PBIRCH	12.6	00	0	0	ASPEN	SPROUT
*16-00	10	061	14-W	000	57	071	6	020	PBIRCH	19.3	00	0	0	PBIRCH	SPROUT
*02-00	27	061	14-W	000	43	069	4	079	PBIRCH	10.2	00	0	0	N PINE	PLANT
04-00	26	061	14-W	000	50	068	5	013	PBIRCH	25.0	00	0	0	N PINE	ART SD
*25-00	09	061	14-W	007	48	066	3	040	PBIRCH	9.8	00	0	0	J PINE	ART SD
07-00	15	061	18-W	000	49	063	2	010	PBIRCH	4.7	40	1	0	N PINE	PLANT
*30-00	13	061	14-W	000	70	063	3	008	PBIRCH	6.3	00	0	0	J PINE	ART SD
02-00	03	061	14-W	007	55	062	3	020	PBIRCH	7.4	00	0	0	PBIRCH	SPROUT
*15-00	16	061	14-W	007	56	068	4	015	PBIRCH	6.2	15	2	0	PBIRCH	SPROUT
*04-00	23	061	14-W	000	52	061	5	085	PBIRCH	11.3	00	0	0	ASPEN	SPROUT
*02-00	22	061	14-W	000	52	064	4	055	PBIRCH	10.6	40	2	0	ASPEN	SPROUT

04-00	27	061	13-W	000	58	058	3	006	PBIRCH	11.0	00	0	0	WH	SPR	PLANT
*02-00	04	061	14-W	007	56	063	3	037	PBIRCH	7.7	40	2	0	J	PINE	ART SD
x22-00	13	061	14-W		52	057	1	018	PBIRCH	2.2				PICKOVER		NP PLANT

TOTAL STANDS 23 TOTAL ACRES 700
 =====

Balm of Gilead

Rotation Age (years) - 47
 Current Clearcut Base (acres) - 128
 Ten Year Allowable Cut (acres) - 27
 Ten Yr. Proposed Clearcut (acres) - 57

LISTING OF ALL STANDS TO BE REGENERATED AFTER SALVAGE

													REGEN PLANS			
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD	
05-00	35	061	19-W	000	65	090	3	009	BALM	7.0	99	4	1	BALM	SPROUT	
TOTAL STANDS				1				TOTAL ACRES								9

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LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

x - Stand is part of active sale prior to 1986

													REGEN PLANS			
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD	
01-00	30	061	17-W	000	57	066	7	006	BALM	24.6	28	2	0	BALM	SPROUT	
06-00	34	061	19-W	000	54	063	5	012	BALM	15.3	00	0	0	BALM	SPROUT	
07-00	32	061	19-W	000	56	056	3	021	BALM	3.0	00	0	0	BALM	SPROUT	
x02-00	16	061	14-W					018	BALM					WP	PLANT	
TOTAL STANDS				4				TOTAL ACRES								57

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White Pine

Rotation Age (years) - 97
 Current Clearcut Base (acres) - 36
 Ten Year Allowable Cut (acres) - 3
 Ten Yr. Proposed Clearcut (acres) - 18

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

											REGEN PLANS				
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD
07-00	16	061	14-W	007	45	144	4	018	W PINE	6.8	40	2	0	W PINE	PLANT
TOTAL STANDS		1		TOTAL ACRES		18									

Norway Pine

Rotation Age (years) - 108
 Current Clearcut Base (acres) - 798
 Ten Year Allowable Cut (acres) - 73
 Ten Yr. Proposed Clearcut (acres) - 62

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

x - Stand is part of active sale prior to 1986.

											REGEN PLANS				
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD
13-00	36	061	19-W	000	44	114	4	010	N PINE	16.5	00	0	0	N PINE	PLANT
15-00	36	061	19-W	000	39	112	3	012	N PINE	11.6	00	0	0	N PINE	PLANT
11-00	36	061	17-W	000	48	113	2	012	N PINE	4.2	00	0	0	WH SPR	PLANT
x17-00	16	061	13-W		48	92	9	004	N PINE	22.5				N PINE	PLANT
x20-00	16	061	15-W		52	81	7	024	N PINE					ASP	SPROUT
TOTAL STANDS		5		TOTAL ACRES		62									

LISTING OF ALL STANDS TO BE THINNED

SIZE CLASS: 1

											BASAL			
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	AREA
14-00	08	061	13-W	000	59	007	3	004	N PINE	0.5	00	0	0	000

SIZE CLASS: 2

											BASAL			
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	AREA
.20-00	34	061	13-W	000	70	019	3	024	N PINE	0.9	00	0	0	010

SIZE CLASS: 3

ST-NBR	SCIN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	BASAL AREA
01-00	35	061	13-W	000	53	022	2	034	N PINE	0.5	99	2	1	046
24-00	36	061	13-W	000	53	022	2	050	N PINE	1.0	99	2	1	046
23-00	16	061	17-W	000	55	018	2	004	N PINE	0.8	00	0	0	013

SIZE CLASS: 5

ST-NBR	SCIN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	BASAL AREA
08-00	24	061	17-W	000	61	094	9	006	N PINE	56.4	00	0	0	202
14-00	16	061	19-W	000	48	084	9	006	N PINE	52.7	00	0	0	190
10-00	09	061	14-W	007	60	065	9	005	N PINE	50.8	00	0	0	177
07-00	04	061	14-W	007	62	077	9	018	N PINE	35.0	00	0	0	176
22-00	16	061	15-W	000	59	085	9	019	N PINE	36.6	00	0	0	175
14-00	04	061	13-W	000	61	078	9	005	N PINE	58.3	00	0	0	170
10-00	08	061	14-W	007	59	070	8	006	N PINE	30.1	00	0	0	170
01-00	16	061	14-W	007	48	085	9	019	N PINE	36.2	00	0	0	160
02-00	08	061	14-W	007	56	089	9	011	N PINE	44.3	00	0	0	150
04-00	16	061	15-W	000	58	069	8	004	N PINE	39.5	00	0	0	150
17-00	16	061	15-W	000	48	082	9	004	N PINE	22.5	00	0	0	140
03-00	04	061	13-W	000	58	070	9	005	N PINE	32.3	00	0	0	140
14-00	16	061	15-W	000	58	080	8	004	N PINE	23.8	00	0	0	136
05-00	09	061	13-W	000	60	066	7	004	N PINE	18.3	00	0	0	136
19-00	16	061	14-W	007	58	078	7	008	N PINE	31.0	28	4	0	133
07-00	16	061	19-W	000	53	074	7	007	N PINE	9.7	00	0	0	133

SIZE CLASS: 6

ST-NBR	SCIN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	BASAL AREA
17-00	36	061	17-W	000	52	091	9	009	N PINE	38.7	00	0	0	180

TOTAL STANDS 22 TOTAL ACRES 256

Jack Pine

Rotation Age (years) - 58
 Current Clearcut Base (acres) - 1080
 Ten Year Allowable Cut (acres) - 186
 Ten Yr. Proposed Clearcut (acres) - 373

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

											REGEN PLANS				
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD
25-00	34	061	13-W	000	60	017	2	004	J PINE	0.6	00	0	0	N PINE	UNDERS
04-00	17	061	13-W	000	48	012	2	031	J PINE	0.7	00	0	0	N PINE	UNDERS
TOTAL STANDS		2		TOTAL ACRES		35									

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

* - Acreage listed is for part of stand to be harvested.
 x - Stand is part of active sales sold prior to FY 1986.

											REGEN PLANS				
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD
02-00	32	061	17-W	000	57	096	4	011	J PINE	6.0	00	0	0	J PINE	NAT SD
08-00	32	061	17-W	000	61	092	5	007	J PINE	10.7	00	0	0	J PINE	NAT SD
*30-00	34	061	13-W	000	48	079	9	035	J PINE	40.7	00	0	0	N PINE	PLANT
*10-00	35	061	13-W	000	58	079	7	007	J PINE	19.0	28	2	1	N PINE	PLANT
11-00	04	061	13-W	000	56	075	6	008	J PINE	23.7	00	0	0	J PINE	NAT SD
06-00	27	061	13-W	000	58	073	6	017	J PINE	14.6	99	1	1	ASPEN	SPROUT
21-00	34	061	13-W	000	68	071	7	012	J PINE	32.3	99	3	3	N PINE	PLANT
04-00	09	061	13-W	000	59	071	4	019	J PINE	15.0	40	2	0	J PINE	ART SD
08-00	09	061	13-W	000	57	070	6	011	J PINE	19.8	00	0	0	J PINE	ART SD
08-00	04	061	13-W	000	60	068	6	007	J PINE	12.3	00	0	0	J PINE	ART SD
05-00	27	061	13-W	000	57	068	8	010	J PINE	38.0	99	2	2	J PINE	NAT SD
*06-00	04	060	13-W	000	60	074	7	025	J PINE	37.0	00	0	0	N PINE	PLANT
04-00	33	061	13-W	000	57	066	7	008	J PINE	30.6	00	0	0	J PINE	ART SD
*06-00	33	061	13-W	000	63	065	9	010	J PINE	45.5	00	0	0	J PINE	ART SD
16-00	34	061	13-W	000	60	064	7	011	J PINE	24.5	00	0	0	N PINE	PLANT
*16-00	36	060	16-W	000	61	070	5	010	J PINE	17.0	00	0	0	N PINE	PLANT
08-00	33	061	13-W	000	67	063	8	019	J PINE	35.3	51	1	0	N PINE	PLANT
01-00	07	061	16-W	000	49	068	5	008	J PINE	18.2	00	0	0	J PINE	ART SD
*10-00	32	061	13-W	000	75	063	9	021	J PINE	45.2	28	1	0	N PINE	PLANT
09-00	35	061	13-W	000	49	062	4	007	J PINE	17.3	00	0	0	N PINE	PLANT
*08-00	36	061	14-W	000	60	064	5	070	J PINE	13.9	99	1	1	J PINE	ART SD
x04 00	36	060	16-W		55	058	3	040	J PINE	7.9				N PINE	PLANT
TOTAL STANDS		22		TOTAL ACRES		373									

Balsam Fir

Rotation Age (years) - 50
 Current Clearcut Base (acres) - 562
 Ten Year Allowable Cut (acres) - 112
 Ten Yr. Proposed Clearcut (acres) - 129

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

											REGEN PLANS				
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD
14-00	28	061	19-W	000	52	074	2	039	BALSAM	5.2	51	1	1	WH SPR	PLANT
TOTAL STANDS		1		TOTAL ACRES		39									

LISTING OF ALL STANDS TO BE REGENERATED AFTER SALVAGE

x - Stand is part of active sale sold prior to FY 1986.

											REGEN PLANS				
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD
02-00	18	061	13-W	000	60	063	4	005	BALSAM	9.0	51	3	3	BALSAM	UNDERS
01-00	28	061	19-W	000	43	058	1	016	BALSAM	3.4	00	0	0	WH SPR	PLANT
03-00	27	061	13-W	000	42	058	2	009	BALSAM	4.2	00	0	0	WH SPR	PLANT
09-00	28	061	19-W	000	54	052	1	018	BALSAM	5.5	00	0	0	WH SPR	PLANT
22-00	16	060	16-W	000	53	050	2	007	BALSAM	4.7	06	2	2	WH SPR	PLANT
01-00	36	060	16-W	000	55	045	3	009	BALSAM	4.3	06	1	1	ASPEN	SPROUT
x23-00	36	060	16-W		50	040	1	008	BALSAM	2.0	06	3	1	N PINE	PLANT
x25-00	36	060	16-W		65	056	2	013	BALSAM	7.3	06	3	1	WH SPR	PLANT
TOTAL STANDS		8		TOTAL ACRES		85									

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

* - Acreage listed is for part of stand to be harvested.

x - Stand is part of active sale sold prior to FY 1986.

											REGEN PLANS				
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD
12-00	28	061	17-W	000	49	103	5	009	BALSAM	13.0	51	0	3	ASPEN	SPROUT
12-00	16	061	19-W	000	44	081	5	014	BALSAM	6.0	00	0	0	ASPEN	SPROUT
04-00	10	061	17-W	000	48	077	3	008	BALSAM	8.6	06	2	2	ASPEN	SPROUT
02-00	34	061	14-W	000	52	076	3	017	BALSAM	5.5	00	0	0	ASPEN	SPROUT
*20-00	16	061	19-W	000	50	073	2	013	BALSAM	5.3	00	0	0	ASPEN	SPROUT
01-00	36	061	13-W	000	44	068	6	023	BALSAM	11.3	51	1	0	ASPEN	SPROUT
*07-00	21	061	19-W	000	44	062	2	025	BALSAM	6.5	99	1	0	WH SPR	PLANT
04-00	22	061	17-W	000	50	063	3	010	BALSAM	10.0	51	3	5	WH SPR	PLANT
x21-00	13	061	14-W		52	052	3	010	BALSAM	7.2				WH SPR	PLANT
TOTAL STANDS		9		TOTAL ACRES		129									

Lowland Black Spruce

Rotation Age (years) - 105
 Current Clearcut Base (acres) - 2494
 Ten Year Allowable Cut (acres) - 237
 Ten Yr. Proposed Clearcut (acres) - 272

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS		
													SPECIES	METHOD	
04-00	14	061	18-W	000	33	112	1	008	BL SPR	3.3	23	4	3	BL SPR	ART SD
03-00	26	061	19-W	000	27	110	1	010	BL SPR	3.8	00	0	0	BL SPR	ART SD
01-00	22	061	18-W	000	38	106	1	025	BL SPR	2.9	23	1	0	BL SPR	ART SD
28-00	36	061	19-W	000	31	106	1	008	BL SPR	2.5	00	0	0	BL SPR	ART SD
20-00	16	061	17-W	000	36	079	1	008	BL SPR	3.0	23	4	1	BL SPR	ART SD
10-00	21	061	19-W	000	37	027	2	037	BL SPR	0.3	00	0	0	BL SPR	ART SD
TOTAL STANDS		6		TOTAL ACRES		96									

LISTING OF ALL STANDS TO BE REGENERATED AFTER SALVAGE

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS		
													SPECIES	METHOD	
16-00	26	061	14-W	000	29	123	1	012	BL SPR	3.5	00	0	0	BL SPR	ART SD
09-00	34	061	13-W	000	30	123	3	006	BL SPR	12.7	23	3	2	BL SPR	ART SD
05-00	28	061	17-W	000	28	108	1	009	BL SPR	7.0	00	0	0	BL SPR	ART SD
04-00	36	061	17-W	000	34	096	7	004	BL SPR	33.0	23	4	1	BL SPR	ART SD
02-00	36	061	17-W	000	30	094	4	009	BL SPR	19.3	23	5	1	BL SPR	ART SD
03-00	36	061	17-W	000	30	093	1	009	BL SPR	6.3	23	5	3	BL SPR	ART SD
10-00	24	061	17-W	000	38	087	2	008	BL SPR	5.0	23	4	1	BL SPR	ART SD
08-00	16	060	15-W	000	28	079	1	009	BL SPR	6.7	23	3	1	BL SPR	ART SD
04-00	28	061	13-W	000	27	060	1	011	BL SPR	3.0	00	0	0	BL SPR	ART SD
02-00	22	061	18-W	000	35	056	2	015	BL SPR	6.6	23	3	1	BL SPR	ART SD
06-00	15	061	18-W	000	35	056	2	006	BL SPR	6.6	23	3	1	BL SPR	ART SD
01-00	36	061	17-W	000	37	050	2	021	BL SPR	9.8	23	5	1	BL SPR	ART SD
TOTAL STANDS		12		TOTAL ACRES		119									

LISTING OF ALL STANDS TO BE RESERVED

* - Marginally commercial stand with low site index that may be managed as part of the clear cut base in the future.

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	BASAL
													AREA
10-00	27	061	19-W	000	28	106	2	015	BL SPR	7.7	00	0	0
09-00	35	061	19-W	000	25	094	1	015	BL SPR	4.7	00	0	0
11-00	27	061	19-W	000	23	087	1	056	BL SPR	4.3	00	0	0

06-00	28	061	19-W	000	23	087	1	006	BL	SPR	4.3	00	0	0	
01-00	34	061	17-W	000	26	091	1	036	BL	SPR	2.8	00	0	0	
27-00	36	061	17-W	000	37	050	2	003	BL	SPR	9.8	23	5	1	
10-00	34	061	19-W	000	25	047	3	016	BL	SPR	1.4	00	0	0	
01-00	34	061	19-W	000	25	047	3	095	BL	SPR	1.4	00	0	0	
03-00	28	061	19-W	000	27	027	3	074	BL	SPR	1.5	00	0	0	
15-00	28	061	19-W	000	20	020	3	006	BL	SPR	0.5	00	0	0	
05-00	28	061	19-W	000	23	017	4	118	BL	SPR	1.5	00	0	0	
12-00	27	061	19-W	000	23	017	4	017	BL	SPR	1.5	00	0	0	
05-00	32	061	19-W	000	23	017	3	035	BL	SPR	1.5	00	0	0	
05-00	29	061	19-W	000	23	017	3	017	BL	SPR	1.5	00	0	0	
17-00	33	061	19-W	000	23	017	3	037	BL	SPR	1.5	00	0	0	
03-00	27	061	19-W	000	26	015	3	005	BL	SPR	1.5	00	0	0	
02-00	27	061	19-W	000	26	015	3	078	BL	SPR	1.5	00	0	0	
*02-00	18	061	19-W	000	26	084	3	012	BL	SPR	1.7	00	0	0	102
*12-00	36	061	19-W	000	25	027	1	010	BL	SPR	0.5	00	0	0	030
*03-00	10	061	17-W	000	26	129	3	014	BL	SPR	1.5	00	0	0	110
*03-00	36	061	14-W	000	00	009	2	004	BL	SPR	0.0	00	0	0	000
*11-00	34	061	19-W	000	27	104	1	009	BL	SPR	6.7	00	0	0	155
*03-00	13	061	18-W	000	23	142	2	017	BL	SPR	6.0	23	2	0	095
*06-00	24	061	18-W	000	26	108	1	006	BL	SPR	5.2	23	1	0	090
*02-00	24	061	18-W	000	26	108	1	007	BL	SPR	5.2	23	1	0	090
*01-00	27	061	19-W	000	27	105	1	018	BL	SPR	3.7	00	0	0	087
*07-00	34	061	19-W	000	27	090	1	027	BL	SPR	3.6	00	0	0	087
*07-00	16	060	15-W	000	27	083	1	009	BL	SPR	0.5	23	3	1	080
*01-00	32	061	16-W	000	25	100	2	014	BL	SPR	9.0	00	0	0	077
*06-00	29	061	19-W	000	27	094	1	019	BL	SPR	6.8	00	0	0	070
*08-00	28	061	19-W	000	27	094	1	015	BL	SPR	6.8	00	0	0	070
*02-00	26	061	19-W	000	26	082	1	008	BL	SPR	5.0	00	0	0	060
*04-00	28	061	19-W	000	27	094	1	012	BL	SPR	4.3	23	2	1	055
*09-00	27	061	19-W	000	27	094	1	063	BL	SPR	4.3	23	2	1	055
*08-00	26	061	14-W	000	32	105	1	013	BL	SPR	3.3	00	0	0	053
*05-00	27	061	14-W	000	32	105	1	005	BL	SPR	3.7	00	0	0	053
*17-00	16	061	14-W	007	27	103	1	012	BL	SPR	3.5	00	0	0	042

TOTAL STANDS 37 TOTAL ACRES 923

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

* - Acreage listed is for part of stand to be harvested.
x - Stand is part of active sale sold prior to FY 1986.

ST-NBR	SCIN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS		
													SPECIES	METHOD	
13-00	34	061	13-W	000	28	143	5	021	BL	SPR	22.8	23	1	0	BL SPR ART SD
*03-00	16	061	15-W	000	28	140	3	015	BL	SPR	16.4	00	0	0	BL SPR ART SD
07-00	10	061	17-W	000	29	126	3	074	BL	SPR	15.2	40	0	1	BL SPR NAT SD
01-00	26	061	18-W	000	27	123	4	022	BL	SPR	19.1	00	0	0	BL SPR NAT SD
01-00	36	061	16-W	000	31	127	2	016	BL	SPR	6.0	00	0	0	BL SPR ART SD
07-00	33	061	13-W	000	28	115	2	007	BL	SPR	9.7	00	0	0	BL SPR ART SD
06-00	08	061	13-W	000	32	113	4	008	BL	SPR	19.3	00	0	0	BL SPR ART SD
08-00	22	061	19-W	000	40	109	3	007	BL	SPR	10.2	00	0	0	BL SPR ART SD

*02-00	14	061	18-W	000	38	108	4	010	BL SPR	18.4	00	0	0	BL SPR	ART	SD
02-00	24	061	14-W	000	29	108	4	012	BL SPR	9.8	00	0	0	BL SPR	NAT	SD
09-00	34	061	19-W	000	37	105	2	011	BL SPR	11.7	00	0	0	BL SPR	ART	SD
*08-00	33	061	19-W	000	37	105	3	010	BL SPR	16.5	00	0	0	BL SPR	ART	SD
06-00	36	061	19-W	000	40	104	6	028	BL SPR	1.2	00	0	0	BL SPR	ART	SD
03-00	07	061	16-W	000	39	109	4	008	BL SPR	18.4	00	0	0	BL SPR	ART	SD
02-00	34	061	19-W	000	31	099	3	007	BL SPR	8.5	00	0	0	BL SPR	ART	SD
x14-00	35	061	19-W		31	099	3	011	BL SPR	8.5				BL SPR	ART	SD

TOTAL STANDS 16 TOTAL ACRES 272
 =====

Tamarack

Rotation Age (years) - 106
 Current Clearcut Base (acres) - 497
 Ten Year Allowable Cut (acres) - 46
 Ten Yr. Proposed Clearcut (acres) - 8

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

													REGEN PLANS			
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD	
03-00	21	061	19-W	000	44	120	1	027	TMRACK	2.6	00	0	0	TMRACK	NAT SD	
05-00	26	061	19-W	000	33	101	2	005	TMRACK	2.5	99	2	1	TMRACK	NAT SD	
05-00	27	061	19-W	000	33	101	1	024	TMRACK	2.5	99	2	1	TMRACK	NAT SD	

TOTAL STANDS 3 TOTAL ACRES 56
 =====

LISTING OF ALL STANDS TO BE REGENERATED AFTER SALVAGE

													REGEN PLANS			
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD	
09-00	32	061	17-W	000	28	107	1	004	TMRACK	3.3	00	0	0	TMRACK	NAT SD	
14-00	32	061	17-W	000	28	107	1	020	TMRACK	3.3	00	0	0	TMRACK	NAT SD	

TOTAL STANDS 2 TOTAL ACRES 24
 =====

LISTING OF ALL STANDS TO BE RESERVED

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M		
28-00	36	061	17-W	000	32	078	2	011	TMRACK	4.0	00	0	0		

TOTAL STANDS 1 TOTAL ACRES 11
 =====

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

											REGEN PLANS				
ST-NBR	SCIN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD
22-00	34	061	13-W	000	35	113	3	008	TMRACK	7.0	51	3	3	TMRACK	NAT SD
TOTAL STANDS		1		TOTAL ACRES		8									

Northern White Cedar

Rotation Age (years) - 126
 Current Clearcut Base (acres) - 553
 Ten Year Allowable Cut (acres) - 43
 Ten Yr. Proposed Clearcut (acres) - 30

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

* - Acreage listed is for part of stand to be harvested.

											REGEN PLANS				
ST-NBR	SCIN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD
*15-00	10	061	14-W	000	33	133	4	030	WCEDAR	9.8	28	4	0	WCEDAR	PLANT
TOTAL STANDS		1		TOTAL ACRES		30									

Upland Black Spruce

Rotation Age (years) - 70
 Current Clearcut Base (acres) - 81
 Ten Year Allowable Cut (acres) - 11
 Ten Yr. Proposed Clearcut (acres) - 31

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

*Acreage listed is for part of stand to be harvested.

											REGEN PLANS				
ST-NBR	SCIN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD
*04-00	32	061	13-W	000	43	089	7	005	BL SPR	28.0	00	0	0	WH SPR	PLANT
17-00	34	061	13-W	000	41	083	7	004	BL SPR	21.0	00	0	0	BL SPR	NAT SD
03-00	21	061	14-W	000	49	083	4	012	BL SPR	7.0	00	0	0	J PINE	ART SD
TOTAL STANDS		3		TOTAL ACRES		31									

Cutover Area

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	REGEN PLANS	
														SPECIES	METHOD
17-10	36	061	13-W	000	00	002	0	044	NONE	0.0	00	0	0	N PINE	UNDERS
08-10	16	061	13-W	000	55	003	0	006	NONE	0.0	00	0	0	J PINE	UNDERS
02-10	20	061	13-W	000	50	003	0	014	NONE	0.0	00	0	0	J PINE	UNDERS
22-00	32	061	13-W	000	70	003	0	008	NONE	0.0	00	0	0	ASPEN	UNDERS
01-10	29	061	13-W	000	50	003	0	002	NONE	0.0	00	0	0	J PINE	UNDERS
25-00	32	061	13-W	000	57	003	0	011	NONE	0.0	00	0	0	N PINE	PLANT
02-10	35	061	13-W	000	55	003	0	006	NONE	0.0	00	0	0	N PINE	PLANT
11-00	04	061	14-W	007	51	003	0	008	NONE	0.0	00	0	0	N PINE	UNDERS
04-00	08	061	13-W	000	48	003	0	032	NONE	0.0	00	0	0	J PINE	UNDERS
03-00	35	061	13-W	000	00	004	0	008	NONE	0.0	00	0	0	N PINE	UNDERS
16-00	23	061	14-W	000	00	003	0	022	NONE	0.0	00	0	0	J PINE	UNDERS
23-10	36	060	16-W	000	00	005	0	027	NONE	0.0	00	0	0	WH SPR	UNDERS
05-00	04	061	14-W	007	00	002	0	007	NONE	0.0	00	0	0	N PINE	UNDERS
01-00	16	060	15-W	000	00	003	0	016	NONE	0.0	00	0	0	ASPEN	UNDERS
08-00	36	060	15-W	000	00	003	0	032	NONE	0.0	00	0	0	WH SPR	PLANT
07-00	16	061	13-W	000	00	004	0	043	NONE	0.0	00	0	0	J PINE	UNDERS
15-00	16	061	19-W	000	00	003	0	020	BALSAM	0.4	00	0	0	N PINE	UNDERS
19-10	16	061	19-W	000	00	001	0	011	NONE	0.0	00	0	0	ASPEN	UNDERS
02-00	16	061	19-W	000	00	003	0	009	NONE	0.0	00	0	0	N PINE	UNDERS
16-00	27	061	14-W	000	00	003	0	009	NONE	0.0	00	0	0	ASPEN	UNDERS
08-00	16	061	18-W	000	00	002	0	048	NONE	0.0	00	0	0	ASPEN	UNDERS
25-00	16	061	17-W	000	00	003	0	038	NONE	0.0	00	0	0	ASPEN	UNDERS
02-00	07	061	16-W	000	52	005	0	030	NONE	0.0	00	0	0	BALSAM	UNDERS
02-00	26	061	18-W	000	27	002	0	019	NONE	0.0	00	0	0	BL SPR	UNDERS
04-00	07	061	17-W	000	00	004	0	008	NONE	0.0	00	0	0	ASPEN	UNDERS
22-00	16	061	17-W	000	00	003	0	004	NONE	0.0	00	0	0	ASPEN	UNDERS
18-00	16	061	17-W	000	00	003	0	021	NONE	0.0	00	0	0	ASPEN	UNDERS
02-10	27	061	14-W	000	00	002	0	005	NONE	0.0	00	0	0	N PINE	PLANT
03-00	14	061	18-W	000	00	002	0	009	NONE	0.0	00	0	0	J PINE	PLANT
29-00	16	061	17-W	000	00	003	0	027	NONE	0.0	00	0	0	WH SPR	UNDERS

TOTAL STANDS 30 TOTAL ACRES 544

Lowland Brush

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	REGEN PLANS	
														SPECIES	METHOD
06-00	36	061	15-W	000	00	003	0	011	NONE	0.0	00	0	0	BL SPR	PLANT
19-00	16	061	17-W	000	00	003	0	021	NONE	0.0	00	0	0	BL SPR	PLANT
13-00	34	061	19-W	000	00	002	0	029	NONE	0.0	00	0	0	TMRACK	NAT SD
03-00	33	061	19-W	000	00	002	0	020	NONE	0.0	00	0	0	BL SPR	PLANT
04-00	22	061	19-W	000	00	002	0	033	NONE	0.0	00	0	0	TMRACK	PLANT

03-00	32	061	13-W	000	00	004	0	013	NONE	0.0	00	0	0	BL SPR	PLANT
03-00	08	061	13-W	000	00	002	0	018	NONE	0.0	00	0	0	BL SPR	PLANT
02-00	08	061	13-W	000	25	003	0	017	NONE	0.0	00	0	0	BL SPR	PLANT
01-00	16	060	14-W	000	00	009	0	025	NONE	0.0	00	0	0	BL SPR	PLANT
04-00	16	060	15-W	000	00	003	0	047	NONE	0.0	00	0	0	BL SPR	PLANT

TOTAL STANDS	10	TOTAL ACRES	234
	=====		=====

Upland Brush

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	REGEN PLANS	
														SPECIES	METHOD
17-00	23	061	14-W	000	00	003	0	005	NONE	0.0	00	0	0	N PINE	UNDERS
13-00	35	061	19-W	000	00	002	0	007	NONE	0.0	00	0	0	J PINE	PLANT

TOTAL STANDS	2	TOTAL ACRES	12
	=====		=====

LAURENTIAN DIVIDE RMU 8

EXISTING CONDITION

Table B.36 Laurentian Divide RMU Timber Summary

Type	Acres	% Of Area	Avg Site Index	Avg % Updated	Avg % Over Rot. Age	% At High Risk
Ash	192	0	32	114	51	0
Aspen	5879	24	59	44	54	16
Birch	1485	6	50	63	66	11
White Pine	18	0	46	83	61	0
Red Pine	79	0	47	77	13	0
Jack Pine	2378	10	54	46	30	7
White Spruce	96	0	47	58	0	0
Balsam Fir	808	3	43	40	0	5
Black Spr. Lowland	3653	15	33	65	61	5
Tamarack	373	2	36	69	0	2
N. White Cedar	372	2	26	94	20	0
Black Spr. Upland	1242	5	41	53	27	3
Cutover Area	409	2				
Lowland Grass	41	0				
Upland Grass	53	0				
Lowland Brush	1178	5				
Upland Brush	154	0				
Unproductive Forest	2125	9				
Non Forest	4288	17				
Total	24823	100				

COVER TYPE COMPOSITION GOALS

Based on existing cover type conditions, timber markets, wildlife concerns, land administration proposals, and economic and biologic limitations and potentials, the following composition goals have been established for this unit.

Table B.37 Laurentian Divide RMU Cover Type Composition Goals

Cover Type	Present		Ten Year		Long-term	
	Acres	%	Acres	%	Acres	%
Ash	192	1	196	1	196	1
Aspen	5879	24	6351	26	6850	28
Birch	1485	6	991	4	300	1
White Pine	18	0	11	0	200	1
Norway Pine	79	0	305	1	400	2
Jack Pine	2378	10	2524	10	2950	12
White Spruce	96	0	160	1	250	1
Balsam Fir	808	3	843	3	480	2
Black Spruce Lowland	3653	15	3760	16	3800	16
Tamarack	373	1	453	2	435	2
N. White Cedar	372	2	403	2	403	2
Black Spruce Upland	1242	5	1061	4	600	2
Cutover Area	409	2	79	0	100	0
Lowland Grass	41	0	41	0	41	0
Upland Grass	53	0	5	0	200	1
Lowland Brush	1178	5	1073	4	1051	4
Upland Brush	154	1	154	1	154	1
Unproductive Forest	2125	9	2125	9	2125	9
Non Forest	4288	17	4288	17	4288	17
Total*	24,823	100	24,823	100	24,823	100

* Includes 370 acres of commercial forest land administered by the DNR Division of Minerals.

MANAGEMENT PRESCRIPTIONS

Table B.38 summarizes the management prescriptions by type for the next ten years in the Laurentian Divide RMU. Tables B.39 and B.40 outline regeneration needs for the next ten years. Table B.41 projects harvest levels by type in the future. These tables are followed by detailed lists of stands in each cover type to receive various treatments in the next ten years.

Table B.38 Management Prescriptions By Cover Type - Laurentian Divide

COVER TYPE	CLEAR CUT		THINNING		ALL-AGED		SALVAGE		REGEN		TOTAL	
	STD	ACRES	STD	ACRES	STD	ACRES	STD	ACRES	STD	ACRES	STD	ACRES
ASH	3	20	0	0	4	41	1	5	0	0	8	66
ASPEN	69	1623	0	0	0	0	6	99	7	254	82	1976
PBIRCH	17	509	0	0	0	0	2	29	3	79	22	617
W PINE	1	7	0	0	0	0	0	0	0	0	1	7
N PINE	4	21	0	0	0	0	0	0	0	0	4	21
J PINE	42	402	0	0	0	0	0	0	0	0	42	402
WH SPR	2	34	0	0	0	0	0	0	0	0	2	34
BALSAM	10	105	0	0	0	0	6	102	2	37	18	244
BL SPR	27	325	0	0	0	0	8	129	1	15	36	469
TMRACK	4	34	0	0	0	0	1	3	0	0	5	37
WCEDAR	2	18	0	0	0	0	1	4	0	0	3	22
UPBSPR	15	199	0	0	0	0	3	32	0	0	18	231
CUT	0	0	0	0	0	0	0	0	22	403	22	403
LOGRAS	0	0	0	0	0	0	0	0	0	0	0	0
UPGRAS	0	0	0	0	0	0	0	0	3	48	3	48
LOBRSH	0	0	0	0	0	0	0	0	2	105	2	105
UPBRSH	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	195	3297	0	0	4	41	28	403	40	941	268	4682

Table B.39 Regeneration Plans for Lands Harvested, Salvaged, and Regenerated without Harvest by Type
 Laurentian Divide RMU
 (Acres)

Regen. Method & Spp.	Current Cover Type															Tot.
	Ash	Bi	Asp	WP	NP	JP	WS	BF	BSL	Tam	Ced	BSU	COA	UG	LB	
<u>Natural</u>																
Ash	25										4					29
BS								13	95			27	107			242
Asp		206	1921	7	6	40	22	100				17	145			2464
Bi		114						11								125
JP						238							7			245
BF		83			3	24	12	81				102	14			319
Tam									33	31					35	99
WC									42							42
<u>Plant</u>																
NP		57	55		12	68		39						16		247
JP						15							77			92
WS		17										34	15	32		98
BS															70	70
<u>Art. Seed</u>																
JP		140				17			15			51	7			230
BS									284	6	7		31			328
Ced											11					11
Total	25	617	1976	7	21	402	34	244	469	37	22	231	403	48	105	4641

Table B.40 Summary of Artificial Regeneration Needs
 Laurentian Divide RMU
 (Acres by Species and Regeneration Method)

SPECIES	PLANT	SEED
N PINE	247	0
WH SPR	98	0
J PINE	92	230
BL SPR	70	328
WCEDAR	0	11
TOTAL	507	569

Table B.41 Projected Harvest Levels by Type, 1986 - 2036
and Estimated Sustained Yield with Year of Regulation

Type	Clearcut Acres by 10 year Period					Sustain yield	
	1986-95	1996-05	2006-15	2016-25	2026-35	Acres	Year
Ash	20	31	29	33	33	10	2106+
Aspen	1623	1223	731	979	1537	1537	2106
Birch	509	436	255	52	61	60	2106+
W Pine	7	11					
N Pine	21	13	13	8	8	50	2106
J Pine	402	302	444	452	461	470	2096
Wh Spr	34	13	13	18	18	11	2126
Balsam	105	192	106	115	111	60	2106+
Bl Spr Lo	325	314	315	315	316	316	2126
Tam	34	19	17	71	68	43	2106+
W Cedar	18	40	40	40	40	40	2106+
Bl Spr Up	199	115	299	301	123	126	2106+
Total	3,297	2,709	2,262	2,384	2,776	2,723	

Ash

Rotation Age (years) - 90
Current Clearcut Base (acres) - 146
Ten Year Allowable Cut (acres) - 16
Ten Yr. Proposed Clearcut (acres) - 20

LISTING OF ALL STANDS TO BE REGENERATED AFTER SALVAGE

													REGEN PLANS	
ST-NBR	SCIN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM %	M	SPECIES	METHOD
13-00	28	060	12-W	000	35	091	1	005	ASH	4.0	55	5	2	ASH UNDERS
TOTAL STANDS	1	TOTAL ACRES		5										

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

													REGEN PLANS	
ST-NBR	SCIN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM %	M	SPECIES	METHOD
23-00	36	059	13-W	000	35	164	2	009	ASH	8.7	40	4	1	ASH UNDERS
04-00	10	059	12-W	000	40	139	2	003	ASH	7.3	00	0	0	ASH UNDERS
15-00	10	060	13-W	000	29	139	1	008	ASH	5.0	00	0	0	ASH SPROUT
TOTAL STANDS	3	TOTAL ACRES		20										

LISTING OF ALL STANDS TO BE MANAGED ON AN ALL-AGED BASIS

SIZE CLASS: 4

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	BASAL AREA
04-00	16	059	15-W	000	40	171	3	012	ASH	11.0	00	0	0	130
02-00	03	059	12-W	000	40	129	4	013	ASH	7.8	00	0	0	103

SIZE CLASS: 5

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	BASAL AREA
18-00	16	060	13-W	000	34	114	4	010	ASH	19.4	00	0	0	112
03-00	16	059	15-W	000	34	127	3	006	ASH	14.0	60	2	0	106

TOTAL STANDS 4 TOTAL ACRES 41

Aspen

Rotation Age (years) - 50
 Current Clearcut Base (acres) - 5510
 Ten Year Allowable Cut (acres) - 1102
 Ten Yr. Proposed Clearcut (acres) - 1623

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD
01-00	28	061	08-W	000	50	092	2	012	ASPEN	9.8	27	2	1	ASPEN	SPROUT
05-00	36	062	11-W	000	55	091	2	020	ASPEN	3.6	26	4	1	ASPEN	SPROUT
16-00	16	061	11-W	000	50	080	1	042	ASPEN	2.0	26	5	1	ASPEN	SPROUT
25-00	16	061	11-W	000	52	071	2	035	ASPEN	5.4	26	5	3	ASPEN	SPROUT
16-00	36	062	11-W	000	56	070	1	109	ASPEN	4.3	26	3	1	ASPEN	SPROUT
14-00	13	059	14-W	000	61	071	1	021	ASPEN	3.2	25	1	1	ASPEN	SPROUT
11-00	15	061	11-W	000	00	073	2	015	ASPEN	8.0	00	0	0	ASPEN	SPROUT

TOTAL STANDS 7 TOTAL ACRES 254

LISTING OF ALL STANDS TO BE REGENERATED AFTER SALVAGE

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD
11-00	16	061	11-W	000	58	079	2	019	ASPEN	8.3	27	5	2	ASPEN	SPROUT
02-00	14	061	08-W	000	60	077	4	009	ASPEN	13.5	27	3	2	ASPEN	SPROUT
01-00	33	059	12-W	000	63	077	6	027	ASPEN	23.5	27	4	3	ASPEN	SPROUT
31-00	16	059	13-W	000	50	064	4	019	ASPEN	9.5	26	5	1	ASPEN	SPROUT

07-00	28	059	14-W	000	62	051	1	013	ASPEN	3.2	25	3	0	ASPEN	SPROUT
02-00	13	059	14-W	000	70	027	3	012	ASPEN	9.7	27	3	2	ASPEN	SPROUT

TOTAL STANDS	6	TOTAL ACRES	99
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LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

* - Acreage listed is for part of stand to be harvested.

													REGEN PLANS		
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD
04-00	14	059	12-W	000	70	114	6	021	ASPEN	15.2	00	0	0	ASPEN	SPROUT
01-00	13	059	12-W	000	70	114	6	006	ASPEN	15.2	00	0	0	ASPEN	SPROUT
11-00	02	061	11-W	000	60	093	4	005	ASPEN	10.1	99	2	0	ASPEN	SPROUT
07-00	02	061	11-W	000	60	093	4	006	ASPEN	10.0	99	2	0	ASPEN	SPROUT
04-00	03	059	12-W	000	58	086	5	007	ASPEN	12.3	26	4	0	ASPEN	SPROUT
03-00	03	059	12-W	000	63	084	6	010	ASPEN	25.7	26	4	1	ASPEN	SPROUT
05-00	32	061	08-W	000	50	077	2	008	ASPEN	5.7	00	0	0	ASPEN	SPROUT
01-00	36	061	11-W	000	57	075	3	007	ASPEN	13.2	26	4	1	ASPEN	SPROUT
07-00	13	059	14-W	000	65	075	5	028	ASPEN	21.6	26	3	1	ASPEN	SPROUT
02-00	35	061	11-W	000	55	078	5	056	ASPEN	13.0	40	2	0	ASPEN	SPROUT
03-00	31	061	08-W	000	48	072	2	005	ASPEN	8.3	26	1	0	ASPEN	SPROUT
01-00	15	059	12-W	000	59	072	4	035	ASPEN	18.5	27	3	2	ASPEN	SPROUT
30-00	16	059	12-W	000	59	072	5	045	ASPEN	20.4	27	3	1	ASPEN	SPROUT
*33-00	16	059	12-W	000	59	072	4	010	ASPEN	9.8	27	2	1	ASPEN	SPROUT
13-00	16	059	12-W	000	58	071	3	020	ASPEN	10.0	27	3	2	ASPEN	SPROUT
04-00	18	059	13-W	000	66	070	5	031	ASPEN	20.6	27	3	1	ASPEN	SPROUT
03-00	13	059	14-W	000	66	070	5	011	ASPEN	20.6	27	3	1	ASPEN	SPROUT
10-00	13	059	14-W	000	57	070	4	053	ASPEN	16.5	26	2	0	ASPEN	SPROUT
01-00	16	060	12-W	000	74	071	5	007	ASPEN	18.7	27	4	1	ASPEN	SPROUT
11-00	36	059	15-W	000	70	075	5	033	ASPEN	8.3	00	0	0	ASPEN	SPROUT
02-00	18	059	13-W	000	65	069	4	017	ASPEN	15.3	27	2	1	ASPEN	SPROUT
16-00	07	060	11-W	000	73	067	7	014	ASPEN	27.5	27	2	1	ASPEN	SPROUT
04-00	07	060	11-W	000	55	068	2	010	ASPEN	5.2	26	5	1	N PINE	PLANT
01-00	16	061	11-W	000	66	066	6	003	ASPEN	28.7	27	3	1	ASPEN	SPROUT
12-00	07	060	11-W	000	58	066	6	006	ASPEN	15.9	27	2	1	ASPEN	SPROUT
12-00	13	059	14-W	000	61	066	5	013	ASPEN	24.1	27	3	1	ASPEN	SPROUT
09-00	36	060	12-W	000	50	067	3	007	ASPEN	6.3	26	3	0	ASPEN	SPROUT
01-00	09	060	13-W	000	50	071	4	008	ASPEN	8.8	00	0	0	ASPEN	SPROUT
04-00	36	060	11-W	000	64	065	6	033	ASPEN	16.0	27	1	1	ASPEN	SPROUT
02-00	36	060	11-W	000	69	065	5	035	ASPEN	22.0	26	2	1	ASPEN	SPROUT
01-00	36	060	11-W	000	64	065	3	027	ASPEN	13.0	27	3	1	ASPEN	SPROUT
07-00	16	061	11-W	000	51	065	5	012	ASPEN	15.7	26	5	1	ASPEN	SPROUT
18-00	36	060	12-W	000	61	065	2	040	ASPEN	8.0	26	2	1	ASPEN	SPROUT
32-00	16	059	13-W	000	65	065	2	006	ASPEN	5.0	00	0	0	ASPEN	SPROUT
*15-00	16	059	13-W	000	72	065	4	032	ASPEN	15.7	00	0	0	ASPEN	SPROUT
*03-00	36	059	12-W	000	50	063	5	025	ASPEN	14.7	00	0	0	ASPEN	SPROUT
24-00	22	060	12-W	000	50	064	6	009	ASPEN	18.7	26	4	1	ASPEN	SPROUT
03-00	27	060	12-W	000	58	064	4	006	ASPEN	8.5	26	5	2	ASPEN	SPROUT
31-00	22	060	12-W	000	50	064	6	006	ASPEN	17.0	26	5	1	ASPEN	SPROUT
10-00	36	059	15-W	000	62	069	4	076	ASPEN	9.3	00	0	0	ASPEN	SPROUT

20-00	36	059	15-W	000	62	069	4	010	ASPEN	9.3	00	0	0	ASPEN	SPROUT
*17-00	36	059	13-W	000	57	064	5	029	ASPEN	14.8	26	3	0	ASPEN	SPROUT
05-00	36	059	14-W	000	65	064	6	010	ASPEN	30.7	27	3	1	ASPEN	SPROUT
19-00	07	060	11-W	000	64	062	6	058	ASPEN	21.8	27	2	1	ASPEN	SPROUT
*14-00	36	059	14-W	000	64	063	6	040	ASPEN	14.8	27	4	2	ASPEN	SPROUT
14-00	10	060	13-W	000	62	068	5	015	ASPEN	24.3	00	0	0	ASPEN	SPROUT
*14-00	36	059	12-W	000	49	062	4	032	ASPEN	12.2	27	2	1	ASPEN	SPROUT
*17-00	36	059	12-W	000	49	062	4	014	ASPEN	12.2	27	2	1	ASPEN	SPROUT
18-00	36	059	14-W	000	69	062	5	006	ASPEN	17.6	27	4	3	ASPEN	SPROUT
13-00	04	061	11-W	000	57	065	4	005	ASPEN	11.0	40	4	0	ASPEN	SPROUT
06-00	36	059	12-W	000	65	060	5	100	ASPEN	15.0	27	2	1	ASPEN	SPROUT
07-00	10	060	13-W	000	54	065	2	028	ASPEN	3.9	00	0	0	ASPEN	SPROUT
15-00	31	060	12-W	000	62	060	6	021	ASPEN	22.6	27	2	1	ASPEN	SPROUT
12-00	32	060	12-W	000	62	060	6	012	ASPEN	22.6	27	2	1	ASPEN	SPROUT
*11-00	16	060	13-W	000	55	064	3	022	ASPEN	7.0	40	2	0	ASPEN	SPROUT
11-00	17	061	09-W	000	60	058	5	009	ASPEN	17.7	25	2	1	ASPEN	SPROUT
29-00	36	061	11-W	000	57	063	5	006	ASPEN	24.5	40	4	0	ASPEN	SPROUT
*01-00	16	059	15-W	000	59	063	4	108	ASPEN	13.0	40	2	0	ASPEN	SPROUT
14-00	07	060	11-W	000	54	056	5	045	ASPEN	16.3	27	1	1	N PINE	PLANT
05-00	23	059	14-W	000	68	057	5	027	ASPEN	18.2	27	3	1	ASPEN	SPROUT
*03-00	23	059	14-W	000	71	057	4	019	ASPEN	15.5	27	3	1	ASPEN	SPROUT
08-00	19	059	12-W	000	63	057	2	074	ASPEN	6.2	00	0	0	ASPEN	SPROUT
02-00	36	059	14-W	000	67	055	3	036	ASPEN	10.2	27	4	1	ASPEN	SPROUT
01-00	36	059	15-W	000	65	059	4	092	ASPEN	14.8	00	0	0	ASPEN	SPROUT
07-00	36	059	15-W	000	70	059	4	005	ASPEN	17.0	00	0	0	ASPEN	SPROUT
04-00	36	059	15-W	000	59	059	5	019	ASPEN	21.9	00	0	0	ASPEN	SPROUT
20-00	16	060	13-W	000	58	058	6	007	ASPEN	30.0	00	0	0	ASPEN	SPROUT
*27-00	16	060	13-W	000	58	057	4	051	ASPEN	15.4	00	0	0	ASPEN	SPROUT
11-00	10	060	13-W	000	57	056	4	027	ASPEN	14.7	00	0	0	ASPEN	SPROUT

TOTAL STANDS 69 TOTAL ACRES 1623

Birch

Rotation Age (years) - 60
 Current Clearcut Base (acres) - 1375
 Ten Year Allowable Cut (acres) - 229
 Ten Yr. Proposed Clearcut (acres) - 509

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	* M	REGEN PLANS		
													SPECIES	METHOD	
02-00	16	059	12-W	000	41	078	1	025	PBIRCH	2.6	30	3	1	J PINE	ART SD
11-00	34	060	12-W	000	53	063	1	016	PBIRCH	3.8	00	0	0	BALSAM	UNDERS
09-00	16	059	12-W	000	48	063	1	038	PBIRCH	2.3	30	3	2	BALSAM	UNDERS

TOTAL STANDS 3 TOTAL ACRES 79

LISTING OF ALL STANDS TO BE REGENERATED AFTER SALVAGE

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS		
													SPECIES	METHOD	
20-00	36	062	11-W	000	45	094	1	025	PBIRCH	2.4	30	2	1	BALSAM	UNDERS
01-00	04	059	12-W	000	43	060	2	004	PBIRCH	5.6	00	0	0	BALSAM	UNDERS
TOTAL STANDS		2	TOTAL ACRES		29										

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

* - Acreage listed is for part of stand to be harvested.

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS		
													SPECIES	METHOD	
01-00	14	059	12-W	000	42	099	3	013	PBIRCH	10.3	30	1	1	WH SPR	PLANT
06-00	11	059	12-W	000	42	099	3	004	PBIRCH	10.3	30	1	2	WH SPR	PLANT
07-00	36	061	11-W	000	55	081	1	007	PBIRCH	2.4	30	2	1	ASPEN	SPROUT
*08-00	16	060	13-W	000	80	079	3	075	PBIRCH	12.9	00	0	0	ASPEN	SPROUT
*02-00	36	059	13-W	000	51	073	5	018	PBIRCH	12.2	00	0	0	ASPEN	SPROUT
21-00	36	059	13-W	000	50	072	2	013	PBIRCH	5.0	00	0	0	N PINE	PLANT
*01-00	36	059	13-W	000	50	072	4	025	PBIRCH	12.7	00	0	0	N PINE	PLANT
15-00	13	059	14-W	000	54	070	3	016	PBIRCH	4.8	00	0	0	PBIRCH	SPROUT
11-00	19	059	12-W	000	45	069	2	034	PBIRCH	8.6	00	0	0	J PINE	ART SD
18-00	20	059	12-W	000	45	069	2	049	PBIRCH	8.6	00	0	0	J PINE	ART SD
06-00	33	060	12-W	000	51	067	1	012	PBIRCH	3.7	00	0	0	PBIRCH	SPROUT
*01-00	33	060	12-W	000	53	067	4	060	PBIRCH	8.6	30	2	2	ASPEN	SPROUT
01-00	03	059	12-W	000	43	061	2	006	PBIRCH	6.3	30	1	1	PBIRCH	SPROUT
13-00	16	060	13-W	000	37	066	3	032	PBIRCH	12.0	00	0	0	J PINE	ART SD
*05-00	36	060	14-W	000	55	066	2	019	PBIRCH	6.0	00	0	0	N PINE	PLANT
*06-00	16	059	13-W	000	41	060	3	046	PBIRCH	7.2	00	0	0	ASPEN	SPROUT
*01-00	36	060	14-W	000	55	061	4	080	PBIRCH	18.6	00	0	0	PBIRCH	SPROUT
TOTAL STANDS		17	TOTAL ACRES		509										

White Pine

Rotation Age (years) - 90
 Current Clearcut Base (acres) - 18
 Ten Year Allowable Cut (acres) - 2
 Ten Yr. Proposed Clearcut (acres) - 7

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS		
													SPECIES	METHOD	
17-00	36	061	11-W	000	49	068	5	007	W PINE	8.5	00	0	0	ASPEN	SPROUT
TOTAL STANDS		1		TOTAL ACRES		7									

Norway Pine

Rotation Age (years) - 90
 Current Clearcut Base (acres) - 79
 Ten Year Allowable Cut (acres) - 9
 Ten Yr. Proposed Clearcut (acres) - 21

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

* - Acreage listed is for part of stand to be harvested.

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS		
													SPECIES	METHOD	
10-00	32	061	08-W	000	40	116	2	006	N PINE	4.3	00	0	0	ASPEN	SPROUT
02-00	24	059	12-W	000	49	105	4	003	N PINE	10.8	00	0	0	BALSAM	NAT SD
05-00	07	060	11-W	000	50	082	6	006	N PINE	8.0	00	0	0	N PINE	PLANT
*07-00	07	060	11-W	000	46	077	2	006	N PINE	5.5	00	0	0	N PINE	PLANT
TOTAL STANDS		4		TOTAL ACRES		21									

Jack Pine

Rotation Age (years) - 57
 Current Clearcut Base (acres) - 2354
 Ten Year Allowable Cut (acres) - 413
 Ten Yr. Proposed Clearcut (acres) - 402

LISTING OF ALL STANDS TO BE RESERVED

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M
05-00	12	060	11-W	000	54	092	8	014	J PINE	29.3	40	2 2
04-00	12	060	11-W	000	54	092	8	009	J PINE	29.3	40	2 2
TOTAL STANDS		2		TOTAL ACRES		23						

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

* - Acreage listed is for part of stand to be harvested.

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS	
													SPECIES	METHOD
19-00	03	061	11-W	000	45	125	5	007	J PINE	25.2	99	2 0	J PINE	PLANT
01-00	15	061	11-W	000	50	113	5	007	J PINE	15.3	99	2 0	BALSAM	NAT SD
07-00	15	061	11-W	000	50	113	5	010	J PINE	15.3	99	2 0	BALSAM	NAT SD
02-00	15	061	11-W	000	50	113	5	007	J PINE	15.3	99	2 0	BALSAM	NAT SD
13-00	23	060	12-W	000	55	096	6	006	J PINE	25.0	00	0 0	J PINE	NAT SD
32-00	16	059	12-W	000	53	096	6	007	J PINE	31.0	99	2 2	J PINE	NAT SD
01-00	34	060	12-W	000	56	094	8	007	J PINE	37.4	51	2 0	J PINE	NAT SD
07-00	34	060	12-W	000	51	093	7	009	J PINE	28.8	51	1 0	J PINE	NAT SD
18-00	22	060	12-W	000	55	093	9	014	J PINE	44.0	60	2 1	J PINE	NAT SD
13-00	22	060	12-W	000	56	087	7	027	J PINE	27.0	00	0 0	J PINE	NAT SD
02-00	23	060	12-W	000	48	086	4	004	J PINE	9.7	00	0 0	J PINE	NAT SD
16-00	22	060	12-W	000	48	086	4	004	J PINE	9.7	00	0 0	J PINE	NAT SD
03-00	23	060	12-W	000	48	086	5	007	J PINE	13.5	00	0 0	J PINE	NAT SD
02-00	06	060	11-W	000	51	082	9	010	J PINE	20.0	00	0 0	J PINE	NAT SD
16-00	33	060	12-W	000	60	084	9	004	J PINE	49.7	00	0 0	J PINE	NAT SD
02-00	10	059	12-W	000	46	084	4	003	J PINE	14.0	18	4 1	J PINE	NAT SD
05-00	03	059	12-W	000	47	084	4	004	J PINE	18.0	00	0 0	ASPEN	SPROUT
11-00	16	059	12-W	000	54	078	4	020	J PINE	8.0	00	0 0	J PINE	NAT SD
01-00	15	060	12-W	000	53	075	5	005	J PINE	18.3	00	0 0	J PINE	NAT SD
*07-00	36	059	14-W	000	57	075	7	015	J PINE	20.1	42	3 1	ASPEN	SPROUT
20-00	36	059	14-W	000	59	075	4	008	J PINE	8.7	42	2 1	J PINE	PLANT
07-00	36	059	13-W	000	52	075	5	012	J PINE	7.4	00	0 0	ASPEN	SPROUT
13-00	36	059	14-W	000	62	074	7	013	J PINE	26.0	42	1 0	J PINE	NAT SD
03-00	15	060	12-W	000	55	072	6	005	J PINE	15.5	00	0 0	J PINE	NAT SD
03-00	22	060	12-W	000	53	072	6	045	J PINE	26.0	00	0 0	N PINE	PLANT
29-00	16	061	11-W	000	55	071	4	009	J PINE	5.3	00	0 0	ASPEN	SPROUT
08-00	07	060	11-W	000	52	070	8	023	J PINE	26.8	99	1 1	N PINE	PLANT
*14-00	36	060	11-W	000	55	070	6	009	J PINE	18.7	00	0 0	J PINE	NAT SD
28-00	16	060	13-W	000	52	076	8	017	J PINE	32.6	00	0 0	J PINE	ART SD
06-00	16	060	13-W	000	64	075	6	005	J PINE	23.6	00	0 0	J PINE	NAT SD
07-00	16	060	13-W	000	62	075	6	004	J PINE	24.1	00	0 0	J PINE	NAT SD
17-00	16	060	13-W	000	59	073	9	014	J PINE	37.0	00	0 0	J PINE	NAT SD
18-00	17	061	09-W	000	55	067	8	007	J PINE	35.0	00	0 0	J PINE	NAT SD
08-00	36	060	11-W	000	59	065	6	006	J PINE	24.0	00	0 0	J PINE	NAT SD
19-00	22	060	12-W	000	50	064	1	007	J PINE	3.7	00	0 0	J PINE	NAT SD
19-00	16	060	13-W	000	58	069	8	006	J PINE	37.0	00	0 0	J PINE	NAT SD
31-00	36	061	11-W	000	48	068	6	005	J PINE	21.0	00	0 0	J PINE	NAT SD
36-00	36	061	11-W	000	48	068	6	002	J PINE	21.0	00	0 0	J PINE	NAT SD
32-00	36	061	11-W	000	48	068	6	004	J PINE	21.0	00	0 0	J PINE	NAT SD
33-00	36	061	11-W	000	48	068	6	005	J PINE	21.0	00	0 0	J PINE	NAT SD
34-00	36	061	11-W	000	48	068	6	019	J PINE	21.0	00	0 0	J PINE	NAT SD
x03-00	7	060	11-W		51	076	6	005	J PINE	21.0			J PINE	NAT SD

TOTAL STANDS 42 TOTAL ACRES 402
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White Spruce

Rotation Age (years) - 65
Current Clearcut Base (acres) - 96
Ten Year Allowable Cut (acres) - 15
Ten Yr. Proposed Clearcut (acres) - 34

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	REGEN PLANS	
														SPECIES	METHOD
14-00	16	061	11-W	000	40	073	3	022	WH SPR	6.7	00	0	0	ASPEN	SPROUT
07-00	36	060	11-W	000	58	065	2	012	WH SPR	5.0	00	0	0	BALSAM	NAT SD
TOTAL STANDS		2		TOTAL ACRES		34									

Balsam Fir

Rotation Age (years) - 43
Current Clearcut Base (acres) - 629
Ten Year Allowable Cut (acres) - 146
Ten Yr. Proposed Clearcut (acres) - 105

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	REGEN PLANS	
														SPECIES	METHOD
03-00	21	061	08-W	000	36	045	1	013	BALSAM	1.7	00	0	0	ASPEN	UNDERS
20-00	16	059	12-W	000	54	043	2	024	BALSAM	8.0	00	0	0	BALSAM	UNDERS
TOTAL STANDS		2		TOTAL ACRES		37									

LISTING OF ALL STANDS TO BE REGENERATED AFTER SALVAGE

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	REGEN PLANS	
														SPECIES	METHOD
01-00	29	059	13-W	000	55	065	2	013	BALSAM	3.8	00	0	0	BL SPR	UNDERS
09-00	36	062	11-W	000	55	060	2	019	BALSAM	3.8	00	0	0	BALSAM	UNDERS
05-00	24	059	12-W	000	62	054	3	010	BALSAM	7.7	06	4	4	BALSAM	UNDERS
02-00	23	059	12-W	000	58	053	4	010	BALSAM	10.0	06	3	3	ASPEN	SPROUT
13-00	33	060	12-W	000	53	049	4	011	BALSAM	11.6	06	4	4	PBIRCH	SPROUT
20-00	36	060	12-W	000	42	044	2	039	BALSAM	5.1	51	2	0	N PINE	PLANT
TOTAL STANDS		6		TOTAL ACRES		102									

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	REGEN PLANS	
														SPECIES	METHOD
08-00	36	061	11-W	000	35	078	4	015	BALSAM	8.0	51	1	0	ASPEN	SPROUT
03-00	18	060	11-W	000	53	073	6	007	BALSAM	12.3	00	0	0	ASPEN	SPROUT
05-00	18	060	11-W	000	52	072	2	004	BALSAM	6.3	51	1	0	ASPEN	SPROUT
06-00	13	059	12-W	000	38	074	5	012	BALSAM	7.0	51	1	2	ASPEN	SPROUT
05-00	13	059	12-W	000	56	069	5	005	BALSAM	8.3	51	2	0	BALSAM	NAT SD
22-00	36	062	11-W	000	47	064	3	023	BALSAM	3.6	00	0	0	BALSAM	UNDERS
18-00	36	060	11-W	000	58	060	4	008	BALSAM	4.0	06	0	2	ASPEN	SPROUT
03-00	14	059	12-W	000	57	059	6	009	BALSAM	13.0	00	0	0	ASPEN	SPROUT
06-00	02	061	11-W	000	65	048	4	011	BALSAM	14.0	00	0	0	ASPEN	SPROUT
04-00	35	061	11-W	000	60	028	2	011	BALSAM	0.0	00	0	0	ASPEN	SPROUT
TOTAL STANDS		10	TOTAL ACRES		105										

Lowland Black Spruce

Rotation Age (years) - 105
 Current Clearcut Base (acres) - 3040
 Ten Year Allowable Cut (acres) - 290
 Ten Yr. Proposed Clearcut (acres) - 325

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	REGEN PLANS	
														SPECIES	METHOD
10-00	23	060	12-W	000	40	006	1	015	BL SPR	0.6	00	0	0	J PINE	ART SD
TOTAL STANDS		1	TOTAL ACRES		15										

LISTING OF ALL STANDS TO BE REGENERATED AFTER SALVAGE

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	REGEN PLANS	
														SPECIES	METHOD
07-00	16	060	12-W	000	33	132	1	017	BL SPR	3.0	00	0	0	BL SPR	UNDERS
07-00	09	061	08-W	000	29	123	1	005	BL SPR	6.0	99	2	2	BL SPR	NAT SD
15-00	17	061	09-W	000	29	113	1	013	BL SPR	7.3	51	2	2	BL SPR	UNDERS
04-00	32	061	08-W	000	30	113	1	004	BL SPR	5.3	99	1	1	BL SPR	UNDERS
04-00	12	060	12-W	000	33	112	2	042	BL SPR	5.3	51	3	0	WCEDAR	UNDERS
04-00	20	059	12-W	000	26	101	1	033	BL SPR	4.0	55	3	3	TMRACK	NAT SD
15-00	33	060	12-W	000	39	073	1	008	BL SPR	4.3	51	4	4	BL SPR	ART SD
08-00	34	060	12-W	000	37	071	1	007	BL SPR	3.0	51	5	2	BL SPR	ART SD
TOTAL STANDS		8	TOTAL ACRES		129										

LISTING OF ALL STANDS TO BE RESERVED

* - Marginally commercial stand with low site index that may be managed as part of the clear cut base in the future.

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM %	M	BASAL AREA
*14-00	28	061	11-W	000	25	026	4	007	BL SPR	1.3	00	0 0	070
*02-00	32	060	11-W	000	28	020	1	026	BL SPR	0.5	00	0 0	056
*07-00	32	061	08-W	000	26	028	3	005	BL SPR	1.7	00	0 0	027
*06-00	14	060	12-W	000	26	024	1	030	BL SPR	0.3	00	0 0	020
*01-00	31	061	08-W	000	24	030	2	004	BL SPR	0.6	00	0 0	010
*11-00	32	061	08-W	000	25	028	1	005	BL SPR	0.7	00	0 0	000
*03-00	25	060	12-W	000	25	018	2	018	BL SPR	0.5	00	0 0	000
*25-00	36	060	12-W	000	26	009	2	018	BL SPR	0.4	00	0 0	000
*15-00	32	061	08-W	000	25	074	9	004	BL SPR	4.3	00	0 0	160
*04-00	36	060	12-W	000	26	033	8	009	BL SPR	0.0	23	1 0	160
*15-00	14	060	12-W	000	24	054	1	017	BL SPR	0.3	00	0 0	055
*06-00	13	059	14-W	000	35	016	1	010	BL SPR	0.3	00	0 0	033
*03-00	16	059	12-W	000	26	050	3	008	BL SPR	0.9	00	0 0	030
*18-00	35	061	11-W	000	23	038	4	015	BL SPR	0.6	00	0 0	030
*06-00	27	061	11-W	000	25	027	2	004	BL SPR	0.5	00	0 0	026
*08-00	29	060	11-W	000	25	045	1	016	BL SPR	0.5	23	1 1	023
*05-00	30	060	11-W	000	25	045	1	031	BL SPR	0.5	23	1 1	023
*11-00	34	062	11-W	000	00	008	1	007	BL SPR	0.0	00	0 0	015
*03-00	18	059	13-W	000	35	016	1	012	BL SPR	0.3	00	0 0	003
*05-00	12	060	12-W	000	23	108	4	005	BL SPR	1.3	00	0 0	146
*15-00	16	059	12-W	000	25	086	5	008	BL SPR	2.4	23	3 1	067
*12-00	20	059	12-W	000	27	113	5	010	BL SPR	27.0	00	0 0	153
*23-00	36	059	14-W	000	25	125	2	020	BL SPR	11.2	51	0 1	090
*02-00	25	060	12-W	000	25	069	2	023	BL SPR	5.0	00	0 0	090
*10-00	20	059	12-W	000	26	056	2	019	BL SPR	9.5	00	0 0	073
*02-00	31	061	08-W	000	24	120	1	003	BL SPR	3.7	00	0 0	063
*01-00	35	061	11-W	000	38	083	1	005	BL SPR	6.0	60	2 0	060
*01-00	20	059	13-W	000	23	158	1	003	BL SPR	3.3	00	0 0	057
*06-00	21	059	13-W	000	23	158	1	001	BL SPR	3.3	00	0 0	057
*04-00	14	060	12-W	000	30	103	1	042	BL SPR	4.4	00	0 0	054
*01-00	20	059	12-W	000	27	094	1	019	BL SPR	4.0	00	0 0	050
*22-00	36	059	14-W	000	25	084	1	007	BL SPR	4.5	51	1 0	040
*04-00	32	060	12-W	000	25	106	1	014	BL SPR	3.5	00	0 0	038
*08-00	17	061	09-W	000	26	065	1	004	BL SPR	2.7	23	3 1	030
*20-00	36	059	12-W	000	26	118	1	029	BL SPR	3.0	00	0 0	026

TOTAL STANDS 35 TOTAL ACRES 458

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

													REGEN PLANS	
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM %	M	SPECIES	METHOD
05-00	36	060	11-W	000	28	153	3	008	BL SPR	14.0	23	3	1	BL SPR ART SD
12-00	28	061	11-W	000	27	143	2	002	BL SPR	10.7	99	0	2	BL SPR NAT SD
03-00	29	060	11-W	000	32	128	3	004	BL SPR	15.0	51	2	0	BL SPR NAT SD
16-00	34	060	12-W	000	23	124	3	023	BL SPR	15.0	00	0	0	BL SPR NAT SD
05-00	28	061	11-W	000	27	111	3	004	BL SPR	14.0	99	0	1	BL SPR NAT SD
09-00	34	060	12-W	000	46	109	4	030	BL SPR	19.9	51	3	1	BL SPR ART SD
27-00	36	061	11-W	000	33	107	1	003	BL SPR	5.0	53	3	3	BL SPR NAT SD
02-00	23	061	08-W	000	31	105	4	006	BL SPR	15.1	00	0	0	BL SPR ART SD
01-00	23	061	08-W	000	31	105	4	006	BL SPR	19.0	00	0	0	BL SPR ART SD
12-00	16	059	12-W	000	30	106	2	011	BL SPR	9.0	23	3	1	BL SPR ART SD
02-00	02	059	12-W	000	45	099	7	020	BL SPR	35.2	00	0	0	BL SPR ART SD
07-00	22	060	12-W	000	40	099	6	031	BL SPR	29.4	00	0	0	BL SPR ART SD
04-00	34	060	12-W	000	38	096	3	022	BL SPR	15.6	51	3	0	BL SPR ART SD
08-00	22	060	12-W	000	35	094	5	005	BL SPR	17.0	00	0	0	BL SPR ART SD
14-00	22	060	12-W	000	40	094	3	007	BL SPR	17.0	00	0	0	BL SPR ART SD
11-00	36	061	11-W	000	30	088	2	005	BL SPR	7.2	60	3	2	BL SPR ART SD
03-00	35	060	12-W	000	32	087	5	017	BL SPR	16.9	51	1	0	BL SPR ART SD
02-00	34	060	12-W	000	46	080	6	009	BL SPR	29.6	51	1	0	BL SPR NAT SD
17-00	33	060	12-W	000	45	079	5	016	BL SPR	22.5	51	2	2	BL SPR ART SD
08-00	35	061	11-W	000	38	083	1	007	BL SPR	6.0	60	2	0	BL SPR NAT SD
25-00	22	060	12-W	000	35	078	3	033	BL SPR	14.7	00	0	0	BL SPR ART SD
28-00	36	061	11-W	000	35	081	6	006	BL SPR	28.0	60	2	0	BL SPR ART SD
02-00	36	061	11-W	000	35	081	6	004	BL SPR	28.0	60	2	0	BL SPR NAT SD
12-00	33	060	12-W	000	46	073	6	007	BL SPR	26.0	51	1	0	BL SPR ART SD
15-00	22	060	12-W	000	50	064	1	005	BL SPR	5.0	00	0	0	BL SPR ART SD
01-00	23	060	12-W	000	50	064	1	020	BL SPR	5.0	00	0	0	BL SPR ART SD
20-00	22	060	12-W	000	38	062	3	014	BL SPR	16.0	51	2	2	BL SPR ART SD

TOTAL STANDS 27 TOTAL ACRES 325
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Tamarack

Rotation Age (years) - 108
 Current Clearcut Base (acres) - 370
 Ten Year Allowable Cut (acres) - 34
 Ten Yr. Proposed Clearcut (acres) - 34

LISTING OF ALL STANDS TO BE REGENERATED AFTER SALVAGE

													REGEN PLANS	
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM %	M	SPECIES	METHOD
09-00	02	061	11-W	000	27	111	1	003	TMRACK	3.0	00	0	0	TMRACK NAT SD

TOTAL STANDS 1 TOTAL ACRES 3
 =====

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS		
													SPECIES	METHOD	
01-00	35	060	12-W	000	32	107	3	007	TMRACK	6.7	51	1	0	TMRACK	NAT SD
26-00	34	060	12-W	000	32	107	3	005	TMRACK	6.7	51	1	0	TMRACK	NAT SD
06-00	14	059	12-W	000	38	094	5	006	TMRACK	7.0	28	3	3	BL SPR	ART SD
27-00	16	059	13-W	000	44	094	3	016	TMRACK	7.5	00	0	0	TMRACK	NAT SD
TOTAL STANDS		4		TOTAL ACRES		34									

Northern White Cedar

Rotation Age (years) - 125
 Current Clearcut Base (acres) - 359
 Ten Year Allowable Cut (acres) - 29
 Ten Yr. Proposed Clearcut (acres) - 18

LISTING OF ALL STANDS TO BE REGENERATED AFTER SALVAGE

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS		
													SPECIES	METHOD	
12-00	28	060	12-W	000	25	120	3	004	WCEDAR	11.0	55	5	1	ASH	UNDERS
TOTAL STANDS		1		TOTAL ACRES		4									

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

* - Acreage listed is for part of stand to be harvested.

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS		
													SPECIES	METHOD	
04-00	29	060	11-W	000	24	128	2	007	WCEDAR	10.0	28	4	0	BL SPR	ART SD
*16-00	16	059	13-W	000	28	126	4	011	WCEDAR	12.2	00	0	0	WCEDAR	ART SD
TOTAL STANDS		2		TOTAL ACRES		18									

LISTING OF ALL STANDS TO BE MANAGED ON AN ALL-AGED BASIS

SIZE CLASS: 5

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	BASAL AREA
06-00	28	059	14-W	000	22	092	5	009	WCEDAR	7.0	28	4	0	130
TOTAL STANDS		1		TOTAL ACRES		9								

Upland Black Spruce

Rotation Age (years) - 60
 Current Clearcut Base (acres) - 1207
 Ten Year Allowable Cut (acres) - 201
 Ten Yr. Proposed Clearcut (acres) - 199

LISTING OF ALL STANDS TO BE REGENERATED AFTER SALVAGE

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	REGEN PLANS SPECIES METHOD
01-00	16	059	12-W	000	40	093	1	007	BL SPR	2.3	00	0	0	BALSAM UNDERS
14-00	36	060	12-W	000	44	069	2	017	BL SPR	2.4	51	3	3	BALSAM UNDERS
10-00	34	060	12-W	000	50	057	6	008	BL SPR	24.0	51	3	3	BL SPR NAT SD
TOTAL STANDS		3		TOTAL ACRES		32								

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

* - Acreage listed is for part of stand to be harvested.

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	REGEN PLANS SPECIES METHOD
06-00	36	062	11-W	000	39	089	2	015	BL SPR	4.7	00	0	0	BALSAM UNDERS
32-00	16	061	11-W	000	36	088	4	008	BL SPR	9.2	99	1	1	BALSAM NAT SD
09-00	13	059	12-W	000	42	087	9	008	BL SPR	45.0	51	2	0	BL SPR NAT SD
11-00	36	062	11-W	000	40	084	2	013	BL SPR	6.7	99	2	1	ASPEN SPROUT
25-00	36	061	11-W	000	42	080	2	004	BL SPR	2.8	99	0	1	ASPEN SPROUT
12-00	13	059	12-W	000	44	081	7	003	BL SPR	28.5	51	3	0	BL SPR NAT SD
10-00	09	061	08-W	000	46	075	4	005	BL SPR	19.3	00	0	0	BL SPR NAT SD
05-00	16	061	11-W	000	37	073	2	009	BL SPR	1.5	51	0	1	BALSAM NAT SD
*03-00	16	061	11-W	000	40	071	6	051	BL SPR	23.2	00	0	0	J PINE ART SD
11-00	09	061	08-W	000	44	068	2	003	BL SPR	6.7	00	0	0	BL SPR NAT SD
01-00	04	061	11-W	000	32	072	2	023	BL SPR	9.0	00	0	0	WH SPR PLANT
09-00	36	060	11-W	000	51	065	2	010	BL SPR	5.0	00	0	0	BALSAM NAT SD

10-00	36	060	11-W	000	51	065	2	012	BL SPR	5.0	00	0	0	BALSAM	NAT SD
01-00	14	061	08-W	000	45	063	2	024	BL SPR	4.2	00	0	0	BALSAM	NAT SD
11-00	04	061	11-W	000	42	060	4	011	BL SPR	10.2	00	0	0	WH SPR	PLANT

TOTAL STANDS	15	TOTAL ACRES	199
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Cutover Area

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	REGEN PLANS	
														SPECIES	METHOD
24-10	35	061	11-W	000	00	006	0	004	NONE	0.0	00	0	0	ASPEN	SPROUT
05-00	22	060	12-W	000	40	003	0	016	NONE	0.0	00	0	0	BL SPR	NAT SD
11-00	29	060	12-W	000	00	004	0	010	NONE	0.0	00	0	0	BL SPR	NAT SD
03-00	33	060	12-W	000	00	004	0	035	NONE	0.0	00	0	0	ASPEN	SPROUT
07-00	12	060	12-W	000	00	004	0	015	NONE	0.0	00	0	0	ASPEN	SPROUT
06-00	12	060	12-W	000	00	004	0	012	NONE	0.0	00	0	0	ASPEN	SPROUT
11-00	12	060	12-W	000	00	004	0	014	NONE	0.0	00	0	0	BALSAM	NAT SD
09-00	12	060	12-W	000	00	004	0	046	NONE	0.0	00	0	0	ASPEN	SPROUT
04-00	26	060	12-W	000	00	004	0	017	NONE	0.0	00	0	0	BL SPR	ART SD
21-00	28	060	12-W	000	28	004	0	009	NONE	0.0	00	0	0	BL SPR	NAT SD
07-00	28	060	12-W	000	00	004	0	026	NONE	0.0	00	0	0	BL SPR	NAT SD
06-00	23	060	12-W	000	00	004	0	015	NONE	0.0	00	0	0	WH SPR	PLANT
01-00	26	060	12-W	000	42	004	0	007	NONE	0.0	00	0	0	J PINE	ART SD
06-00	36	059	14-W	000	00	004	0	049	NONE	0.0	00	0	0	J PINE	PLANT
01-00	16	059	13-W	000	00	004	0	015	NONE	0.0	00	0	0	ASPEN	SPROUT
09-00	36	059	14-W	000	00	004	0	028	NONE	0.0	00	0	0	J PINE	PLANT
10-00	29	059	13-W	000	00	003	0	007	NONE	0.0	00	0	0	J PINE	NAT SD
04-00	16	060	11-W	000	00	002	0	014	NONE	0.0	00	0	0	BL SPR	ART SD
11-00	29	059	13-W	000	00	003	0	021	NONE	0.0	00	0	0	BL SPR	NAT SD
12-00	16	060	11-W	000	00	002	0	013	NONE	0.0	00	0	0	BL SPR	NAT SD
10-00	20	059	13-W	000	00	003	0	012	NONE	0.0	00	0	0	BL SPR	NAT SD
06-00	23	059	14-W	000	00	004	0	018	NONE	0.0	00	0	0	ASPEN	SPROUT

TOTAL STANDS	22	TOTAL ACRES	403
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Upland Grass

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS		
													SPECIES	METHOD	
09-00	29	060	11-W	000	00	003	0	032	NONE	0.0	00	0	0	WH SPR	PLANT
02-00	25	060	11-W	000	00	003	0	006	NONE	0.0	00	0	0	N PINE	PLANT
01-00	25	060	11-W	000	00	003	0	010	NONE	0.0	00	0	0	N PINE	PLANT
TOTAL STANDS		3	TOTAL ACRES		48										
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Lowland Brush

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS		
													SPECIES	METHOD	
32-00	36	059	13-W	000	00	004	0	035	NONE	0.0	00	0	0	TMRACK	NAT SD
09-00	22	060	12-W	000	00	004	0	070	NONE	0.0	00	0	0	BL SPR	PLANT
TOTAL STANDS		2	TOTAL ACRES		105										
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BURNTSIDE LAKE RMU 9

EXISTING CONDITION

Table B.42 Burntside Lake RMU Timber Summary

Type	Acres	% Of Area	Avg Site Index	Avg % Updated	% Over Rot. Age	% At High Risk
Ash	345	1	41	95	59	1
Aspen	12567	32	60	51	69	22
Birch	2006	5	53	67	68	7
White Pine	802	2	48	95	41	14
Red Pine	1175	3	48	86	20	2
Jack Pine	5197	13	51	64	71	8
White Spruce	33	0	55	65	70	0
Balsam Fir	562	1	45	36	47	5
Black Spr. Lowland	3561	9	32	76	19	2
Tamarack	277	1	38	73	15	0
N. White Cedar	266	1	29	103	28	0
Black Spr. Upland	2143	5	40	64	53	3
Cutover Area	1900	5				
Lowland Grass	163	0				
Upland Grass	105	0				
Lowland Brush	1528	4				
Upland Brush	5	0				
Unproductive Forest	3420	9				
Non Forest	3255	8				
Total	39,310	100				

COVER TYPE COMPOSITION GOALS

Based on existing cover type conditions, timber markets, wildlife concerns, land administration proposals, and economic and biologic limitations and potentials, the following composition goals have been established for this unit.

Table B.43 Burntside Lake RMU Cover Type Composition Goals

Cover Type	Present		Ten Year		Long-term	
	Acres	%	Acres	%	Acres	%
Ash	345	1	345	1	345	1
Aspen	12567	32	12636	32	11386	29
Birch	2006	5	1561	4	1461	4
European Larch	0	0	37	0	37	0
White Pine	802	2	678	2	332	1
Norway Pine	1175	3	1491	4	2565	7
Jack Pine	5197	13	6061	15	5711	15
White Spruce	33	0	735	2	1907	5
Balsam Fir	562	1	387	1	387	1
Black Spruce Lowland	3561	9	3513	9	3113	8
Tamarack	277	1	414	1	814	2
N. White Cedar	266	1	273	1	273	1
Black Spruce Upland	2143	5	1558	4	1358	3
Cutover Area	1900	5	1272	3	1272	3
Lowland Grass	163	0	163	0	163	0
Upland Grass	105	0	18	0	18	0
Lowland Brush	1528	4	1493	4	1493	4
Upland Brush	5	0	0	0	0	0
Unproductive Forest	3420	9	3420	9	3420	9
Non Forest	3255	8	3255	8	3255	8
Total	39,310	100	39,310	100	39,310	100

MANAGEMENT PRESCRIPTIONS

Table B.44 summarizes the management prescriptions by type for the next ten years in the Burntside Lake RMU. Tables B.45 and B.46 outline regeneration needs for the next ten years. Table B.47 projects harvest levels by type in the future. These tables are followed by detailed lists of stands in each cover type to receive various treatments in the next ten years.

Table B.44 Management Prescriptions By Cover Type - Burntside Lake RMU

COVER TYPE	CLEAR CUT		THINNING		ALL-AGED		SALVAGE		REGEN		TOTAL	
	STD	ACRES	STD	ACRES	STD	ACRES	STD	ACRES	STD	ACRES	STD	ACRES
ASH	2	21	0	0	0	0	2	21	0	0	4	42
ASPEN	129	3510	0	0	10	209	26	724	18	644	183	5087
PBIRCH	15	420	0	0	8	238	2	33	6	52	31	743
W PINE	8	124	0	0	2	60	0	0	1	17	11	201
N PINE	12	120	5	87	0	0	0	0	0	0	17	207
J PINE	101	1852	0	0	8	79	4	38	2	35	115	2004
WH SPR	1	20	0	0	0	0	0	0	0	0	1	20
BALSAM	7	94	0	0	0	0	0	0	7	110	14	204
BL SPR	23	269	0	0	0	0	10	129	2	20	35	418
WCEDAR	0	0	0	0	1	5	0	0	0	0	1	5
UPBSPR	34	619	0	0	3	36	4	64	1	36	42	755
CUT	0	0	0	0	0	0	0	0	26	628	26	628
LOGRAS	0	0	0	0	0	0	0	0	0	0	0	0
UPGRAS	0	0	0	0	0	0	0	0	3	87	3	87
LOBRSH	0	0	0	0	0	0	0	0	1	35	1	35
UPBRSH	0	0	0	0	0	0	0	0	1	5	1	5
TOTAL	332	7049	5	87	32	627	48	1009	68	1669	485	10441

Table B.45 Regeneration Plans for Lands Harvested, Salvaged, and Regenerated without Harvest by Type
 Burntside Lake RMU
 (Acres)

Regen. Method & Spp.	Current Cover Type														Tot.
	Ash	Bi	Asp	WP	NP	JP	WS	BF	BSL	BSU	COA	UG	LB	UB	
<u>Natural</u>															
Ash	42														42
Asp		224	4350		11	34		36		104	181				4940
Bi		60													60
L.T. Asp			7												7
JP			231			103				14	306	63			717
BF		13	10					6							29
WP				17											17
BS						2			2	18					22
Tam									11	14					25
NP											9	24			33
<u>Plant</u>															
NP			80	23	109	139				25	22			5	403
JP			26			261		46		95					428
WS		186	18	101		54	20	99		244					722
BS											73				73
Tam								17		6			35		58
Ced										7					7
<u>Art. Seed</u>															
JP		22	156			1332				134					1644
BS									314	58	37				409
Tam									91						91
Total	42	505	4878	141	120	1925	20	204	418	719	628	87	35	5	9727

Table B.46 Summary of Artificial Regeneration Needs
 Burntside Lake RMU
 (Acres by Species and Regeneration Method)

SPECIES	PLANT	SEED
N PINE	403	0
WH SPR	722	0
J PINE	428	1644
TMRACK	58	91
BL SPR	73	409
WCEDAR	7	0
TOTAL	1691	2144

Table B.47 Projected Harvest Levels by Type, 1986 - 2036
and Estimated Sustained Yield with Year of Regulation

Type	Clearcut Acres by 10 year Period					Sustain yield	
	1986-95	1996-05	2006-15	2016-25	2026-35	Acres	Year
Ash	21	38	38	38	38	38	1996
Aspen	3510	2221	2221	1496	2221	2221	2026
Birch	420	110	102	94	94	94	2016
W Pine	124	61	57	52	48	??	????
N Pine	120	139	155	171	69	246	2086
J Pine	1852	657	657	657	657	1004	2036
Wh Spr	20	3	0	0	0	254	2056
Balsam	94	82	82	82	82	82	1994
Bl Spr Lo	269	299	295	291	287	261	2086
Tam	0	40	40	40	40	78	2086
W Cedar	0	22	22	22	22	22	1996
Bl Spr Up	619	234	218	203	203	203	2016
	7,049	3,906	3,887	3,146	3,761	4503	

Ash

Rotation Age (years) - 90
 Current Clearcut Base (acres) - 324
 Ten Year Allowable Cut (acres) - 36
 Ten Yr. Proposed Clearcut (acres) - 21

LISTING OF ALL STANDS TO BE REGENERATED AFTER SALVAGE

													REGEN PLANS		
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	SPECIES	METHOD	
29-00	16	063	12-W	000	30	136	2	014	ASH	4.0	55	2	1	ASH	UNDERS
32-00	16	063	12-W	000	46	095	3	007	ASH	8.3	28	2	1	ASH	UNDERS
TOTAL STANDS		2		TOTAL ACRES		21									

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	REGEN PLANS				
											DAM	%	M SPECIES METHOD		
04-00	03	063	09-W	000	44	198	3	007	ASH	12.4	00	0	0	ASH	NAT SD
05-00	17	061	12-W	000	56	107	3	014	ASH	15.0	00	0	0	ASH	NAT SD
TOTAL STANDS		2	TOTAL ACRES		21										

Aspen

Rotation Age (years) - 50
 Current Clearcut Base (acres) - 10901
 Ten Year Allowable Cut (acres) - 3488
 Ten Yr. Proposed Clearcut (acres) - 3510

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

* - Acreage listed is for part of stand to be treated.

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	REGEN PLANS				
											DAM	%	M SPECIES METHOD		
02-00	34	064	13-W	000	49	083	1	010	ASPEN	1.6	27	4	1	BALSAM	UNDERS
15-00	33	064	13-W	000	55	078	1	033	ASPEN	2.4	26	5	3	ASPEN	UNDERS
11-00	16	062	11-W	000	55	077	5	007	ASPEN	18.7	27	5	1	ASPEN	SPROUT
*08-00	36	066	15-W	000	63	074	1	157	ASPEN	3.7	00	0	0	ASPEN	SPROUT
02-00	29	065	14-W	000	51	074	2	018	ASPEN	4.0	25	3	2	WH SPR	PLANT
12-00	10	064	13-W	000	48	073	3	052	ASPEN	10.7	27	2	0	ASPEN	SPROUT
02-00	14	065	14-W	000	68	070	2	016	ASPEN	8.0	25	4	2	ASPEN	SPROUT
04-00	02	065	15-W	000	56	064	1	005	ASPEN	4.0	00	0	0	ASPEN	SPROUT
03-00	01	065	15-W	000	55	064	2	007	ASPEN	7.3	25	1	1	ASPEN	SPROUT
01-00	17	063	16-W	000	45	068	2	026	ASPEN	6.7	00	0	0	ASPEN	SPROUT
07-00	36	065	14-W	000	57	061	2	008	ASPEN	7.3	27	3	1	ASPEN	SPROUT
13-00	16	063	09-W	000	57	053	2	028	ASPEN	5.0	26	5	2	ASPEN	SPROUT
03-00	19	065	13-W	000	67	051	1	011	ASPEN	3.0	00	0	0	ASPEN	SPROUT
01-00	28	065	13-W	000	63	046	7	022	ASPEN	12.7	27	3	1	ASPEN	SPROUT
10-00	09	064	13-W	000	58	044	4	007	ASPEN	19.0	27	4	2	ASPEN	SPROUT
14-00	29	065	13-W	000	52	018	1	026	ASPEN	0.6	00	0	0	J PINE	PLANT
02-00	30	065	13-W	000	40	008	3	076	ASPEN	0.7	00	0	0	J PINE	UNDERS
05-00	36	065	16-W	000	50	007	1	155	ASPEN	0.3	00	0	0	J PINE	UNDERS
TOTAL STANDS		18	TOTAL ACRES		644										

LISTING OF ALL STANDS TO BE REGENERATED AFTER SALVAGE

													REGEN PLANS	
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	SPECIES	METHOD
05-00	29	065	14-W	000	59	087	4	021	ASPEN	8.4	25	4	2	ASPEN SPROUT
17-00	04	064	13-W	000	47	087	4	028	ASPEN	12.5	27	3	1	ASPEN SPROUT
11-00	16	064	16-W	000	59	085	2	006	ASPEN	9.0	26	4	0	ASPEN SPROUT
03-00	36	062	13-W	000	52	085	5	029	ASPEN	9.2	27	3	1	ASPEN SPROUT
03-00	36	064	13-W	000	45	083	3	043	ASPEN	7.0	27	3	1	N PINE PLANT
05-00	16	063	16-W	000	65	088	2	024	ASPEN	4.8	00	0	0	ASPEN SPROUT
12-00	16	062	14-W	000	60	080	4	008	ASPEN	7.7	27	4	1	ASPEN SPROUT
05-00	36	063	15-W	000	61	078	2	013	ASPEN	7.8	26	5	1	ASPEN SPROUT
05-00	32	064	16-W	000	64	075	4	014	ASPEN	4.7	27	3	2	ASPEN SPROUT
08-00	11	065	15-W	000	43	074	2	013	ASPEN	7.3	26	1	1	ASPEN SPROUT
08-00	36	064	13-W	000	56	073	5	022	ASPEN	17.1	27	4	2	ASPEN SPROUT
03-00	16	065	14-W	000	53	072	3	015	ASPEN	5.8	26	5	2	ASPEN SPROUT
24-00	36	064	13-W	000	62	071	3	045	ASPEN	8.1	27	3	1	ASPEN SPROUT
15-00	36	063	15-W	000	56	070	3	007	ASPEN	5.6	27	3	1	ASPEN SPROUT
09-00	11	061	12-W	000	57	074	2	006	ASPEN	3.6	00	0	0	ASPEN SPROUT
32-00	36	063	15-W	000	61	068	3	012	ASPEN	5.2	27	3	1	ASPEN SPROUT
17-00	16	064	16-W	000	56	065	2	008	ASPEN	5.5	26	3	0	ASPEN SPROUT
11-00	16	063	10-W	000	44	057	2	153	ASPEN	5.8	27	2	1	J PINE ART SD
21-00	36	062	12-W	000	49	058	2	006	ASPEN	10.6	27	5	3	ASPEN SPROUT
19-00	36	062	12-W	000	49	058	1	044	ASPEN	4.2	27	4	2	ASPEN SPROUT
22-00	36	062	12-W	000	49	058	2	006	ASPEN	8.7	27	4	2	ASPEN SPROUT
25-00	36	062	12-W	000	49	058	1	018	ASPEN	4.0	27	4	2	ASPEN SPROUT
08-00	36	063	13-W	000	61	058	2	007	ASPEN	6.5	26	3	0	ASPEN SPROUT
05-00	16	062	14-W	000	64	054	5	008	ASPEN	18.6	27	3	1	ASPEN SPROUT
01-00	36	062	12-W	000	49	057	2	028	ASPEN	6.0	40	2	0	ASPEN SPROUT
07-00	36	062	12-W	000	49	057	2	140	ASPEN	9.6	40	2	0	ASPEN SPROUT

TOTAL STANDS 26 TOTAL ACRES 724
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LISTING OF ALL STANDS TO BE RESERVED

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	
25-00	28	062	13-W	000	58	081	4	063	ASPEN	9.7	27	3	1
30-00	06	063	11-W	000	50	066	2	006	ASPEN	5.8	26	2	0

TOTAL STANDS 2 TOTAL ACRES 69
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LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

* - Acreage listed is for part of stand to be harvested.
 x - Stand is part of active sale sold prior to FY 1986

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS		
													SPECIES	METHOD	
02-00	20	064	16-W	000	71	091	6	037	ASPEN	12.5	27	3	2	ASPEN	SPROUT
11-00	16	065	14-W	000	62	088	4	026	ASPEN	13.3	26	5	2	ASPEN	SPROUT
05-00	27	065	14-W	000	67	087	5	013	ASPEN	14.0	27	4	1	ASPEN	SPROUT
11-00	14	064	16-W	000	57	085	5	005	ASPEN	18.0	26	4	1	ASPEN	SPROUT
10-00	16	064	16-W	000	62	084	3	018	ASPEN	12.0	26	4	0	ASPEN	SPROUT
12-00	16	064	16-W	000	62	083	3	003	ASPEN	16.5	26	4	0	ASPEN	SPROUT
14-00	16	064	16-W	000	57	083	5	014	ASPEN	14.3	26	4	0	ASPEN	SPROUT
01-00	08	062	11-W	000	69	082	4	075	ASPEN	9.3	26	5	1	ASPEN	SPROUT
05-00	08	062	11-W	000	69	082	4	004	ASPEN	9.3	26	5	1	ASPEN	SPROUT
17-00	36	064	13-W	000	58	082	6	009	ASPEN	28.0	27	2	1	ASPEN	SPROUT
08-00	09	064	16-W	000	65	082	9	005	ASPEN	33.8	26	4	1	ASPEN	SPROUT
14-00	17	064	16-W	000	58	082	6	009	ASPEN	20.0	26	3	1	ASPEN	SPROUT
09-00	09	064	16-W	000	65	082	9	022	ASPEN	33.8	26	4	1	ASPEN	SPROUT
09-00	28	062	13-W	000	63	081	4	055	ASPEN	11.4	26	4	1	ASPEN	SPROUT
31-00	28	062	13-W	000	63	081	4	026	ASPEN	11.4	26	4	1	ASPEN	SPROUT
19-00	36	064	13-W	000	68	079	2	028	ASPEN	6.2	27	4	2	ASPEN	SPROUT
02-00	36	064	12-W	000	58	080	7	016	ASPEN	30.7	00	0	0	ASPEN	SPROUT
37-00	36	063	15-W	000	56	080	5	027	ASPEN	13.5	26	3	1	ASPEN	SPROUT
05-00	16	063	12-W	000	59	079	4	016	ASPEN	10.5	27	2	1	ASPEN	SPROUT
24-00	16	062	11-W	000	55	077	3	006	ASPEN	6.3	26	5	1	ASPEN	SPROUT
04-00	02	061	12-W	000	55	082	3	011	ASPEN	11.5	40	2	0	ASPEN	SPROUT
21-00	14	064	16-W	000	56	074	6	005	ASPEN	17.3	27	4	1	ASPEN	SPROUT
30-00	28	062	13-W	000	58	074	3	009	ASPEN	6.8	26	4	0	ASPEN	SPROUT
01-00	28	062	13-W	000	58	074	3	039	ASPEN	6.8	26	4	0	ASPEN	SPROUT
29-00	28	062	13-W	000	58	074	3	024	ASPEN	6.8	26	4	0	ASPEN	SPROUT
15-00	32	062	13-W	000	57	074	6	007	ASPEN	12.5	26	2	1	ASPEN	SPROUT
*05-00	16	062	13-W	000	57	074	5	117	ASPEN	17.5	26	4	1	ASPEN	SPROUT
23-00	09	064	13-W	000	55	073	3	011	ASPEN	14.2	25	2	0	ASPEN	SPROUT
03-00	28	063	13-W	000	48	078	5	043	ASPEN	14.3	40	2	0	ASPEN	SPROUT
01-00	13	064	12-W	000	58	074	6	007	ASPEN	13.0	27	4	1	ASPEN	SPROUT
04-00	13	064	12-W	000	58	074	6	004	ASPEN	13.0	27	4	1	ASPEN	SPROUT
02-00	16	064	12-W	000	57	073	7	013	ASPEN	32.0	26	4	1	ASPEN	SPROUT
40-00	36	063	15-W	000	58	073	5	034	ASPEN	20.2	27	3	2	ASPEN	SPROUT
04-00	36	063	13-W	000	68	072	6	042	ASPEN	22.3	26	3	2	ASPEN	SPROUT
23-00	16	062	14-W	000	61	072	5	005	ASPEN	20.6	27	4	2	ASPEN	SPROUT
12-00	36	065	14-W	000	58	071	7	029	ASPEN	14.5	00	0	0	ASPEN	SPROUT
*02-00	16	063	16-W	000	57	076	3	350	ASPEN	5.4	40	2	0	ASPEN	SPROUT
*04-00	36	063	16-W	000	60	076	6	050	LT ASP	23.3	40	4	0	ASPEN	SPROUT
13-00	36	063	16-W	000	60	076	6	010	LT ASP	23.3	40	4	0	ASPEN	SPROUT
07-00	20	064	16-W	000	69	070	6	040	ASPEN	24.0	25	4	2	ASPEN	SPROUT
06-00	21	064	16-W	000	55	070	4	016	ASPEN	13.2	26	5	0	ASPEN	SPROUT
19-00	36	063	15-W	000	59	071	4	006	ASPEN	13.6	26	4	1	ASPEN	SPROUT
03-00	06	063	11-W	000	60	075	5	013	ASPEN	22.0	00	0	0	ASPEN	SPROUT
*34-00	16	062	14-W	000	53	071	5	058	ASPEN	16.7	27	3	0	ASPEN	SPROUT
*14-00	28	064	16-W	000	50	069	4	013	ASPEN	10.0	27	1	1	ASPEN	SPROUT
01-00	30	064	16-W	000	71	069	5	122	ASPEN	11.3	27	4	3	ASPEN	SPROUT

*16-00	16	064	16-W	000	56	069	3	038	ASPEN	7.3	26	3	0	ASPEN	SPROUT
01-00	31	064	16-W	000	71	069	5	029	ASPEN	11.3	27	4	3	ASPEN	SPROUT
04-00	18	061	12-W	000	53	075	2	011	ASPEN	9.3	40	2	0	ASPEN	SPROUT
02-00	33	064	13-W	000	55	068	3	014	ASPEN	5.0	27	4	1	ASPEN	SPROUT
01-00	32	064	16-W	000	55	068	4	025	ASPEN	7.2	27	3	2	ASPEN	SPROUT
10-00	17	064	16-W	000	67	068	4	009	ASPEN	16.6	26	5	0	ASPEN	SPROUT
13-00	16	064	16-W	000	63	068	4	003	ASPEN	13.5	26	4	0	ASPEN	SPROUT
02-00	27	063	16-W	000	65	073	6	021	ASPEN	28.3	40	4	0	ASPEN	SPROUT
31-00	06	063	11-W	000	57	068	5	007	ASPEN	10.2	26	3	1	ASPEN	SPROUT
03-00	32	062	13-W	000	59	069	5	012	ASPEN	12.0	00	0	0	ASPEN	SPROUT
03-00	36	062	16-W	000	61	069	5	038	ASPEN	9.5	27	3	1	ASPEN	SPROUT
02-00	23	066	16-W	000	59	068	3	015	ASPEN	7.8	00	0	0	ASPEN	SPROUT
04-00	12	065	15-W	000	50	068	2	003	ASPEN	6.3	26	2	1	J PINE	ART SD
30-00	36	063	15-W	000	71	068	5	063	ASPEN	20.5	27	3	1	ASPEN	SPROUT
35-00	36	063	15-W	000	61	068	4	033	ASPEN	10.3	25	3	1	ASPEN	SPROUT
02-00	10	064	16-W	000	68	067	6	008	ASPEN	21.9	26	4	1	ASPEN	SPROUT
03-00	16	061	12-W	000	57	073	9	008	ASPEN	46.0	00	0	0	ASPEN	SPROUT
*34-00	36	063	12-W	000	65	068	5	022	ASPEN	23.2	27	2	1	ASPEN	SPROUT
20-00	16	064	12-W	000	61	067	3	013	ASPEN	10.0	26	3	1	ASPEN	SPROUT
07-00	36	063	12-W	000	58	068	7	007	LT ASP	18.0	26	3	1	LT ASP	SPROUT
*08-00	36	062	13-W	000	50	066	4	033	ASPEN	5.7	27	1	1	ASPEN	SPROUT
*09-00	36	065	14-W	000	55	066	5	018	ASPEN	14.0	26	2	1	ASPEN	SPROUT
10-00	36	065	13-W	000	45	070	3	032	ASPEN	5.6	00	0	0	N PINE	PLANT
17-00	28	062	13-W	000	51	065	6	017	ASPEN	16.5	27	3	1	ASPEN	SPROUT
*03-00	20	062	13-W	000	65	065	5	036	ASPEN	9.6	27	3	1	ASPEN	SPROUT
*01-00	36	063	14-W	000	52	070	4	050	ASPEN	20.0	00	0	0	ASPEN	SPROUT
03-00	30	064	11-W	000	59	064	4	014	ASPEN	10.2	27	1	0	ASPEN	SPROUT
04-00	08	061	12-W	000	52	071	5	041	ASPEN	17.6	40	2	0	ASPEN	SPROUT
13-00	01	061	12-W	000	58	071	5	006	ASPEN	19.7	40	2	0	ASPEN	SPROUT
01-00	17	064	16-W	000	56	065	4	008	ASPEN	5.6	26	3	0	ASPEN	SPROUT
02-00	15	064	16-W	000	64	065	4	069	ASPEN	12.8	27	3	1	ASPEN	SPROUT
09-00	16	063	12-W	000	53	065	4	024	ASPEN	12.6	26	1	1	ASPEN	SPROUT
13-00	16	063	12-W	000	57	065	4	012	ASPEN	19.7	26	1	0	ASPEN	SPROUT
07-00	16	063	12-W	000	55	065	5	011	ASPEN	21.0	26	1	0	ASPEN	SPROUT
17-00	16	063	10-W	000	58	064	3	037	ASPEN	10.2	27	2	1	ASPEN	SPROUT
02-00	20	063	16-W	000	61	068	3	107	ASPEN	9.8	40	4	0	ASPEN	SPROUT
*06-00	16	066	16-W	000	72	064	5	065	ASPEN	20.4	27	1	1	ASPEN	SPROUT
*14-00	16	066	16-W	000	58	064	6	019	ASPEN	23.4	27	2	2	ASPEN	SPROUT
01-00	07	063	16-W	000	62	063	8	030	ASPEN	33.0	27	2	1	ASPEN	SPROUT
*27-00	06	063	11-W	000	69	065	5	014	ASPEN	20.0	26	2	0	ASPEN	SPROUT
*12-00	06	063	11-W	000	57	065	6	022	ASPEN	25.6	00	0	0	ASPEN	SPROUT
04-00	30	064	11-W	000	72	062	6	027	ASPEN	22.5	27	1	1	ASPEN	SPROUT
03-00	03	064	13-W	000	55	063	5	024	ASPEN	17.4	26	3	1	ASPEN	SPROUT
08-00	36	063	12-W	000	61	065	5	005	ASPEN	15.9	00	0	0	ASPEN	SPROUT
*08-00	06	063	11-W	000	57	068	6	063	ASPEN	25.6	00	0	0	ASPEN	SPROUT
*01-00	28	061	12-W	000	56	069	3	040	ASPEN	13.2	00	0	0	ASPEN	SPROUT
03-00	25	064	13-W	000	59	063	5	008	ASPEN	11.3	27	4	1	ASPEN	SPROUT
13-00	16	062	14-W	000	59	064	3	014	ASPEN	12.5	27	4	1	ASPEN	SPROUT
16-00	16	063	10-W	000	56	062	4	031	ASPEN	12.7	27	3	1	ASPEN	SPROUT
02-00	16	063	09-W	000	69	062	5	004	ASPEN	13.0	27	3	1	ASPEN	SPROUT
01-00	32	061	12-W	000	48	068	4	021	ASPEN	20.0	00	0	0	ASPEN	SPROUT
02-00	11	061	12-W	000	49	068	3	017	ASPEN	5.1	00	0	0	ASPEN	SPROUT
08-00	36	063	16-W	000	53	067	4	023	LT ASP	8.8	40	2	0	ASPEN	SPROUT
*03-00	07	063	16-W	000	64	062	6	064	ASPEN	21.0	27	1	1	ASPEN	SPROUT

06-00	25	065	14-W	000	59	062	8	005	ASPEN	31.7	26	3	0	ASPEN	SPROUT
*11-00	16	066	16-W	000	76	061	7	050	ASPEN	31.4	27	2	1	ASPEN	SPROUT
02-00	20	066	16-W	000	72	061	7	016	ASPEN	34.2	00	0	0	ASPEN	SPROUT
15-00	36	064	10-W	000	68	061	6	047	ASPEN	21.4	27	1	1	ASPEN	SPROUT
01-00	28	063	16-W	000	55	066	3	008	ASPEN	6.0	40	4	0	ASPEN	SPROUT
21-00	36	063	12-W	000	66	063	5	009	ASPEN	18.0	27	1	1	ASPEN	SPROUT
02-00	28	063	13-W	000	50	065	6	031	ASPEN	21.5	00	0	0	ASPEN	SPROUT
03-00	19	063	16-W	000	59	064	6	037	ASPEN	26.3	40	4	0	ASPEN	SPROUT
*03-00	16	066	16-W	000	68	060	5	071	ASPEN	25.8	25	2	1	ASPEN	SPROUT
01-00	08	061	12-W	000	46	066	3	010	ASPEN	13.0	40	2	0	ASPEN	SPROUT
01-00	16	061	12-W	000	71	066	5	013	ASPEN	24.8	00	0	0	ASPEN	SPROUT
02-00	03	064	16-W	000	70	060	5	032	ASPEN	19.5	27	4	3	ASPEN	SPROUT
02-00	03	065	16-W	000	64	059	4	005	ASPEN	20.3	27	5	2	ASPEN	SPROUT
31-00	36	063	12-W	000	67	061	5	004	ASPEN	13.3	26	2	0	ASPEN	SPROUT
05-00	22	062	12-W	000	51	065	4	005	ASPEN	18.0	40	2	0	N PINE	PLANT
01-00	07	062	16-W	000	60	060	4	050	ASPEN	12.5	27	4	1	ASPEN	SPROUT
08-00	18	063	16-W	000	68	062	4	006	ASPEN	18.8	40	2	0	ASPEN	SPROUT
06-00	18	063	16-W	000	68	062	4	027	ASPEN	18.8	40	2	0	ASPEN	SPROUT
02-00	32	063	14-W	000	57	063	2	036	ASPEN	10.0	40	2	0	ASPEN	SPROUT
01-00	33	061	12-W	000	67	064	3	011	ASPEN	14.5	00	0	0	ASPEN	SPROUT
01-00	29	065	13-W	000	57	057	5	016	ASPEN	11.6	27	2	1	ASPEN	SPROUT
06-00	23	066	16-W	000	67	057	3	006	ASPEN	6.0	00	0	0	ASPEN	SPROUT
03-00	28	063	16-W	000	73	062	6	011	ASPEN	20.7	40	4	0	ASPEN	SPROUT
08-00	14	063	09-W	000	54	057	3	005	ASPEN	8.3	27	1	1	ASPEN	SPROUT
*07-00	16	061	12-W	000	62	062	4	045	ASPEN	13.7	00	0	0	ASPEN	SPROUT
03-00	18	061	12-W	000	45	059	3	003	ASPEN	6.5	40	2	0	ASPEN	SPROUT
01-00	01	063	12-W	000	75	051	6	011	ASPEN	26.3	27	4	1	ASPEN	SPROUT
x11-00	16	061	12-W		60	071	5	020	ASPEN	21.5	27	2	1	ASPEN	SPROUT
x01-00	17	061	12-W		54	054	3	040	ASPEN	9.4	25	1	1	ASPEN	SPROUT

TOTAL STANDS 129 TOTAL ACRES 3510
 =====

LISTING OF ALL STANDS TO BE MANAGED ON AN ALL-AGED BASIS

SIZE CLASS: 4

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	BASAL AREA
17-00	36	063	16-W	000	55	062	4	002	ASPEN	20.0	00	0	0	090
16-00	28	063	16-W	000	59	062	3	004	ASPEN	8.7	00	0	0	070

SIZE CLASS: 5

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	BASAL AREA
14-00	36	063	16-W	000	60	076	6	022	LT ASP	23.3	40	4	0	205
06-00	19	063	16-W	000	59	064	6	011	ASPEN	26.3	40	4	0	131
11-00	36	063	12-W	000	61	065	5	045	ASPEN	15.9	00	0	0	117
20-00	28	063	16-W	000	55	066	3	019	ASPEN	6.0	40	4	0	104
06-00	36	066	15-W	000	64	066	4	014	ASPEN	6.6	27	2	1	094

12-00	36	063	16-W	000	53	067	4	010	LT ASP	8.8	40	2	0	092
01-00	20	063	16-W	000	61	068	3	042	ASPEN	9.8	40	4	0	078
07-00	36	066	15-W	000	65	065	4	040	ASPEN	11.2	26	2	0	075

TOTAL STANDS 10 TOTAL ACRES 209
 =====

Birch

Rotation Age (years) - 63
 Current Clearcut Base (acres) - 1053
 Ten Year Allowable Cut (acres) - 344
 Ten Yr. Proposed Clearcut (acres) - 420

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	REGEN PLANS	
														SPECIES	METHOD
02-00	09	064	15-W	000	42	092	2	006	PBIRCH	5.6	30	3	1	BALSAM	UNDERS
18-00	36	065	16-W	000	48	081	1	007	PBIRCH	3.3	00	0	0	ASPEN	UNDERS
02-00	36	063	16-W	000	38	082	3	009	PBIRCH	9.0	00	0	0	PBIRCH	SPROUT
08-00	10	064	13-W	000	55	073	2	006	PBIRCH	7.3	00	0	0	ASPEN	UNDERS
03-00	12	065	15-W	000	43	068	1	017	PBIRCH	2.4	51	1	1	WH SPR	PLANT
09-00	32	062	13-W	000	49	053	2	007	PBIRCH	3.0	30	3	1	BALSAM	UNDERS
TOTAL STANDS	6							TOTAL ACRES	52						

LISTING OF ALL STANDS TO BE REGENERATED AFTER SALVAGE

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	REGEN PLANS	
														SPECIES	METHOD
02-00	01	064	13-W	000	53	128	3	022	PBIRCH	6.2	30	3	1	J PINE	ART SD
14-00	20	062	13-W	000	55	054	4	011	PBIRCH	10.5	31	4	0	ASPEN	SPROUT
TOTAL STANDS	2							TOTAL ACRES	33						

LISTING OF ALL STANDS TO BE RESERVED

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M
01-00	36	063	16-W	000	38	082	3	062	PBIRCH	9.0	00	0	0
01-00	36	062	14-W	007	49	074	1	036	PBIRCH	2.6	40	4	0
11-00	36	062	14-W	007	49	074	1	014	PBIRCH	2.6	40	4	0
05-00	36	062	14-W	007	50	064	2	230	PBIRCH	6.6	40	4	0

01-00	36	064	09-W	000	51	057	2	081	PBIRCH	5.2	30	5	1
15-00	36	062	14-W	007	50	060	1	005	PBIRCH	3.0	40	4	0
17-00	36	062	14-W	007	52	059	6	023	PBIRCH	12.3	40	4	0
02-00	36	062	14-W	007	51	059	2	179	PBIRCH	5.8	40	4	0

TOTAL STANDS	8	TOTAL ACRES	630
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LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

* - Acreage listed is for part of stand to be harvested.
 x - Stand is part of active sale sold prior to FY 1986.

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS		
													SPECIES	METHOD	
27-00	16	062	14-W	000	46	081	3	031	PBIRCH	7.0	30	3	1	ASPEN	SPROUT
02-00	07	063	16-W	000	42	081	2	021	PBIRCH	4.0	30	2	1	ASPEN	SPROUT
02-00	16	062	11-W	000	48	078	3	025	PBIRCH	8.9	00	0	0	WH SPR	PLANT
04-00	16	062	11-W	000	48	078	4	010	PBIRCH	8.0	30	2	1	PBIRCH	SPROUT
26-00	16	062	11-W	000	48	077	4	034	PBIRCH	6.4	30	2	1	WH SPR	PLANT
03-00	16	062	13-W	000	53	077	6	010	PBIRCH	23.0	00	0	0	PBIRCH	SPROUT
06-00	36	062	13-W	000	44	076	2	013	PBIRCH	11.0	30	2	2	ASPEN	SPROUT
05-00	02	061	12-W	000	45	075	3	011	PBIRCH	10.0	30	1	1	PBIRCH	SPROUT
*09-00	36	063	12-W	000	47	075	4	010	PBIRCH	13.2	00	0	0	WH SPR	PLANT
*02-00	16	062	13-W	000	59	071	6	020	PBIRCH	21.5	00	0	0	PBIRCH	SPROUT
*01-00	18	063	16-W	000	59	073	3	100	PBIRCH	8.5	00	0	0	WH SPR	PLANT
07-00	18	063	16-W	000	59	073	3	055	PBIRCH	8.5	00	0	0	ASPEN	SPROUT
*02-00	19	063	16-W	000	59	073	3	025	PBIRCH	8.5	00	0	0	ASPEN	SPROUT
06-00	11	063	09-W	000	47	063	3	045	PBIRCH	4.6	30	1	1	ASPEN	SPROUT
x04-00	16	063	11-W		65	050	3	010	PBIRCH	5.0	30	1	1	ASPEN	SPROUT

TOTAL STANDS	15	TOTAL ACRES	420
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LISTING OF ALL STANDS TO BE MANAGED ON AN ALL-AGED BASIS

SIZE CLASS: 4

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	BASAL	
													AREA	
01-00	27	063	16-W	000	54	063	4	066	PBIRCH	13.0	00	0	0	140
02-00	23	063	12-W	000	57	052	2	047	PBIRCH	4.5	00	0	0	087
05-00	19	063	16-W	000	59	073	3	028	PBIRCH	8.5	00	0	0	079
01-00	34	063	16-W	000	56	061	2	005	PBIRCH	6.0	00	0	0	073
17-00	36	062	12-W	000	45	053	2	007	PBIRCH	7.0	30	2	1	043

SIZE CLASS: 5

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	BASAL AREA
13-00	28	063	16-W	000	64	075	3	012	PBIRCH	7.0	00	0	0	081
14-00	28	063	16-W	000	64	075	3	034	PBIRCH	7.0	00	0	0	081
10-00	28	063	16-W	000	64	075	3	039	PBIRCH	7.0	00	0	0	081
TOTAL STANDS		8	TOTAL ACRES		238									

White Pine

Rotation Age (years) - 100
 Current Clearcut Base (acres) - 725
 Ten Year Allowable Cut (acres) - 72
 Ten Yr. Proposed Clearcut (acres) - 124

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	REGEN PLANS SPECIES METHOD
01-00	33	064	13-W	000	55	099	2	017	W PINE	6.8	16	3	1	W PINE NAT SD
TOTAL STANDS		1	TOTAL ACRES		17									

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

* - Acreage listed is for part of stand to be harvested

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	REGEN PLANS SPECIES METHOD
11-00	16	064	12-W	000	48	149	2	014	W PINE	3.6	16	2	1	WH SPR PLANT
08-00	16	064	12-W	000	43	147	3	018	W PINE	4.6	16	2	1	WH SPR PLANT
13-00	16	064	12-W	000	40	125	1	010	W PINE	4.8	26	2	1	WH SPR PLANT
*01-00	16	062	11-W	000	46	118	8	010	W PINE	24.2	16	2	1	WH SPR PLANT
27-00	16	062	11-W	000	45	115	4	023	W PINE	13.0	16	3	1	WH SPR PLANT
03-00	16	062	11-W	000	43	115	4	021	W PINE	11.8	16	2	1	WH SPR PLANT
*05-00	16	062	11-W	000	47	107	6	005	W PINE	18.9	16	2	1	WH SPR PLANT
02-00	20	062	13-W	000	55	107	4	023	W PINE	9.8	16	5	0	N PINE PLANT
TOTAL STANDS		8	TOTAL ACRES		124									

LISTING OF ALL STANDS TO BE MANAGED ON AN ALL-AGED BASIS

SIZE CLASS: 6

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	BASAL AREA
07-00	36	063	16-W	000	53	108	5	021	W PINE	3.2	40	2	0	135

SIZE CLASS: 7

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	BASAL AREA
11-00	36	063	16-W	000	52	128	5	039	W PINE	6.6	60	2	0	117

TOTAL STANDS 2 TOTAL ACRES 60
 =====

Norway Pine

Rotation Age (years) - 100
 Current Clearcut Base (acres) - 1075
 Ten Year Allowable Cut (acres) - 106
 Ten Yr. Proposed Clearcut (acres) - 120

LISTING OF ALL STANDS TO BE RESERVED

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M
02-00	25	063	16-W	000	46	064	3	013	N PINE	5.9	40	4	0

TOTAL STANDS 1 TOTAL ACRES 13
 =====

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

* - Acreage listed is for part of stand to be harvested.
 x - Stand is part of active sale sold prior to FY 1986.

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD
06-00	16	064	12-W	000	41	189	2	021	N PINE	3.6	00	0	0	N PINE	PLANT
04-00	26	065	13-W	000	45	149	4	009	N PINE	18.5	00	0	0	N PINE	PLANT
01-00	01	064	13-W	000	41	128	2	020	N PINE	6.8	00	0	0	N PINE	PLANT
02-00	04	062	11-W	000	46	133	5	006	N PINE	4.9	00	0	0	N PINE	PLANT
04-00	36	062	13-W	000	44	118	2	005	N PINE	4.6	00	0	0	N PINE	PLANT
*11-00	28	062	13-W	000	54	116	5	005	N PINE	11.4	00	0	0	ASPEN	SPROUT
02-00	26	062	13-W	000	49	112	3	010	N PINE	7.2	28	2	0	N PINE	PLANT
17-00	28	064	16-W	000	38	111	9	006	N PINE	30.7	60	1	1	N PINE	PLANT
05-00	36	062	13-W	000	45	106	3	006	N PINE	5.4	00	0	0	N PINE	PLANT

x11-00	16	063	15-W	46	104	4	006	NPINE	10.0	ASPEN	SPROUT
x02-00	36	063	15-W	43	89	4	008	NPINE	10.0	N PINE	PLANT
x11-00	36	063	15-W	43	86	4	018	NPINE	10.0	N PINE	PLANT

TOTAL STANDS 12 TOTAL ACRES 120
 =====

LISTING OF ALL STANDS TO BE THINNED

SIZE CLASS: 5

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	BASAL AREA
14-00	16	062	13-W	000	56	079	9	005	N PINE	66.3	00	0	0	210
01-00	23	063	12-W	000	51	086	9	004	N PINE	64.7	54	3	0	187
01-00	36	063	13-W	000	59	083	9	007	N PINE	55.0	00	0	0	186
18-00	36	063	15-W	000	53	079	9	008	N PINE	50.8	55	1	1	170
01-00	36	064	13-W	000	47	085	9	063	N PINE	20.6	00	0	0	169

TOTAL STANDS 5 TOTAL ACRES 87
 =====

Jack Pine

Rotation Age (years) - 56
 Current Clearcut Base (acres) - 5036
 Ten Year Allowable Cut (acres) - 1798
 Ten Yr. Proposed Clearcut (acres) - 1852

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	REGEN PLANS SPECIES METHOD
12-00	13	064	16-W	000	34	067	1	004	J PINE	3.0	00	0	0	J PINE UNDERS
02-00	16	066	16-W	000	45	053	1	031	J PINE	3.8	00	0	0	J PINE ART SD

TOTAL STANDS 2 TOTAL ACRES 35
 =====

LISTING OF ALL STANDS TO BE REGENERATED AFTER SALVAGE

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	REGEN PLANS SPECIES METHOD
09-00	16	064	16-W	000	46	088	2	004	J PINE	5.0	00	0	0	J PINE ART SD
08-00	25	064	13-W	000	48	078	5	010	J PINE	15.0	99	3	3	N PINE PLANT
10-00	16	062	14-W	000	47	072	1	017	J PINE	3.0	51	4	3	J PINE ART SD
01-00	29	061	12-W	000	51	062	1	007	J PINE	3.7	00	0	0	J PINE ART SD

TOTAL STANDS 4 TOTAL ACRES 38
 =====

LISTING OF ALL STANDS TO BE RESERVED

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	* M
11-00	03	064	13-W	000	40	075	7	009	J PINE	28.4	51	2 1

TOTAL STANDS 1 TOTAL ACRES 9

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

* - Acreage listed is for part of stand to be harvested.
 x - Stand is part of active sale sold prior to FY 1986.

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	* M	REGEN PLANS	
													SPECIES	METHOD
06-00	04	064	15-W	000	50	130	5	070	J PINE	12.1	51	3 0	J PINE	PLANT
18-00	36	062	13-W	000	41	121	3	055	J PINE	6.1	60	3 1	J PINE	ART SD
06-00	27	065	14-W	000	52	115	4	012	J PINE	15.6	18	1 1	J PINE	PLANT
01-00	32	065	14-W	000	52	110	3	005	J PINE	7.2	99	1 1	J PINE	ART SD
04-00	20	062	12-W	000	44	108	6	004	J PINE	24.3	00	0 0	J PINE	NAT SD
03-00	28	065	14-W	000	54	106	6	011	J PINE	15.5	99	1 1	N PINE	PLANT
02-00	36	062	13-W	000	43	105	6	006	J PINE	20.0	60	5 1	J PINE	NAT SD
18-00	03	064	13-W	000	38	105	6	007	J PINE	23.1	00	0 0	J PINE	ART SD
08-00	07	065	15-W	000	50	104	8	002	J PINE	24.7	28	3 1	ASPEN	SPROUT
08-00	16	064	16-W	000	50	104	4	006	J PINE	7.8	28	2 0	J PINE	PLANT
14-00	03	064	13-W	000	47	100	4	004	J PINE	17.8	51	2 1	J PINE	NAT SD
07-00	29	065	14-W	000	49	099	2	003	J PINE	5.0	00	0 0	J PINE	NAT SD
15-00	16	062	13-W	000	51	098	5	005	J PINE	19.1	00	0 0	J PINE	NAT SD
03-00	16	063	12-W	000	51	098	6	003	J PINE	20.0	99	0 2	ASPEN	SPROUT
04-00	16	063	12-W	000	51	098	5	011	J PINE	22.0	99	0 2	N PINE	PLANT
*06-00	20	064	16-W	000	57	097	7	015	J PINE	33.3	00	0 0	J PINE	ART SD
04-00	20	064	16-W	000	57	097	4	011	J PINE	13.3	00	0 0	J PINE	ART SD
26-00	16	063	12-W	000	48	097	4	013	J PINE	10.8	99	1 1	J PINE	ART SD
21-00	16	063	12-W	000	49	097	3	020	J PINE	3.0	99	1 1	J PINE	ART SD
03-00	16	064	12-W	000	41	097	4	018	J PINE	17.2	00	0 0	J PINE	ART SD
10-00	34	064	13-W	000	46	095	6	005	J PINE	17.2	00	0 0	J PINE	NAT SD
03-00	05	064	15-W	000	41	094	4	015	J PINE	14.4	51	3 3	J PINE	ART SD
*02-00	11	064	16-W	000	46	094	8	072	J PINE	33.1	52	2 2	J PINE	ART SD
08-00	36	065	14-W	000	42	094	3	027	J PINE	14.8	00	0 0	J PINE	ART SD
01-00	25	065	14-W	000	44	094	4	017	J PINE	17.4	51	2 2	J PINE	PLANT
09-00	11	065	15-W	000	44	093	5	008	J PINE	11.3	51	2 1	J PINE	ART SD
05-00	02	065	15-W	000	44	093	5	002	J PINE	11.3	51	2 1	J PINE	ART SD
01-00	13	064	16-W	000	48	093	6	003	J PINE	19.8	51	1 1	J PINE	ART SD
07-00	12	064	16-W	000	48	093	6	012	J PINE	19.8	51	1 1	J PINE	ART SD
11-00	28	064	16-W	000	56	092	8	055	J PINE	21.2	60	1 1	J PINE	SPROUT
08-00	13	064	16-W	000	48	091	5	009	J PINE	21.2	51	1 1	J PINE	ART SD
07-00	16	063	09-W	000	53	091	5	023	J PINE	8.8	00	0 0	J PINE	ART SD
03-00	36	063	15-W	000	49	091	3	010	J PINE	6.8	52	1 2	J PINE	ART SD
02-00	10	064	13-W	000	40	090	4	007	J PINE	17.6	51	2 0	J PINE	ART SD
01-00	10	064	16-W	000	45	089	6	032	J PINE	28.4	60	1 1	J PINE	ART SD
08-00	17	064	16-W	000	49	089	8	009	J PINE	35.7	60	1 1	J PINE	ART SD

09-00	12	064	16-W	000	46	089	5	007	J PINE	20.2	51	1	1	J PINE	ART SD
05-00	03	063	09-W	000	56	089	5	001	J PINE	23.5	00	0	0	J PINE	NAT SD
*19-00	16	063	09-W	000	49	089	6	020	J PINE	23.8	00	0	0	WH SPR	PLANT
03-00	09	064	16-W	000	53	088	7	007	J PINE	36.0	60	1	1	J PINE	PLANT
01-00	24	065	14-W	000	47	088	7	013	J PINE	27.2	00	0	0	J PINE	PLANT
*01-00	16	064	16-W	000	42	088	5	017	J PINE	17.8	00	0	0	J PINE	PLANT
02-00	18	064	16-W	000	50	088	6	024	J PINE	28.4	60	1	1	J PINE	ART SD
*07-00	09	064	16-W	000	54	088	7	012	J PINE	30.0	60	1	1	N PINE	PLANT
05-00	16	064	16-W	000	50	088	7	007	J PINE	35.6	28	1	0	J PINE	ART SD
04-00	16	064	16-W	000	46	088	8	008	J PINE	38.0	28	1	0	J PINE	ART SD
11-00	13	064	16-W	000	46	088	5	013	J PINE	20.0	51	1	1	J PINE	ART SD
*05-00	03	064	16-W	000	49	088	8	019	J PINE	29.2	60	1	1	J PINE	ART SD
14-00	24	064	13-W	000	55	088	6	021	J PINE	16.0	99	3	2	N PINE	PLANT
06-00	36	064	09-W	000	48	088	7	016	J PINE	29.6	00	0	0	J PINE	PLANT
02-00	25	064	13-W	000	55	088	6	006	J PINE	16.0	99	3	2	WH SPR	PLANT
08-00	14	064	16-W	000	47	087	6	053	J PINE	22.3	52	2	2	J PINE	ART SD
03-00	09	064	15-W	000	48	087	4	026	J PINE	9.6	51	1	1	J PINE	ART SD
*6-00	11	064	16-W	000	50	087	8	028	J PINE	38.1	52	2	2	WH SPR	PLANT
10-00	03	063	09-W	000	54	087	6	021	J PINE	23.1	00	0	0	N PINE	PLANT
07-00	21	064	16-W	000	49	086	6	004	J PINE	26.6	02	1	0	J PINE	ART SD
03-00	19	064	16-W	000	56	086	5	013	J PINE	16.0	60	2	2	J PINE	ART SD
*05-00	18	064	16-W	000	56	086	8	022	J PINE	25.5	60	1	1	N PINE	PLANT
*12-00	17	064	16-W	000	47	086	7	010	J PINE	30.2	60	2	2	J PINE	ART SD
06-00	21	065	13-W	000	50	086	6	018	J PINE	17.0	00	0	0	J PINE	ART SD
12-00	28	064	16-W	000	52	086	4	005	J PINE	15.5	51	1	1	J PINE	ART SD
01-00	07	064	15-W	000	50	086	5	016	J PINE	18.8	51	1	1	J PINE	ART SD
09-00	13	064	16-W	000	32	085	1	002	J PINE	3.0	52	3	3	BL SPR	UNDERS
38-00	36	063	15-W	000	54	086	6	007	J PINE	22.6	51	0	3	J PINE	ART SD
02-00	04	064	15-W	000	46	084	3	007	J PINE	12.0	51	1	0	J PINE	ART SD
02-00	12	064	16-W	000	46	084	5	015	J PINE	25.0	28	1	1	J PINE	ART SD
01-00	09	064	15-W	000	48	084	8	008	J PINE	36.3	51	2	2	J PINE	ART SD
01-00	15	064	16-W	000	57	084	6	030	J PINE	21.7	00	0	0	J PINE	ART SD
04-00	12	064	16-W	000	50	083	3	003	J PINE	9.3	51	1	1	J PINE	ART SD
*13-00	04	064	13-W	000	51	083	5	044	J PINE	9.1	00	0	0	J PINE	ART SD
10-00	09	065	15-W	000	54	083	3	009	J PINE	10.3	00	0	0	J PINE	PLANT
07-00	33	065	14-W	000	50	083	4	006	J PINE	14.3	00	0	0	J PINE	PLANT
*07-00	04	064	13-W	000	49	082	5	042	J PINE	9.1	00	0	0	J PINE	ART SD
04-00	04	064	13-W	000	49	082	5	004	J PINE	9.1	00	0	0	J PINE	ART SD
*11-00	16	063	09-W	000	47	081	5	026	J PINE	24.0	00	0	0	J PINE	PLANT
05-00	09	065	15-W	000	42	081	3	004	J PINE	7.7	00	0	0	J PINE	ART SD
03-00	15	065	15-W	000	45	080	2	009	J PINE	6.0	00	0	0	J PINE	SPROUT
27-00	36	065	16-W	000	46	080	2	008	J PINE	10.0	52	1	1	J PINE	ART SD
05-00	19	064	16-W	000	50	080	6	003	J PINE	19.0	60	2	2	J PINE	ART SD
*03-00	16	064	16-W	000	50	080	5	046	J PINE	22.6	28	1	0	J PINE	PLANT
*10-00	20	064	16-W	000	55	080	7	017	J PINE	31.0	00	0	0	J PINE	ART SD
01-00	12	064	16-W	000	54	080	6	003	J PINE	21.0	51	2	2	J PINE	NAT SD
*01-00	04	064	13-W	000	49	080	5	058	J PINE	9.1	00	0	0	J PINE	ART SD
11-00	20	064	16-W	000	52	079	6	023	J PINE	21.6	00	0	0	J PINE	ART SD
04-00	15	064	16-W	000	54	079	7	005	J PINE	31.7	00	0	0	J PINE	ART SD
03-00	15	064	16-W	000	59	078	6	034	J PINE	22.0	00	0	0	J PINE	ART SD
01-00	13	063	09-W	000	50	078	4	073	J PINE	10.5	51	1	2	J PINE	ART SD
16-00	16	063	09-W	000	46	078	5	016	J PINE	8.4	00	0	0	J PINE	PLANT
*04-00	09	064	13-W	000	47	077	5	055	J PINE	19.2	00	0	0	J PINE	ART SD
01-00	28	064	16-W	000	48	077	4	003	J PINE	15.0	28	1	1	ASPEN	SPROUT

26-00	36	065	16-W	000	46	076	5	035	J PINE	21.2	00	0	0	J PINE	ART SD
07-00	19	064	16-W	000	58	076	5	031	J PINE	12.8	60	2	1	J PINE	ART SD
09-00	25	064	13-W	000	50	076	5	031	J PINE	7.5	00	0	0	N PINE	PLANT
18-00	01	061	12-W	000	38	082	3	031	J PINE	9.0	00	0	0	J PINE	ART SD
02-00	13	063	09-W	000	53	075	6	020	J PINE	17.0	51	1	3	J PINE	ART SD
*19-00	36	065	14-W	000	67	071	8	020	J PINE	11.4	00	0	0	ASPEN	SPROUT
02-00	15	065	15-W	000	47	070	6	010	J PINE	29.3	00	0	0	J PINE	ART SD
11-00	14	063	09-W	000	56	069	8	004	J PINE	35.3	00	0	0	J PINE	NAT SD
24-00	16	062	14-W	000	52	069	4	006	J PINE	11.0	00	0	0	ASPEN	SPROUT
x15-00	01	061	12-W		57	071	5	040	J PINE	21.0				J PINE	ART SD
x01-00	02	061	12-W		53	061	5	070	J PINE	19.4				J PINE	ART SD

TOTAL STANDS 101 TOTAL ACRES 1852
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LISTING OF ALL STANDS TO BE MANAGED ON AN ALL-AGED BASIS

SIZE CLASS: 4

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	BASAL AREA
07-00	05	064	15-W	000	43	093	5	004	J PINE	20.3	00	0	0	097
10-00	36	065	16-W	000	43	071	4	021	J PINE	18.0	00	0	0	086
03-00	25	065	14-W	000	40	085	4	006	J PINE	12.7	00	0	0	080

SIZE CLASS: 5

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	BASAL AREA
01-00	19	065	13-W	000	56	078	9	005	J PINE	32.3	00	0	0	170
26-00	28	062	13-W	000	64	085	7	011	J PINE	24.5	00	0	0	125
08-00	09	064	13-W	000	47	077	5	010	J PINE	19.2	00	0	0	103
23-00	28	062	13-W	000	51	089	5	013	J PINE	27.5	00	0	0	085
20-00	36	063	15-W	000	47	085	2	009	J PINE	5.3	52	0	1	039

TOTAL STANDS 8 TOTAL ACRES 79
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White Spruce

Rotation Age (years) - 75
 Current Clearcut Base (acres) - 33
 Ten Year Allowable Cut (acres) - 4
 Ten Yr. Proposed Clearcut (acres) - 20

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

													REGEN PLANS		
ST-NBR	SCIN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD
15-00	32	064	16-W	000	52	094	2	020	WH SPR	4.0	00	0	0	WH SPR	PLANT
TOTAL STANDS		1		TOTAL ACRES		20									

Balsam Fir

Rotation Age (years) - 45
 Current Clearcut Base (acres) - 437
 Ten Year Allowable Cut (acres) - 97
 Ten Yr. Proposed Clearcut (acres) - 94

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

													REGEN PLANS		
ST-NBR	SCIN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD
03-00	09	065	15-W	000	48	058	1	017	BALSAM	3.1	00	0	0	ASPEN	SPROUT
04-00	23	066	16-W	000	44	055	2	021	BALSAM	5.2	00	0	0	WH SPR	PLANT
08-00	28	062	11-W	000	35	020	2	035	BALSAM	0.6	00	0	0	WH SPR	PLANT
08-00	16	063	09-W	000	45	017	1	008	BALSAM	0.3	00	0	0	J PINE	PLANT
06-00	09	065	15-W	000	37	015	1	013	BALSAM	0.2	00	0	0	J PINE	PLANT
03-00	16	063	09-W	000	45	013	1	010	BALSAM	0.2	00	0	0	J PINE	PLANT
06-00	33	065	14-W	000	38	013	1	006	BALSAM	0.3	00	0	0	J PINE	PLANT
TOTAL STANDS		7		TOTAL ACRES		110									

LISTING OF ALL STANDS TO BE RESERVED

ST-NBR	SCIN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M
05-00	16	063	10-W	000	20	023	2	015	BALSAM	0.5	00	0	0
TOTAL STANDS		1		TOTAL ACRES		15							

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

* - Acreage listed is for part of stand to be harvested.

													REGEN PLANS		
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD
03-00	32	064	16-W	000	68	074	5	009	BALSAM	6.2	60	3	1	J PINE	PLANT
14-00	32	062	13-W	000	47	068	2	004	BALSAM	5.7	06	2	1	WH SPR	PLANT
21-00	28	062	13-W	000	50	068	3	006	BALSAM	6.3	00	0	0	BALSAM	NAT SD
05-00	16	064	12-W	000	53	069	3	012	BALSAM	5.7	00	0	0	WH SPR	PLANT
01-00	26	062	13-W	000	54	057	2	027	BALSAM	5.0	00	0	0	WH SPR	PLANT
*05-00	07	065	15-W	000	52	054	4	017	BALSAM	8.4	28	3	1	TMRACK	PLANT
04-00	07	065	15-W	000	57	053	6	019	BALSAM	10.5	28	3	1	ASPEN	SPROUT
TOTAL STANDS		7		TOTAL ACRES		94									
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Lowland Black Spruce

Rotation Age (years) - 105
 Current Clearcut Base (acres) - 3014
 Ten Year Allowable Cut (acres) - 289
 Ten Yr. Proposed Clearcut (acres) - 269

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

													REGEN PLANS		
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD
03-00	07	064	15-W	000	23	062	1	011	BL SPR	4.0	55	2	2	TMRACK	UNDERS
08-00	16	062	13-W	000	30	018	2	009	BL SPR	0.8	23	5	2	TMRACK	ART SD
TOTAL STANDS		2		TOTAL ACRES		20									
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LISTING OF ALL STANDS TO BE REGENERATED AFTER SALVAGE

													REGEN PLANS		
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD
22-00	36	064	13-W	000	28	137	2	006	BL SPR	6.3	00	0	0	BL SPR	ART SD
05-00	04	062	11-W	000	28	125	1	015	BL SPR	3.0	23	2	0	BL SPR	ART SD
16-00	16	062	13-W	000	29	116	2	011	BL SPR	10.0	23	3	1	BL SPR	ART SD
06-00	17	061	12-W	000	38	117	2	014	BL SPR	5.7	00	0	0	BL SPR	ART SD
07-00	03	064	13-W	000	32	105	1	007	BL SPR	6.7	00	0	0	BL SPR	ART SD
04-00	11	061	12-W	000	33	109	2	005	BL SPR	8.0	00	0	0	BL SPR	ART SD
05-00	13	064	16-W	000	42	094	4	011	BL SPR	18.3	51	2	2	BL SPR	ART SD

12-00	16	062	13-W	000	42	083	5	006	BL SPR	24.0	23	2	1	BL SPR	ART SD
03-00	31	064	16-W	000	31	076	2	030	BL SPR	10.0	23	3	2	TMRACK	ART SD
04-00	30	064	16-W	000	31	076	2	024	BL SPR	10.0	23	3	2	TMRACK	ART SD

TOTAL STANDS 10 TOTAL ACRES 129

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LISTING OF ALL STANDS TO BE RESERVED

* - Marginally commercial stand with low site index that may be managed as part of the clear cut base in the future.

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	BASAL AREA
17-00	36	065	14-W	000	31	107	1	008	BL SPR	3.7	00	0	0	
03-00	36	062	14-W	007	39	112	6	007	BL SPR	29.0	00	0	0	
04-00	36	062	14-W	007	40	089	6	015	BL SPR	29.0	00	0	0	
04-00	04	061	12-W	000	23	065	1	018	BL SPR	0.6	00	0	0	
*18-00	28	063	16-W	000	38	017	1	008	BL SPR	0.0	00	0	0	005
*05-00	28	063	16-W	000	38	017	1	011	BL SPR	0.0	00	0	0	005
*19-00	14	064	16-W	000	24	069	4	007	BL SPR	1.3	00	0	0	053
*17-00	16	062	11-W	000	25	048	3	009	BL SPR	1.2	00	0	0	026
*01-00	17	066	16-W	000	23	121	3	023	BL SPR	1.4	00	0	0	097
*02-00	16	062	12-W	000	24	079	1	028	BL SPR	0.5	00	0	0	022
*12-00	16	062	12-W	000	24	079	1	017	BL SPR	0.5	00	0	0	022
*02-00	36	066	15-W	000	33	103	4	006	BL SPR	20.0	00	0	0	130
*18-00	29	065	13-W	000	27	107	1	004	BL SPR	3.3	23	4	2	103
*07-00	10	062	12-W	000	24	115	2	008	BL SPR	7.5	00	0	0	095
*16-00	36	062	14-W	007	39	110	5	008	BL SPR	23.5	00	0	0	095
*12-00	26	062	13-W	000	24	122	1	028	BL SPR	4.0	99	1	1	085
*04-00	32	065	14-W	000	25	109	1	013	BL SPR	3.2	23	1	1	080
*02-00	05	064	15-W	000	24	089	1	015	BL SPR	2.0	00	0	0	064
*13-00	36	065	13-W	000	24	134	1	011	BL SPR	3.5	00	0	0	057
*02-00	13	064	13-W	000	28	121	1	009	BL SPR	3.5	00	0	0	045
*07-00	16	064	12-W	000	28	106	1	005	BL SPR	7.0	00	0	0	037
*07-00	11	065	15-W	000	24	087	1	091	BL SPR	6.0	00	0	0	032
*03-00	20	064	16-W	000	26	122	1	022	BL SPR	3.4	00	0	0	028

TOTAL STANDS 23 TOTAL ACRES 371

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LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

* - Acreage listed is for part of stand to be harvested.

													REGEN PLANS	
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	SPECIES	METHOD
12-00	14	063	09-W	000	32	176	4	007	BL SPR	18.3	00	0	0	BL SPR ART SD
06-00	36	063	15-W	000	32	169	4	005	BL SPR	19.6	51	1	1	BL SPR ART SD
01-00	20	066	16-W	000	38	158	3	004	BL SPR	16.4	00	0	0	BL SPR ART SD
23-00	36	064	13-W	000	31	143	2	008	BL SPR	12.0	60	3	1	BL SPR ART SD
02-00	28	062	13-W	000	37	142	3	007	BL SPR	11.5	23	3	2	TMRACK ART SD
22-00	16	066	16-W	000	31	134	3	002	BL SPR	15.4	00	0	0	BL SPR ART SD
02-00	17	066	16-W	000	31	134	3	023	BL SPR	15.4	00	0	0	BL SPR ART SD
03-00	20	066	16-W	000	31	134	3	002	BL SPR	15.4	00	0	0	BL SPR ART SD
14-00	28	062	13-W	000	30	128	7	018	BL SPR	37.0	00	0	0	BL SPR ART SD
*06-00	07	065	15-W	000	23	122	2	023	BL SPR	10.4	00	0	0	BL SPR ART SD
03-00	13	063	09-W	000	33	115	3	005	BL SPR	14.3	51	0	3	BL SPR ART SD
12-00	16	063	12-W	000	34	115	2	004	BL SPR	7.5	99	0	1	BL SPR ART SD
17-00	16	063	12-W	000	34	114	2	003	BL SPR	10.0	51	0	1	BL SPR ART SD
02-00	28	065	16-W	000	28	111	2	021	TMRACK	10.5	00	0	0	TMRACK ART SD
*03-00	35	065	13-W	000	28	113	4	030	BL SPR	18.5	00	0	0	BL SPR ART SD
05-00	13	063	09-W	000	35	104	4	002	BL SPR	22.0	51	0	1	BL SPR NAT SD
08-00	26	062	13-W	000	32	104	5	025	BL SPR	26.8	53	1	1	BL SPR ART SD
04-00	19	064	16-W	000	35	103	2	004	BL SPR	7.4	51	1	1	BL SPR ART SD
04-00	18	064	16-W	000	31	101	4	020	BL SPR	16.0	00	0	0	BL SPR ART SD
07-00	16	065	14-W	000	39	101	6	020	BL SPR	25.3	51	1	0	BL SPR ART SD
09-00	17	064	16-W	000	43	101	9	022	BL SPR	56.7	23	1	1	BL SPR ART SD
12-00	16	064	12-W	000	28	102	3	007	BL SPR	8.4	00	0	0	BL SPR ART SD
09-00	16	064	12-W	000	31	102	3	007	BL SPR	13.3	23	1	0	BL SPR ART SD
TOTAL STANDS		23	TOTAL ACRES		269									
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Northern White Cedar

Rotation Age (years) - 120
 Current Clearcut Base (acres) - 261
 Ten Year Allowable Cut (acres) - 21
 Ten Yr. Proposed Clearcut (acres) - 0

LISTING OF ALL STANDS TO BE MANAGED ON AN ALL-AGED BASIS

SIZE CLASS: 5

													BASAL	
ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	AREA	
05-00	36	066	15-W	000	28	128	4	005	WCEDAR	20.0	00	0	0	120
TOTAL STANDS		1	TOTAL ACRES		5									
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Upland Black Spruce

Rotation Age (years) - 65
 Current Clearcut Base (acres) - 2007
 Ten Year Allowable Cut (acres) - 617
 Ten Yr. Proposed Clearcut (acres) - 619

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS		
													SPECIES	METHOD	
04-00	29	065	14-W	000	35	066	1	036	BL SPR	2.3	00	0	0	J PINE	PLANT
TOTAL STANDS		1		TOTAL ACRES		36									
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LISTING OF ALL STANDS TO BE REGENERATED AFTER SALVAGE

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS		
													SPECIES	METHOD	
10-00	16	064	12-W	000	30	077	2	008	BL SPR	4.0	00	0	0	BL SPR	UNDERS
01-00	01	061	12-W	000	41	079	2	024	BL SPR	4.4	00	0	0	WH SPR	PLANT
04-00	04	064	15-W	000	30	072	2	007	BL SPR	7.8	51	2	2	WCEDAR	PLANT
03-00	25	065	13-W	000	39	075	2	025	BL SPR	7.0	15	4	0	N PINE	PLANT
TOTAL STANDS		4		TOTAL ACRES		64									
====				=====											

LISTING OF ALL STANDS TO BE HARVESTED AND REGENERATED

* - Acreage listed is for part of stand to be harvested.

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	% M	REGEN PLANS		
													SPECIES	METHOD	
*01-00	04	064	15-W	000	39	125	3	059	BL SPR	11.7	51	1	0	J PINE	ART SD
04-00	02	064	13-W	000	36	113	2	011	BL SPR	4.3	00	0	0	WH SPR	PLANT
03-00	02	064	13-W	000	35	108	3	047	BL SPR	13.0	00	0	0	WH SPR	PLANT
07-00	02	064	13-W	000	35	108	3	025	BL SPR	13.0	00	0	0	WH SPR	PLANT
06-00	11	065	15-W	000	45	108	4	004	BL SPR	8.8	51	1	1	TMRACK	PLANT

05-00	02	064	13-W	000	34	101	3	040	BL SPR	7.4	00	0	0	WH SPR	PLANT
03-00	02	063	09-W	000	42	097	4	023	BL SPR	10.1	00	0	0	WH SPR	PLANT
03-00	01	061	12-W	000	35	102	4	009	BL SPR	10.6	00	0	0	WH SPR	PLANT
20-00	09	064	13-W	000	41	095	4	009	BL SPR	15.0	00	0	0	J PINE	ART SD
10-00	03	064	13-W	000	46	090	4	009	BL SPR	10.4	51	2	1	J PINE	PLANT
17-00	36	063	15-W	000	44	091	4	025	BL SPR	5.6	52	2	1	ASPEN	SPROUT
32-00	36	063	12-W	000	43	090	2	005	BL SPR	6.0	00	0	0	ASPEN	SPROUT
25-00	09	064	13-W	000	44	088	7	058	BL SPR	19.1	00	0	0	BL SPR	ART SD
*05-00	04	064	15-W	000	35	088	2	022	BL SPR	3.3	51	4	0	J PINE	ART SD
03-00	24	065	14-W	000	43	086	7	017	BL SPR	18.0	00	0	0	J PINE	PLANT
02-00	27	065	14-W	000	46	084	6	029	BL SPR	10.3	00	0	0	J PINE	ART SD
20-00	14	064	16-W	000	45	083	7	015	BL SPR	16.6	52	2	2	WH SPR	PLANT
11-00	09	065	15-W	000	39	083	2	002	BL SPR	4.7	00	0	0	WH SPR	PLANT
09-00	36	063	15-W	000	40	083	3	018	BL SPR	3.6	52	1	1	ASPEN	SPROUT
09-00	14	063	09-W	000	38	081	4	006	BL SPR	13.7	00	0	0	BL SPR	NAT SD
06-00	32	065	14-W	000	41	079	2	005	BL SPR	4.3	00	0	0	ASPEN	SPROUT
03-00	33	065	14-W	000	50	075	9	003	BL SPR	24.7	00	0	0	J PINE	NAT SD
08-00	11	061	12-W	000	34	080	3	011	BL SPR	8.5	00	0	0	J PINE	NAT SD
*18-00	36	065	13-W	000	25	078	2	033	BL SPR	4.5	00	0	0	J PINE	PLANT
14-00	11	065	15-W	000	36	073	4	002	BL SPR	9.0	00	0	0	TMRACK	PLANT
07-00	21	065	13-W	000	52	071	6	007	BL SPR	25.0	00	0	0	WH SPR	PLANT
*05-00	01	061	12-W	000	50	074	5	040	BL SPR	12.4	00	0	0	WH SPR	PLANT
13-00	14	063	09-W	000	47	068	3	004	BL SPR	11.7	00	0	0	BL SPR	NAT SD
03-00	21	065	13-W	000	47	067	4	024	BL SPR	8.8	00	0	0	ASPEN	SPROUT
*05-00	12	061	12-W	000	31	072	2	015	BL SPR	6.4	00	0	0	J PINE	ART SD
04-00	22	062	12-W	000	35	072	3	014	BL SPR	5.2	00	0	0	TMRACK	NAT SD
06-00	12	061	12-W	000	39	071	5	006	BL SPR	17.8	00	0	0	ASPEN	SPROUT
*08-00	01	061	12-W	000	39	071	5	020	BL SPR	17.8	00	0	0	ASPEN	SPROUT
01-00	18	061	12-W	000	42	069	5	001	BL SPR	14.0	00	0	0	ASPEN	SPROUT

TOTAL STANDS 34 TOTAL ACRES 619
 =====

LISTING OF ALL STANDS TO BE MANAGED ON AN ALL-AGED BASIS

SIZE CLASS: 4

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	BASAL AREA
07-00	09	064	13-W	000	44	088	4	015	BL SPR	11.2	00	0	0	095
04-00	17	063	16-W	000	35	082	1	019	BL SPR	2.2	99	2	0	050

SIZE CLASS: 5

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	BASAL AREA
05-00	01	065	15-W	000	39	081	3	002	BL SPR	6.7	00	0	0	057

TOTAL STANDS 3 TOTAL ACRES 36
 =====

Cutover Area

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	REGEN PLANS	
														SPECIES	METHOD
04-00	25	064	13-W	000	56	003	0	009	NONE	0.0	00	0	0	N PINE	UNDERS
09-00	06	063	11-W	000	00	004	0	015	NONE	0.0	00	0	0	J PINE	UNDERS
08-10	06	063	11-W	000	00	004	0	039	NONE	0.0	00	0	0	ASPEN	UNDERS
05-00	04	063	09-W	000	54	003	0	011	NONE	0.0	00	0	0	J PINE	UNDERS
02-00	04	063	09-W	000	44	003	0	020	NONE	0.0	00	0	0	ASPEN	UNDERS
04-00	06	063	11-W	000	00	006	0	014	NONE	0.0	00	0	0	ASPEN	UNDERS
01-00	12	061	12-W	000	00	006	0	110	NONE	0.0	00	0	0	J PINE	UNDERS
13-00	11	061	12-W	000	00	006	0	030	NONE	0.0	00	0	0	ASPEN	UNDERS
20-00	16	061	12-W	000	58	004	0	034	NONE	0.0	00	0	0	BL SPR	UNDERS
04-00	13	061	12-W	000	00	006	0	011	NONE	0.0	00	0	0	J PINE	UNDERS
05-00	13	061	12-W	000	00	006	0	109	NONE	0.0	00	0	0	J PINE	UNDERS
14-00	16	061	12-W	000	00	003	0	016	NONE	0.0	00	0	0	N PINE	PLANT
13-00	10	062	12-W	000	00	005	0	006	NONE	0.0	00	0	0	J PINE	UNDERS
01-10	10	062	12-W	000	00	005	0	014	NONE	0.0	00	0	0	J PINE	UNDERS
07-10	10	062	12-W	000	00	003	0	017	NONE	0.0	00	0	0	BL SPR	UNDERS
04-10	10	062	12-W	000	00	003	0	007	NONE	0.0	00	0	0	BL SPR	UNDERS
01-00	10	062	12-W	000	00	005	0	011	NONE	0.0	00	0	0	BL SPR	ART SD
03-00	10	062	12-W	000	00	005	0	017	NONE	0.0	00	0	0	BL SPR	ART SD
23-00	16	063	12-W	000	00	004	0	015	NONE	0.0	00	0	0	BL SPR	UNDERS
01-00	04	063	09-W	000	44	003	0	013	NONE	0.0	00	0	0	ASPEN	UNDERS
24-00	16	063	12-W	000	00	004	0	051	NONE	0.0	00	0	0	ASPEN	UNDERS
12-00	33	064	13-W	000	00	002	0	008	NONE	0.0	00	0	0	ASPEN	UNDERS
01-00	08	064	15-W	000	50	002	0	030	NONE	0.0	00	0	0	J PINE	UNDERS
09-00	33	064	13-W	000	00	002	0	006	NONE	0.0	00	0	0	ASPEN	UNDERS
11-00	33	064	13-W	000	00	002	0	006	NONE	0.0	00	0	0	N PINE	PLANT
10-00	33	064	13-W	000	00	002	0	009	NONE	0.0	00	0	0	BL SPR	ART SD

TOTAL STANDS 26 TOTAL ACRES 628

Upland Grass

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	REGEN PLANS	
														SPECIES	METHOD
10-00	10	062	12-W	000	00	003	0	024	NONE	0.0	00	0	0	N PINE	UNDERS
01-50	10	062	12-W	000	00	003	0	055	NONE	0.0	00	0	0	J PINE	UNDERS
01-20	10	062	12-W	000	00	003	0	008	NONE	0.0	00	0	0	J PINE	UNDERS

TOTAL STANDS 3 TOTAL ACRES 87

LISTING OF ALL STANDS TO BE RESERVED

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M
05-00	36	063	12-W	000	00	005	0	016	NONE	0.0	00	0	0

TOTAL STANDS 1 TOTAL ACRES 16
 =====

Lowland Brush

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD
14-00	36	066	15-W	000	00	003	0	035	NONE	0.0	00	0	0	TMRACK	PLANT

TOTAL STANDS 1 TOTAL ACRES 35
 =====

LISTING OF ALL STANDS TO BE RESERVED

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M
15-00	36	066	15-W	000	00	003	0	050	NONE	0.0	00	0	0

TOTAL STANDS 1 TOTAL ACRES 50
 =====

Upland Brush

LISTING OF ALL STANDS TO BE REGENERATED WITHOUT HARVEST

ST-NBR	SCTN	TWN	RNGE	MGMT	SI	AGE	DEN	ACRES	MA-SPEC	VOL	DAM	%	M	SPECIES	METHOD
10-00	21	065	13-W	000	00	003	0	005	NONE	0.0	00	0	0	N PINE	PLANT

TOTAL STANDS 1 TOTAL ACRES 5
 =====

ORR AREA FOREST RESOURCE MANAGEMENT PLAN

Appendix C. State Forest Road Plan

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INTRODUCTION

The purpose of this appendix is to provide for the orderly development and maintenance of state forest roads in the Orr Area. There are currently 56.5 miles of inventoried state forest road in the Orr Area. This figure does not include class 5 and 6 roads. If all proposed road projects are completed, there will be approximately 160 miles of permanently maintained state forest road in the Orr Area. Much of the increased mileage will be on existing class 5 road.

Road proposals for the Orr Area were developed in conjunction with plans for timber, wildlife, recreation, and land administration. District Foresters determined the adequacy of existing access to all Division of Forestry administered land that will require road access for management during the next ten years. Where access was inadequate for proposed management purposes, the District Forester developed road project proposals. The proposals were reviewed by area, regional, and St. Paul road specialists. Construction and reconstruction proposals were prioritized because they are capital improvements requiring large expenditures and extended time periods to complete. No attempt was made to prioritize the acquisition of easements. Priorities for easements will be the same as the priority of project they serve. Proposals were designed to provide permanent legal access to lands that the Division intends to manage on a long term basis. The period for implementation of the proposals may exceed the 10 years covered by the plan, depending on markets, management needs, and budgets.

GUIDELINES

The Division of Forestry will develop and maintain a system of forest roads that provide access to, and permit management, protection, and development of state forest resources as required by state law (MS 89.002). Statewide forest road policies contained on pages 43 through 56 of the State Forest Road Plan (MN DNR - Forestry, 1982) will apply in the Orr Area. The forest road policies cover road classification, siting criteria, construction and maintenance, mapping, road names and numbers, signing, securing of rights-of-way, water permits, transfer of responsibility, abandonment, seasonal closures, cooperative agreements, and evaluation and prioritization of road projects.

Access to state lands in the Orr Area is hampered by a scattered ownership pattern. This problem is being addressed in part through land exchanges aimed at consolidating land into more manageable blocks. While land exchanges can help alleviate the access problem they can never totally solve it. The Area will acquire easements across the lands of other owners to permit resource management on, and public access to state land.

The following policies will apply to the state forest roads in the Orr Area:

1. Cooperative road agreements will be developed with federal agencies (USFS), counties (St. Louis, Lake, and Koochiching), and private industrial concerns (timber and mining companies) when roads on lands of these owners are used to access state lands.
2. Easements will be acquired across the lands of federal agencies, counties, and private industrial concerns when the state will be spending money to construct or reconstruct permanent roads across these lands to serve state lands. These rights-of-way will then become state forest roads and will be entered on the state forest road inventory.
3. Unrestricted, permanent easements will be acquired across nonindustrial private lands to access state lands where ongoing management is planned. All easement proposals must be checked to see that legal right-of-way has not already been acquired through prescription. If easements cannot be acquired, allow loggers or contractors to acquire access for harvesting and management activities. Lands that have not adequately accessed should be reevaluated for appropriate disposition when the Area Plan is updated or rewritten.

4. Forestry personnel will work with loggers to determine the best route for roads that the loggers are developing in conjunction with timber sales on state lands so that access is gained systematically. These roads should be added to the state forest road inventory.
5. When managing lands proposed for exchange, acquire easements only if they are donated. Otherwise allow the logger to acquire access and develop roads to the parcel at no cost to the state. (Some lands which are proposed for exchange will be managed on an interim basis because of the uncertainties connected with exchanges).
6. All roads on state lands or on other ownerships where the state holds legal right-of-way will be recorded on a comprehensive state forest road inventory.
7. State forest roads may be closed to vehicular traffic on a temporary or permanent basis to prevent roadway damage, to reduce maintenance costs, or to protect resources.
8. Snowmobiles will be allowed to use unplowed state forest roads.
9. When trails or roads used for snowmobiling are plowed to allow timber hauling an alternate trail will be provided if feasible. If it is not feasible to reroute the trail, signs will be posted to warn users of hazards.
10. The DNR will cooperate with other agencies and land owners to limit average road density in areas of actual or potential wolf habitat to no more than 1 mile of road per square mile [see Appendix H and draft "Road Densities and Wolf Populations - Guidelines for Management" (MN DNR - Wildlife, 1987)].

STATE FOREST ROAD PROPOSALS

AREAWIDE SUMMARY

Easements

Acquisition of easements for about 50 miles of right-of-way are proposed to provide adequate access to state lands scheduled for management in the next ten years. The anticipated cost in 1986 dollars is approximately \$80,000. Donation of easements will be encouraged. For details on individual easements see road proposals by RMU in this appendix.

Construction

Construction of about 52 miles of road are proposed to provide adequate access for management activities scheduled for the next ten years. For budgeting purposes recreational roads have been separated from those to be used for other management purposes. Tables C.1 and C.2 summarize road construction proposals. Details on each proposal can be found under the appropriate RMU in this appendix.

Reconstruction

Reconstruction of 34 miles of road are proposed to provide adequate access to state lands scheduled for management in the next ten years. Table C.3 summarizes road reconstruction proposals. For details about individual reconstruction projects see the descriptions by RMU in this appendix.

Maintenance

Road mileage to be maintained is expected to increase from the current 56.5 miles of inventoried road to about 160 miles at the end of the ten year period. The new mileage will result from new construction, the reconstruction of some roads currently not on inventory, and the acquisition of easements over existing road right of way. The cost of maintaining the state forest road system in the Orr Area is projected to increase to \$50,000 per year (in 1986 dollars) by the end of the ten year period.

Table C.1 Summary of Orr Area State Forest Road Construction Proposals by Priority

Road Name	Location	RMU	Miles	Class	Cost
1. Rat Root River	68-21	1	4.50	4	\$230,000
2. Haley	63-19	5	6.00	4	120,000
3. Gannon Amundsen	67-19	3	12.00	4	450,000
	68-19				
4. Murray Spur	61-14	7	2.00	4	90,000
5. "5" Bones	63-17	5	3.00	4	125,000
6. Black Duck Grade	66-19	5	1.00	4	75,000
	66-20				
7. Little Long Lake	63-12	9	0.75	5	35,000
8. Hanson	65-20	5	1.00	4	35,000
	65-21				
9. North Bay	61-12	9	1.00	5	5,000
10. Birch Lake	61-11	9	2.00	4	80,000
	61-12				
	62-12				
11. Bear Island L. Spur	61-13	7	0.75	5	10,000
12. Cut Root	63-19	5	2.00	4	80,000
13. Big Lake ^a	65-13	9	6.00	4	270,000
	64-13				
14. Benville	60-13	8	0.30	5	3,000
15. South Kawishiwi	62-11	9	2.25	4	110,000
16. Wampus	60-10	8	1.25	4	15,000
	60-11				
17. Cheney	61-19	6	1.50	5	10,000
18. 35 South	61-19	7	1.50	5	30,000
19. Old Winter	61-18	7	1.00	5	15,000
20. Koscielak	62-17	6	1.00	5	10,000
Total			50.80		\$1,798,000

Note: a. Cooperative project with USFS cost sharing anticipated.

Table C.2 Summary of Orr Area Recreation Related State Forest Road Construction Proposals by Priority

Road Name	Location	RMU	Miles	Class	Cost
1. Wooden Frog Cpg.	69-21	3	0.30	3	\$18,000
2. Shively Falls	63-17	5	0.75	4	30,000
3. Wakemup Bay Cpg.	63-18	5	0.50	2	250,000
Total			1.55		\$298,000

Table C.3 Summary of Orr Area State Forest Road Reconstruction Proposals by Priority

Road Name	Location	RMU	Miles	Class	Cost
1. Rat Root River	68-21	1	1.60	4	\$32,000
2. Pearl Lake	67-21	1	3.20	4	60,000
3. Niles Bay Extension	63-17	5	1.50	4	45,000
4. Hoodoo Lake	63-19	5	0.75	5	5,000
5. Murray Spur ^a	62-15&14 61-14	9&7	4.00	4	80,000
6. "5" Bones	63-17	5	1.75	4	60,000
7. Black Duck Grade	66-19	5	0.50	4	10,000
8. Hanson	65-20	5	1.50	4	35,000
9. Bearscratch ^b	66-19	5	2.00	4	50,000
10. Clover ^b	66-19	5	1.50	4	38,000
11. Biondich	67-22	1	6.50	4	162,000
12. Niles Bay	63-17	5	3.10	4	108,000
13. Benville	60-13	8	0.70	5	7,000
14. South Kawishiwi	62-11	9	0.50	4	10,000
15. Autio	64-19	5	1.00	4	45,000
16. Smith	64-21	6	3.60	4	4,000
Total			33.70		\$751,000

Notes: a. Cooperative project with St. Louis County cost share.
 b. Cooperative project with Division of Fish & Wildlife cost share.

PEARL LAKE RESOURCE MANAGEMENT UNIT - RMU 1

Easements

Table C.4 Proposed Easement Acquisitions - RMU 1

Owner	Location	Mi.	Reason
Boise	T68 R21 S28, 29, 20	1.60	Rehabilitation, Bridge project. See Rat Root River Road proposal.
Private	T68 R20 S31	0.25	Insure access.
USFS	T67 R21 S18, 19	1.50	Portion of proposed Biondich Road. (See reconstruction proposal).
Boise	T67 R22 S24, 25	1.10	Portion of proposed Biondich Road. (See reconstruction proposal).
Boise	T67 R22 S25, 31, 32, 33	2.00	Portion of proposed Biondich Road. (See reconstruction proposal).
Total		6.45	

Construction

Table C.5 State Forest Road Construction Proposals by Priority RMU 1

Location	Miles	Class	Reason
1. Rat Root River Road T68 R21	4.50	4	To provide guaranteed access to summer access wood in 6600 acre state block. Proposed to be partially funded with RIM money because it will allow wildlife habitat improvement. Bridge necessary to cross the Rat Root River. Easements necessary. (See related reconstruction proposal).
Total	4.50		

Reconstruction

Table C.6 State Forest Road Reconstruction Proposals by Priority RMU 1

Location	Miles	Class
1. Rat Root River Road T68 R21	1.60	4
<u>Reason</u> This Boise Cascade road (easements necessary) is a portion of the proposed Rat Root River Road.		
<u>Repairs Necessary</u> Upgrade to class 4.		
2. Pearl Lake Road T67 R21	3.20	4
<u>Reason</u> Access an area of high fire potential with many acres of young conifer plantation and logging slash. Timber harvesting will be limited during the first ten year period but will increase significantly during the second ten year period.		
<u>Repairs Needed</u> Minor repairs are necessary. Increased lift is needed on portions of the road, the corduroy is exposed in places and some culverts are in need of replacement. The entire roadway should be resurfaced with class 5 material.		
3. Biondich Road T67 R22 S25, 31, 32, 33	6.50	4
<u>Reason</u> The road is in poor condition. It serves as the access to an area of state land scheduled for management. The road is also needed for fire protection.		
<u>Repairs Needed</u> Increase road lift, resurface with class 5 and replace about 35 culverts. Easements necessary.		
Total	11.30	

LONG LAKE RESOURCE MANAGEMENT UNIT - RMU 3

Easements

Table C.7 Proposed Easement Acquisitions - RMU 3

Owner	Location	Miles	Reason
Boise	T67 R19 S4, 5, 8 T68 R19 S9, 10 24, 26, 27, 33	3.8	To provide right of way for the proposed Gannon Amundson Road. (See new road proposals.) 1.2 miles is for an existing class 4 road on Boise Cascade land.
Rajala Mills	T68 R19 S34	0.6	Needed for construction of proposed Gannon Amundson Road. (See new road proposals).
USFS	T68 R19 S9,24,25	0.7	Needed for construction of proposed Gannon Amundson Road. (See new road proposals).
Total		5.1	

Construction

Table C.8 State Forest Road Construction Proposals by Priority RMU 3

Location	Miles	Class	Reason
1. Wooden Frog Cpg. Road T69 R21	.30	3	To provide access to campground. (See Appendix A for details).
2. Gannon Amundsen Road T67 R19 T68 R19	12.00	4	To provide access to 5500 acres of state land. Management activity is planned on about 1800 acres. Easements necessary.
Total	12.30		

PELICAN LAKE RESOURCE MANAGEMENT UNIT - RMU 5

Easements

Table C.9 Proposed Easement Acquisitions - RMU 5

Owner	Location	Miles	Reason
County	T63 R19 NE1/4	1.00	Insure access. Four easements are necessary from county for the proposed Haley Road. (See new road proposals).
Private	T63 R19 NE1/4	0.50	Insure access
Private	T63 R19 S7	0.50	Insure access. One of 2 routes possible.
Private	T63 R19 S21	1.50	Insure access.
Potlatch	T63 R19 S21	1.00	Insure access.
Private	T63 R19 S17,18,20,21	0.50	Insure access.
Private	T66 R20 S17, 20	0.75	To provide adequate access to 320 acres 60 of which is scheduled for harvest.
Private	T66 R20 S26	0.25	Insure access.
Private	T65 R21 S27, 23	0.50	Insure access.
Private	T65 R18 S23	0.50	Insure access.
Private	T65 R18 S23	0.50	Insure access.
Private	T64 R17 S35, 36	0.25	Insure access.
Private	T64 R19 S1	0.25	Insure access.
Private	T64 R19 S20	0.25	Insure access.
County	T63 R17 S17	0.70	Portion of proposed "5" Bones Road. (See new road proposals).
County	T66 R19 S7,8	0.50	New portion of Black Duck Grade Road.
Private	T66 R19 S8	0.30	Black Duck Grade Road reconstruction proposal.
Total		9.75	

Construction

Table C.10 State Forest Road Construction Proposals By Priority RMU 5

Location	Miles	Class	Reason
1. Wakemup Bay Campground Road T63 R18 S36	0.50	2	Cooperative road project with St. Louis County to reroute road around Wakemup Bay Campground (see Appendix A for details).
2. Shively Falls Access Road T63 R17 S2	0.75	4	To provide access for state land management and to serve as parking area for a carry-in access to Vermilion River near Shively Falls.
3. Haley Road T63 R19 S4, 5, 9, 10, 11, 14, 15, 16, 23	6.00	4	To provide summer access to about 3800 acres of state land where timber is to be harvested. This road should be gated after reconstruction to limit access for wildlife purposes. Easements necessary.
4. "5" Bones Road T63 R17 S20	3.00	4	To provide summer access to about 1200 acres of state land where timber is to be harvested. Easement necessary. (See related reconstruction proposal)
5. Black Duck Grade Road T66 R19 S8, 7 T66 R20 S1, 11, 12	1.00	4	To provide summer access to about 1400 acres of state land. About 200 acres are scheduled for treatment in the next 10 year period. Easement necessary. (See related reconstruction proposal)
6. Hanson Road T65 R20 S5,6 T65 R21 S1	1.00	4	To provide adequate access to about 4800 acres of state land. Easement necessary. (See related reconstruction proposal)
7. Cut Root Road T63 R19 S27, 28, 29, 33, 34	2.00	4	To provide summer access to about 1000 acres of state land where timber is scheduled for harvest.
Total	14.25		

Reconstruction

Table C.11 State Forest Road Reconstruction Proposals by Priority - RMU 5

Location	Miles	Class
1. Niles Bay Extension Road T63 R17	1.50	4
<u>Reason</u> Provides access to the proposed "5" Bones road (See related new road proposal).		
<u>Repairs Necessary</u> Upgrade to class 4.		
2. "5" Bones Road T63 R17 S16, 17	1.75	4
<u>Reason</u> Upgrade this class 5 road to class 4 so that it is the same standard as a proposed extension. (see related new road proposal).		
<u>Repairs Needed</u> Ditching is needed on 3/4 mile of road to prevent washing on hills. Three culverts are necessary to drain the road bed. A 200 foot section of road should be raised with 6" of lift. Class 5 material should then be applied over the entire road.		
3. Hoodoo Lake Road T63 R19 S3	0.75	5
<u>Reason</u> Winter access to about 300 acres		
<u>Repairs Necessary</u> Upgrade.		
4. Black Duck Grade Road T66 R19 S8	0.50	4
<u>Reason</u> This road connects to a proposed extension which is to be built to class 4 standards. (See related new road proposal). Easement needed.		
<u>Repairs Necessary</u> Upgrade to class 4.		
5. Hanson Road T65 R20 S5, 6	1.50	4
<u>Reason</u> This road connects to a proposed extension which is to be built to class 4 standards. (See related new road proposal).		
<u>Repairs Necessary</u> Upgrade to class 4.		
6. Bearsclatch Road T66 R19 S8	2.00	4
<u>Reason</u> This road was built with wildlife funds to access 2900 acres. The Division of Wildlife intends upgrade the road to class 4 using RIM monies to facilitate habitat improvement.		
<u>Repairs Necessary</u> Upgrade to class 4		

7. Clover Road
T66 R19 S26, 27

1.50

4

Reason

This road was built by wildlife and accesses about 2,000 acres. The Division of Wildlife intends to upgrade the road to class 4 standards using RIM monies to facilitate habitat improvement.

Repairs Necessary

Upgrade to class 4.

8. Niles Bay Road

T63 R17 S10

3.10

4

Reason

Road provides access into large blocks of young conifer plantations and several lake homes. The road serves about 4600 acres of timberland.

Repairs Needed

Ditch approximately 1/4 mile of road on three hills. Apply chloride to 3/8 mile to stop road shoulder erosion. Remove stumps and boulders from right-of-way. Apply lift of class five when needed. Gravel is easy to to obtain on site.

9. Autio Road

T64 R19 S15,16

1.00

4

Reason

To provide adequate access to 720 acres of state land. About 260 are scheduled for harvest during the next ten years. Possible cooperative project with St. Louis County.

Repairs Necessary

Upgrade to class 4 from class 5.

Total

13.60

LITTLE FORK RIVER RESOURCE MANAGEMENT UNIT - RMU 6

Easements

Table C.12 Proposed Easement Acquisitions - RMU 6

Owner	Location	Miles	Reason
Private	T63 R20 S1, 2	0.50	Insure access
Private	T63 R20 S2	0.50	Insure access
Private	T63 R20 S27	0.50	Insure access. On old township road.
Private	T63 R20 S22, 23, 24, 25, 26	0.25	Insure access. On old road on the south side of section 22.
Private	T62 R17 S7, 8, 9	0.25	Insure access.
Private	T62 R17 S28, 29	0.50	Insure access.
Private	T62 R17 S28, 29	0.50	Insure access.
Private	T62 R18 S36, 25	0.50	Insure access.
Private	T62 R19 S16	0.25	Insure access.
Private	T62 R20 S16	0.25	Insure access.
Private	T62 R20 S17, 20	0.25	Insure access.
Private	T62 R21 S16, 15	0.50	Possible easements necessary on established winter road.
Private	T62 R21 S28	0.50	Insure access.
Private	T64 R22 S27	0.50	Insure access.
Private	T64 R22 S32	0.25	Insure access.
Private	T64 R22 S36	0.25	Insure access.
Private	T63 R22 S15, 16	0.50	Insure access.
Private	T63 R22 R18	0.25	Insure access.
Private	T63 R22 S28	0.25	Insure access.
Private	T64 R22 S27	0.50	Insure access. Easement need is contingent on exchange with county.
Total		7.75	

Construction

Table C.13 State Forest Road Construction Proposals By Priority - RMU 6

Location	Miles	Class	Reason
1. Cheney Road T61 R19 5, 6	1.50	5	Winter access to about 1200 acres of state land.
2. Koscielak Road T62 R17 S34	1.00	5	Winter access to 640 acres of state land.
Totals	2.50		

Reconstruction

Table C.13A State Forest Road Reconstruction Proposals by Priority - RMU 6

Location	Miles	Class
1. Smith Road T64 R21 S25,26,27,36	3.60	4
<u>Reason</u> To maintain adequate access to about 3,000 acres of state land.		
<u>Repairs Necessary</u> Spot gravel, upgrade some portions.		
Total	3.60	

EMBARRASS RESOURCE MANAGEMENT UNIT - RMU 7

Easements

Table C.14 Proposed Easement Acquisitions - RMU 7

Owner	Location	Miles	Reasons
Private	T61 R13 S27	0.50	Insure access
Private	T61 R13 S19	0.50	On road which is proposed snowmobile trail around Bear Head Lake State Park.
County	T61 R14 S5,6	1.50	To reconstruct road accessing state land. (See Murray Spur Road proposal.)
Private	T61 R14 S3	0.50	On existing State Forest Road.
Private	T61 R14 S36	1.25	Insure access.
Private	T60 R14 S23, 26, 35	3.00	Insure access
Private	T60 R15 S25	0.50	Insure access
Private	T60 R15 S16	0.25	Insure access.
Private	T61 R19 S27	0.50	Portion of existing road.
Private	T61 R19 S28	0.50	Insure access.
Private	T61 R19 S29,30,31,32	0.50	Insure access.
Private	T61 R19 S33	0.25	Insure access.
Private	T61 R19 S34, 35	0.25	Insure access. (see proposed 35 South Road).
Private	T61 R18 S24	0.75	Insure access. Two easements necessary.
Private	T61 R18 S36	0.25	Insure access (see proposed Old Winter Road).
Private	T62 R15 S25	0.50	Portion of proposed Murray Spur Road. (See new road proposals)
County	T62 R14 S30, 31	1.50	Portion of proposed Murray Spur Road. (See new road proposals)
Total		13.00	

Construction

Table C.15 State Forest Road Construction Proposals By Priority - RMU 7

Location	Miles	Class	Reason
1. Murray Spur Road T61 R14 S5, 8, 9	2.00	4	To access about 1,800 acres of state land. See related reconstruction project.
2. Bear Island Lake Spur Road T61 R13 S4, 9	0.75	5	To provide access to about 1,000 acres of state land.
3. 35 South Road T61 R19 S35, 36	1.50	5	Winter access to about 700 acres of state land. Easements necessary.
4. Old Winter Road T61 R18 S36	1.00	5	Winter access to 640 acres of state land. Easements necessary.
Total	5.25		

Reconstruction

Table C.16 State Forest Road Reconstruction Proposals by Priority - RMU 7

Location	Miles	Class
1. Murray Spur Road T62 R15 S25 T62 R14 S30,31 T61 R14 S5,6	4.00	4
<u>Reason</u> Upgrade to standard of new road. Easements necessary. Move Taconite Trail to new alignment adjacent to road.		
<u>Repairs Necessary</u> Upgrade to class 4.		
Total	4.00	

LAURENTIAN DIVIDE RESOURCE MANAGEMENT UNIT - RMU 8

Easements

Table C.17 Proposed Easement Acquisitions - RMU 8

Owner	Location	Miles	Reason
Private	T61 R11 S9	0.25	Insure access
Private	T60 R13 S9, 16	0.25	Insure access (see Benville Road proposal.)
Reserve Mining	T60 R13 S9, 16	0.30	Insure access (see Benville Road proposal.)
USFS	T60 R10 S31	0.40	To construct new road (see Wampus Lake Road proposal.)
Lake County	T60 R10 S31	0.10	To construct new road (see Wampus Lake Road proposal.)
USFS	T61 R11 S6	0.25	Portion of proposed Birch Lake Road. (See new road project in RMU 9).
Total		1.55	

Construction

Table C.18 State Forest Road Construction Proposals by Priority - RMU 8

Location	Miles	Class	Reason
1. Benville Road T60 R13 S9, 16	0.30	5	With related reconstruction project will provide summer access to over 700 acres. Easements necessary.
2. Wampus Lake Road T60 R10 S31 T60 R11 S36	1.25	4	To provide summer access to about 700 acres. Easement necessary.
Total	1.55		

Reconstruction

Table C.19 State Forest Road Reconstruction Proposals by Priority - RMU 8

Location	Miles	Class
1. Benville Road T60 R13 S9,16	0.70	5
<u>Reason</u> Portion of Benville Road (See new road proposals). <u>Repairs Necessary</u> This project includes replacement of a deteriorated bridge. Easement necessary.		
Total	0.70	

BURNTSIDE LAKE RESOURCE MANAGEMENT UNIT - RMU 9

Easements

Table C.20 Proposed Easement Acquisitions - RMU 9

Owner	Location	Miles	Reason
Potlatch	T62 R11 S28, 21, 20, 17, 16	1.25	Reconstruction (see South Kawihwi Road project.)
Private	T64 R10 S36	0.25	Insure access
Private	T64 R12 S36	0.30	Road to public access on Low Lake. Repair of road and replacement of 2 bridges necessary.
Industry	T64&65 R13 Scattered sections	0.10	New road construction (see Big Lake Road project.)
USFS	T64&65 R13 Scattered sections	2.50	New road construction (see Big Lake Road project.)
Lake Co.	T63 R12 S10	0.25	New Road to access state land. (see Little Long Lake Road project)
Private	T63 R12 S10	0.25	New Road to access state land. (see Little Long Lake Road Project)
Private	T63 R14 S34	0.75	Wolf Lake Road provides access to Burntside State Forest.
Private	T61 R12 S15	0.30	Provide connection from county road to proposed North Bay Road.
Private	T62 R14 S25	0.50	Portion of Murray Spur Road. (See new road proposals.)
Total		6.45	

Construction

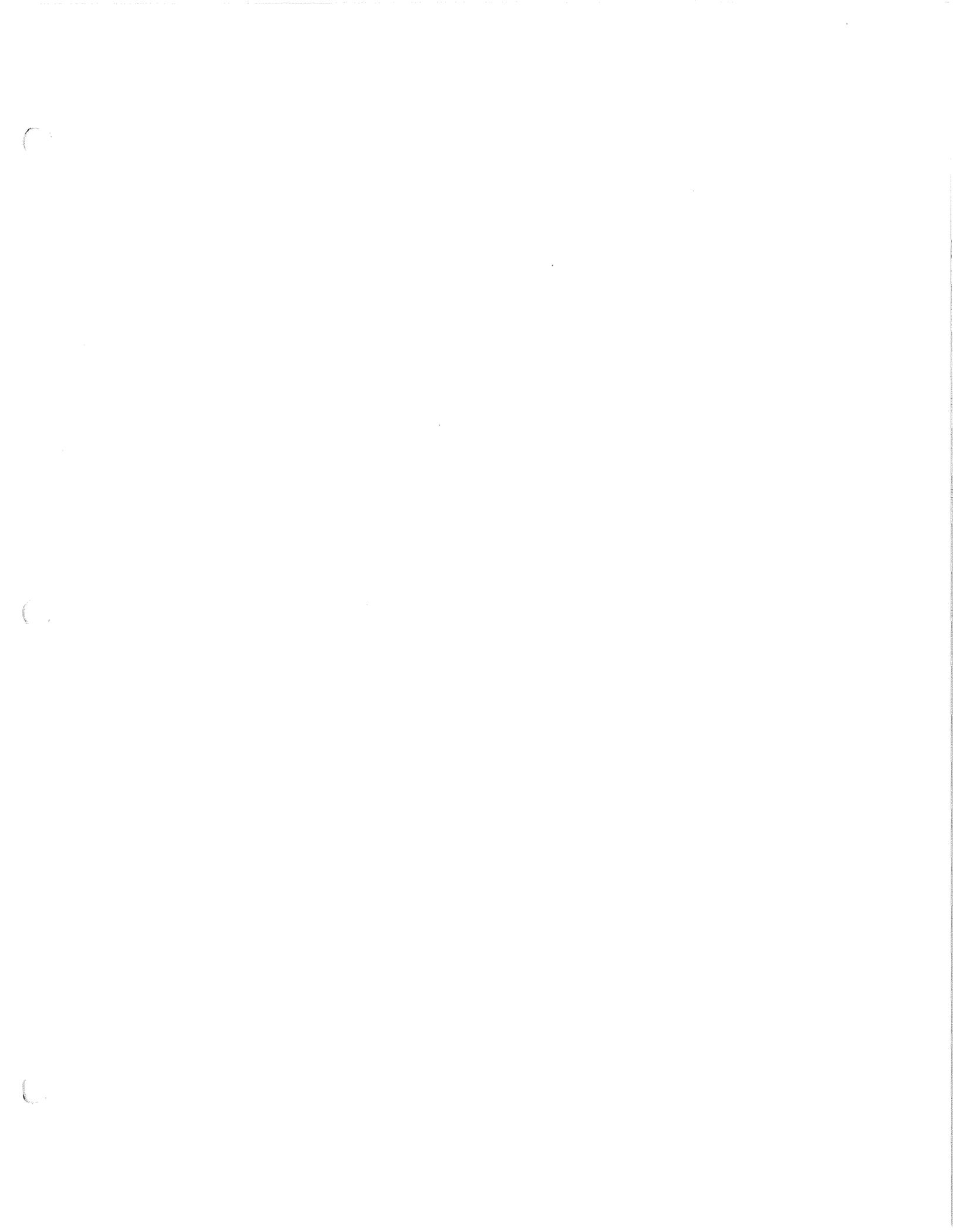
Table C.21 State Forest Road Construction Proposals by Priority - RMU 9

Location	Miles	Class	Reason
1. Little Long Lake Road T63 R12 S10,15,16	0.75	5	To provide adequate access for summer timber harvesting to 200 acres. Easement necessary.
2. North Bay Road T61 R12 S16,17	1.00	5	To provide summer access to about 1200 acres of state land. Easements necessary.
3. Birch Lake Road T61 R11 S6 T61 R12 S1,2,11,12 T62 R12 S36	2.00	4	To provide adequate access to about 2,000 acres of state land. Easements necessary. Partially in RMU 8.
4. Big Lake Road T65 R13 S35,36 T64 R13 S2,4,9,19,11	6.00	4	To provide summer access to about 2,500 acres of state land. Easements necessary. Coop. project with USFS.
5. S. Kawishiwi Road T62 R11 S17,20,21 28	2.25	4	To provide summer access to over 1000 acres of state land. Easements necessary. (See reconstruction proposals.)
Total	12.00		

Reconstruction

Table C.22 State Forest Road Reconstruction Proposals by Priority - RMU 9

Location	Miles	Class
1. Murray Spur Road T62 R15 S25	(See project description in RMU 7)	
2. South Kawishiwi Road T62 R11	0.50	4
<u>Reason</u> This road will form a portion of the proposed South Kawishiwi Forest Road. (See new road proposals) Easements necessary. It requires upgrading so that it is the same class as the new portion of the road.		
<u>Repairs Needed</u> Upgrade to class 4.		
Total	0.50	



ORR AREA FOREST RESOURCE MANAGEMENT PLAN

APPENDIX D. LAND OWNERSHIP AND ADMINISTRATION

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INTRODUCTION

This appendix is the land ownership and administration plan for the Orr Area. It was prepared by members of the Orr Area planning team using land ownership maps, land ownership records, other agencies' land adjustment plans, and Phase II forest inventory information. The recommendations for land ownership and administration are based on current views of what the ultimate ownership pattern should be. Negotiations with other agencies, corporations, and private individuals will ultimately determine the extent to which these proposals are adopted. Some recommendations may not be carried out in the next ten years due to budget or staff constraints or lack of willing exchange partners.

The state land ownership information used in developing this plan was current as of April 1985. Recommendations were made for the disposition of Division of Forestry administered land through a parcel by parcel review. Each parcel was reviewed by St. Paul planners and the District Foresters in charge of management activities on the identified parcels. The District Forester provided information about the quality and value of timber, accessibility of the parcel, past activities on the parcel, surrounding ownerships, and unique features that was not available from the printed sources mentioned above. Decisions were made for each parcel as to whether it should be retained, exchanged, sold, or transferred to another administrator.

This plan also identifies areas where the Division would like to acquire lands through exchange to consolidate ownership. These areas are described in general terms (not parcel by parcel) and the current owners are generally not identified. Details about parcels and owners in these identified areas will be developed when exchange proposals are initiated.

AREAWIDE GUIDELINES

The Division of Forestry administers 375,560 acres in the Orr Area. Sixty-four percent of this land is within state forest boundaries. The land ownership pattern in the Orr area is scattered and complex. Division of Forestry administered lands include large contiguous blocks and small isolated parcels.

The Division administers about 75,000 acres of land in the Orr Area that are within the Boundary Waters Canoe Area Wilderness (BWCAW). About 58,000 acres of this land is trust fund land which is currently not providing revenue for the trust because of its wilderness status.

The Minnesota Forest Resources Plan (MN DNR - Forestry, 1987) includes a goal of achieving an optimum land ownership pattern for the multiple use management of forest resources.

The Department has developed and adopted the following documents which provide general procedures and guidelines for land use, ownership, and administration adjustments :

- Department Policy No.16 - Land Exchanges, Land Title Transfers, etc....., (MN DNR, 1983)
- Department Policy No.17 - Procedures for the Internal Transfers of Administrative Control, (MN DNR, 1983)
- The Land Manual, (MN DNR - Bureau of Lands, no date)

LAND OWNERSHIP ADJUSTMENT

The overall objective for land ownership adjustments in the Orr Area is to consolidate DNR Division of Forestry administered land into larger and more accessible blocks to improve management efficiencies.

Consolidation will be accomplished through disposal of small, isolated parcels primarily by exchange.

Exchange

Lands identified for exchange were selected primarily to increase forest resource management efficiencies through consolidation of ownerships, not because they did not meet the criteria for state forest status.

All state land in the BWCAW (except for state land within the Burntside State Forest boundaries) should be exchanged for land outside of the wilderness area.

Areas where the blocking and enlarging of state land ownership is preferred have been identified. Exact descriptions of parcels to be acquired by exchange are not

listed in this plan. All proposed exchanges will require additional analysis and agreement between the state and the appropriate exchange partner.

Lots with cabin or homesite leases, or active industrial developments should not be considered for exchange.

Tracts with recreational facilities (trails, campgrounds, river developments) should not be considered for exchange. This restriction will not apply in the proposed BWCAW exchange.

State land with active mineral leases can be exchanged with the permission of the lessees. Generally, tracts with active mineral leases should not be considered for exchange, although exceptions can be made based upon other considerations (i.e. manageability, accessibility, location).

Lakeshore tracts should not be considered for exchange if management opportunities are present. Otherwise, they should be considered for exchange for similar lakeshore in the same general location.

Lands in state ownership after the exchanges are completed will be proposed for designation as state forests.

Sale

Lands which generally lack resource characteristics or management opportunities which would make them suitable for continued management by the Division of Forestry or for exchange or transfer to other public agencies or private industry should be made available for sale.

Acquisition

The only land purchases currently planned in the Orr Area are related to recreational and road development proposals (see Appendices A and C). Lands may be acquired by donation or purchase. Proposed purchases should be examined and prioritized using the following criteria:

The land is within or adjacent to an existing state forest or state land proposed for state forest status in this plan.

There is unrestricted legal public access to the land or the land provides access to currently inaccessible public land.

The land is capable of producing timber on a sustained yield basis.

The land has significant recreational value or is adjacent to existing recreational facilities or areas where recreational development is proposed.

The land has significant fish or wildlife habitat value or provides habitat for endangered, threatened, or special concern plants or animals.

The land is adjacent to protected waters.

The land has significant educational or historical value.

The land has natural area preservation or wilderness potential.

The land may likely be used for purposes incompatible with adjacent state forest land if it is not acquired.

The land has potential mineral resources.

Lands that meet one or more of the above criteria can be considered for acquisition. A parcel that meets several criteria will likely receive higher priority for acquisition than one that meets only one criterion. Acquisition by purchase will be subject to availability of funds.

LAND ADMINISTRATION ADJUSTMENT

The overall goal for land administration adjustments in the Orr Area is to place state land in appropriate management units while ensuring the income generating capabilities of trust fund lands.

The land administration adjustment goal will be accomplished by : 1) transferring administrative control 2) transferring of trust fund status, and 3) modification of state forest boundaries.

Transfer of Administrative Control

Parcels recommended for transfer of administrative control are usually Division of Forestry administered lands within or adjacent to other DNR management units which are better suited for management as part of the other unit (e.g. parks, fish and wildlife management areas). Trust lands should not be transferred to non-income producing units unless provisions are made to compensate the trust fund.

Transfer of Trust Fund Status

The trust status of non-income producing lands in parks or where Division of Forestry recreational facilities exist, should be transferred to parcels which have been acquired through fee acquisition. This will permit generation of income for the trust fund in accordance with the goal of the permanent school fund (MN Laws 1985, Chapter 116, Sec. 2).

State Forest Boundary Changes

One of the DNR's objectives is to reduce the amount of undedicated land it administers by placing land suitable for long term natural resource management in appropriate management units. Currently, about 136,000 acres (more than 1/3) of the DNR administered land in the Orr Area is not in designated management units.

The plan recommends that the majority of the undedicated land outside of the BWCAW be given state forest status. Most land acquired by exchange will also be added to state forests. Nearly all of the 240,000 acres currently in state forests will retain state forest status. Eventually there may be about 300,000 acres of state forest land in the Orr Area.

The Orr Area planning team identified three alternatives methods of providing state forest status to those lands suitable for long term forest resource management. Briefly, they are : (1) to modify the boundaries of the existing state forests to include all suitable lands, (2) to eliminate existing state forests and create one new state forest whose boundary coincides with the Orr Area, and (3) eliminate the need for state forest boundaries by redefining state forest as all land under the authority of the Commissioner of Natural Resources except for lands acquired or dedicated by the state for other specific purposes such as state parks or wildlife management units. Each approach has advantages and disadvantages and all three require legislative action. The planning team recommends further analysis of the alternatives to determine the most effective means of providing state forest status to suitable undedicated lands. In the mean time, existing state forest boundaries should remain and area staff effort should be directed towards completion of the recommended land exchanges.

DEFINITION OF ABBREVIATIONS AND CODES

The abbreviations used in the heading of the land parcel listings are defined as follows : CO = county; TWP = township; RGE = range; SE = section; QSEC = quarter section; RAD = region, area, district number; ST = land status; AD = administrator; CF = county forest management area code; N = national forest management area code; SF = state forest management area code; PARK = parks and recreation management area code; FWMAC = fish, wildlife, and enforcement management area code; M = mineral ownership; 1 = first use classification; 2 = second use classification; D = disposition; W = water orientation; L = land disposition. Code numbers and letters used under these fields are defined in the Land Ownership/ Classification Record System Manual (MN DNR - Bureau of Lands), with the exception of the land disposition (L) and COMMENT fields. Codes under these fields were created specifically for Division of Forestry area planning purposes and are defined as follows:

Land Disposition (L)

- A - Parcels to RETAIN in State Forest status
- B - Parcels to ADD to State Forest status
- C - Parcels to EXCHANGE
- D - Parcels to TRANSFER administrative control
- E - Parcels to SELL
- F - Parcels to TRANSFER TRUST FUND Status

Comment

- A - Rivershore
- B - Lakeshore
- C - Island
- D - Protected Waters
- E - Originally proposed for exchange; retained due to mineral potential
- F - Sand/Gravel Potential
- G - Clay Potential
- H - Retain if BWCAW land exchange is enacted
- I - Parcel will be exchanged only if lakeshore leases present on parcels are sold
- J - Wooden Frog State Forest Campground
- K - Wake-em up Bay State Forest Campground
- L - Hinsdale State Forest Campground
- M - International Border
- N - Undivided Interest land; state owns 1/16th interest
- O - Trust Fund Land Within the Burntside State Forest
- P - Parcel will be exchanged only if Gannon-Amundson Lake road proposal is approved (see Appendix C). If exchanged, the assumption is that the state will pick up the majority of federal lands in the remainder of township 68-19W.
- Q - Possibly will not be exchanged

PEARL LAKE RMU 1

There are two alternative ownership objectives for this RMU. The first involves exchange of state administered lands in the BWCAW for federal lands outside of the BWCAW. Under this alternative the state would acquire all or most of the federal land in the RMU while retaining existing state lands. The second alternative would simply consolidate state ownership in the RMU without making major changes in the total acreage administered by various landowners. The first alternative is preferred. The following list contains parcels that the state would be willing to exchange to consolidate ownership under alternative 2.

LANDS FOR EXCHANGE

CO	TWP	RGE	SE	QSEC	RAD	ST	AD	ACRES	CF	N	SF	PARK	FWMAC	M	1	2	D	W	L	COMMENT
69	066	21W	03	01	241	BA	20	44.97	00	0	27	00000	00000	1	6	6	5	0	C	
69	066	21W	03	02	241	BA	20	45.29	00	0	27	00000	00000	1	6	6	5	9	C	
69	066	21W	05	03	241	CJ	20	48.42	00	0	27	00000	00000	4	6	6	1	0	C	
69	066	21W	05	SWNW	241	CJ	20	40.00	00	0	27	00000	00000	4	6	6	1	0	C	
69	066	21W	05	SENW	241	CJ	20	40.00	00	0	27	00000	00000	4	6	6	1	0	C	
69	066	21W	05	NESW	241	CJ	20	40.00	00	0	27	00000	00000	4	6	6	1	0	C	
69	066	21W	19	01	241	CA	20	43.93	00	0	27	00000	00000	1	6	6	1	0	C	
69	066	21W	19	02	241	CA	20	43.31	00	0	27	00000	00000	1	6	6	1	0	C	
69	066	21W	24	SWSW	241	CB	20	40.00	00	0	27	00000	00000	4	6	6	5	0	C	
69	066	21W	25	NWNW	241	CB	20	40.00	00	0	27	00000	00000	4	6	6	5	0	C	
69	066	21W	26	NENE	241	CB	20	40.00	00	0	27	00000	00000	4	6	6	5	0	C	
69	067	20W	11	NENE	242	BA	20	40.00	00	0	27	00000	00000	1	6	6	1	0	C	
69	067	20W	11	NESW	242	BA	20	40.00	00	0	27	00000	00000	1	6	6	1	0	C	
69	067	20W	22	NESE	242	BA	20	40.00	00	0	27	00000	00000	1	6	6	1	8	C	D
69	067	20W	27	SWSW	242	BA	20	40.00	00	0	27	00000	00000	1	6	6	1	0	C	
69	067	20W	33	SESW	242	BA	20	40.00	00	0	27	00000	00000	1	6	6	1	0	C	
69	067	20W	33	NESE	242	CA	20	40.00	00	0	27	00000	00000	1	6	6	1	0	C	
69	067	21W	11	SESE	242	CA	20	40.00	00	0	27	00000	00000	1	6	6	1	0	C	
69	067	21W	19	SENW	242	BA	20	40.00	00	0	27	00000	00000	1	6	6	1	0	C	
69	067	21W	19	SESE	242	CA	20	40.00	00	0	27	00000	00000	1	6	6	1	8	C	A
69	067	21W	28	NESW	242	CA	20	40.00	00	0	27	00000	00000	1	6	6	1	0	C	F
69	067	21W	28	NWSW	242	CA	20	40.00	00	0	27	00000	00000	1	6	6	1	0	C	F
69	067	21W	28	SWSW	242	BA	20	40.00	00	0	27	00000	00000	1	6	6	1	9	C	
69	067	21W	28	NESE	242	CA	20	40.00	00	0	27	00000	00000	1	6	6	1	9	C	
69	067	21W	29	NESW	242	BA	20	40.00	00	0	27	00000	00000	1	6	6	1	0	C	
69	067	21W	29	SWSW	242	BA	20	40.00	00	0	27	00000	00000	1	6	6	1	0	C	
69	067	21W	29	SESW	242	CA	20	40.00	00	0	27	00000	00000	1	6	6	1	9	C	
69	067	21W	29	SWSE	242	CA	20	40.00	00	0	27	00000	00000	1	6	6	1	9	C	
69	067	21W	31	SENE	242	BA	20	40.00	00	0	27	00000	00000	1	6	6	1	0	C	
69	067	21W	32	SWNE	242	CA	20	40.00	00	0	27	00000	00000	1	6	6	1	9	C	F
69	067	21W	32	SENE	242	BA	20	40.00	00	0	27	00000	00000	1	6	6	1	0	C	F
69	067	21W	32	NENW	242	CA	20	40.00	00	0	27	00000	00000	1	6	6	1	9	C	
69	067	21W	32	SENW	242	CA	20	40.00	00	0	27	00000	00000	1	6	6	1	9	C	
69	067	21W	32	NESW	242	CA	20	40.00	00	0	27	00000	00000	1	6	6	1	0	C	
69	067	21W	32	SESW	242	CA	20	40.00	00	0	27	00000	00000	1	6	6	1	0	C	
69	067	21W	32	NWSE	242	CA	20	40.00	00	0	27	00000	00000	1	6	6	1	9	C	F

CO	TWP	RGE	SE	QSEC	RAD	ST	AD	ACRES	CF	N	SF	PARK	FWMAC	M	1	2	D	W	L	COMMENT
69	067	21W	32	SWSE	242	CA	20	40.00	00	0	27	00000	00000	1	6	6	1	9	C	F
69	067	21W	33	SWNE	242	BA	20	40.00	00	0	27	00000	00000	1	6	6	1	9	C	D
69	067	21W	33	SENE	242	BA	20	40.00	00	0	27	00000	00000	1	6	6	1	9	C	D
69	067	21W	33	NESE	242	BA	20	40.00	00	0	27	00000	00000	1	6	6	1	9	C	D
69	067	21W	36	NENE	242	AA	20	40.00	00	0	27	00000	00000	1	6	6	1	9	C	
69	067	21W	36	NWNE	242	AA	20	40.00	00	0	27	00000	00000	1	6	6	1	9	C	
69	067	21W	36	SWNE	242	AA	20	40.00	00	0	27	00000	00000	1	6	6	1	0	C	
69	067	21W	36	SENE	242	AA	20	40.00	00	0	27	00000	00000	1	6	6	1	0	C	
69	067	21W	36	NENW	242	AA	20	40.00	00	0	27	00000	00000	1	6	6	1	0	C	
69	067	21W	36	NWNW	242	AA	20	40.00	00	0	27	00000	00000	1	6	6	1	0	C	F
69	067	21W	36	SWNW	242	AA	20	40.00	00	0	27	00000	00000	1	6	6	1	0	C	
69	067	21W	36	SENW	242	AA	20	40.00	00	0	27	00000	00000	1	6	6	1	0	C	
69	067	21W	36	NESW	242	AA	20	40.00	00	0	27	00000	00000	1	6	6	1	0	C	
69	067	21W	36	NWSW	242	AA	20	40.00	00	0	27	00000	00000	1	6	6	1	0	C	
69	067	21W	36	SWSW	242	AA	20	40.00	00	0	27	00000	00000	1	6	6	1	0	C	
69	067	21W	36	SESW	242	AA	20	40.00	00	0	27	00000	00000	1	6	6	1	9	C	
69	067	21W	36	NESE	242	AA	20	40.00	00	0	27	00000	00000	1	6	6	1	0	C	
69	067	21W	36	NWSE	242	AA	20	40.00	00	0	27	00000	00000	1	6	6	1	9	C	
69	067	21W	36	SWSE	242	AA	20	40.00	00	0	27	00000	00000	1	6	6	1	9	C	
69	067	21W	36	SESE	242	AA	20	40.00	00	0	27	00000	00000	1	6	6	1	0	C	

TOTAL 2,265.92
56 of the 1445 records

AREAS FOR ACQUISITION BY EXCHANGE

Under the BWCAW exchange proposal, the state would acquire all or most of the federal land in this RMU while retaining existing state lands.

If the BWCAW exchange is not completed, the state will follow the second alternative described above, and try to consolidate its ownership in the following areas. The state will build ownership around blocks of existing state ownership throughout the townships indicated.

TWP	RGE	COMMENT
68	20W	
68	21W	
68	22W	North half, exchange with county
67	20W	Adjacent to Sheep Ranch State Forest Road
67	21W	Adjacent to County Road 520 and Pearl Lake State Forest Road
67	22W	Exchange with industry
66	21W	Adjacent to County Road 518
66	22W	Exchange with industry

LONG LAKE RMU 3

The major blocks of DNR administered land are currently located in townships 68-19, 68-20, and 68-21. Federal lands in these three townships are in the Superior National Forest's Kabetogama Purchase Unit and could be acquired by exchange for state land in the BWCAW.

LANDS FOR EXCHANGE

CO	TWP	RGE	SE	QSEC	RAD	ST	AD	ACRES	CF	N	SF	PARK	FWMAC	M	1	2	D	W	L	COMMENT
69	066	17W	27	04	243	CA	20	26.60	08	5	27	00000	00000	1	5	5	1	2	C	B
69	066	17W	31	03	243	CB	20	16.25	00	5	27	00000	00000	4	5	6	1	7	C	A
69	066	17W	31	SWNE	243	CB	20	40.00	00	0	27	00000	00000	4	6	6	1	0	C	
69	066	17W	33	NENE	243	CA	20	40.00	08	5	27	00000	00000	1	6	6	5	0	C	
69	066	18W	03	01	243	CA	20	13.80	08	5	27	00000	00000	1	5	5	1	7	C	A
69	066	18W	03	02	243	CA	20	6.65	08	5	27	00000	00000	1	5	5	1	7	C	A
69	066	18W	03	SESE	243	AB	20	40.00	08	0	27	00000	00000	4	6	5	1	0	C	
69	066	18W	11	NWSW	243	AB	20	40.00	08	5	27	00000	00000	4	6	6	1	0	C	
69	066	18W	13	SWNW	243	CA	20	40.00	08	5	27	00000	00000	1	6	6	5	0	C	
69	066	18W	21	SENW	243	AB	20	40.00	00	0	27	00000	00000	4	6	6	1	0	C	
69	067	17W	01	01	243	LG	20	51.75	00	5	27	00000	00000	4	5	5	1	2	C	B, I
69	067	17W	01	05	243	LG	20	54.75	00	5	27	00000	00000	4	5	5	1	2	C	B, I
69	067	17W	12	06	243	LG	20	54.50	00	5	27	00000	00000	4	5	5	1	2	C	B, I
69	067	17W	12	07	243	LG	20	35.50	00	5	27	00000	00000	4	5	5	1	2	C	B, I
69	067	17W	12	08	243	LG	20	13.00	00	5	27	00000	00000	4	5	5	1	2	C	B, I
69	067	17W	14	03	243	CJ	20	48.75	00	5	27	00000	00000	4	5	5	1	2	C	B
69	067	17W	14	SENW	243	CJ	20	40.00	00	5	27	00000	00000	4	5	5	1	0	C	
69	067	17W	14	05	243	CJ	20	39.00	00	5	27	00000	00000	4	5	5	1	2	C	B, I
69	067	17W	15	01	243	CJ	20	35.25	00	5	27	00000	00000	4	5	5	1	2	C	B
69	067	18W	04	01	243	AB	20	40.06	00	5	27	00000	00000	4	6	6	5	0	C	
69	067	18W	07	NWNE	243	AB	20	40.00	00	5	27	00000	00000	4	5	6	5	8	C	
69	067	18W	22	NENE	243	CA	20	40.00	00	5	27	00000	00000	1	6	6	5	4	C	
69	067	18W	34	03	243	CA	20	36.76	00	5	27	00000	00000	1	5	5	1	7	C	A
69	067	18W	35	06	243	AB	20	22.90	00	5	27	00000	00000	4	5	5	1	7	C	A
69	067	19W	03	01	242	CA	20	40.06	00	0	27	00000	00000	1	6	6	1	9	C	H
69	067	19W	03	02	242	CA	20	40.19	00	0	27	00000	00000	1	6	6	1	9	C	H
69	067	19W	15	01	242	CA	20	23.75	00	0	27	00000	00000	1	6	5	1	2	C	B, H
69	067	19W	16	NENE	242	AA	20	40.00	00	0	27	00000	00000	1	6	6	1	9	C	H
69	067	19W	16	NWNE	242	AA	20	40.00	00	0	27	00000	00000	1	6	6	1	0	C	H
69	067	19W	16	SWNE	242	AA	20	40.00	00	0	27	00000	00000	1	6	6	1	9	C	H
69	067	19W	16	SENE	242	AA	20	40.00	00	0	27	00000	00000	1	6	6	1	9	C	H
69	067	19W	16	NENW	242	AA	20	40.00	00	0	27	00000	00000	1	6	6	1	9	C	H
69	067	19W	16	NWNW	242	AA	20	40.00	00	0	27	00000	00000	1	6	6	1	9	C	H
69	067	19W	16	SWNW	242	AA	20	40.00	00	0	27	00000	00000	1	6	6	1	0	C	H
69	067	19W	16	SENW	242	AA	20	40.00	00	0	27	00000	00000	1	6	6	1	9	C	H
69	067	19W	16	NESW	242	AA	20	40.00	00	0	27	00000	00000	1	6	6	1	9	C	H
69	067	19W	16	NWSW	242	AA	20	40.00	00	0	27	00000	00000	1	6	6	1	9	C	H
69	067	19W	16	SWSW	242	AA	20	40.00	00	0	27	00000	00000	1	6	6	1	0	C	H
69	067	19W	16	SESW	242	AA	20	40.00	00	0	27	00000	00000	1	6	6	1	0	C	H
69	067	19W	16	NESE	242	AA	20	40.00	00	0	27	00000	00000	1	6	6	1	0	C	H
69	067	19W	16	NWSE	242	AA	20	40.00	00	0	27	00000	00000	1	6	6	1	0	C	H
69	067	19W	16	SWSE	242	AA	20	40.00	00	0	27	00000	00000	1	6	6	1	0	C	H

CO TWP RGE SE QSEC RAD ST AD ACRES CF N SF PARK FWMAC M 1 2 D W L COMMENT

69	067	19W	16	01	242	AA	20	13.75	00	0	27	00000	00000	1	6	5	1	2	C	B,	H
69	067	19W	20	NESE	242	CB	20	40.00	00	0	27	00000	00000	4	6	6	1	0	C	H	
69	067	19W	29	NESW	242	CB	20	40.00	00	0	27	00000	00000	4	6	6	1	9	C	H	
69	067	19W	29	SWSW	242	CB	20	40.00	00	0	27	00000	00000	4	6	6	1	0	C	H	
69	067	19W	29	SESW	242	CB	20	40.00	00	0	27	00000	00000	4	6	6	1	9	C	H	
69	067	19W	29	NWSE	242	CB	20	40.00	00	0	27	00000	00000	4	6	6	1	0	C	H	
69	067	19W	30	NENE	242	CB	20	40.00	00	0	27	00000	00000	4	6	6	1	0	C	H	
69	067	19W	30	01	242	CB	20	48.29	00	0	27	00000	00000	4	6	6	1	0	C	H	
69	067	19W	30	02	242	CB	20	49.27	00	0	27	00000	00000	4	6	6	1	0	C	H	
69	067	19W	30	SENE	242	CB	20	40.00	00	0	27	00000	00000	4	6	6	1	0	C	H	
69	067	19W	32	NESW	242	CB	20	40.00	00	0	27	00000	00000	4	6	6	1	0	C	H	
69	067	19W	32	SESW	242	CB	20	40.00	00	0	27	00000	00000	4	6	6	1	0	C	H	
69	068	17W	36	08	243	AA	20	29.00	00	5	27	00000	00000	1	5	5	1	2	C	B,	I
69	068	17W	36	09	243	AA	20	49.25	00	5	27	00000	00000	1	5	5	1	2	C	B,	I
69	068	18W	16	NENE	242	AA	20	40.00	00	5	27	00000	00000	1	6	6	1	0	C		
69	068	18W	16	NWNE	242	AA	20	40.00	00	5	27	00000	00000	1	6	6	1	0	C		
69	068	18W	16	SWNE	242	AA	20	40.00	00	5	27	00000	00000	1	6	6	1	0	C		
69	068	18W	16	SENE	242	AA	20	40.00	00	5	27	00000	00000	1	6	6	1	0	C		
69	068	18W	16	NENW	242	AA	20	40.00	00	5	27	00000	00000	1	6	6	1	0	C		
69	068	18W	16	NWNW	242	AA	20	40.00	00	5	27	00000	00000	1	6	6	1	0	C		
69	068	18W	16	01	242	AA	20	29.70	00	5	27	00000	00000	1	5	6	1	2	C	B	
69	068	18W	16	SENW	242	AA	20	40.00	00	5	27	00000	00000	1	6	6	1	0	C		
69	068	18W	16	NESW	242	AA	20	40.00	00	5	27	00000	00000	1	6	6	1	0	C		
69	068	18W	16	02	242	AA	20	12.25	00	5	27	00000	00000	1	5	6	1	2	C	B	
69	068	18W	16	04	242	AA	20	0.35	00	5	27	00000	00000	1	5	6	1	2	C	B	
69	068	18W	16	03	242	AA	20	45.30	00	5	27	00000	00000	1	5	6	1	2	C	B	
69	068	18W	16	NESE	242	AA	20	40.00	00	5	27	00000	00000	1	6	6	1	5	C		
69	068	18W	16	NWSE	242	AA	20	40.00	00	5	27	00000	00000	1	6	6	1	0	C		
69	068	18W	16	SWSE	242	AA	20	40.00	00	5	27	00000	00000	1	6	6	1	0	C		
69	068	18W	16	SESE	242	AA	20	40.00	00	5	27	00000	00000	1	6	6	1	0	C		
69	068	18W	19	NENE	242	BA	20	40.00	00	5	27	00000	00000	1	6	6	1	0	C		
69	068	18W	19	SENE	242	BA	20	40.00	00	5	27	00000	00000	1	6	6	1	0	C		
69	068	18W	19	SWSE	242	CA	20	40.00	00	5	27	00000	00000	1	5	6	1	8	C		
69	068	18W	19	SESE	242	CA	20	40.00	00	5	27	00000	00000	1	5	6	1	8	C		
69	068	18W	20	SWSW	242	BA	20	40.00	00	5	27	00000	00000	1	6	6	1	0	C		
69	068	18W	21	SENE	242	CA	20	40.00	00	5	27	00000	00000	1	6	6	1	0	C		
69	068	18W	29	NENE	242	BA	20	40.00	00	5	27	00000	00000	1	6	6	1	0	C		
69	068	18W	29	NWNW	242	BA	20	40.00	00	5	27	00000	00000	1	6	6	1	0	C		
69	068	18W	29	NWSE	242	BA	20	40.00	00	5	27	00000	00000	1	6	6	1	0	C		
69	068	18W	29	SWSE	242	BA	20	40.00	00	5	27	00000	00000	1	6	6	1	0	C		
69	068	18W	29	SESE	242	BA	20	40.00	00	5	27	00000	00000	1	6	6	1	0	C		
69	068	19W	16	NWSW	242	AA	20	40.00	00	0	27	00000	00000	1	6	6	1	0	C	P	
69	068	19W	16	SWSW	242	AA	20	40.00	00	0	27	00000	00000	1	6	6	1	0	C	P	
69	068	19W	16	SESW	242	AA	20	40.00	00	0	27	00000	00000	1	6	6	1	0	C	P	
69	068	19W	16	SWSE	242	AA	20	40.00	00	0	27	00000	00000	1	6	6	1	0	C	P	
69	068	19W	20	SESE	242	CA	20	40.00	00	0	27	00000	00000	1	6	6	1	0	C	P	
69	068	19W	21	SWSW	242	CA	20	40.00	00	0	27	00000	00000	1	6	6	1	8	C	P	
69	068	19W	22	NWNW	242	CB	20	40.00	00	0	27	00000	00000	4	6	6	1	0	C	P	
69	068	19W	22	SESW	242	CA	20	40.00	00	0	27	00000	00000	1	6	6	1	8	C	P	
69	068	19W	22	SWSE	242	CA	20	40.00	00	0	27	00000	00000	1	6	6	1	8	C	P	
69	068	19W	28	NENE	242	LG	20	40.00	00	0	27	00000	00000	3	6	6	1	0	C	P	
69	068	19W	28	NWNE	242	CA	20	40.00	00	0	27	00000	00000	1	6	6	1	0	C	P	

CO	TWP	RGE	SE	QSEC	RAD	ST	AD	ACRES	CF	N	SF	PARK	FWMAC	M	1	2	D	W	L	COMMENT
69	068	19W	28	SWNE	242	LG	20	40.00	00	0	27	00000	00000	3	6	6	1	0	C	P
69	068	19W	28	SENE	242	LG	20	40.00	00	0	27	00000	00000	3	6	6	1	0	C	P
69	068	19W	28	NENW	242	CA	20	40.00	00	0	27	00000	00000	1	6	6	1	0	C	P
69	068	19W	28	NWNW	242	CA	20	40.00	00	0	27	00000	00000	1	6	6	1	8	C	P
69	068	19W	28	NWSW	242	LG	20	40.00	00	0	27	00000	00000	3	6	6	1	8	C	P
69	068	19W	28	SWSW	242	LG	20	40.00	00	0	27	00000	00000	3	6	6	1	8	C	P
69	068	19W	28	SESW	242	CA	20	40.00	00	0	27	00000	00000	1	6	6	1	0	C	P
69	068	19W	29	SWSE	242	LG	20	40.00	00	0	27	00000	00000	3	6	6	1	0	C	P
69	068	19W	29	SESE	242	LG	20	40.00	00	0	27	00000	00000	3	6	6	1	8	C	P
69	068	19W	30	05	242	LG	20	40.00	00	0	27	00000	00000	3	6	6	1	0	C	P
69	068	19W	31	04	242	LG	20	40.00	00	0	27	00000	00000	3	6	6	1	0	C	P
69	068	19W	31	05	242	LG	20	40.00	00	0	27	00000	00000	3	6	6	1	0	C	P
69	068	19W	31	07	242	LG	20	36.86	00	0	27	00000	00000	3	6	6	1	0	C	P
69	068	19W	32	SENE	242	LG	20	40.00	00	0	27	00000	00000	3	6	6	1	0	C	P
69	068	19W	32	NESE	242	LG	20	40.00	00	0	27	00000	00000	3	6	6	1	0	C	P
69	068	19W	32	SESE	242	LG	20	40.00	00	0	27	00000	00000	3	6	6	1	0	C	P
69	068	19W	33	NENW	242	CA	20	40.00	00	0	27	00000	00000	1	6	6	1	0	C	P
69	068	19W	33	NESW	242	LG	20	40.00	00	0	27	00000	00000	3	6	6	1	0	C	P
69	068	19W	34	SWNW	242	CB	20	40.00	00	0	27	00000	00000	4	6	6	1	0	C	P
69	069	21W	07	NESW	242	BA	20	40.00	00	0	27	00000	00000	1	6	6	1	0	C	
69	069	21W	07	SESW	242	BA	20	40.00	00	0	27	00000	00000	1	6	6	1	0	C	
69	069	21W	17	03	242	BA	20	28.75	00	0	27	00000	00000	1	5	5	1	2	C	B, C
69	069	21W	18	NENW	242	AB	20	40.00	00	0	27	00000	00000	4	6	6	1	0	C	
69	069	21W	18	SESW	242	AB	20	40.00	00	0	27	00000	00000	4	6	6	1	0	C	
69	069	21W	18	NESW	242	BA	20	40.00	00	0	27	00000	00000	1	6	6	1	0	C	F
69	069	21W	18	SESW	242	BA	20	40.00	00	0	27	00000	00000	1	6	6	1	0	C	F
69	069	21W	30	01	242	BA	20	40.40	00	0	27	00000	00000	1	6	6	1	0	C	
69	069	21W	30	02	242	BA	20	40.32	00	0	27	00000	00000	1	6	6	1	0	C	
69	069	21W	30	03	242	BA	20	40.28	00	0	27	00000	00000	1	6	6	1	0	C	
69	069	21W	30	04	242	BA	20	40.22	00	0	27	00000	00000	1	6	6	1	0	C	

TOTAL

ACRES 4,743.51
124 of the 767 records

AREAS FOR ACQUISITION BY EXCHANGE

The state will try to consolidate its ownerships in the following areas primarily through the proposed BWCAW exchange with the U.S.Forest Service:

TWP	RGE	COMMENT
68	21W	High priority
68	20W	High priority
68	19W	High priority
68	18W	Lower priority
67	19W	Lower priority
67	18W	West of Vermillion River, lower priority
67	17W	West of Vermillion River, lower priority
66	18W	West of Vermillion River, lower priority
66	17W	West of Vermillion River, lower priority

Other areas to acquire land by exchange are :

<u>SECTION(S)</u>	<u>TWP</u>	<u>RGE</u>	<u>COMMENT</u>
15	67	17W	Exchange with City of Tower
2-4, 9, 10	67	19W	Exchange with City of Tower
9, 17	68	19W	Exchange with City of Tower

Lot 3 in 17-68-19 should be acquired from Boise Cascade to permit extension of the Ash River Hiking Trail to Ash River Falls.

LANDS FOR TRANSFER OF TRUST STATUS

CO	TWP	RGE	SE	QSEC	RAD	ST	AD	ACRES	CF	N	SF	PARK	FWMAC	M	1	2	D	W	L	COMMENT	
69	069	21W	08	03	242	BA	20	22.50	00	0	27	00000	00000	1	5	5	1	2	F	J	
								TOTAL													
ACRES								22.50													

1 of 767 records

PELICAN LAKE RMU 5

LANDS FOR EXCHANGE

CO	TWP	RGE	SE	QSEC	RAD	ST	AD	ACRES	CF	N	SF	PARK	FWMAC	M	1	2	D	W	L	COMMENT
69	063	17W	01	03	246	BJ	20	8.60	00	0	27	00000	00000	4	5	5	1	7	C	A
69	063	17W	01	04	246	BJ	20	25.93	00	0	27	00000	00000	4	5	5	1	7	C	A
69	063	17W	01	05	246	BJ	20	43.00	00	5	27	00000	00000	4	5	5	1	7	C	A
69	063	17W	01	06	246	BJ	20	52.50	00	5	27	00000	00000	4	5	5	1	7	C	A
69	063	17W	01	NESE	246	CA	20	40.00	00	2	27	00000	00000	1	6	6	5	9	C	
69	063	17W	01	SESE	246	CA	20	40.00	00	2	27	00000	00000	1	6	6	5	9	C	
69	063	17W	11	NENE	246	AB	20	40.00	00	2	27	00000	00000	4	6	6	5	0	C	
69	063	17W	11	NWNE	246	AB	20	40.00	00	2	27	00000	00000	4	6	6	5	0	C	
69	063	17W	11	SENE	246	AB	20	40.00	00	2	27	00000	00000	4	6	6	5	0	C	
69	063	17W	12	NENW	246	AB	20	40.00	00	2	27	00000	00000	4	6	6	5	0	C	
69	063	17W	12	NWNW	246	AB	20	40.00	00	2	27	00000	00000	4	6	6	5	5	C	
69	063	17W	12	SWNW	246	AB	20	40.00	00	2	27	00000	00000	4	6	6	5	0	C	
69	063	17W	12	SENW	246	AB	20	40.00	00	2	27	00000	00000	4	6	6	5	0	C	
69	063	18W	10	NENE	246	BA	20	40.00	00	0	27	00000	00000	1	6	6	1	0	C	
69	063	18W	10	NENW	246	BA	20	40.00	00	0	27	00000	00000	1	6	6	1	0	C	
69	063	19W	20	NENW	246	CB	20	40.00	08	0	27	00000	00000	4	6	6	1	9	C	
69	064	17W	01	SWNW	243	BA	20	40.00	08	5	27	00000	00000	1	6	6	5	9	C	
69	064	17W	16	SWSW	243	AA	20	40.00	08	0	27	00000	00000	1	6	6	5	0	C	
69	064	17W	32	SENE	243	CA	20	40.00	08	0	27	00000	00000	1	6	6	5	0	C	
69	064	17W	33	SWNW	243	CA	20	40.00	08	0	27	00000	00000	1	6	6	5	0	C	
69	064	17W	35	NWNW	243	CA	20	40.00	08	0	27	00000	00000	1	6	6	5	9	C	
69	064	18W	18	NENE	243	CA	20	40.00	08	0	27	00000	00000	1	6	6	1	8	C	
69	064	18W	30	NESW	246	CA	20	40.00	08	0	27	00000	00000	1	6	6	5	0	C	
69	064	19W	03	SWSE	241	CA	20	40.00	08	0	27	00000	00000	1	6	6	5	8	C	A
69	064	19W	04	02	241	CA	20	30.49	08	0	27	00000	00000	1	6	6	5	0	C	
69	064	19W	12	SENE	241	CA	20	40.00	08	0	27	00000	00000	1	6	6	5	9	C	
69	064	19W	17	SWSW	241	BA	20	40.00	00	0	27	00000	00000	1	6	6	1	0	C	F
69	064	19W	23	NWNE	241	AB	20	40.00	08	0	27	00000	00000	4	6	6	1	0	C	
69	064	19W	23	NENW	241	AB	20	40.00	08	0	27	00000	00000	4	6	6	1	0	C	
69	064	19W	23	SWNW	241	AB	20	40.00	08	0	27	00000	00000	4	6	6	1	0	C	
69	064	19W	23	SENW	241	AB	20	40.00	08	0	27	00000	00000	4	6	6	1	0	C	
69	064	19W	26	SENE	241	CA	20	40.00	08	0	27	00000	00000	1	6	6	1	8	C	A
69	064	19W	26	NWNW	241	AB	20	40.00	08	0	27	00000	00000	4	6	6	1	0	C	
69	064	19W	26	SWNW	241	AB	20	40.00	08	0	27	00000	00000	4	6	6	1	0	C	
69	064	19W	27	NENE	241	AB	20	40.00	08	0	27	00000	00000	4	6	6	1	9	C	
69	064	19W	27	NWNE	241	AB	20	40.00	08	0	27	00000	00000	4	6	6	1	0	C	
69	064	19W	27	SENE	241	CA	20	40.00	08	0	27	00000	00000	1	6	6	1	9	C	
69	064	19W	27	NESE	241	CA	20	40.00	08	0	27	00000	00000	1	6	6	1	8	C	
69	064	19W	27	NWSE	241	CA	20	40.00	08	0	27	00000	00000	1	6	6	1	9	C	
69	064	19W	27	SWSE	241	CA	20	40.00	08	0	27	00000	00000	1	6	6	1	8	C	
69	064	20W	12	SENE	241	BA	20	12.72	00	0	27	00000	00000	1	6	6	5	8	C	
69	064	20W	28	SWNE	241	BA	20	40.00	00	0	27	00000	00000	1	6	6	5	0	C	
69	064	20W	29	NWNW	241	BA	20	40.00	00	0	27	00000	00000	1	6	6	1	0	C	
69	064	20W	29	SESW	241	CA	20	40.00	00	0	27	00000	00000	1	6	6	1	0	C	
69	064	20W	29	SWSE	241	CA	20	40.00	00	0	27	00000	00000	1	6	6	1	0	C	
69	065	17W	13	NWNW	243	CA	20	40.00	08	5	27	00000	00000	1	6	6	5	0	C	
69	065	17W	19	NWSE	243	CA	20	40.00	08	0	27	00000	00000	1	6	6	1	9	C	

CO	TWP	RGE	SE	QSEC	RAD	ST	AD	ACRES	CF	N	SF	PARK	FWMAC	M	1	2	D	W	L	COMMENT
69	065	17W	20	SESE	243	CA	20	40.00	08	0	27	00000	00000	1	6	6	1	0	C	
69	065	17W	21	SWSW	243	CA	20	40.00	08	0	27	00000	00000	1	6	6	1	0	C	
69	065	17W	28	02	243	CA	20	37.55	08	0	27	00000	00000	1	6	5	1	2	C	B
69	065	17W	28	NESW	243	CA	20	40.00	08	0	27	00000	00000	1	6	5	1	0	C	
69	065	17W	30	NENW	243	CA	20	40.00	08	0	27	00000	00000	1	6	6	5	9	C	
69	065	18W	18	SESW	243	CJ	20	40.00	08	0	27	00000	00000	4	6	6	1	0	C	
69	065	18W	18	SWSE	243	CJ	20	40.00	08	0	27	00000	00000	4	6	6	1	0	C	
69	065	19W	03	02	241	CA	20	15.80	08	0	27	00000	00000	1	6	5	1	2	C	B
69	065	19W	14	NENW	241	BA	20	40.00	08	0	27	00000	00000	1	5	6	1	8	C	
69	065	19W	26	NESW	241	CA	20	40.00	08	0	27	00000	00000	1	6	6	1	0	C	
69	065	19W	26	SWSW	241	CA	20	40.00	08	0	27	00000	00000	1	6	6	1	0	C	
69	065	19W	27	SESE	241	CA	20	40.00	08	0	27	00000	00000	1	6	6	1	0	C	
69	065	19W	34	NENE	241	CA	20	40.00	08	0	27	00000	00000	1	6	6	1	0	C	
69	065	19W	35	NENW	241	CB	20	40.00	08	0	27	00000	00000	4	6	6	1	0	C	
69	065	20W	13	NWNE	241	CA	20	40.00	08	0	27	00000	00000	1	6	6	3	0	C	
69	066	19W	04	SESW	241	LG	20	40.00	08	0	27	00000	00000	3	6	6	1	8	C	
69	066	19W	13	SWSE	241	LG	20	40.00	08	0	27	00000	00000	3	6	6	1	0	C	
69	066	19W	25	NWNE	241	LG	20	40.00	08	0	27	00000	00000	3	6	6	1	0	C	
69	066	19W	25	SESW	241	LG	20	40.00	08	0	27	00000	00000	3	6	6	1	0	C	
69	066	19W	25	NESE	241	LG	20	40.00	08	0	27	00000	00000	3	6	6	1	0	C	
69	066	19W	25	NWSE	241	LG	20	40.00	08	0	27	00000	00000	3	6	6	1	0	C	
69	066	19W	29	SESW	241	LG	20	40.00	08	0	27	00000	00000	3	6	6	1	0	C	
69	066	19W	29	NESW	241	LG	20	40.00	08	0	27	00000	00000	3	6	6	1	0	C	
69	066	20W	03	NWSW	241	CJ	20	40.00	08	0	27	00000	00000	4	6	6	3	0	C	
69	066	20W	10	NWSE	241	CJ	20	40.00	08	0	27	00000	00000	4	6	6	3	0	C	
69	066	20W	13	04	241	CJ	20	35.25	08	0	27	00000	00000	4	5	6	1	2	C	B
69	066	20W	15	NENW	241	CJ	20	40.00	08	0	27	00000	00000	4	6	6	3	8	C	
69	066	20W	15	SESW	241	CJ	20	40.00	08	0	27	00000	00000	4	6	6	3	0	C	
69	066	20W	18	06	241	CJ	20	39.09	08	0	27	00000	00000	4	6	6	1	0	C	
69	066	20W	18	SESW	241	CA	20	40.00	08	0	27	00000	00000	1	6	6	1	8	C	
69	066	20W	18	07	241	CA	20	25.50	08	0	27	00000	00000	1	5	6	1	2	C	B
69	066	20W	18	08	241	BA	20	57.50	08	0	27	00000	00000	1	5	6	1	2	C	B
69	066	20W	19	NENE	241	AB	20	40.00	08	0	27	00000	00000	4	6	6	1	0	C	
69	066	20W	19	NWNE	241	AB	20	40.00	08	0	27	00000	00000	4	6	6	1	0	C	
69	066	20W	19	NENW	241	CA	20	40.00	08	0	27	00000	00000	1	6	6	1	8	C	
69	066	20W	19	01	241	CA	20	39.15	08	0	27	00000	00000	1	6	6	1	8	C	
69	066	20W	29	SWNE	241	CA	20	40.00	08	0	27	00000	00000	1	6	6	3	8	C	
69	066	20W	29	SENE	241	CA	20	40.00	08	0	27	00000	00000	1	6	6	3	8	C	
69	066	20W	30	03	241	CA	20	40.43	08	0	27	00000	00000	1	6	6	3	0	C	
69	066	20W	31	NESW	241	CA	20	40.00	08	0	27	00000	00000	1	6	6	3	0	C	

TOTAL

ACRES 3,383.51
Printed 87 of the 1894 records.

AREAS FOR ACQUISITION BY EXCHANGE

Where no sections are listed, the state will build ownership around blocks of existing state ownership throughout the township indicated.

<u>SECTION(S)</u>	<u>TWP</u>	<u>RGE</u>	<u>COMMENT</u>
4-6,10,14, 15,18,19	63	17W	Exchange with county, federal, & industry
11,18,19,24	63	18W	Exchange with county, federal, & industry
2,3,13,15,28	63	19W	Exchange with county and federal
25	64	17W	Exchange with City of Tower
	64	19W	
	65	20W	Exchange with county
	65	21W	Exchange with industry
	66	19W	Exchange with federal
	66	20W	NE 1/4 especially, exchange with federal and county

LANDS FOR TRANSFER OF TRUST STATUS

CO	TWP	RGE	SE	QSEC	RAD	ST	AD	ACRES	CF	N	SF	PARK	FWMAC	M	1	2	D	W	L	COMMENT
69	063	17W	36	02	246	AA	20	32.75	00	5	27	00000	00000	1	5	5	1	1	1	F L
69	063	17W	36	03	246	AA	20	44.25	00	5	27	00000	00000	1	5	5	1	1	1	F L
69	063	17W	36	04	246	AA	20	31.50	00	5	27	00000	00000	1	5	5	1	1	1	F L
69	063	17W	36	06	246	AA	20	28.00	00	5	27	00000	00000	1	5	5	1	1	1	F L
69	063	17W	36	07	246	AA	20	16.25	00	5	27	00000	00000	1	5	5	1	1	1	F L
69	063	18W	36	03	246	AA	20	32.75	00	5	27	00000	00000	1	5	5	1	2	1	F K

TOTAL

 ACRES 185.50
 6 of the 1894 records

LITTLE FORK RIVER RMU 6

AREAS FOR ACQUISITION BY EXCHANGE

<u>SECTION(S)</u>	<u>TWP</u>	<u>RGE</u>	<u>COMMENT</u>
17	62	19W	Exchange with industry
6,17,30	62	20W	Exchange with federal
10,11,14, 15,27,30	62	21W	Exchange with county
2,3,16,17, 27,33	63	20W	Exchange with county and industry

LANDS TO BE ADDED TO STATE FORESTS

There are 10,159 acres of Division of Forestry administered land currently undedicated to any specific management unit in RMU 6. All of this land should be assigned State Forest status.

EMBARRASS RMU 7

LANDS FOR EXCHANGE

CO	TWP	RGE	SE	QSEC	RAD	ST	AD	ACRES	CF	N	SF	PARK	FWMAC	M	1	2	D	W	L	COMMENT
69	060	14W	16	NWNE	245	AA	21	40.00	00	0	00	00000	00000	1	6	6	1	8	C	F
69	060	14W	16	SWNE	245	AA	21	40.00	00	0	00	00000	00000	1	6	6	1	8	C	F
69	060	14W	16	SENE	245	AA	21	40.00	00	0	00	00000	00000	1	6	6	1	0	C	F
69	060	14W	16	SWNW	245	AA	21	40.00	00	0	00	00000	00000	1	6	6	1	0	C	F
69	060	14W	16	SESW	245	AA	21	40.00	00	0	00	00000	00000	1	6	6	1	0	C	F
69	060	14W	16	NESW	245	AA	21	40.00	00	0	00	00000	00000	1	6	6	1	8	C	F
69	060	14W	16	NWSW	245	AA	21	40.00	00	0	00	00000	00000	1	6	6	1	8	C	F
69	060	14W	16	SWSW	245	AA	21	40.00	00	0	00	00000	00000	1	6	6	1	8	C	F
69	060	14W	16	SESW	245	AA	21	40.00	00	0	00	00000	00000	1	6	6	1	8	C	F
69	060	14W	16	NWSE	245	AA	21	40.00	00	0	00	00000	00000	1	6	6	1	8	C	F
69	060	14W	16	SWSE	245	AA	21	40.00	00	0	00	00000	00000	1	6	6	1	8	C	F

TOTAL

 ACRES 440.00
 11 of the 711 records

AREAS FOR ACQUISITION BY EXCHANGE

<u>SECTION(S)</u>	<u>TWP</u>	<u>RGE</u>	<u>COMMENT</u>
4,9,19	61	13W	Exchange with county
3,4,9,10,13, 14,22-27	61	14W	Exchange with county
16	61	15W	Exchange with county
20,24,28	61	17W	Exchange with federal and county
34,35	61	19W	

LANDS FOR TRANSFER OF ADMINISTRATIVE CONTROL

The parcels identified for transfer of administrative control in this RMU are all currently assigned trust fund status. Prior to the transfer of administrative control of these lands, the trust fund status should be transferred to parcels which have been acquired through fee acquisition outside of the Bear Head Lake State Park boundary.

CO	TWP	RGE	SE	QSEC	RAD	ST	AD	ACRES	CF	N	SF	PARK	FWMAC	M	1	2	D	W	L	COMMENT
69	061	13W	06	04	245	CA	21	34.97	00	0	00	P0109	00000	1	5	5	1	2	D	
69	061	13W	07	04	245	CA	21	30.50	00	0	00	P0109	00000	1	5	5	1	0	D	
69	061	14W	03	SENE	245	EA	20	40.00	00	0	04	P0109	00000	1	5	5	1	0	D	

CO	TWP	RGE	SE	QSEC	RAD	ST	AD	ACRES	CF	N	SF	PARK	FWMAC	M	1	2	D	W	L	COMMENT
69	061	14W	03	NESE	245	EA	20	40.00	07	0	04	P0109	00000	1	5	5	1	0	D	
69	061	14W	03	SWSE	245	EA	20	40.00	07	0	04	P0109	00000	1	5	5	1	0	D	
69	061	14W	03	SESE	245	EA	20	40.00	07	0	04	P0109	00000	1	5	5	1	0	D	
69	061	14W	11	06	245	BA	20	31.75	00	0	04	P0109	00000	1	5	5	1	2	D	
69	061	14W	11	03	245	BA	20	7.00	00	0	04	P0109	00000	1	5	5	1	2	D	
69	061	14W	11	04	245	BA	20	0.50	00	0	04	P0109	00000	1	5	5	1	2	D	
69	061	14W	12	NENE	245	EA	20	40.00	00	0	04	P0109	00000	1	5	5	1	0	D	
69	061	14W	12	NWNE	245	EA	20	40.00	00	0	04	P0109	00000	1	5	5	1	5	D	
69	061	14W	12	SWNE	245	EA	20	40.00	00	0	04	P0109	00000	1	5	5	1	5	D	
69	061	14W	12	03	245	EA	20	39.00	00	0	04	P0109	00000	1	5	5	1	2	D	
69	061	14W	12	01	245	EA	20	58.25	00	0	04	P0109	00000	1	5	5	1	2	D	
69	061	14W	12	02	245	EA	20	30.25	00	0	04	P0109	00000	1	5	5	1	2	D	
69	061	14W	12	SENE	245	EA	20	40.00	00	0	04	P0109	00000	1	5	5	1	0	D	
69	061	14W	12	04	245	EA	20	46.50	00	0	04	P0109	00000	1	5	5	1	2	D	
69	061	14W	13	NWNW	245	BA	20	40.00	00	0	04	P0109	00000	1	5	5	1	0	D	
69	062	14W	26	06	245	BA	21	6.00	07	0	00	P0109	00000	1	5	5	1	1	D	
69	062	14W	27	09	245	BA	21	2.25	07	0	00	P0109	00000	1	5	5	1	1	D	
69	062	14W	36	NENE	245	AA	21	40.00	07	0	00	P0109	00000	1	5	5	1	0	D	
69	062	14W	36	NWNE	245	AA	21	40.00	07	0	00	P0109	00000	1	5	5	1	0	D	
69	062	14W	36	SWNE	245	AA	21	40.00	07	0	00	P0109	00000	1	5	5	1	0	D	
69	062	14W	36	SENE	245	AA	21	40.00	07	0	00	P0109	00000	1	5	5	1	0	D	
69	062	14W	36	01	245	AA	21	39.50	07	0	00	P0109	00000	1	5	5	1	2	D	
69	062	14W	36	04	245	AA	21	12.00	07	0	00	P0109	00000	1	5	5	1	1	D	
69	062	14W	36	03	245	AA	21	33.00	07	0	00	P0109	00000	1	5	5	1	2	D	
69	062	14W	36	05	245	AA	21	0.60	07	0	00	P0109	00000	1	5	5	1	1	D	
69	062	14W	36	02	245	AA	21	39.95	07	0	00	P0109	00000	1	5	5	1	2	D	
69	062	14W	36	NESW	245	AA	21	40.00	07	0	00	P0109	00000	1	5	5	1	0	D	
69	062	14W	36	NWSW	245	AA	21	40.00	07	0	00	P0109	00000	1	5	5	1	0	D	
69	062	14W	36	SWSW	245	AA	21	40.00	07	0	00	P0109	00000	1	5	5	1	0	D	
69	062	14W	36	SESW	245	AA	21	40.00	07	0	00	P0109	00000	1	5	5	1	0	D	
69	062	14W	36	NESE	245	AA	21	40.00	07	0	00	P0109	00000	1	5	5	1	0	D	
69	062	14W	36	NWSE	245	AA	21	40.00	07	0	00	P0109	00000	1	5	5	1	0	D	
69	062	14W	36	SWSE	245	AA	21	40.00	07	0	00	P0109	00000	1	5	5	1	0	D	
69	062	14W	36	SESE	245	AA	21	40.00	07	0	00	P0109	00000	1	5	5	1	0	D	

TOTAL

ACRES 1,252.02
37 of 711 records

Comment : All parcels are in Bear Head Lake State Park

LANDS TO BE ADDED TO STATE FORESTS

Excluding land proposed for exchange, there are 5,953 acres of Division of Forestry administered land currently undedicated to any specific management unit in RMU 7. All of this land should be assigned State Forest status. Undedicated land which is proposed for exchange should be given state forest status if an exchange or sale does not ultimately appear feasible.

LAURENTIAN DIVIDE RMU 8

LANDS FOR EXCHANGE

CO	TWP	RGE	SE	QSEC	RAD	ST	AD	ACRES	CF	N	SF	PARK	FWMAC	M	1	2	D	W	L	COMMENT
38	061	08W	02	06	245	CA	21	14.95	00	3	00	00000	00000	1	5	5	5	7	C	A
38	061	08W	02	07	245	CA	21	15.50	00	3	00	00000	00000	1	5	6	5	7	C	A
38	061	08W	09	NENW	245	CA	21	40.00	00	5	00	00000	00000	1	5	5	5	3	C	
38	061	08W	09	NWNW	245	CA	21	40.00	00	5	00	00000	00000	1	5	5	5	0	C	
38	061	08W	09	SWNW	245	CA	21	40.00	00	5	00	00000	00000	1	5	5	5	0	C	
38	061	08W	09	01	245	CA	21	39.08	00	5	00	00000	00000	1	6	5	5	2	C	B
38	061	08W	11	02	245	CA	21	26.60	00	5	00	00000	00000	1	5	5	5	7	C	A
38	061	08W	14	05	245	CA	21	39.94	00	5	00	00000	00000	1	6	5	5	7	C	A
38	061	08W	14	06	245	CA	21	12.05	00	5	00	00000	00000	1	6	6	5	7	C	A
38	061	08W	17	NENW	245	CA	21	40.00	00	5	00	00000	00000	1	6	6	5	0	C	
38	061	08W	17	SENW	245	CA	21	40.00	00	5	00	00000	00000	1	6	6	5	0	C	
38	061	08W	21	NENE	245	CA	21	40.00	00	5	00	00000	00000	1	6	6	5	0	C	
38	061	08W	22	NWNW	245	CA	21	40.00	00	5	00	00000	00000	1	6	6	5	0	C	
38	061	08W	23	SWSE	245	CA	21	40.00	00	5	00	00000	00000	1	6	6	5	0	C	
38	061	08W	23	SESE	245	CA	21	40.00	00	5	00	00000	00000	1	6	6	5	8	C	
38	061	08W	27	NWSW	245	CA	21	40.00	00	5	00	00000	00000	1	6	6	5	8	C	
38	061	08W	27	SWSW	245	CA	21	40.00	00	5	00	00000	00000	1	6	6	5	8	C	
38	061	08W	28	NESE	245	CA	21	40.00	00	5	00	00000	00000	1	6	6	5	8	C	
38	061	08W	31	07	245	CA	21	35.72	00	5	00	00000	00000	1	6	6	5	8	C	
38	061	08W	32	SENE	245	CA	21	40.00	00	5	00	00000	00000	1	6	6	5	0	C	
38	061	08W	32	NESE	245	CA	21	40.00	00	5	00	00000	00000	1	6	6	5	0	C	
38	061	08W	32	03	245	CA	21	40.22	00	5	00	00000	00000	1	6	6	5	8	C	
38	061	09W	17	NWNE	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	061	09W	17	NENW	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	061	09W	17	SWNW	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	061	09W	17	SENW	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	061	09W	17	NWSE	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	9	C	
38	061	09W	17	SWSE	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	9	C	
69	059	12W	23	SENE	245	CA	21	40.00	00	2	00	00000	00000	1	6	6	1	0	C	
69	059	12W	24	NENW	245	CA	21	40.00	00	2	00	00000	00000	1	6	6	1	0	C	
69	059	12W	24	NWNW	245	CA	21	40.00	00	2	00	00000	00000	1	6	6	1	0	C	
69	059	12W	24	SWNW	245	CA	21	40.00	00	2	00	00000	00000	1	6	6	1	0	C	
69	059	12W	24	SENW	245	CA	21	40.00	00	2	00	00000	00000	1	6	6	1	0	C	
69	059	12W	24	SWSE	245	CA	21	40.00	00	2	00	00000	00000	1	6	6	1	4	C	
69	059	12W	25	SENE	245	CA	21	40.00	00	2	00	00000	00000	1	6	6	3	0	C	
69	059	12W	25	SESE	245	CA	21	40.00	00	2	00	00000	00000	1	6	6	1	0	C	
69	059	12W	29	NENW	245	BA	21	40.00	00	2	00	00000	00000	1	6	6	3	0	C	
69	059	12W	33	SWSW	245	BA	21	40.00	00	2	00	00000	00000	1	6	6	3	0	C	

TOTAL

 ACRES 1,424.06
 Printed 38 of the 640 records.

AREAS FOR ACQUISITION BY EXCHANGE

<u>SECTION(S)</u>	<u>TWP</u>	<u>RGE</u>	<u>COMMENT</u>
13,20	59	12W	Exchange with federal
7,16	60	11W	Exchange with federal
15,33	60	12W	Exchange with federal
2-4,35	61	11W	
33	62	11W	

LANDS TO BE ADDED TO STATE FORESTS

Excluding land proposed for exchange, there are 18,681 acres of Division of Forestry administered land currently undedicated to any specific management unit in RMU 8. All of this land should be assigned State Forest status. Undedicated land which is proposed for exchange should be given state forest status if an exchange or sale does not ultimately appear feasible.

BURNTSIDE LAKE RMU 9

LANDS FOR EXCHANGE

CO	TWP	RGE	SE	QSEC	RAD	ST	AD	ACRES	CF	N	SF	PARK	FWMAC	M	1	2	D	W	L	COMMENT
38	062	11W	04	SESW	245	CA	20	40.00	00	5	04	00000	00000	1	6	6	1	0	C	
38	062	11W	05	06	245	BA	20	36.50	00	5	04	00000	00000	1	5	5	1	2	C	
38	062	11W	06	07	245	CA	20	46.00	00	5	04	00000	00000	1	5	5	1	2	C	
38	062	11W	07	04	245	BA	20	38.75	00	5	04	00000	00000	1	5	5	1	2	C	B
38	062	11W	08	NESW	245	CA	20	40.00	00	5	04	00000	00000	1	6	6	1	0	C	
38	062	11W	08	NWSW	245	CA	20	40.00	00	5	04	00000	00000	1	6	6	1	0	C	
38	062	11W	08	SWSW	245	CA	20	40.00	00	5	04	00000	00000	1	6	6	1	0	C	
38	062	11W	08	NESE	245	CA	20	40.00	00	5	04	00000	00000	1	6	6	1	0	C	
38	062	11W	08	NWSE	245	CA	20	40.00	00	5	04	00000	00000	1	6	6	1	0	C	
38	062	11W	10	SWSW	245	CA	20	40.00	00	5	04	00000	00000	1	6	6	1	0	C	
38	062	11W	18	SESW	245	CA	20	40.00	00	5	04	00000	00000	1	6	6	1	0	C	
38	062	11W	20	SWNE	245	CA	20	40.00	00	5	04	00000	00000	1	6	6	1	0	C	
38	062	11W	20	SENE	245	CA	20	40.00	00	5	04	00000	00000	1	6	6	1	0	C	
38	062	11W	20	SWNW	245	CA	20	40.00	00	5	04	00000	00000	1	6	6	1	0	C	
38	062	11W	20	SENW	245	CA	20	40.00	00	5	04	00000	00000	1	6	6	1	0	C	
38	062	11W	20	NESW	245	CA	20	40.00	00	5	04	00000	00000	1	6	6	1	0	C	
38	062	11W	20	SESW	245	CA	20	40.00	00	5	04	00000	00000	1	6	6	1	0	C	
38	062	11W	20	NWSE	245	CA	20	40.00	00	5	04	00000	00000	1	6	6	1	0	C	
38	063	09W	01	02	245	BA	21	33.50	00	5	00	00000	00000	1	5	5	5	1	C	C
38	063	10W	20	NWSW	245	CA	21	40.00	00	5	00	00000	00000	1	6	6	5	8	C	
38	064	09W	36	01	245	AA	21	34.00	00	5	00	00000	00000	1	5	5	5	1	C	C
38	064	09W	36	03	245	AA	21	20.75	00	5	00	00000	00000	1	5	5	5	1	C	C
38	064	09W	36	02	245	AA	21	34.50	00	5	00	00000	00000	1	5	5	5	1	C	C
38	064	09W	36	04	245	AA	21	28.50	00	5	00	00000	00000	1	5	5	5	1	C	C
69	061	12W	08	SWSW	245	CA	20	40.00	00	5	04	00000	00000	1	6	6	1	0	C	
69	061	12W	08	NESE	245	CA	20	40.00	00	5	04	00000	00000	1	6	6	1	0	C	
69	061	12W	08	SESE	245	CA	20	40.00	00	5	04	00000	00000	1	6	6	1	0	C	
69	061	12W	28	04	245	BA	20	57.25	00	5	04	00000	00000	1	5	6	1	2	C	B
69	061	12W	28	05	245	BA	20	42.50	00	5	04	00000	00000	1	5	6	1	2	C	B
69	061	12W	29	08	245	BA	20	24.75	00	5	04	00000	00000	1	5	6	1	2	C	B
69	061	12W	32	01	245	BA	20	42.00	00	5	04	00000	00000	1	5	6	1	2	C	B
69	061	12W	33	03	245	BA	20	26.00	00	5	04	00000	00000	1	5	6	1	2	C	B
69	062	12W	28	SENE	245	CA	21	40.00	00	5	00	00000	00000	1	6	6	5	0	C	
69	062	12W	28	SWNW	245	CA	21	40.00	00	5	00	00000	00000	1	6	6	5	0	C	
69	062	12W	34	SWNE	245	CA	21	40.00	00	5	00	00000	00000	1	6	6	5	0	C	
69	062	13W	34	NWNW	245	CA	20	40.00	00	2	04	00000	00000	1	6	6	1	8	C	
69	062	13W	34	01	245	CA	20	32.00	00	2	04	00000	00000	1	6	5	1	2	C	B
69	062	16W	36	01	245	AA	21	4.75	00	0	00	00000	00000	1	5	5	1	1	C	C
69	062	16W	36	02	245	AA	21	1.00	00	0	00	00000	00000	1	5	5	1	2	C	B
69	062	16W	36	03	245	AA	21	44.25	00	0	00	00000	00000	1	5	5	1	2	C	B
69	064	12W	13	05	245	BJ	20	34.40	00	5	01	00000	00000	4	5	5	5	8	C	
69	064	12W	26	03	245	CA	21	27.50	00	5	00	00000	00000	1	5	6	5	2	C	B
69	064	15W	07	03	243	CA	21	34.12	00	5	00	00000	00000	1	6	6	3	0	C	
69	064	15W	08	SWNW	243	CA	21	40.00	00	5	00	00000	00000	1	6	6	3	0	C	
69	064	15W	09	SWNE	243	CA	21	40.00	00	5	00	00000	00000	1	6	6	3	0	C	
69	064	16W	10	NENW	243	CA	21	40.00	00	5	00	00000	00000	1	6	6	5	0	C	
69	064	16W	12	SENE	243	CA	21	40.00	00	5	00	00000	00000	1	6	6	5	0	C	

CO	TWP	RGE	SE	QSEC	RAD	ST	AD	ACRES	CF	N	SF	PARK	FWMAC	M	1	2	D	W	L	COMMENT
69	064	16W	13	NENE	243	CA	21	40.00	00	5	00	00000	00000	1	6	6	5	0	C	
69	064	16W	13	SENE	243	CA	21	40.00	00	5	00	00000	00000	1	6	6	5	0	C	
69	064	16W	29	NWNE	243	CA	21	40.00	00	5	00	00000	00000	1	6	6	1	0	C	
69	065	13W	29	SWSW	243	CA	21	40.00	00	5	00	00000	00000	1	6	6	3	0	C	
69	065	14W	14	NENE	243	CA	21	40.00	00	5	00	00000	00000	1	6	6	3	0	C	
69	065	14W	17	SESW	243	CA	21	40.00	00	5	00	00000	00000	1	6	6	3	0	C	
69	065	14W	20	NWNW	243	CA	21	40.00	00	5	00	00000	00000	1	6	6	1	9	C	
69	065	15W	29	NWSW	243	CA	21	40.00	00	5	00	00000	00000	1	6	6	3	0	C	
69	065	15W	29	SWSW	243	CA	21	40.00	00	5	00	00000	00000	1	6	6	3	0	C	
69	065	15W	29	SESW	243	CA	21	40.00	00	5	00	00000	00000	1	6	6	3	0	C	
69	065	16W	03	04	243	CA	21	20.38	00	5	00	00000	00000	1	6	6	5	0	C	
69	065	16W	10	SENE	243	CA	21	40.00	00	5	00	00000	00000	1	6	6	5	0	C	
69	065	16W	11	SNW	243	CA	21	40.00	00	5	00	00000	00000	1	6	6	5	0	C	
69	065	16W	28	SESE	243	CA	21	40.00	00	5	00	00000	00000	1	6	6	5	0	C	
69	066	16W	20	04	243	CA	21	38.25	00	5	00	00000	00000	1	5	5	1	2	C	
69	066	16W	26	SESW	243	CA	21	40.00	00	5	00	00000	00000	1	6	6	5	0	C	
69	067	16W	06	01	243	LG	20	30.15	00	5	01	00000	00000	4	5	6	1	2	C	B, M
69	067	16W	06	02	243	LG	20	38.20	00	5	01	00000	00000	4	6	6	1	0	C	M
69	067	16W	07	05	243	LG	20	39.77	00	5	01	00000	00000	4	5	5	3	0	C	
69	068	16W	31	01	243	BA	21	18.50	00	5	00	00000	00000	1	5	5	1	2	C	I

TOTAL

ACRES 2,468.27
67 of the 1032 records

AREAS FOR ACQUISITION BY EXCHANGE

<u>SECTION(S)</u>	<u>TWP</u>	<u>RGE</u>	<u>COMMENT</u>
1,9,12,17,18	61	12W	Exchange with federal
21,28	62	11W	Exchange with federal
35	62	12W	Exchange with federal
26	62	13W	Exchange with federal
16	63	12W	Exchange with county
16,17,21	64	12W	Exchange with federal
2,3,10,11, 33,34,36	64	13W	Exchange with federal and county
	64	16W	

LANDS TO BE ADDED TO STATE FORESTS

Excluding land proposed for exchange, there are 19,016 acres of Division of Forestry administered land currently undedicated to any specific management unit in RMU 9. All of this land should be assigned State Forest status. Undedicated land which is proposed for exchange should be given state forest status if an exchange or sale does not ultimately appear feasible.

BOUNDARY WATERS CANOE AREA WILDERNESS RMU 10

The state owned trust land currently administered by the Division of Forestry should be exchanged to the Superior National Forest for land outside of the BWCAW so that the lands can be managed to produce revenue for the trust.

State administered lands within the Burntside State Forest should continue to be managed by the Division of Forestry. The Orr Recreational Sub-Area Plan contains proposals for recreational trails development on old logging roads within the BWCAW portion of the Burntside State Forest.

LANDS FOR EXCHANGE

CO	TWP	RGE	SE	QSEC	RAD	ST	AD	ACRES	CF	N	SF	PARK	FWMAC	M	1	2	D	W	L	COMMENT
38	061	08W	04	SWSW	245	CA	21	40.00	00	4	00	00000	00000	1	5	5	5	4	C	
38	061	08W	07	08	245	CA	21	36.83	00	4	00	00000	00000	1	5	5	5	0	C	
38	061	08W	08	05	245	CA	21	39.90	00	4	00	00000	00000	1	6	5	5	2	C	
38	061	08W	08	06	245	CA	21	34.40	00	4	00	00000	00000	1	6	5	5	2	C	
38	061	09W	06	04	245	CA	21	44.19	00	3	00	00000	00000	1	5	5	5	7	C	
38	061	09W	06	05	245	CA	21	35.17	00	3	00	00000	00000	1	5	5	5	8	C	
38	061	09W	06	06	245	CA	21	34.79	00	3	00	00000	00000	1	5	5	5	8	C	
38	061	09W	08	SWSE	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	061	09W	17	NWNE	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	061	09W	17	NENW	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	061	09W	17	SWNW	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	061	09W	17	SENW	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	061	09W	17	NWSE	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	9	C	
38	061	09W	17	SWSE	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	9	C	
38	062	08W	06	SENE	245	CA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	062	08W	06	NESE	245	CA	21	40.00	00	3	00	00000	00000	1	5	5	5	3	C	
38	062	08W	34	NENE	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	062	08W	36	01	245	AA	20	15.50	00	4	29	00000	00000	1	5	5	5	1	C	
38	062	08W	36	02	245	AA	20	4.50	00	4	29	00000	00000	1	5	5	5	1	C	
38	062	08W	36	03	245	AA	20	9.00	00	5	29	00000	00000	1	5	5	5	2	C	
38	062	08W	36	04	245	AA	20	3.40	00	5	29	00000	00000	1	5	5	5	1	C	
38	062	08W	36	05	245	AA	20	17.25	00	5	29	00000	00000	1	5	5	5	2	C	
38	062	08W	36	06	245	AA	20	16.75	00	5	29	00000	00000	1	5	5	5	2	C	
38	062	09W	14	NENE	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	9	C	
38	062	09W	14	NWNE	245	CA	21	40.00	00	4	00	00000	00000	1	5	6	5	3	C	
38	062	09W	14	SWNW	245	CA	21	40.00	00	4	00	00000	00000	1	6	5	5	3	C	
38	062	09W	16	01	245	AA	21	26.75	00	3	00	00000	00000	1	5	6	5	2	C	
38	062	09W	16	02	245	AA	21	26.50	00	3	00	00000	00000	1	5	6	5	2	C	
38	062	09W	16	04	245	AA	21	35.00	00	3	00	00000	00000	1	5	5	5	2	C	
38	062	09W	16	03	245	AA	21	39.75	00	3	00	00000	00000	1	5	5	5	2	C	
38	062	09W	16	05	245	AA	21	18.75	00	3	00	00000	00000	1	5	5	5	2	C	
38	062	09W	16	07	245	AA	21	24.50	00	3	00	00000	00000	1	5	5	5	2	C	
38	062	09W	16	06	245	AA	21	38.00	00	3	00	00000	00000	1	5	5	5	2	C	
38	062	09W	20	07	245	CA	21	2.00	00	4	00	00000	00000	1	5	5	5	2	C	
38	062	09W	36	01	245	AA	21	38.00	00	3	00	00000	00000	1	5	5	5	2	C	

CO	TWP	RGE	SE	QSEC	RAD	ST	AD	ACRES	CF	N	SF	PARK	FWMAC	M	1	2	D	W	L	COMMENT
38	062	09W	36	04	245	AA	21	26.00	00	3	00	00000	00000	1	5	5	5	7	C	
38	062	09W	36	02	245	AA	21	14.50	00	3	00	00000	00000	1	5	5	5	7	C	
38	062	09W	36	03	245	AA	21	23.50	00	3	00	00000	00000	1	5	5	5	7	C	
38	062	09W	36	10	245	AA	21	44.00	00	3	00	00000	00000	1	5	5	5	7	C	
38	062	09W	36	07	245	AA	21	30.00	00	3	00	00000	00000	1	5	5	5	7	C	
38	062	09W	36	05	245	AA	21	19.50	00	3	00	00000	00000	1	5	5	5	7	C	
38	062	09W	36	06	245	AA	21	16.75	00	3	00	00000	00000	1	5	5	5	7	C	
38	062	09W	36	09	245	AA	21	53.25	00	3	00	00000	00000	1	5	5	5	7	C	
38	062	09W	36	08	245	AA	21	41.75	00	3	00	00000	00000	1	5	5	5	7	C	
38	062	10W	10	01	245	CA	21	42.30	00	4	00	00000	00000	1	5	5	5	2	C	
38	062	10W	12	SWSW	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	062	10W	16	01	245	AA	21	3.25	00	4	00	00000	00000	1	5	5	5	2	C	
38	062	10W	16	02	245	AA	21	46.85	00	4	00	00000	00000	1	5	5	5	2	C	
38	062	10W	16	03	245	AA	21	40.30	00	4	00	00000	00000	1	5	5	5	2	C	
38	062	10W	16	04	245	AA	21	34.75	00	4	00	00000	00000	1	5	5	5	2	C	
38	062	10W	16	05	245	AA	21	21.15	00	4	00	00000	00000	1	5	5	5	2	C	
38	062	10W	16	06	245	AA	21	42.50	00	4	00	00000	00000	1	5	5	5	2	C	
38	062	10W	16	07	245	AA	21	39.80	00	4	00	00000	00000	1	5	6	5	2	C	
38	062	10W	16	08	245	AA	21	38.90	00	4	00	00000	00000	1	5	5	5	2	C	
38	062	10W	16	09	245	AA	21	53.60	00	4	00	00000	00000	1	5	6	5	2	C	
38	062	10W	16	10	245	AA	21	36.85	00	4	00	00000	00000	1	5	5	5	2	C	
38	062	10W	16	11	245	AA	21	3.00	00	4	00	00000	00000	1	5	5	5	2	C	
38	062	10W	17	08	245	CA	21	31.20	00	4	00	00000	00000	1	5	5	5	2	C	
38	062	10W	26	04	245	CA	21	23.75	00	3	00	00000	00000	1	5	5	5	2	C	
38	062	10W	26	05	245	CA	21	20.25	00	3	00	00000	00000	1	5	5	5	2	C	
38	062	10W	33	NESW	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	062	10W	33	NWSW	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	062	10W	33	SWSW	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	062	10W	33	SESW	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	062	10W	33	NWSE	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	062	10W	33	SWSE	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	062	10W	36	01	245	AA	21	20.50	00	3	00	00000	00000	1	5	5	5	2	C	
38	062	10W	36	02	245	AA	21	39.90	00	3	00	00000	00000	1	5	5	5	2	C	
38	062	10W	36	SWNW	245	AA	21	40.00	00	3	00	00000	00000	1	5	6	5	0	C	
38	062	10W	36	03	245	AA	21	32.60	00	3	00	00000	00000	1	5	5	5	2	C	
38	062	10W	36	NESW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	062	10W	36	NWSW	245	AA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	062	10W	36	SWSW	245	AA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	062	10W	36	SESW	245	AA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	062	10W	36	04	245	AA	21	30.00	00	3	00	00000	00000	1	5	5	5	2	C	
38	062	10W	36	05	245	AA	21	40.30	00	3	00	00000	00000	1	5	5	5	2	C	
38	062	10W	36	06	245	AA	21	32.65	00	3	00	00000	00000	1	5	5	5	2	C	
38	062	11W	02	SWSE	245	CA	20	40.00	00	4	04	00000	00000	1	6	6	1	9	C	
38	062	11W	02	SESE	245	CA	20	40.00	00	4	04	00000	00000	1	6	6	1	0	C	
38	063	06W	16	01	245	AA	21	33.00	00	3	00	00000	00000	1	5	5	5	2	C	
38	063	06W	16	NENW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	5	C	
38	063	06W	16	02	245	AA	21	39.90	00	3	00	00000	00000	1	5	5	5	2	C	
38	063	06W	16	03	245	AA	21	42.25	00	3	00	00000	00000	1	5	5	5	2	C	
38	063	06W	16	04	245	AA	21	42.75	00	3	00	00000	00000	1	5	5	5	2	C	
38	063	06W	16	05	245	AA	21	11.00	00	3	00	00000	00000	1	5	5	5	2	C	
38	063	06W	16	07	245	AA	21	0.40	00	3	00	00000	00000	1	5	5	5	2	C	
38	063	06W	16	08	245	AA	21	21.75	00	3	00	00000	00000	1	5	5	5	2	C	

CO	TWP	RGE	SE	QSEC	RAD	ST	AD	ACRES	CF	N	SF	PARK	FWMAC	M	1	2	D	W	L	COMMENT
38	063	06W	16	06	245	AA	21	25.75	00	3	00	00000	00000	1	5	5	5	2	C	
38	063	06W	16	09	245	AA	21	1.50	00	3	00	00000	00000	1	5	5	5	2	C	
38	063	06W	16	10	245	AA	21	40.75	00	3	00	00000	00000	1	5	5	5	2	C	
38	063	07W	06	12	245	BA	21	23.85	00	3	00	00000	00000	1	5	5	5	0	C	
38	063	07W	06	11	245	BA	21	29.50	00	3	00	00000	00000	1	5	5	5	2	C	
38	063	07W	06	13	245	BA	21	36.85	00	3	00	00000	00000	1	5	5	5	2	C	
38	063	07W	06	17	245	BA	21	27.75	00	3	00	00000	00000	1	5	5	5	0	C	
38	063	07W	06	16	245	BA	21	42.00	00	3	00	00000	00000	1	5	5	5	2	C	
38	063	07W	06	15	245	BA	21	35.75	00	3	00	00000	00000	1	5	5	5	2	C	
38	063	07W	16	01	245	AA	21	22.00	00	3	00	00000	00000	1	5	5	5	2	C	
38	063	07W	16	02	245	AA	21	5.75	00	3	00	00000	00000	1	5	5	5	2	C	
38	063	07W	16	03	245	AA	21	22.75	00	3	00	00000	00000	1	5	5	5	2	C	
38	063	07W	16	04	245	AA	21	55.25	00	3	00	00000	00000	1	5	5	5	2	C	
38	063	07W	16	05	245	AA	21	31.75	00	3	00	00000	00000	1	5	5	5	2	C	
38	063	07W	16	06	245	AA	21	25.75	00	3	00	00000	00000	1	5	5	5	2	C	
38	063	07W	36	NENE	245	AA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	063	07W	36	NWNE	245	AA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	063	07W	36	SWNE	245	AA	21	40.00	00	4	00	00000	00000	1	6	6	5	5	C	
38	063	07W	36	SENE	245	AA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	063	07W	36	NENW	245	AA	21	40.00	00	4	00	00000	00000	1	6	6	5	5	C	
38	063	07W	36	NWNW	245	AA	21	40.00	00	4	00	00000	00000	1	6	6	5	9	C	
38	063	07W	36	SWNW	245	AA	21	40.00	00	4	00	00000	00000	1	6	6	5	9	C	
38	063	07W	36	SENW	245	AA	21	40.00	00	4	00	00000	00000	1	6	6	5	5	C	
38	063	07W	36	NESW	245	AA	21	40.00	00	4	00	00000	00000	1	6	6	5	5	C	
38	063	07W	36	NWSW	245	AA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	063	07W	36	SWSW	245	AA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	063	07W	36	SESW	245	AA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	063	07W	36	NESE	245	AA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	063	07W	36	NWSE	245	AA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	063	07W	36	SWSE	245	AA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	063	07W	36	SESE	245	AA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	063	08W	02	08	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	063	08W	02	09	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	063	08W	02	NESE	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	063	08W	02	NWSE	245	BA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	063	08W	02	SWSE	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	063	08W	05	02	245	BA	21	6.65	00	3	00	00000	00000	1	5	5	5	1	C	
38	063	08W	05	03	245	BA	21	18.50	00	3	00	00000	00000	1	5	6	5	2	C	
38	063	08W	05	04	245	BA	21	9.25	00	3	00	00000	00000	1	5	6	5	2	C	
38	063	08W	06	01	245	BA	21	29.55	00	3	00	00000	00000	1	5	6	5	2	C	
38	063	08W	06	05	245	BA	21	7.75	00	3	00	00000	00000	1	5	5	5	2	C	
38	063	08W	06	06	245	BA	21	14.75	00	4	00	00000	00000	1	5	5	5	2	C	
38	063	08W	06	07	245	BA	21	34.00	00	4	00	00000	00000	1	5	6	5	2	C	
38	063	08W	07	01	245	BA	21	28.25	00	4	00	00000	00000	1	5	6	5	2	C	
38	063	08W	07	SWNE	245	BA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	063	08W	07	02	245	BA	21	26.00	00	4	00	00000	00000	1	5	6	5	2	C	
38	063	08W	07	03	245	BA	21	26.00	00	4	00	00000	00000	1	5	6	5	2	C	
38	063	08W	07	04	245	BA	21	43.37	00	4	00	00000	00000	1	6	6	5	5	C	
38	063	08W	07	SENW	245	BA	21	40.00	00	4	00	00000	00000	1	6	6	5	5	C	
38	063	08W	07	NESW	245	BA	21	40.00	00	4	00	00000	00000	1	5	5	5	3	C	
38	063	08W	08	NESW	245	BA	21	40.00	00	4	00	00000	00000	1	5	5	5	3	C	
38	063	08W	08	NWSW	245	BA	21	40.00	00	4	00	00000	00000	1	5	6	5	3	C	

CO	TWP	RGE	SE	QSEC	RAD	ST	AD	ACRES	CF	N	SF	PARK	FWMAC	M	1	2	D	W	L	COMMENT
38	063	08W	08	SWSW	245	BA	21	40.00	00	4	00	00000	00000	1	6	6	5	3	C	
38	063	08W	08	SESW	245	BA	21	40.00	00	4	00	00000	00000	1	5	6	5	3	C	
38	063	08W	10	NWNE	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	063	08W	10	NENW	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	063	08W	10	NWNW	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	5	C	
38	063	08W	12	NWNW	245	CA	21	40.00	00	3	00	00000	00000	1	5	5	5	3	C	
38	063	08W	16	01	245	AA	21	27.75	00	4	00	00000	00000	1	5	5	5	2	C	
38	063	08W	16	NWNE	245	AA	21	40.00	00	4	00	00000	00000	1	5	6	5	5	C	
38	063	08W	16	SWNE	245	AA	21	40.00	00	4	00	00000	00000	1	5	6	5	5	C	
38	063	08W	16	SENE	245	AA	21	40.00	00	4	00	00000	00000	1	5	6	5	0	C	
38	063	08W	16	NENW	245	AA	21	40.00	00	4	00	00000	00000	1	6	6	5	5	C	
38	063	08W	16	NWNW	245	AA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	063	08W	16	SWNW	245	AA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	063	08W	16	SENW	245	AA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	063	08W	16	NESW	245	AA	21	40.00	00	4	00	00000	00000	1	6	6	5	5	C	
38	063	08W	16	NWSW	245	AA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	063	08W	16	SWSW	245	AA	21	40.00	00	4	00	00000	00000	1	6	6	5	3	C	
38	063	08W	16	SESW	245	AA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	063	08W	16	NESE	245	AA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	063	08W	16	NWSE	245	AA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	063	08W	16	SWSE	245	AA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	063	08W	16	SESE	245	AA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	063	08W	22	SWSW	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	063	08W	22	SESW	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	063	08W	22	SWSE	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	063	08W	28	NENE	245	CA	21	40.00	00	4	00	00000	00000	1	5	6	5	3	C	
38	063	08W	36	01	245	AA	20	20.75	00	3	26	00000	00000	1	5	5	1	2	C	Q (Enforcement Cabin)
38	063	08W	36	02	245	AA	20	14.25	00	3	26	00000	00000	1	5	5	5	2	C	
38	063	08W	36	03	245	AA	20	2.50	00	3	26	00000	00000	1	5	5	5	1	C	
38	063	08W	36	SWNE	245	AA	20	40.00	00	3	26	00000	00000	1	5	5	5	0	C	
38	063	08W	36	SENE	245	AA	20	40.00	00	3	26	00000	00000	1	5	5	5	0	C	
38	063	08W	36	04	245	AA	20	11.25	00	3	26	00000	00000	1	5	5	5	2	C	
38	063	08W	36	05	245	AA	20	2.00	00	3	26	00000	00000	1	5	5	5	1	C	
38	063	08W	36	06	245	AA	20	1.25	00	3	26	00000	00000	1	5	5	5	2	C	
38	063	08W	36	07	245	AA	20	3.50	00	3	26	00000	00000	1	5	5	5	1	C	
38	063	08W	36	08	245	AA	20	1.75	00	3	26	00000	00000	1	5	5	5	1	C	
38	063	08W	36	09	245	AA	20	3.00	00	3	26	00000	00000	1	5	5	5	1	C	
38	063	08W	36	10	245	AA	20	41.25	00	3	26	00000	00000	1	5	5	5	2	C	
38	063	08W	36	NESW	245	AA	20	40.00	00	3	26	00000	00000	1	5	5	5	0	C	
38	063	08W	36	11	245	AA	20	1.25	00	3	26	00000	00000	1	5	5	5	1	C	
38	063	08W	36	12	245	AA	20	24.00	00	3	26	00000	00000	1	5	5	5	2	C	
38	063	08W	36	13	245	AA	20	38.25	00	3	26	00000	00000	1	5	5	5	2	C	
38	063	08W	36	SESW	245	AA	20	40.00	00	3	26	00000	00000	1	5	5	5	0	C	
38	063	08W	36	NESE	245	AA	20	40.00	00	3	26	00000	00000	1	5	5	5	9	C	
38	063	08W	36	NWSE	245	AA	20	40.00	00	3	26	00000	00000	1	5	5	5	0	C	
38	063	08W	36	SWSE	245	AA	20	40.00	00	3	26	00000	00000	1	5	5	5	0	C	
38	063	08W	36	SESE	245	AA	20	40.00	00	3	26	00000	00000	1	5	5	5	9	C	
38	063	09W	15	03	245	BA	21	7.25	00	3	00	00000	00000	1	5	5	5	2	C	
38	063	09W	16	04	245	AA	21	19.75	00	5	00	00000	00000	1	5	5	5	2	C	
38	063	09W	16	06	245	AA	21	21.25	00	3	00	00000	00000	1	5	5	5	2	C	
38	063	09W	16	10	245	AA	21	30.00	00	3	00	00000	00000	1	5	5	5	2	C	
38	063	09W	16	11	245	AA	21	48.50	00	3	00	00000	00000	1	5	5	5	2	C	

CO	TWP	RGE	SE	QSEC	RAD	ST	AD	ACRES	CF	N	SF	PARK	FWMAC	M	1	2	D	W	L	COMMENT
38	063	09W	16	07	245	AA	21	25.75	00	3	00	00000	00000	1	5	5	5	2	C	
38	063	09W	16	08	245	AA	21	35.25	00	3	00	00000	00000	1	5	5	5	2	C	
38	063	09W	16	12	245	AA	21	53.75	00	3	00	00000	00000	1	5	5	5	2	C	
38	063	09W	16	13	245	AA	21	21.25	00	3	00	00000	00000	1	5	5	5	2	C	
38	063	09W	19	04	245	BA	21	33.49	00	5	00	00000	00000	1	6	5	5	0	C	
38	063	09W	19	05	245	BA	21	26.25	00	5	00	00000	00000	1	5	5	5	7	C	
38	063	09W	19	08	245	BA	21	17.25	00	3	00	00000	00000	1	5	5	5	7	C	
38	063	09W	19	10	245	BA	21	12.50	00	3	00	00000	00000	1	5	5	5	7	C	
38	063	09W	19	09	245	BA	21	20.75	00	5	00	00000	00000	1	5	5	5	7	C	
38	063	09W	19	SESW	245	BA	21	40.00	00	3	00	00000	00000	1	6	5	5	5	C	
38	063	09W	20	08	245	BA	21	45.75	00	3	00	00000	00000	1	5	5	5	7	C	
38	063	09W	20	SESW	245	BA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	063	09W	20	NESW	245	BA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	063	09W	20	12	245	BA	21	34.00	00	3	00	00000	00000	1	5	5	5	2	C	
38	063	09W	21	01	245	BA	21	9.50	00	3	00	00000	00000	1	5	5	5	1	C	
38	063	09W	21	02	245	BA	21	1.25	00	3	00	00000	00000	1	5	5	5	2	C	
38	063	09W	21	03	245	BA	21	18.50	00	3	00	00000	00000	1	5	5	5	2	C	
38	063	09W	22	03	245	BA	21	1.75	00	3	00	00000	00000	1	5	5	5	2	C	
38	063	09W	22	04	245	BA	21	2.25	00	3	00	00000	00000	1	5	5	5	2	C	
38	063	09W	24	SENE	245	BA	21	40.00	00	3	00	00000	00000	1	6	6	5	0	C	
38	063	09W	24	NWSE	245	BA	21	40.00	00	3	00	00000	00000	1	6	6	5	0	C	
38	063	09W	29	NESW	245	BA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	063	09W	29	NWSW	245	BA	21	40.00	00	4	00	00000	00000	1	6	6	5	9	C	
38	063	09W	29	SWSW	245	BA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	063	09W	29	SESW	245	BA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	063	09W	32	SENE	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	063	09W	32	SNNW	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	063	09W	32	NWSW	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	063	09W	32	SWSW	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	063	09W	32	NESE	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	063	09W	36	01	245	AA	21	29.75	00	3	00	00000	00000	1	5	5	5	2	C	
38	063	09W	36	05	245	AA	21	37.75	00	3	00	00000	00000	1	5	5	5	2	C	
38	063	09W	36	02	245	AA	21	6.75	00	3	00	00000	00000	1	5	5	5	2	C	
38	063	09W	36	03	245	AA	21	7.00	00	3	00	00000	00000	1	5	5	5	2	C	
38	063	09W	36	04	245	AA	21	19.50	00	3	00	00000	00000	1	5	5	5	2	C	
38	063	09W	36	07	245	AA	21	20.75	00	3	00	00000	00000	1	5	5	5	2	C	
38	063	09W	36	08	245	AA	21	18.00	00	3	00	00000	00000	1	5	5	5	2	C	
38	063	09W	36	SWSW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	063	09W	36	SESW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	063	09W	36	06	245	AA	21	46.25	00	3	00	00000	00000	1	5	5	5	2	C	
38	063	09W	36	NWSE	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	063	09W	36	SWSE	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	063	09W	36	SESE	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	063	10W	25	SENE	245	BA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	063	10W	25	02	245	BA	21	7.75	00	3	00	00000	00000	1	5	5	5	7	C	
38	063	10W	25	03	245	BA	21	50.25	00	3	00	00000	00000	1	5	5	5	7	C	
38	063	10W	25	SESW	245	BA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	063	10W	26	08	245	BA	21	4.00	00	3	00	00000	00000	1	5	5	5	1	C	
38	063	10W	26	04	245	BA	21	18.50	00	5	00	00000	00000	1	5	5	5	7	C	
38	063	10W	26	09	245	CA	21	20.75	00	3	00	00000	00000	1	5	5	5	7	C	
38	063	10W	27	01	245	BA	21	14.50	00	5	00	00000	00000	1	5	5	5	7	C	
38	063	10W	28	01	245	BA	21	10.50	00	5	00	00000	00000	1	5	5	5	7	C	

CO	TWP	RGE	SE	QSEC	RAD	ST	AD	ACRES	CF	N	SF	PARK	FWMAC	M	1	2	D	W	L	COMMENT
38	063	10W	28	08	245	BA	21	56.00	00	3	00	00000	00000	1	5	5	5	7	C	
38	063	10W	28	NESW	245	BA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	063	10W	28	SESW	245	CA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	063	10W	28	NESE	245	CA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	063	10W	28	NWSE	245	CA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	063	10W	28	SWSE	245	BA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	063	10W	33	NWNE	245	BA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	063	10W	33	SWNE	245	BA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	063	10W	33	SWSE	245	BA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	063	10W	34	SWNW	245	CA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	063	10W	34	SESW	245	CA	21	40.00	00	3	00	00000	00000	1	5	5	5	4	C	
38	063	10W	34	NWSW	245	CA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	063	10W	36	NENE	245	AA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	063	10W	36	NWNE	245	AA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	063	10W	36	02	245	AA	21	37.75	00	4	00	00000	00000	1	6	5	5	2	C	
38	063	10W	36	01	245	AA	21	22.50	00	4	00	00000	00000	1	5	5	5	2	C	
38	063	10W	36	NENW	245	AA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	063	10W	36	NWNW	245	AA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	063	10W	36	SWNW	245	AA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	063	10W	36	SESW	245	AA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	063	10W	36	03	245	AA	21	51.25	00	4	00	00000	00000	1	6	5	5	2	C	
38	063	10W	36	NWSW	245	AA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	063	10W	36	SWSW	245	AA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	063	10W	36	04	245	AA	21	39.00	00	4	00	00000	00000	1	6	5	5	2	C	
38	063	10W	36	06	245	AA	21	50.25	00	4	00	00000	00000	1	6	5	5	2	C	
38	063	10W	36	05	245	AA	21	30.00	00	4	00	00000	00000	1	5	5	5	2	C	
38	063	10W	36	07	245	AA	21	39.50	00	4	00	00000	00000	1	6	5	5	2	C	
38	063	11W	36	NENE	245	AA	20	40.00	00	4	04	00000	00000	1	6	5	1	0	C	
38	063	11W	36	NWNE	245	AA	20	40.00	00	4	04	00000	00000	1	6	6	1	0	C	
38	063	11W	36	SWNE	245	AA	20	40.00	00	4	04	00000	00000	1	6	6	1	0	C	
38	063	11W	36	SENE	245	AA	20	40.00	00	4	04	00000	00000	1	6	6	1	0	C	
38	063	11W	36	NENW	245	AA	20	40.00	00	4	04	00000	00000	1	6	6	1	0	C	
38	063	11W	36	NWNW	245	AA	20	40.00	00	4	04	00000	00000	1	6	6	1	0	C	
38	063	11W	36	SWNW	245	AA	20	40.00	00	4	04	00000	00000	1	6	5	1	0	C	
38	063	11W	36	SESW	245	AA	20	40.00	00	4	04	00000	00000	1	6	5	1	0	C	
38	063	11W	36	02	245	AA	20	39.00	00	4	04	00000	00000	1	6	5	1	2	C	
38	063	11W	36	01	245	AA	20	19.25	00	4	04	00000	00000	1	5	5	1	2	C	
38	063	11W	36	03	245	AA	20	53.25	00	4	04	00000	00000	1	6	5	1	2	C	
38	063	11W	36	NESE	245	AA	20	40.00	00	4	04	00000	00000	1	6	6	1	0	C	
38	063	11W	36	NWSE	245	AA	20	40.00	00	4	04	00000	00000	1	6	6	1	0	C	
38	063	11W	36	SWSE	245	AA	20	40.00	00	4	04	00000	00000	1	6	6	1	0	C	
38	063	11W	36	SESE	245	AA	20	40.00	00	4	04	00000	00000	1	6	6	1	0	C	
38	064	06W	11	SESW	245	CA	21	40.00	00	3	00	00000	00000	1	5	5	5	3	C	
38	064	06W	16	NENE	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	3	C	
38	064	06W	16	NWNE	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	064	06W	16	SWNE	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	9	C	
38	064	06W	16	SENE	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	5	C	
38	064	06W	16	NENW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	3	C	
38	064	06W	16	NWNW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	3	C	
38	064	06W	16	SWNW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	5	C	
38	064	06W	16	SESW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	064	06W	16	02	245	AA	21	36.50	00	3	00	00000	00000	1	5	5	5	2	C	

CO	TWP	RGE	SE	QSEC	RAD	ST	AD	ACRES	CF	N	SF	PARK	FWMAC	M	1	2	D	W	L	COMMENT
38	064	06W	16	01	245	AA	21	8.25	00	3	00	00000	00000	1	5	5	5	2	C	
38	064	06W	16	03	245	AA	21	11.50	00	3	00	00000	00000	1	5	5	5	2	C	
38	064	06W	16	04	245	AA	21	39.90	00	3	00	00000	00000	1	5	5	5	2	C	
38	064	06W	16	SESW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	064	06W	16	NESE	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	3	C	
38	064	06W	16	NWSE	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	9	C	
38	064	06W	16	SWSE	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	5	C	
38	064	06W	16	SESE	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	3	C	
38	064	06W	36	01	245	AA	21	18.75	00	4	00	00000	00000	1	5	5	5	2	C	
38	064	06W	36	03	245	AA	21	15.00	00	4	00	00000	00000	1	5	5	5	2	C	
38	064	06W	36	NWNE	245	AA	21	40.00	00	4	00	00000	00000	1	5	5	5	0	C	
38	064	06W	36	SWNE	245	AA	21	40.00	00	4	00	00000	00000	1	5	5	5	0	C	
38	064	06W	36	02	245	AA	21	38.50	00	4	00	00000	00000	1	5	5	5	2	C	
38	064	06W	36	NENW	245	AA	21	40.00	00	4	00	00000	00000	1	5	5	5	3	C	
38	064	06W	36	NWNW	245	AA	21	40.00	00	4	00	00000	00000	1	5	5	5	3	C	
38	064	06W	36	SWNW	245	AA	21	40.00	00	4	00	00000	00000	1	5	5	5	9	C	
38	064	06W	36	SENW	245	AA	21	40.00	00	4	00	00000	00000	1	5	5	5	9	C	
38	064	06W	36	NESW	245	AA	21	40.00	00	4	00	00000	00000	1	5	5	5	0	C	
38	064	06W	36	NWSW	245	AA	21	40.00	00	4	00	00000	00000	1	5	5	5	5	C	
38	064	06W	36	SWSW	245	AA	21	40.00	00	4	00	00000	00000	1	5	5	5	0	C	
38	064	06W	36	SESW	245	AA	21	40.00	00	4	00	00000	00000	1	5	5	5	0	C	
38	064	06W	36	NESE	245	AA	21	40.00	00	4	00	00000	00000	1	5	5	5	5	C	
38	064	06W	36	NWSE	245	AA	21	40.00	00	4	00	00000	00000	1	5	5	5	3	C	
38	064	06W	36	SWSE	245	AA	21	40.00	00	4	00	00000	00000	1	5	5	5	3	C	
38	064	06W	36	SESE	245	AA	21	40.00	00	4	00	00000	00000	1	5	5	5	3	C	
38	064	07W	08	NESE	245	CA	21	40.00	00	3	00	00000	00000	1	5	5	5	5	C	
38	064	07W	08	SESE	245	CA	21	40.00	00	3	00	00000	00000	1	5	5	5	3	C	
38	064	07W	10	SENE	245	CA	21	40.00	00	3	00	00000	00000	1	5	6	5	5	C	
38	064	07W	10	NESE	245	CA	21	40.00	00	3	00	00000	00000	1	5	6	5	5	C	
38	064	07W	10	NWSE	245	CA	21	40.00	00	3	00	00000	00000	1	5	6	5	0	C	
38	064	07W	10	SWSE	245	CA	21	40.00	00	3	00	00000	00000	1	5	6	5	0	C	
38	064	07W	10	SESE	245	CA	21	40.00	00	3	00	00000	00000	1	5	6	5	9	C	
38	064	07W	14	02	245	CA	21	50.50	00	3	00	00000	00000	1	5	5	5	2	C	
38	064	07W	14	NENW	245	CA	21	40.00	00	3	00	00000	00000	1	5	6	5	0	C	
38	064	07W	14	NWNW	245	CA	21	40.00	00	3	00	00000	00000	1	5	6	5	0	C	
38	064	07W	16	NENE	245	AA	21	40.00	00	3	00	00000	00000	1	5	6	5	0	C	
38	064	07W	16	NWNE	245	AA	21	40.00	00	3	00	00000	00000	1	5	6	5	5	C	
38	064	07W	16	SWNE	245	AA	21	40.00	00	3	00	00000	00000	1	5	6	5	0	C	
38	064	07W	16	SENE	245	AA	21	40.00	00	3	00	00000	00000	1	5	6	5	0	C	
38	064	07W	16	NENW	245	AA	21	40.00	00	3	00	00000	00000	1	5	6	5	5	C	
38	064	07W	16	NWNW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	3	C	
38	064	07W	16	SWNW	245	AA	21	40.00	00	3	00	00000	00000	1	5	6	5	5	C	
38	064	07W	16	SENW	245	AA	21	40.00	00	3	00	00000	00000	1	5	6	5	0	C	
38	064	07W	16	NESW	245	AA	21	40.00	00	3	00	00000	00000	1	5	6	5	0	C	
38	064	07W	16	NWSW	245	AA	21	40.00	00	3	00	00000	00000	1	5	6	5	0	C	
38	064	07W	16	SWSW	245	AA	21	40.00	00	3	00	00000	00000	1	5	6	5	0	C	
38	064	07W	16	SESW	245	AA	21	40.00	00	3	00	00000	00000	1	5	6	5	0	C	
38	064	07W	16	NESE	245	AA	21	40.00	00	3	00	00000	00000	1	5	6	5	0	C	
38	064	07W	16	NWSE	245	AA	21	40.00	00	3	00	00000	00000	1	5	6	5	0	C	
38	064	07W	16	SWSE	245	AA	21	40.00	00	3	00	00000	00000	1	5	6	5	5	C	
38	064	07W	16	SESE	245	AA	21	40.00	00	3	00	00000	00000	1	5	6	5	0	C	
38	064	07W	20	NESE	245	CA	21	40.00	00	3	00	00000	00000	1	5	5	5	5	C	

CO	TWP	RGE	SE	QSEC	RAD	ST	AD	ACRES	CF	N	SF	PARK	FWMAC	M	1	2	D	W	L	COMMENT
38	064	07W	30	NENW	245	CA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	064	07W	30	03	245	CA	21	39.75	00	3	00	00000	00000	1	5	5	5	2	C	
38	064	07W	36	NENE	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	064	07W	36	NWNE	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	3	C	
38	064	07W	36	SWNE	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	3	C	
38	064	07W	36	SENE	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	5	C	
38	064	07W	36	NENW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	064	07W	36	NWNW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	5	C	
38	064	07W	36	SWNW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	3	C	
38	064	07W	36	SENW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	3	C	
38	064	07W	36	NESW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	3	C	
38	064	07W	36	NWSW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	3	C	
38	064	07W	36	SWSW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	3	C	
38	064	07W	36	SESW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	3	C	
38	064	07W	36	NESE	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	5	C	
38	064	07W	36	NWSE	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	064	07W	36	SWSE	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	3	C	
38	064	07W	36	01	245	AA	21	33.25	00	3	00	00000	00000	1	5	5	5	2	C	
38	064	08W	08	02	245	CA	21	39.25	00	3	00	00000	00000	1	5	5	5	2	C	
38	064	08W	10	NENE	245	CA	21	40.00	00	3	00	00000	00000	1	5	5	5	9	C	
38	064	08W	16	06	245	AA	21	0.50	00	3	00	00000	00000	1	5	5	5	2	C	
38	064	08W	16	02	245	AA	21	24.75	00	3	00	00000	00000	1	5	5	5	2	C	
38	064	08W	16	SWNE	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	6	C	
38	064	08W	16	01	245	AA	21	30.75	00	3	00	00000	00000	1	5	5	5	2	C	
38	064	08W	16	03	245	AA	21	22.25	00	3	00	00000	00000	1	5	5	5	2	C	
38	064	08W	16	04	245	AA	21	22.50	00	3	00	00000	00000	1	5	5	5	2	C	
38	064	08W	16	SWNW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	064	08W	16	SENW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	064	08W	16	NESW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	064	08W	16	NWSW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	064	08W	16	SWSW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	064	08W	16	SESW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	064	08W	16	NESE	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	5	C	
38	064	08W	16	NWSE	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	9	C	
38	064	08W	16	05	245	AA	21	36.00	00	3	00	00000	00000	1	5	5	5	2	C	
38	064	08W	16	SESE	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	064	08W	36	NENE	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	3	C	
38	064	08W	36	NWNE	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	064	08W	36	SWNE	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	064	08W	36	SENE	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	3	C	
38	064	08W	36	NENW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	3	C	
38	064	08W	36	NWNW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	3	C	
38	064	08W	36	SWNW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	3	C	
38	064	08W	36	SENW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	3	C	
38	064	08W	36	NESW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	3	C	
38	064	08W	36	NWSW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	3	C	
38	064	08W	36	SWSW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	064	08W	36	SESW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	064	08W	36	NESE	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	3	C	
38	064	08W	36	NWSE	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	5	C	
38	064	08W	36	SWSE	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	9	C	
38	064	08W	36	SESE	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	9	C	

CO	TWP	RGE	SE	QSEC	RAD	ST	AD	ACRES	CF	N	SF	PARK	FWMAC	M	1	2	D	W	L	COMMENT
38	064	09W	01	03	245	CJ	20	34.00	00	3	01	00000	00000	4	5	5	5	2	C	
38	064	09W	01	04	245	CJ	20	14.75	00	3	01	00000	00000	4	5	5	5	2	C	
38	064	09W	01	01	245	CJ	20	29.75	00	3	01	00000	00000	4	5	5	5	1	C	
38	064	09W	01	02	245	CJ	20	20.00	00	3	01	00000	00000	4	5	5	5	1	C	
38	064	09W	02	01	245	CJ	20	39.95	00	3	01	00000	00000	4	5	5	5	2	C	
38	064	09W	04	08	245	BA	21	38.00	00	3	00	00000	00000	1	5	5	5	2	C	
38	064	09W	07	NENW	245	BA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	064	09W	07	02	245	BA	21	36.52	00	3	00	00000	00000	1	5	5	5	0	C	
38	064	09W	07	SESW	245	BA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	064	09W	08	SWSE	245	BA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	064	09W	09	04	245	BA	21	11.75	00	3	00	00000	00000	1	5	5	5	2	C	
38	064	09W	09	NESE	245	BA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	064	09W	16	NENE	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	064	09W	16	NWNE	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	064	09W	16	SWNE	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	064	09W	16	SENE	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	5	C	
38	064	09W	16	NENW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	064	09W	16	NWNW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	064	09W	16	SWNW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	064	09W	16	SESW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	064	09W	16	NESW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	064	09W	16	NWSW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	064	09W	16	SWSW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	064	09W	16	SESW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	064	09W	16	NESE	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	064	09W	16	NWSE	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	064	09W	16	SWSE	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	064	09W	16	SESE	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	064	09W	25	01	245	BA	21	7.50	00	5	00	00000	00000	1	5	5	5	1	C	
38	064	10W	11	01	245	BA	21	3.50	00	3	00	00000	00000	1	5	5	5	1	C	
38	064	10W	14	NWNW	245	CA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	064	10W	16	01	245	AA	21	32.25	00	3	00	00000	00000	1	5	5	5	2	C	
38	064	10W	16	02	245	AA	21	49.00	00	3	00	00000	00000	1	5	5	5	2	C	
38	064	10W	16	10	245	AA	21	20.50	00	3	00	00000	00000	1	5	5	5	2	C	
38	064	10W	16	NENW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	064	10W	16	NWNW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	064	10W	16	04	245	AA	21	35.50	00	3	00	00000	00000	1	5	5	5	2	C	
38	064	10W	16	03	245	AA	21	26.25	00	3	00	00000	00000	1	5	5	5	2	C	
38	064	10W	16	05	245	AA	21	0.36	00	3	00	00000	00000	1	5	5	5	2	C	
38	064	10W	16	06	245	AA	21	4.29	00	3	00	00000	00000	1	5	5	5	2	C	
38	064	10W	16	09	245	AA	21	47.50	00	3	00	00000	00000	1	5	5	5	2	C	
38	064	10W	16	07	245	AA	21	15.25	00	3	00	00000	00000	1	5	5	5	2	C	
38	064	10W	16	08	245	AA	21	37.50	00	3	00	00000	00000	1	5	5	5	2	C	
38	064	10W	18	NENE	245	CA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	064	10W	18	01	245	BA	21	35.58	00	3	00	00000	00000	1	5	5	5	0	C	
38	064	10W	18	03	245	CA	21	35.62	00	3	00	00000	00000	1	5	5	5	0	C	
38	064	10W	18	04	245	CA	21	34.74	00	3	00	00000	00000	1	5	5	5	0	C	
38	064	10W	23	NESE	245	BA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	064	10W	23	NWSE	245	BA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	064	10W	23	SWSE	245	BA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	064	10W	23	SESE	245	BA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	064	10W	24	02	245	BA	21	46.25	00	3	00	00000	00000	1	5	5	5	2	C	

CO	TWP	RGE	SE	QSEC	RAD	ST	AD	ACRES	CF	N	SF	PARK	FWMAC	M	1	2	D	W	L	COMMENT
38	064	10W	24	NWNW	245	BA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	064	10W	24	NWSW	245	BA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	064	10W	24	SWSW	245	BA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	064	11W	16	NENE	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	064	11W	16	NWNE	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	064	11W	16	SWNE	245	AA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	064	11W	16	SENE	245	AA	21	40.00	00	4	00	00000	00000	1	5	5	5	0	C	
38	064	11W	16	01	245	AA	21	35.00	00	3	00	00000	00000	1	5	5	5	2	C	
38	064	11W	16	02	245	AA	21	39.95	00	3	00	00000	00000	1	5	5	5	2	C	
38	064	11W	16	SWNW	245	AA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	064	11W	16	SENW	245	AA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	064	11W	16	NESW	245	AA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	064	11W	16	NWSW	245	AA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	064	11W	16	SWSW	245	AA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	064	11W	16	SESW	245	AA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	064	11W	16	NESE	245	AA	21	40.00	00	4	00	00000	00000	1	5	5	5	0	C	
38	064	11W	16	NWSE	245	AA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	064	11W	16	SWSE	245	AA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
38	064	11W	16	SESE	245	AA	21	40.00	00	4	00	00000	00000	1	5	5	5	0	C	
38	064	11W	24	SESE	245	CA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	064	11W	36	01	245	AA	21	45.75	00	3	00	00000	00000	1	5	5	5	2	C	Q (Four Mile Portage)
38	064	11W	36	02	245	AA	21	28.50	00	3	00	00000	00000	1	5	5	5	2	C	
38	064	11W	36	03	245	AA	21	28.25	00	3	00	00000	00000	1	5	5	5	2	C	
38	064	11W	36	NENW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	9	C	Q (Four Mile Portage)
38	064	11W	36	NWNW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	064	11W	36	SWNW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	Q (Four Mile Portage)
38	064	11W	36	SENW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	9	C	Q (Four Mile Portage)
38	064	11W	36	NESW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	064	11W	36	NWSW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	Q (Four Mile Portage)
38	064	11W	36	04	245	AA	21	36.25	00	3	00	00000	00000	1	5	5	5	2	C	Q (Four Mile Portage)
38	064	11W	36	SESW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	064	11W	36	NESE	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	9	C	
38	064	11W	36	NWSE	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	064	11W	36	SWSE	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	064	11W	36	SESE	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	9	C	
38	065	06W	16	01	245	AA	21	20.25	00	3	00	00000	00000	1	5	5	5	2	C	
38	065	06W	16	02	245	AA	21	28.50	00	3	00	00000	00000	1	5	5	5	2	C	
38	065	06W	16	08	245	AA	21	39.50	00	3	00	00000	00000	1	5	5	5	2	C	
38	065	06W	16	03	245	AA	21	51.00	00	3	00	00000	00000	1	5	5	5	2	C	
38	065	06W	16	04	245	AA	21	52.00	00	3	00	00000	00000	1	5	5	5	2	C	
38	065	06W	16	06	245	AA	21	29.75	00	3	00	00000	00000	1	5	5	5	2	C	
38	065	06W	16	05	245	AA	21	23.25	00	3	00	00000	00000	1	5	5	5	2	C	
38	065	06W	16	13	245	AA	21	29.00	00	3	00	00000	00000	1	5	5	5	2	C	
38	065	06W	16	12	245	AA	21	38.00	00	3	00	00000	00000	1	5	5	5	2	C	
38	065	06W	16	09	245	AA	21	36.50	00	3	00	00000	00000	1	5	5	5	2	C	
38	065	06W	16	07	245	AA	21	37.75	00	3	00	00000	00000	1	5	5	5	2	C	
38	065	06W	16	11	245	AA	21	38.50	00	3	00	00000	00000	1	5	5	5	2	C	
38	065	06W	16	10	245	AA	21	38.25	00	3	00	00000	00000	1	5	5	5	2	C	
38	065	06W	36	NENE	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	065	06W	36	NWNE	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	065	06W	36	04	245	AA	21	38.75	00	3	00	00000	00000	1	5	5	5	2	C	
38	065	06W	36	05	245	AA	21	29.50	00	3	00	00000	00000	1	5	5	5	2	C	

CO	TWP	RGE	SE	QSEC	RAD	ST	AD	ACRES	CF	N	SF	PARK	FWMAC	M	1	2	D	W	I	COMMENT
38	065	06W	36	NENW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	065	06W	36	01	245	AA	21	39.00	00	3	00	00000	00000	1	5	5	5	2	C	
38	065	06W	36	02	245	AA	21	20.00	00	3	00	00000	00000	1	5	5	5	2	C	
38	065	06W	36	03	245	AA	21	28.75	00	3	00	00000	00000	1	5	5	5	2	C	
38	065	06W	36	09	245	AA	21	32.25	00	3	00	00000	00000	1	5	5	5	2	C	
38	065	06W	36	NWSW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	065	06W	36	SWSW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	065	06W	36	SESW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	065	06W	36	06	245	AA	21	33.00	00	3	00	00000	00000	1	5	5	5	2	C	
38	065	06W	36	08	245	AA	21	52.75	00	3	00	00000	00000	1	5	5	5	2	C	
38	065	06W	36	07	245	AA	21	36.25	00	3	00	00000	00000	1	5	5	5	2	C	
38	065	07W	36	01	245	AA	21	24.25	00	3	00	00000	00000	1	5	5	5	2	C	
38	065	07W	36	02	245	AA	21	16.50	00	3	00	00000	00000	1	5	5	5	2	C	
38	065	07W	36	07	245	AA	21	22.25	00	3	00	00000	00000	1	5	5	5	2	C	
38	065	07W	36	08	245	AA	21	38.00	00	3	00	00000	00000	1	5	5	5	2	C	
38	065	07W	36	03	245	AA	21	41.25	00	3	00	00000	00000	1	5	5	5	2	C	
38	065	07W	36	04	245	AA	21	56.00	00	3	00	00000	00000	1	5	5	5	2	C	
38	065	07W	36	11	245	AA	21	1.75	00	3	00	00000	00000	1	5	5	5	1	C	
38	065	07W	36	10	245	AA	21	7.25	00	3	00	00000	00000	1	5	5	5	1	C	
38	065	07W	36	05	245	AA	21	31.25	00	3	00	00000	00000	1	5	5	5	2	C	
38	065	07W	36	SESW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	065	07W	36	06	245	AA	21	45.75	00	3	00	00000	00000	1	5	5	5	2	C	
38	065	07W	36	SWSE	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	065	07W	36	09	245	AA	21	49.75	00	3	00	00000	00000	1	5	5	5	2	C	
38	065	08W	34	03	245	CJ	20	44.75	00	3	01	00000	00000	4	5	5	5	7	C	
38	065	08W	35	02	245	CJ	20	34.75	00	3	01	00000	00000	4	5	5	5	7	C	
38	065	08W	35	01	245	CJ	20	34.25	00	3	01	00000	00000	4	5	5	5	7	C	
38	065	08W	36	02	245	AA	21	41.50	00	3	00	00000	00000	1	5	5	5	2	C	
38	065	08W	36	01	245	AA	21	17.00	00	3	00	00000	00000	1	5	5	5	2	C	
38	065	08W	36	04	245	AA	21	32.75	00	3	00	00000	00000	1	5	5	5	2	C	
38	065	08W	36	03	245	AA	21	30.25	00	3	00	00000	00000	1	5	5	5	2	C	
38	065	08W	36	05	245	AA	21	37.00	00	3	00	00000	00000	1	5	5	5	2	C	
38	065	08W	36	NWSW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	3	C	
38	065	08W	36	SWSW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	5	C	
38	065	08W	36	06	245	AA	21	39.00	00	3	00	00000	00000	1	5	5	5	2	C	
38	065	08W	36	07	245	AA	21	31.25	00	3	00	00000	00000	1	5	5	5	2	C	
38	065	08W	36	08	245	AA	21	33.00	00	3	00	00000	00000	1	5	5	5	2	C	
38	065	10W	19	01	245	CJ	20	25.75	00	3	01	00000	00000	4	5	5	5	7	C	
38	065	10W	19	02	245	CJ	20	32.26	00	3	01	00000	00000	4	5	5	5	7	C	
38	065	10W	19	03	245	BJ	20	40.85	00	3	01	00000	00000	4	5	5	5	0	C	
38	065	10W	19	SENW	245	BA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	065	10W	29	01	245	BA	21	39.50	00	3	00	00000	00000	1	5	5	5	2	C	
38	065	10W	29	03	245	BA	21	11.50	00	3	00	00000	00000	1	5	5	5	2	C	
38	065	10W	30	07	245	BA	21	19.00	00	3	00	00000	00000	1	5	5	5	2	C	
38	065	11W	13	01	245	CJ	20	16.00	00	3	01	00000	00000	4	5	5	5	7	C	
38	065	11W	13	02	245	BA	21	25.50	00	3	00	00000	00000	1	5	5	5	7	C	
38	065	11W	13	03	245	BA	21	37.75	00	3	00	00000	00000	1	5	5	5	7	C	
38	065	11W	14	03	245	BA	21	29.50	00	3	00	00000	00000	1	5	5	5	7	C	
38	065	11W	14	04	245	BA	21	25.50	00	3	00	00000	00000	1	5	5	5	7	C	
38	065	11W	16	01	245	AA	21	39.50	00	3	00	00000	00000	1	5	5	5	2	C	
38	065	11W	16	02	245	AA	21	31.75	00	3	00	00000	00000	1	5	5	5	2	C	
38	065	11W	16	06	245	AA	21	29.50	00	3	00	00000	00000	1	5	5	5	2	C	

CO	TWP	RGE	SE	QSEC	RAD	ST	AD	ACRES	CF	N	SF	PARK	FWMAC	M	1	2	D	W	L	COMMENT
38	065	11W	16	NENW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	065	11W	16	NWNW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	065	11W	16	SWNW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	065	11W	16	03	245	AA	21	29.50	00	3	00	00000	00000	1	5	5	5	2	C	
38	065	11W	16	NESW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	065	11W	16	NWSW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	065	11W	16	SWSW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	065	11W	16	SESW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	065	11W	16	05	245	AA	21	38.25	00	3	00	00000	00000	1	5	5	5	2	C	
38	065	11W	16	04	245	AA	21	31.00	00	3	00	00000	00000	1	5	5	5	2	C	
38	065	11W	16	SWSE	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	065	11W	16	SESE	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	065	11W	22	NENE	245	CA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	065	11W	26	NWNW	245	CA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	065	11W	26	SWNW	245	CA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	065	11W	28	03	245	BA	21	4.25	00	3	00	00000	00000	1	5	5	5	1	C	
38	065	11W	32	01	245	BA	21	4.50	00	3	00	00000	00000	1	5	5	5	2	C	
38	065	11W	32	08	245	BA	21	17.25	00	3	00	00000	00000	1	5	5	5	2	C	
38	065	11W	34	NENE	245	CA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	065	11W	34	NWNW	245	CA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	065	11W	34	SESW	245	CA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	065	11W	35	06	245	BA	21	9.60	00	3	00	00000	00000	1	5	5	5	1	C	
38	065	11W	36	01	245	AA	21	28.25	00	3	00	00000	00000	1	5	5	5	2	C	
38	065	11W	36	02	245	AA	21	46.50	00	3	00	00000	00000	1	5	5	5	2	C	
38	065	11W	36	07	245	AA	21	4.25	00	3	00	00000	00000	1	5	5	5	1	C	
38	065	11W	36	NENW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	065	11W	36	NWNW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	065	11W	36	04	245	AA	21	44.50	00	3	00	00000	00000	1	5	5	5	2	C	
38	065	11W	36	03	245	AA	21	18.75	00	3	00	00000	00000	1	5	5	5	2	C	
38	065	11W	36	05	245	AA	21	3.00	00	3	00	00000	00000	1	5	5	5	1	C	
38	065	11W	36	06	245	AA	21	32.00	00	3	00	00000	00000	1	5	5	5	2	C	
38	065	11W	36	08	245	AA	21	2.24	00	3	00	00000	00000	1	5	5	5	1	C	
38	066	06W	24	04	245	CJ	20	50.25	00	3	01	00000	00000	4	5	5	5	2	C	
38	066	06W	36	NENE	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	066	06W	36	NWNE	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	066	06W	36	01	245	AA	21	39.90	00	3	00	00000	00000	1	5	5	5	2	C	
38	066	06W	36	SENE	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	066	06W	36	NENW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
38	066	06W	36	NWNW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	5	C	
38	066	06W	36	SWNW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	5	C	
38	066	06W	36	02	245	AA	21	49.25	00	3	00	00000	00000	1	5	5	5	2	C	
38	066	06W	36	03	245	AA	21	22.00	00	3	00	00000	00000	1	5	5	5	2	C	
38	066	06W	36	04	245	AA	21	4.75	00	3	00	00000	00000	1	5	5	5	2	C	
38	066	06W	36	05	245	AA	21	47.75	00	3	00	00000	00000	1	5	5	5	2	C	
38	066	06W	36	NESE	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	5	C	
38	066	06W	36	06	245	AA	21	34.75	00	3	00	00000	00000	1	5	5	5	2	C	
38	066	06W	36	SWSE	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	3	C	
38	066	06W	36	SESE	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	9	C	
38	066	11W	16	01	245	AA	21	2.25	00	3	00	00000	00000	1	5	5	5	1	C	
38	066	11W	16	02	245	AA	21	45.25	00	3	00	00000	00000	1	5	5	5	1	C	
38	066	11W	16	03	245	AA	21	37.75	00	3	00	00000	00000	1	5	5	5	1	C	
38	066	11W	16	04	245	AA	21	3.50	00	3	00	00000	00000	1	5	5	5	2	C	

CO	TWP	RGE	SE	QSEC	RAD	ST	AD	ACRES	CF	N	SF	PARK	FWMAC	M	1	2	D	W	L	COMMENT
38	066	11W	18	01	245	BA	21	28.25	00	3	00	00000	00000	1	5	5	5	1	C	
38	066	11W	19	04	245	BA	21	19.00	00	3	00	00000	00000	1	5	5	5	2	C	
38	066	11W	20	05	245	BA	21	45.25	00	3	00	00000	00000	1	5	5	5	2	C	
38	066	11W	20	07	245	BA	21	44.25	00	3	00	00000	00000	1	5	5	5	2	C	
38	066	11W	20	08	245	BA	21	52.50	00	3	00	00000	00000	1	5	5	5	2	C	
38	066	11W	26	01	245	BA	21	29.00	00	3	00	00000	00000	1	5	5	5	2	C	
38	066	11W	27	01	245	BA	21	27.25	00	3	00	00000	00000	1	5	5	5	2	C	
38	066	11W	27	02	245	BA	21	36.25	00	3	00	00000	00000	1	5	5	5	2	C	
38	066	11W	27	03	245	BA	21	30.75	00	3	00	00000	00000	1	5	5	5	2	C	
38	066	11W	27	04	245	BA	21	39.95	00	3	00	00000	00000	1	5	5	5	2	C	
38	066	11W	27	05	245	BA	21	41.25	00	3	00	00000	00000	1	5	5	5	2	C	
38	066	11W	27	07	245	BA	21	14.75	00	3	00	00000	00000	1	5	5	5	2	C	
38	066	11W	27	08	245	BA	21	49.50	00	3	00	00000	00000	1	5	5	5	2	C	
38	066	11W	28	02	245	BA	21	5.75	00	3	00	00000	00000	1	5	5	5	1	C	
38	066	11W	28	03	245	BA	21	39.75	00	3	00	00000	00000	1	5	5	5	2	C	
38	066	11W	28	04	245	BA	21	38.00	00	3	00	00000	00000	1	5	5	5	2	C	
38	066	11W	28	05	245	BA	21	51.50	00	3	00	00000	00000	1	5	5	5	2	C	
38	066	11W	29	01	245	BA	21	30.25	00	3	00	00000	00000	1	5	5	5	2	C	
38	066	11W	29	04	245	BA	21	39.95	00	3	00	00000	00000	1	5	5	5	2	C	
38	066	11W	29	05	245	BA	21	36.00	00	3	00	00000	00000	1	5	5	5	2	C	
38	066	11W	35	01	245	BA	21	24.25	00	3	00	00000	00000	1	5	5	5	2	C	
38	066	11W	35	02	245	BA	21	47.00	00	3	00	00000	00000	1	5	5	5	2	C	
38	066	11W	35	03	245	BA	21	19.50	00	3	00	00000	00000	1	5	5	5	2	C	
38	066	11W	35	04	245	BA	21	31.00	00	3	00	00000	00000	1	5	5	5	2	C	
69	063	15W	01	SWSW	245	BA	21	40.00	00	4	00	00000	00000	1	6	6	5	3	C	
69	063	15W	02	01	245	BA	21	39.63	00	4	00	00000	00000	1	6	6	5	0	C	
69	063	15W	02	SWNE	245	BA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
69	063	15W	02	SENE	245	BA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
69	063	15W	02	NWSE	245	BA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
69	063	15W	02	SESE	245	BA	21	40.00	00	4	00	00000	00000	1	5	5	5	3	C	
69	063	15W	04	02	245	CA	21	39.90	00	4	00	00000	00000	1	6	6	5	4	C	
69	063	15W	04	SWNW	245	CA	21	40.00	00	4	00	00000	00000	1	5	5	5	8	C	
69	063	15W	04	SENW	245	CA	21	40.00	00	4	00	00000	00000	1	5	5	5	8	C	
69	063	15W	04	NESW	245	CA	21	40.00	00	4	00	00000	00000	1	5	5	5	0	C	
69	063	15W	04	NWSE	245	CA	21	40.00	00	3	00	00000	00000	1	5	5	5	8	C	
69	063	15W	04	SWSE	245	BA	21	40.00	00	3	00	00000	00000	1	5	5	5	8	C	
69	063	15W	04	SESE	245	CA	21	40.00	00	3	00	00000	00000	1	5	5	5	8	C	
69	063	15W	08	NENE	245	CA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
69	063	15W	09	NENE	245	BA	21	40.00	00	3	00	00000	00000	1	5	5	5	8	C	
69	063	15W	09	NWNE	245	BA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
69	063	15W	10	NENE	245	BA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
69	063	15W	10	NWNE	245	BA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
69	063	15W	10	NWNW	245	CA	21	40.00	00	4	00	00000	00000	1	5	5	5	8	C	
69	063	15W	10	SWSE	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
69	063	15W	11	NENE	245	BA	21	40.00	00	4	00	00000	00000	1	5	6	5	3	C	
69	063	15W	11	NWNE	245	BA	21	40.00	00	4	00	00000	00000	1	5	5	5	3	C	
69	063	15W	11	SWNE	245	BA	21	40.00	00	4	00	00000	00000	1	5	6	5	9	C	
69	063	15W	11	NWSW	245	BA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
69	063	15W	11	SESW	245	BA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
69	063	15W	12	SWSW	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
69	063	15W	12	SWSE	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	9	C	
69	063	15W	13	NESE	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	5	C	

CO	TWP	RGE	SE	QSEC	RAD	ST	AD	ACRES	CF	N	SF	PARK	FWMAC	M	1	2	D	W	L	COMMENT
69	063	15W	14	NWNE	245	BA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
69	063	15W	14	SWNE	245	BA	21	40.00	00	4	00	00000	00000	1	6	6	5	9	C	
69	063	15W	14	NENW	245	BA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
69	063	15W	14	SENW	245	BA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
69	063	15W	14	SWSW	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	9	C	
69	063	15W	14	SESW	245	BA	21	40.00	00	4	00	00000	00000	1	6	6	5	9	C	
69	063	15W	14	NWSE	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	9	C	
69	063	15W	14	SWSE	245	BA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
69	063	15W	15	01	245	BA	21	45.25	00	3	00	00000	00000	1	5	5	5	2	C	
69	063	15W	15	02	245	BA	21	3.00	00	3	00	00000	00000	1	5	5	5	1	C	
69	063	15W	15	04	245	BA	21	40.50	00	3	00	00000	00000	1	5	5	5	2	C	
69	063	15W	16	01	245	AA	21	1.75	00	3	00	00000	00000	1	5	5	5	2	C	
69	063	15W	16	02	245	AA	21	52.00	00	3	00	00000	00000	1	5	5	5	1	C	
69	063	15W	16	03	245	AA	21	4.25	00	3	00	00000	00000	1	5	5	5	1	C	
69	063	15W	16	04	245	AA	21	41.25	00	3	00	00000	00000	1	5	5	5	2	C	
69	063	15W	16	05	245	AA	21	8.25	00	3	00	00000	00000	1	5	5	5	1	C	
69	063	15W	16	07	245	AA	21	43.50	00	3	00	00000	00000	1	5	5	5	2	C	
69	063	15W	16	06	245	AA	21	53.25	00	3	00	00000	00000	1	5	5	5	2	C	
69	063	15W	16	SWSW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
69	063	15W	16	SESW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
69	063	15W	16	08	245	AA	21	18.75	00	3	00	00000	00000	1	5	5	5	2	C	
69	063	15W	16	09	245	AA	21	1.00	00	3	00	00000	00000	1	5	5	5	2	C	
69	063	15W	17	05	245	CA	21	39.50	00	3	00	00000	00000	1	5	5	5	2	C	
69	063	15W	19	05	245	BA	21	34.25	00	3	00	00000	00000	1	5	5	5	2	C	
69	063	15W	20	SWNE	245	BA	21	40.00	00	4	00	00000	00000	1	5	5	5	0	C	
69	063	15W	20	SENE	245	BA	21	40.00	00	4	00	00000	00000	1	5	5	5	0	C	
69	063	15W	20	NWSW	245	CA	21	40.00	00	4	00	00000	00000	1	5	5	5	0	C	
69	063	15W	20	NESE	245	BA	21	40.00	00	4	00	00000	00000	1	5	5	5	0	C	
69	063	15W	23	SENE	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
69	063	15W	23	NESW	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
69	063	15W	23	NESE	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
69	063	15W	24	NWSW	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
69	063	15W	24	SWSW	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
69	063	15W	24	SESW	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
69	063	15W	24	02	245	CA	21	38.75	00	4	00	00000	00000	1	6	6	5	2	C	
69	063	15W	25	NWNW	245	CA	21	40.00	00	2	00	00000	00000	1	6	6	5	0	C	
69	063	15W	26	NENW	245	CA	21	40.00	00	2	00	00000	00000	1	6	6	5	0	C	
69	063	15W	28	SENE	245	CA	21	40.00	00	2	00	00000	00000	1	6	6	5	9	C	
69	063	15W	29	NWNW	245	CA	21	40.00	00	2	00	00000	00000	1	5	5	5	0	C	
69	063	16W	03	05	245	CA	21	51.65	00	3	00	00000	00000	1	5	5	5	2	C	
69	063	16W	03	SWNW	245	CA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
69	063	16W	23	02	245	EA	20	30.75	00	3	27	00000	00000	1	5	5	5	2	C	
69	063	16W	23	SWNE	245	EA	20	40.00	00	3	27	00000	00000	1	6	6	5	0	C	
69	063	16W	23	SENE	245	EA	20	40.00	00	3	27	00000	00000	1	6	6	5	0	C	
69	063	16W	23	NWNW	245	EA	20	40.00	00	3	27	00000	00000	1	5	6	3	0	C	
69	063	16W	23	03	245	EA	20	35.75	00	4	27	00000	00000	1	5	5	3	2	C	Q (Lakeshore homesite lease)
69	063	16W	23	04	245	EA	20	30.25	00	4	27	00000	00000	1	5	5	3	2	C	Q (Lakeshore homesite lease)
69	063	16W	23	NESE	245	EA	20	40.00	00	3	27	00000	00000	1	6	6	5	0	C	
69	063	16W	23	NWSE	245	EA	20	40.00	00	3	27	00000	00000	1	6	6	5	0	C	
69	063	16W	23	SWSE	245	EA	20	40.00	00	3	27	00000	00000	1	6	6	5	0	C	
69	063	16W	23	SESE	245	EA	20	40.00	00	3	27	00000	00000	1	6	6	5	0	C	
69	064	14W	01	09	245	CA	21	40.00	00	5	00	00000	00000	1	6	6	5	8	C	

CO	TWP	RGE	SE	QSEC	RAD	ST	AD	ACRES	CF	N	SF	PARK	FWMAC	M	1	2	D	W	L	COMMENT
69	064	14W	01	NESE	245	CA	21	40.00	00	5	00	00000	00000	1	6	6	5	0	C	
69	064	14W	01	SESE	245	CA	21	40.00	00	5	00	00000	00000	1	6	6	5	0	C	
69	064	14W	04	NWSW	245	CA	21	40.00	00	5	00	00000	00000	1	6	6	5	0	C	
69	064	14W	04	SWSW	245	CA	21	40.00	00	5	00	00000	00000	1	6	6	5	0	C	
69	064	14W	04	02	245	CA	21	23.38	00	5	00	00000	00000	1	6	6	5	0	C	
69	064	14W	04	03	245	CA	21	23.22	00	5	00	00000	00000	1	6	6	5	0	C	
69	064	14W	05	10	245	CA	21	40.00	00	5	00	00000	00000	1	6	6	5	3	C	
69	064	14W	05	09	245	CA	21	40.00	00	5	00	00000	00000	1	5	5	5	9	C	
69	064	14W	05	NESE	245	CA	21	40.00	00	5	00	00000	00000	1	6	6	5	9	C	
69	064	14W	06	07	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
69	064	14W	06	06	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
69	064	14W	06	02	245	CA	21	23.20	00	4	00	00000	00000	1	6	6	5	0	C	
69	064	14W	07	SENE	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
69	064	14W	08	SWNW	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
69	064	14W	12	NENE	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	4	C	
69	064	14W	12	SENE	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	4	C	
69	064	14W	13	SESW	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
69	064	14W	14	NWNW	245	CA	21	40.00	00	4	00	00000	00000	1	6	5	5	4	C	
69	064	14W	14	03	245	CA	21	38.65	00	4	00	00000	00000	1	5	5	5	2	C	
69	064	14W	16	NENE	245	AA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
69	064	14W	16	01	245	AA	21	35.40	00	4	00	00000	00000	1	6	5	5	2	C	
69	064	14W	16	04	245	AA	21	36.00	00	4	00	00000	00000	1	6	5	5	2	C	
69	064	14W	16	SENE	245	AA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
69	064	14W	16	02	245	AA	21	22.00	00	4	00	00000	00000	1	5	5	5	2	C	
69	064	14W	16	SWNW	245	AA	21	40.00	00	4	00	00000	00000	1	6	5	5	0	C	
69	064	14W	16	03	245	AA	21	35.80	00	4	00	00000	00000	1	5	5	5	2	C	
69	064	14W	16	06	245	AA	21	18.50	00	4	00	00000	00000	1	5	5	5	2	C	
69	064	14W	16	07	245	AA	21	39.75	00	4	00	00000	00000	1	6	5	5	2	C	
69	064	14W	16	08	245	AA	21	30.00	00	4	00	00000	00000	1	6	5	5	2	C	
69	064	14W	16	09	245	AA	21	3.25	00	4	00	00000	00000	1	5	5	5	1	C	
69	064	14W	16	10	245	AA	21	15.75	00	4	00	00000	00000	1	5	5	5	2	C	
69	064	14W	16	NESE	245	AA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
69	064	14W	16	05	245	AA	21	24.75	00	4	00	00000	00000	1	6	5	5	2	C	
69	064	14W	16	11	245	AA	21	39.25	00	4	00	00000	00000	1	6	5	5	2	C	
69	064	14W	16	SESE	245	AA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
69	064	14W	17	NWNE	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	9	C	
69	064	14W	17	NENW	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	9	C	
69	064	14W	17	NWNW	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	9	C	
69	064	14W	17	SWSW	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
69	064	14W	17	SESE	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
69	064	14W	18	NENE	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	9	C	
69	064	14W	18	SENE	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	9	C	
69	064	14W	19	NESE	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
69	064	14W	19	SESE	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
69	064	14W	20	NWNW	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	9	C	
69	064	14W	20	SWNW	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	9	C	
69	064	14W	21	SWSW	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
69	064	14W	21	SESW	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
69	064	14W	21	07	245	CA	21	39.75	00	4	00	00000	00000	1	5	5	5	2	C	
69	064	14W	23	01	245	CA	21	39.00	00	4	00	00000	00000	1	6	5	5	2	C	
69	064	14W	23	04	245	CA	21	34.35	00	4	00	00000	00000	1	6	5	5	2	C	
69	064	14W	23	SESE	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	

CO	TWP	RGE	SE	QSEC	RAD	ST	AD	ACRES	CF	N	SF	PARK	FWMAC	M	1	2	D	W	L	COMMENT
69	064	14W	24	SWNW	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
69	064	14W	24	NWSW	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	4	C	
69	064	14W	30	04	245	CA	21	18.66	00	4	00	00000	00000	1	5	5	5	8	C	
69	064	14W	31	04	245	CA	21	17.54	00	4	00	00000	00000	1	6	6	5	0	C	
69	064	14W	31	SESW	245	CA	21	40.00	00	4	00	00000	00000	1	6	5	5	0	C	
69	064	14W	31	NESE	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
69	064	14W	31	NWSE	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
69	064	14W	32	NENW	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
69	064	14W	32	SWNW	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
69	064	14W	36	01	245	AA	21	25.00	00	4	00	00000	00000	1	5	5	5	2	C	
69	064	14W	36	06	245	AA	21	20.00	00	4	00	00000	00000	1	5	6	5	2	C	
69	064	14W	36	07	245	AA	21	17.30	00	4	00	00000	00000	1	5	6	5	2	C	
69	064	14W	36	02	245	AA	21	2.30	00	4	00	00000	00000	1	5	5	5	1	C	
69	064	14W	36	03	245	AA	21	4.75	00	4	00	00000	00000	1	5	5	5	1	C	
69	064	14W	36	04	245	AA	21	20.85	00	4	00	00000	00000	1	5	5	5	2	C	
69	064	14W	36	05	245	AA	21	32.50	00	4	00	00000	00000	1	6	5	5	2	C	
69	064	14W	36	NESW	245	AA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
69	064	14W	36	10	245	AA	21	22.50	00	4	00	00000	00000	1	5	6	5	2	C	
69	064	14W	36	11	245	AA	21	39.80	00	4	00	00000	00000	1	5	6	5	2	C	
69	064	14W	36	SESW	245	AA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
69	064	14W	36	08	245	AA	21	39.90	00	4	00	00000	00000	1	6	6	5	2	C	
69	064	14W	36	09	245	AA	21	38.80	00	4	00	00000	00000	1	6	6	5	2	C	
69	064	14W	36	12	245	AA	21	38.85	00	4	00	00000	00000	1	5	6	5	2	C	
69	064	14W	36	13	245	AA	21	37.10	00	4	00	00000	00000	1	5	5	5	2	C	
69	064	15W	02	02	243	CA	21	41.13	00	4	00	00000	00000	1	6	6	3	0	C	
69	064	15W	02	SWNE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	064	15W	02	03	243	CA	21	41.16	00	4	00	00000	00000	1	5	6	3	8	C	
69	064	15W	02	04	243	CA	21	41.18	00	4	00	00000	00000	1	5	6	3	8	C	
69	064	15W	02	SWNW	243	CA	21	40.00	00	4	00	00000	00000	1	5	6	3	8	C	
69	064	15W	02	SESW	243	CA	21	40.00	00	4	00	00000	00000	1	5	6	3	8	C	
69	064	15W	02	NESW	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	064	15W	02	NWSW	243	CA	21	40.00	00	4	00	00000	00000	1	5	6	3	8	C	
69	064	15W	02	SWSW	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	8	C	
69	064	15W	02	SESW	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	064	15W	02	NWSE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	064	15W	02	SWSE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	064	15W	03	01	243	CA	21	41.17	00	4	00	00000	00000	1	6	6	3	0	C	
69	064	15W	03	SENE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	064	15W	03	SESW	243	CA	21	40.00	00	4	00	00000	00000	1	6	5	3	8	C	
69	064	15W	03	NWSE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	064	15W	03	SWSE	243	CA	21	40.00	00	4	00	00000	00000	1	5	6	3	8	C	
69	064	15W	10	SWNE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	064	15W	10	NENW	243	CA	21	40.00	00	4	00	00000	00000	1	5	6	3	8	C	
69	064	15W	10	SESW	243	CA	21	40.00	00	4	00	00000	00000	1	5	6	3	8	C	
69	064	15W	10	NESW	243	CA	21	40.00	00	4	00	00000	00000	1	5	6	3	8	C	
69	064	15W	10	NWSW	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	064	15W	10	SWSW	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	064	15W	10	SESW	243	CA	21	40.00	00	4	00	00000	00000	1	6	5	3	8	C	
69	064	15W	10	NESE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	064	15W	10	NWSE	243	CA	21	40.00	00	4	00	00000	00000	1	5	6	3	0	C	
69	064	15W	10	SESE	243	CA	21	40.00	00	4	00	00000	00000	1	5	6	3	8	C	
69	064	15W	12	SWSE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	

CO	TWP	RGE	SE	QSEC	RAD	ST	AD	ACRES	CF	N	SF	PARK	FWMAC	M	1	2	D	W	L	COMMENT
69	064	15W	13	NWNE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	064	15W	13	SESE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	064	15W	14	01	243	CA	21	39.50	00	4	00	00000	00000	1	5	6	3	2	C	
69	064	15W	14	NENW	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	064	15W	14	NWNW	243	CA	21	40.00	00	4	00	00000	00000	1	6	5	3	8	C	
69	064	15W	14	SWNW	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	064	15W	14	SENW	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	064	15W	14	NWSW	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	064	15W	14	SWSW	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	064	15W	15	NENE	243	CA	21	40.00	00	4	00	00000	00000	1	5	6	3	8	C	
69	064	15W	15	SWNE	243	CA	21	40.00	00	4	00	00000	00000	1	6	5	3	8	C	
69	064	15W	15	SENE	243	CA	21	40.00	00	4	00	00000	00000	1	5	6	3	8	C	
69	064	15W	15	NWNW	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	064	15W	15	SWNW	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	064	15W	15	NESW	243	CA	21	40.00	00	4	00	00000	00000	1	6	5	3	8	C	
69	064	15W	15	SWSW	243	CA	21	40.00	00	4	00	00000	00000	1	6	5	3	8	C	
69	064	15W	15	SESW	243	CA	21	40.00	00	4	00	00000	00000	1	6	5	3	8	C	
69	064	15W	15	NESE	243	CA	21	40.00	00	4	00	00000	00000	1	6	5	3	8	C	
69	064	15W	15	NWSE	243	CA	21	40.00	00	4	00	00000	00000	1	6	5	3	8	C	
69	064	15W	15	SWSE	243	CA	21	40.00	00	4	00	00000	00000	1	6	5	3	8	C	
69	064	15W	15	SESE	243	CA	21	40.00	00	4	00	00000	00000	1	6	5	3	8	C	
69	064	15W	16	NENE	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	064	15W	16	NWNE	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	064	15W	16	SWNE	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	064	15W	16	SENE	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	064	15W	16	NENW	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	064	15W	16	NWNW	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	9	C	
69	064	15W	16	SWNW	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	3	C	
69	064	15W	16	SENW	243	AA	21	40.00	00	4	00	00000	00000	1	6	5	3	3	C	
69	064	15W	16	NESW	243	AA	21	40.00	00	4	00	00000	00000	1	5	5	3	3	C	
69	064	15W	16	NWSW	243	AA	21	40.00	00	4	00	00000	00000	1	5	5	3	6	C	
69	064	15W	16	SWSW	243	AA	21	40.00	00	4	00	00000	00000	1	5	5	3	6	C	
69	064	15W	16	SESW	243	AA	21	40.00	00	4	00	00000	00000	1	5	5	3	3	C	
69	064	15W	16	NESE	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	064	15W	16	NWSE	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	064	15W	16	SWSE	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	064	15W	16	SESE	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	064	15W	17	SWSE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	064	15W	21	SWNE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	064	15W	21	SENE	243	CA	21	40.00	00	4	00	00000	00000	1	6	5	3	8	C	
69	064	15W	21	NESE	243	CA	21	40.00	00	4	00	00000	00000	1	6	5	3	8	C	
69	064	15W	21	NWSE	243	CA	21	40.00	00	4	00	00000	00000	1	6	5	3	8	C	
69	064	15W	21	SESE	243	CA	21	40.00	00	4	00	00000	00000	1	6	5	3	8	C	
69	064	15W	22	NWNW	243	CA	21	40.00	00	4	00	00000	00000	1	6	5	3	8	C	
69	064	15W	22	SWNW	243	CA	21	40.00	00	4	00	00000	00000	1	6	5	3	8	C	
69	064	15W	22	NWSW	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	064	15W	22	SWSW	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	064	15W	23	NENE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	9	C	
69	064	15W	23	SENW	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	064	15W	23	SESW	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	064	15W	23	NESE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	064	15W	23	NWSE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	

CO	TWP	RGE	SE	QSEC	RAD	ST	AD	ACRES	CF	N	SF	PARK	FWMAC	M	1	2	D	W	L	COMMENT
69	064	15W	23	SWSE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	064	15W	25	NESW	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	8	C	
69	064	15W	26	SWSE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	8	C	
69	064	15W	26	SESE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	8	C	
69	064	15W	27	SWSE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	064	15W	33	03	243	CA	21	25.50	00	4	00	00000	00000	1	5	6	3	2	C	
69	064	15W	34	NENE	243	CA	21	40.00	00	4	00	00000	00000	1	6	5	3	8	C	
69	064	15W	34	NWNE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	4	C	
69	064	15W	34	SWNE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	4	C	
69	064	15W	34	SENE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	4	C	
69	064	15W	34	NENW	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	064	15W	34	01	243	CA	21	35.50	00	4	00	00000	00000	1	6	5	3	2	C	
69	064	15W	34	SENW	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	064	15W	34	NESW	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	064	15W	34	04	243	CA	21	39.90	00	4	00	00000	00000	1	6	5	3	2	C	
69	064	15W	34	NWSE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	064	15W	34	05	243	CA	21	8.25	00	4	00	00000	00000	1	5	5	3	2	C	
69	064	15W	35	NWNE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	064	15W	35	SWNE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	064	15W	35	NENW	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	064	15W	35	NWNW	243	CA	21	40.00	00	4	00	00000	00000	1	6	5	3	8	C	
69	064	15W	35	SWNW	243	CA	21	40.00	00	4	00	00000	00000	1	6	5	3	8	C	
69	064	15W	35	SENW	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	064	15W	35	NESW	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	064	15W	35	NWSW	243	CA	21	40.00	00	4	00	00000	00000	1	6	5	3	8	C	
69	064	15W	35	01	243	CA	21	27.25	00	4	00	00000	00000	1	5	6	3	2	C	
69	064	15W	35	02	243	CA	21	35.25	00	4	00	00000	00000	1	5	6	3	2	C	
69	064	15W	35	NESE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	064	15W	35	NWSE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	064	15W	36	NENE	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	064	15W	36	NWNE	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	064	15W	36	SWNE	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	064	15W	36	SENE	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	064	15W	36	NENW	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	064	15W	36	NWNW	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	064	15W	36	SWNW	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	064	15W	36	SENW	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	064	15W	36	NESW	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	064	15W	36	NWSW	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	064	15W	36	SWSW	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	064	15W	36	SESW	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	064	15W	36	NESE	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	064	15W	36	NWSE	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	064	15W	36	SWSE	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	064	15W	36	SESE	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	064	16W	22	NENE	243	CA	21	40.00	00	4	00	00000	00000	1	5	6	1	0	C	
69	064	16W	22	NWNE	243	CA	21	40.00	00	4	00	00000	00000	1	5	6	1	0	C	
69	064	16W	22	SENE	243	CA	21	40.00	00	4	00	00000	00000	1	5	6	1	0	C	
69	064	16W	22	NENW	243	CA	21	40.00	00	4	00	00000	00000	1	5	6	1	0	C	
69	064	16W	22	NWNW	243	CA	21	40.00	00	4	00	00000	00000	1	5	6	1	0	C	
69	064	16W	22	SWNW	243	CA	21	40.00	00	4	00	00000	00000	1	5	6	1	0	C	
69	064	16W	27	02	243	CA	21	23.25	00	3	00	00000	00000	1	5	6	3	2	C	

CO	TWP	RGE	SE	QSEC	RAD	ST	AD	ACRES	CF	N	SF	PARK	FWMAC	M	1	2	D	W	L	COMMENT
69	064	16W	27	NWNW	243	CA	21	40.00	00	3	00	00000	00000	1	5	6	3	0	C	
69	064	16W	34	NENW	243	CA	21	40.00	00	3	00	00000	00000	1	5	6	3	9	C	
69	064	16W	34	SWNW	243	CA	21	40.00	00	3	00	00000	00000	1	5	6	3	0	C	
69	064	16W	34	SESW	243	CA	21	40.00	00	3	00	00000	00000	1	5	6	3	9	C	
69	064	16W	34	NESW	243	CA	21	40.00	00	4	00	00000	00000	1	5	6	3	0	C	
69	064	16W	34	NWSW	243	CA	21	40.00	00	4	00	00000	00000	1	5	6	3	0	C	
69	064	16W	34	01	243	CA	21	50.75	00	4	00	00000	00000	1	5	5	3	2	C	
69	064	16W	36	01	243	AA	21	30.50	00	3	00	00000	00000	1	5	5	3	1	C	
69	064	16W	36	03	243	AA	21	40.25	00	3	00	00000	00000	1	5	5	3	1	C	
69	064	16W	36	02	243	AA	21	36.50	00	3	00	00000	00000	1	5	5	3	1	C	
69	064	16W	36	04	243	AA	21	25.75	00	3	00	00000	00000	1	5	5	3	1	C	
69	064	16W	36	NESE	243	AA	21	40.00	00	3	00	00000	00000	1	5	5	3	1	C	
69	064	16W	36	05	243	AA	21	39.50	00	3	00	00000	00000	1	5	5	3	1	C	
69	064	16W	36	06	243	AA	21	38.25	00	3	00	00000	00000	1	5	5	3	1	C	
69	064	16W	36	SESE	243	AA	21	40.00	00	3	00	00000	00000	1	5	5	3	1	C	
69	065	12W	07	SESW	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
69	065	12W	07	SWSE	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
69	065	12W	09	NESE	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	5	C	
69	065	12W	09	NWSE	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	4	C	
69	065	12W	09	SWSE	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
69	065	12W	09	SESE	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	4	C	
69	065	12W	12	05	245	BA	21	25.35	00	3	00	00000	00000	1	5	5	5	2	C	
69	065	12W	13	01	245	BA	21	25.00	00	3	00	00000	00000	1	5	5	5	2	C	
69	065	12W	15	03	245	CA	21	37.85	00	3	00	00000	00000	1	5	5	5	2	C	
69	065	12W	16	NENE	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	5	C	
69	065	12W	16	01	245	AA	21	30.00	00	3	00	00000	00000	1	5	5	5	2	C	
69	065	12W	16	04	245	AA	21	17.00	00	3	00	00000	00000	1	5	5	5	2	C	
69	065	12W	16	SENE	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	9	C	
69	065	12W	16	02	245	AA	21	31.25	00	3	00	00000	00000	1	5	5	5	2	C	
69	065	12W	16	NWNW	245	AA	21	40.00	00	3	00	00000	00000	1	6	6	5	0	C	
69	065	12W	16	SWNW	245	AA	21	40.00	00	3	00	00000	00000	1	6	6	5	0	C	
69	065	12W	16	03	245	AA	21	24.90	00	3	00	00000	00000	1	5	5	5	2	C	
69	065	12W	16	06	245	AA	21	38.25	00	3	00	00000	00000	1	5	5	5	2	C	
69	065	12W	16	NWSW	245	AA	21	40.00	00	3	00	00000	00000	1	5	6	5	0	C	
69	065	12W	16	07	245	AA	21	30.90	00	3	00	00000	00000	1	5	5	5	2	C	
69	065	12W	16	08	245	AA	21	43.00	00	3	00	00000	00000	1	5	5	5	2	C	
69	065	12W	16	NESE	245	AA	21	40.00	00	3	00	00000	00000	1	6	6	5	9	C	
69	065	12W	16	05	245	AA	21	18.40	00	3	00	00000	00000	1	5	5	5	2	C	
69	065	12W	16	09	245	AA	21	38.35	00	3	00	00000	00000	1	5	5	5	2	C	
69	065	12W	16	SESE	245	AA	21	40.00	00	3	00	00000	00000	1	6	6	5	5	C	
69	065	12W	18	SESE	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	5	C	
69	065	12W	22	NENE	245	CA	21	40.00	00	4	00	00000	00000	1	5	6	5	4	C	
69	065	12W	27	SESW	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
69	065	12W	28	SWSE	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
69	065	12W	29	SWNW	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
69	065	12W	34	NWNE	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
69	065	12W	34	SWNE	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	9	C	
69	065	12W	34	SENE	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	9	C	
69	065	12W	34	NENW	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
69	065	12W	34	SWNW	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	9	C	
69	065	12W	34	SESW	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	9	C	
69	065	12W	34	NESW	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	

CO	TWP	RGE	SE	QSEC	RAD	ST	AD	ACRES	CF	N	SF	PARK	FWMAC	M	1	2	D	W	L	COMMENT
69	065	12W	34	NWSW	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
69	065	12W	34	02	245	CA	21	40.50	00	4	00	00000	00000	1	6	6	5	0	C	
69	065	12W	34	NWSE	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
69	065	12W	35	SWNE	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	9	C	
69	065	12W	35	SENE	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
69	065	12W	35	SWNW	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	5	C	
69	065	12W	35	SENW	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	5	C	
69	065	12W	35	NESW	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
69	065	12W	35	04	245	CA	21	39.70	00	4	00	00000	00000	1	6	6	5	0	C	
69	065	12W	35	NWSE	245	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	9	C	
69	065	12W	36	01	245	AA	21	19.15	00	4	00	00000	00000	1	5	5	5	2	C	
69	065	12W	36	02	245	AA	21	0.50	00	4	00	00000	00000	1	5	5	5	1	C	
69	065	12W	36	03	245	AA	21	31.60	00	4	00	00000	00000	1	5	5	5	2	C	
69	065	12W	36	SWNE	245	AA	21	40.00	00	4	00	00000	00000	1	5	5	5	0	C	
69	065	12W	36	05	245	AA	21	40.58	00	4	00	00000	00000	1	5	5	5	2	C	
69	065	12W	36	04	245	AA	21	28.15	00	4	00	00000	00000	1	5	5	5	2	C	
69	065	12W	36	NWNW	245	AA	21	40.00	00	4	00	00000	00000	1	5	5	5	0	C	
69	065	12W	36	SWNW	245	AA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
69	065	12W	36	SENW	245	AA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
69	065	12W	36	NESW	245	AA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
69	065	12W	36	NWSW	245	AA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
69	065	12W	36	SWSW	245	AA	21	40.00	00	4	00	00000	00000	1	6	6	5	5	C	
69	065	12W	36	SESW	245	AA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
69	065	12W	36	06	245	AA	21	37.20	00	4	00	00000	00000	1	5	5	5	2	C	
69	065	12W	36	NWSE	245	AA	21	40.00	00	4	00	00000	00000	1	5	5	5	0	C	
69	065	12W	36	SWSE	245	AA	21	40.00	00	4	00	00000	00000	1	5	5	5	0	C	
69	065	12W	36	07	245	AA	21	15.00	00	4	00	00000	00000	1	5	5	5	2	C	
69	065	13W	01	04	243	CA	21	38.98	00	4	00	00000	00000	1	6	6	5	0	C	
69	065	13W	02	SESW	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	5	C	
69	065	13W	03	04	243	CA	21	44.71	00	4	00	00000	00000	1	5	6	3	8	C	
69	065	13W	03	SWNW	243	CA	21	40.00	00	4	00	00000	00000	1	5	6	3	8	C	
69	065	13W	03	05	243	CA	21	37.80	00	4	00	00000	00000	1	5	6	3	2	C	
69	065	13W	03	NESW	243	CA	21	40.00	00	4	00	00000	00000	1	5	6	3	8	C	
69	065	13W	03	NWSW	243	CA	21	40.00	00	4	00	00000	00000	1	5	6	3	8	C	
69	065	13W	03	SESW	243	CA	21	40.00	00	4	00	00000	00000	1	5	6	3	8	C	
69	065	13W	03	09	243	CA	21	35.25	00	4	00	00000	00000	1	5	6	3	2	C	
69	065	13W	06	04	243	CA	21	44.75	00	4	00	00000	00000	1	6	6	5	5	C	
69	065	13W	08	NENE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	065	13W	08	SWNE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	065	13W	08	SENE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	065	13W	08	SESW	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	065	13W	08	NESE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	065	13W	08	NWSE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	065	13W	10	NENE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	065	13W	10	NWNE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	065	13W	10	SWNE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	065	13W	10	NENW	243	CA	21	40.00	00	4	00	00000	00000	1	5	6	3	8	C	
69	065	13W	10	SENW	243	CA	21	40.00	00	4	00	00000	00000	1	5	6	3	8	C	
69	065	13W	11	NENW	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	5	C	
69	065	13W	11	NWNW	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	4	C	
69	065	13W	16	NENE	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	065	13W	16	NWNE	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	

CO	TWP	RGE	SE	QSEC	RAD	ST	AD	ACRES	CF	N	SF	PARK	FWMAC	M	1	2	D	W	L	COMMENT
69	065	13W	16	SWNE	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	065	13W	16	SENE	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	5	C	
69	065	13W	16	NENW	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	065	13W	16	NWNW	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	065	13W	16	SWNW	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	065	13W	16	SENW	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	065	13W	16	NESW	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	065	13W	16	NWSW	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	065	13W	16	SWSW	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	065	13W	16	SESW	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	065	13W	16	NESE	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	065	13W	16	NWSE	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	065	13W	16	SWSE	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	5	C	
69	065	13W	16	SESE	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	9	C	
69	065	13W	17	NWNE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	065	13W	17	NENW	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	065	13W	17	SWSW	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	065	13W	17	SESW	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	065	13W	17	SWSE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	065	13W	31	NENW	243	CA	21	40.00	00	5	00	00000	00000	1	6	6	1	0	C	
69	065	13W	31	01	243	CA	21	52.24	00	5	00	00000	00000	1	6	6	1	0	C	
69	065	13W	31	02	243	CA	21	53.42	00	5	00	00000	00000	1	6	6	1	0	C	
69	065	13W	32	NWNW	243	CA	21	40.00	00	5	00	00000	00000	1	6	6	3	0	C	
69	065	13W	32	NESW	243	CA	21	40.00	00	5	00	00000	00000	1	6	6	3	8	C	
69	065	13W	32	05	243	CA	21	34.48	00	5	00	00000	00000	1	6	6	3	8	C	
69	065	13W	32	02	243	CA	21	17.00	00	5	00	00000	00000	1	5	6	3	2	C	
69	065	13W	32	NWSE	243	CA	21	40.00	00	5	00	00000	00000	1	6	6	3	8	C	
69	065	13W	32	06	243	CA	21	33.96	00	5	00	00000	00000	1	6	6	3	8	C	
69	065	13W	32	07	243	CA	21	16.00	00	5	00	00000	00000	1	5	6	3	2	C	
69	065	14W	19	NENE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	1	9	C	
69	065	14W	19	NWNE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	1	9	C	
69	065	14W	19	NENW	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	1	9	C	
69	065	14W	19	02	243	CA	21	36.62	00	4	00	00000	00000	1	6	6	1	5	C	
69	065	14W	19	03	243	CA	21	36.96	00	4	00	00000	00000	1	6	6	1	5	C	
69	065	14W	19	04	243	CA	21	37.31	00	4	00	00000	00000	1	6	6	1	0	C	
69	065	14W	30	SWNE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	1	0	C	
69	065	14W	30	SENE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	1	0	C	
69	065	14W	30	01	243	CA	21	37.62	00	4	00	00000	00000	1	6	6	1	0	C	
69	065	14W	30	02	243	CA	21	37.89	00	4	00	00000	00000	1	6	6	1	0	C	
69	065	14W	30	SENW	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	1	0	C	
69	065	14W	30	NESW	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	1	0	C	
69	065	14W	30	03	243	CA	21	38.17	00	4	00	00000	00000	1	6	6	1	0	C	
69	065	14W	30	04	243	CA	21	38.44	00	4	00	00000	00000	1	6	6	1	0	C	
69	065	14W	30	SESW	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	1	0	C	
69	065	14W	30	NESE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	1	0	C	
69	065	14W	30	NWSE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	1	0	C	
69	065	14W	30	SWSE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	1	0	C	
69	065	14W	31	NENW	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	1	0	C	
69	065	14W	31	01	243	CA	21	38.76	00	4	00	00000	00000	1	6	6	1	0	C	
69	065	14W	31	04	243	CA	21	39.82	00	4	00	00000	00000	1	6	6	1	0	C	
69	065	14W	31	SESW	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	1	0	C	
69	065	14W	31	NESE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	1	0	C	

CO	TWP	RGE	SE	QSEC	RAD	ST	AD	ACRES	CF	N	SF	PARK	FWMAC	M	1	2	D	W	L	COMMENT
69	065	14W	31	NWSE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	1	0	C	
69	065	14W	31	SWSE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	1	0	C	
69	065	14W	31	SESE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	1	0	C	
69	065	15W	13	02	243	CA	20	22.35	00	4	30	00000	00000	1	5	6	3	7	C	
69	065	15W	13	03	243	CA	20	39.85	00	4	30	00000	00000	1	6	6	3	0	C	
69	065	15W	13	06	243	CA	20	40.00	00	4	30	00000	00000	1	5	6	3	7	C	
69	065	15W	13	07	243	CA	20	51.00	00	4	30	00000	00000	1	5	6	3	7	C	
69	065	15W	13	08	243	CA	20	27.75	00	4	30	00000	00000	1	5	6	3	7	C	
69	065	15W	13	SESW	243	CA	20	40.00	00	4	30	00000	00000	1	6	6	3	0	C	
69	065	15W	14	02	243	CA	20	51.75	00	4	30	00000	00000	1	5	6	3	7	C	
69	065	15W	14	06	243	CA	20	22.10	00	4	30	00000	00000	1	5	5	3	7	C	
69	065	15W	14	07	243	CA	20	24.25	00	4	30	00000	00000	1	5	5	3	7	C	
69	065	15W	14	03	243	CA	20	23.35	00	4	30	00000	00000	1	5	5	3	7	C	
69	065	15W	14	08	243	CA	20	26.20	00	4	30	00000	00000	1	5	5	3	7	C	
69	065	15W	14	09	243	CA	20	8.85	00	4	30	00000	00000	1	5	5	3	7	C	
69	065	15W	23	01	243	CA	21	25.30	00	4	00	00000	00000	1	5	5	3	7	C	
69	065	15W	23	04	243	CA	21	20.45	00	4	00	00000	00000	1	5	5	3	7	C	
69	065	15W	25	01	243	CA	21	29.75	00	4	00	00000	00000	1	6	6	1	0	C	
69	065	15W	25	NWNE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	1	0	C	
69	065	15W	25	SWNE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	1	0	C	
69	065	15W	25	03	243	CA	21	28.05	00	4	00	00000	00000	1	6	6	1	0	C	
69	065	15W	25	02	243	CA	21	39.77	00	4	00	00000	00000	1	6	6	1	0	C	
69	065	15W	25	SESW	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	1	0	C	
69	065	15W	25	SENW	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	1	0	C	
69	065	15W	25	NESW	243	CA	21	40.00	00	4	00	00000	00000	1	6	5	1	8	C	
69	065	15W	25	NWSW	243	CA	21	40.00	00	4	00	00000	00000	1	6	5	1	8	C	
69	065	15W	25	SWSW	243	CA	21	40.00	00	4	00	00000	00000	1	6	5	1	8	C	
69	065	15W	25	SESW	243	CA	21	40.00	00	4	00	00000	00000	1	6	5	1	8	C	
69	065	15W	25	04	243	CA	21	27.69	00	4	00	00000	00000	1	6	6	1	0	C	
69	065	15W	25	NWSE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	1	0	C	
69	065	15W	25	SWSE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	1	0	C	
69	065	15W	26	05	243	CA	21	0.10	00	4	00	00000	00000	1	5	5	3	7	C	
69	065	15W	26	03	243	CA	21	27.25	00	4	00	00000	00000	1	5	6	3	7	C	
69	065	15W	26	06	243	CA	21	9.00	00	4	00	00000	00000	1	5	5	3	7	C	
69	065	15W	26	07	243	CA	21	27.20	00	4	00	00000	00000	1	5	6	3	7	C	
69	065	15W	26	08	243	CA	21	39.95	00	4	00	00000	00000	1	6	6	3	7	C	
69	065	15W	26	09	243	CA	21	27.05	00	4	00	00000	00000	1	6	5	3	7	C	
69	065	15W	26	10	243	CA	21	38.20	00	4	00	00000	00000	1	5	6	3	7	C	
69	065	15W	35	01	243	CA	21	34.65	00	4	00	00000	00000	1	5	6	3	7	C	
69	065	15W	35	02	243	CA	21	34.05	00	4	00	00000	00000	1	5	6	3	7	C	
69	065	15W	35	04	243	CA	21	32.55	00	4	00	00000	00000	1	5	6	3	7	C	
69	065	15W	35	05	243	CA	21	39.95	00	4	00	00000	00000	1	5	6	3	7	C	
69	065	15W	35	06	243	CA	21	33.50	00	4	00	00000	00000	1	5	6	3	7	C	
69	065	15W	35	07	243	CA	21	21.30	00	4	00	00000	00000	1	5	6	3	7	C	
69	065	15W	35	08	243	CA	21	51.35	00	4	00	00000	00000	1	6	5	3	7	C	
69	066	12W	05	02	245	BA	21	19.00	00	3	00	00000	00000	1	5	5	5	2	C	
69	066	12W	05	03	245	BA	21	48.75	00	3	00	00000	00000	1	5	5	5	2	C	
69	066	12W	05	04	245	BA	21	30.75	00	3	00	00000	00000	1	5	5	5	1	C	
69	066	12W	05	05	245	BA	21	5.00	00	3	00	00000	00000	1	5	5	5	2	C	
69	066	12W	05	06	245	BA	21	0.75	00	3	00	00000	00000	1	5	5	5	2	C	
69	066	12W	06	01	245	BJ	20	33.75	00	3	01	00000	00000	4	5	5	5	2	C	
69	066	12W	06	02	245	BJ	20	22.75	00	3	01	00000	00000	4	5	5	5	2	C	
69	066	12W	08	01	245	BA	21	25.50	00	3	00	00000	00000	1	5	5	5	2	C	

CO	TWP	RGE	SE	QSEC	RAD	ST	AD	ACRES	CF	N	SF	PARK	FWMAC	M	1	2	D	W	L	COMMENT
69	066	12W	08	02	245	BA	21	26.75	00	3	00	00000	00000	1	5	5	5	2	C	
69	066	12W	08	05	245	BA	21	37.50	00	3	00	00000	00000	1	5	5	5	2	C	
69	066	12W	08	03	245	BA	21	35.45	00	3	00	00000	00000	1	5	5	5	2	C	
69	066	12W	08	04	245	BA	21	39.90	00	3	00	00000	00000	1	5	5	5	2	C	
69	066	12W	08	06	245	BA	21	38.75	00	3	00	00000	00000	1	5	5	5	2	C	
69	066	12W	08	07	245	BA	21	30.00	00	3	00	00000	00000	1	5	5	5	2	C	
69	066	12W	09	04	245	BA	21	21.75	00	3	00	00000	00000	1	5	5	5	2	C	
69	066	12W	09	03	245	BA	21	2.75	00	3	00	00000	00000	1	5	5	5	1	C	
69	066	12W	09	02	245	BA	21	18.75	00	3	00	00000	00000	1	5	5	5	1	C	
69	066	12W	09	01	245	BA	21	38.00	00	3	00	00000	00000	1	5	5	5	1	C	
69	066	12W	13	05	245	BA	21	39.95	00	3	00	00000	00000	1	5	5	5	2	C	
69	066	12W	13	06	245	BA	21	50.00	00	3	00	00000	00000	1	5	5	5	2	C	
69	066	12W	14	09	245	BA	21	16.00	00	3	00	00000	00000	1	5	5	5	2	C	
69	066	12W	15	02	245	BA	21	4.50	00	3	00	00000	00000	1	5	5	5	1	C	
69	066	12W	16	01	245	AA	21	2.25	00	3	00	00000	00000	1	5	5	5	1	C	
69	066	12W	16	02	245	AA	21	2.25	00	3	00	00000	00000	1	5	5	5	1	C	
69	066	12W	16	03	245	AA	21	29.25	00	3	00	00000	00000	1	5	5	5	1	C	
69	066	12W	16	04	245	AA	21	23.00	00	3	00	00000	00000	1	5	5	5	1	C	
69	066	12W	16	08	245	AA	21	43.50	00	3	00	00000	00000	1	5	5	5	2	C	
69	066	12W	16	07	245	AA	21	34.50	00	3	00	00000	00000	1	5	5	5	2	C	
69	066	12W	16	06	245	AA	21	18.25	00	3	00	00000	00000	1	5	5	5	2	C	
69	066	12W	16	05	245	AA	21	32.75	00	3	00	00000	00000	1	5	5	5	2	C	
69	066	12W	17	06	245	BA	21	39.95	00	3	00	00000	00000	1	5	5	5	2	C	
69	066	12W	17	05	245	BA	21	20.00	00	3	00	00000	00000	1	5	5	5	2	C	
69	066	12W	24	01	245	BA	21	52.75	00	3	00	00000	00000	1	5	5	5	2	C	
69	066	12W	24	SE	245	BA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
69	066	12W	24	NE	245	BA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
69	066	12W	34	SE	245	CA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
69	066	12W	36	NE	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	8	C	
69	066	12W	36	NW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	4	C	
69	066	12W	36	SW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	4	C	
69	066	12W	36	SE	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	3	C	
69	066	12W	36	NE	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
69	066	12W	36	NW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
69	066	12W	36	SW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
69	066	12W	36	SE	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	3	C	
69	066	12W	36	NE	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	3	C	
69	066	12W	36	NW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
69	066	12W	36	SW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
69	066	12W	36	SE	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	3	C	
69	066	12W	36	NE	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
69	066	12W	36	NW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	3	C	
69	066	12W	36	SW	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	3	C	
69	066	12W	36	SE	245	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
69	066	13W	01	07	243	BA	21	21.25	00	3	00	00000	00000	1	5	5	5	1	C	
69	066	13W	01	08	243	BA	21	35.50	00	3	00	00000	00000	1	5	5	5	1	C	
69	066	13W	01	06	243	BA	21	6.50	00	3	00	00000	00000	1	5	5	5	1	C	
69	066	13W	01	12	243	BA	21	19.50	00	3	00	00000	00000	1	5	5	5	2	C	
69	066	13W	01	11	243	BA	21	22.50	00	3	00	00000	00000	1	5	5	5	2	C	
69	066	13W	02	03	243	BA	21	31.55	00	3	00	00000	00000	1	5	5	5	2	C	
69	066	13W	02	04	243	BA	21	12.50	00	3	00	00000	00000	1	5	5	5	2	C	
69	066	13W	02	05	243	BA	21	9.25	00	3	00	00000	00000	1	5	5	5	2	C	

CO	TWP	RGE	SE	QSEC	RAD	ST	AD	ACRES	CF	N	SF	PARK	FWMAC	M	1	2	D	W	L	COMMENT
69	066	13W	02	06	243	BA	21	14.00	00	3	00	00000	00000	1	5	5	5	2	C	
69	066	13W	02	09	243	BA	21	18.50	00	3	00	00000	00000	1	5	5	5	1	C	
69	066	13W	03	01	243	BA	21	39.55	00	3	00	00000	00000	1	5	5	5	2	C	
69	066	13W	03	05	243	BA	21	38.00	00	3	00	00000	00000	1	5	5	5	2	C	
69	066	13W	03	NESE	243	BA	21	40.00	00	3	00	00000	00000	1	6	6	5	0	C	
69	066	13W	03	SESE	243	BA	21	40.00	00	3	00	00000	00000	1	6	6	5	0	C	
69	066	13W	08	SENE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	8	C	
69	066	13W	08	NESE	243	CA	21	40.00	00	3	00	00000	00000	1	6	6	5	8	C	
69	066	13W	08	SESE	243	CA	21	40.00	00	3	00	00000	00000	1	6	6	5	8	C	
69	066	13W	09	SWNE	243	CA	21	40.00	00	3	00	00000	00000	1	6	6	5	3	C	
69	066	13W	09	SWNW	243	CA	21	40.00	00	3	00	00000	00000	1	6	6	5	0	C	
69	066	13W	09	SENW	243	CA	21	40.00	00	3	00	00000	00000	1	6	6	5	3	C	
69	066	13W	09	NESW	243	CA	21	40.00	00	3	00	00000	00000	1	6	6	5	3	C	
69	066	13W	09	NWSW	243	CA	21	40.00	00	3	00	00000	00000	1	6	6	5	3	C	
69	066	13W	09	SWSW	243	CA	21	40.00	00	3	00	00000	00000	1	6	6	5	9	C	
69	066	13W	09	SESW	243	CA	21	40.00	00	3	00	00000	00000	1	6	6	5	3	C	
69	066	13W	09	NESE	243	CA	21	40.00	00	3	00	00000	00000	1	6	6	5	5	C	
69	066	13W	09	NWSE	243	CA	21	40.00	00	3	00	00000	00000	1	6	6	5	3	C	
69	066	13W	09	SWSE	243	CA	21	40.00	00	3	00	00000	00000	1	6	6	5	3	C	
69	066	13W	10	NENE	243	BA	21	40.00	00	3	00	00000	00000	1	6	6	5	0	C	
69	066	13W	10	01	243	BA	21	39.50	00	3	00	00000	00000	1	5	6	5	2	C	
69	066	13W	10	NWSW	243	CA	21	40.00	00	3	00	00000	00000	1	6	6	5	5	C	
69	066	13W	11	01	243	BA	21	25.75	00	3	00	00000	00000	1	5	5	5	1	C	
69	066	13W	11	03	243	BA	21	11.25	00	3	00	00000	00000	1	5	5	5	1	C	
69	066	13W	11	04	243	BA	21	27.50	00	3	00	00000	00000	1	5	5	5	2	C	
69	066	13W	11	05	243	BA	21	20.50	00	3	00	00000	00000	1	5	5	5	1	C	
69	066	13W	15	SWNW	243	CA	21	40.00	00	3	00	00000	00000	1	6	6	5	5	C	
69	066	13W	16	NENE	243	AA	21	40.00	00	3	00	00000	00000	1	6	6	5	5	C	
69	066	13W	16	NWNE	243	AA	21	40.00	00	3	00	00000	00000	1	6	6	5	0	C	
69	066	13W	16	SWNE	243	AA	21	40.00	00	3	00	00000	00000	1	6	6	5	0	C	
69	066	13W	16	SENE	243	AA	21	40.00	00	3	00	00000	00000	1	6	6	5	5	C	
69	066	13W	16	NENW	243	AA	21	40.00	00	3	00	00000	00000	1	6	6	5	0	C	
69	066	13W	16	NWNW	243	AA	21	40.00	00	3	00	00000	00000	1	6	6	5	0	C	
69	066	13W	16	SWNW	243	AA	21	40.00	00	3	00	00000	00000	1	6	6	5	0	C	
69	066	13W	16	SENW	243	AA	21	40.00	00	3	00	00000	00000	1	6	6	5	0	C	
69	066	13W	16	03	243	AA	21	40.75	00	3	00	00000	00000	1	5	5	5	2	C	
69	066	13W	16	NWSW	243	AA	21	40.00	00	3	00	00000	00000	1	6	6	5	0	C	
69	066	13W	16	04	243	AA	21	46.75	00	3	00	00000	00000	1	5	5	5	2	C	
69	066	13W	16	01	243	AA	21	39.60	00	3	00	00000	00000	1	5	5	5	2	C	
69	066	13W	16	02	243	AA	21	46.50	00	3	00	00000	00000	1	5	5	5	2	C	
69	066	13W	16	05	243	AA	21	14.00	00	3	00	00000	00000	1	5	5	5	2	C	
69	066	13W	16	06	243	AA	21	31.25	00	3	00	00000	00000	1	5	5	5	2	C	
69	066	13W	17	NENE	243	CA	21	40.00	00	3	00	00000	00000	1	5	6	5	8	C	
69	066	13W	17	NWNE	243	CA	21	40.00	00	3	00	00000	00000	1	5	6	5	8	C	
69	066	13W	17	SENE	243	CA	21	40.00	00	3	00	00000	00000	1	6	6	5	0	C	
69	066	13W	27	NWSW	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	0	C	
69	066	13W	28	NESE	243	CA	21	40.00	00	4	00	00000	00000	1	5	6	5	8	C	
69	066	13W	29	NESW	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	066	13W	29	NWSW	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	066	13W	29	SWSW	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	066	13W	29	SESW	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	066	13W	29	SWSE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	

CO	TWP	RGE	SE	QSEC	RAD	ST	AD	ACRES	CF	N	SF	PARK	FWMAC	M	1	2	D	W	L	COMMENT
69	066	13W	30	NESE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	066	13W	30	SESE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	066	13W	31	NESW	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	3	C	
69	066	13W	31	03	243	CA	21	40.71	00	4	00	00000	00000	1	6	6	3	3	C	
69	066	13W	31	04	243	CA	21	40.23	00	4	00	00000	00000	1	6	6	3	3	C	
69	066	13W	31	SESW	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	3	C	
69	066	13W	32	SENE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	8	C	
69	066	13W	32	SESW	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	9	C	
69	066	13W	32	NWSE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	8	C	
69	066	13W	36	NENE	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	5	C	
69	066	13W	36	NWNE	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	066	13W	36	SWNE	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	5	C	
69	066	13W	36	SENE	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	3	C	
69	066	13W	36	NENW	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	066	13W	36	NWNW	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	9	C	
69	066	13W	36	SWNW	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	9	C	
69	066	13W	36	SENW	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	066	13W	36	NESW	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	9	C	
69	066	13W	36	NWSW	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	9	C	
69	066	13W	36	SWSW	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	5	C	
69	066	13W	36	SESW	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	9	C	
69	066	13W	36	NESE	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	5	C	
69	066	13W	36	NWSE	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	066	13W	36	SWSE	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	9	C	
69	066	13W	36	SESE	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	066	14W	16	NENE	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	8	C	
69	066	14W	16	NWNE	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	8	C	
69	066	14W	16	SWNE	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	8	C	
69	066	14W	16	SENE	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	066	14W	16	NENW	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	066	14W	16	NWNW	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	066	14W	16	SWNW	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	9	C	
69	066	14W	16	SENW	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	066	14W	16	NESW	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	8	C	
69	066	14W	16	NWSW	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	8	C	
69	066	14W	16	SWSW	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	8	C	
69	066	14W	16	SESW	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	066	14W	16	NESE	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	066	14W	16	NWSE	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	066	14W	16	SWSE	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	066	14W	16	SESE	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	066	14W	36	01	243	AA	21	40.15	00	3	00	00000	00000	1	5	6	3	2	C	
69	066	14W	36	02	243	AA	21	50.00	00	3	00	00000	00000	1	5	6	3	2	C	
69	066	14W	36	SENE	243	AA	21	40.00	00	3	00	00000	00000	1	6	6	3	0	C	
69	066	14W	36	03	243	AA	21	34.75	00	3	00	00000	00000	1	5	6	3	2	C	
69	066	14W	36	04	243	AA	21	44.00	00	3	00	00000	00000	1	5	5	3	2	C	
69	066	14W	36	SESW	243	AA	21	40.00	00	3	00	00000	00000	1	5	6	3	8	C	
69	066	14W	36	NESE	243	AA	21	40.00	00	3	00	00000	00000	1	6	6	3	5	C	
69	066	14W	36	NWSE	243	AA	21	40.00	00	3	00	00000	00000	1	6	6	3	0	C	
69	066	14W	36	SWSE	243	AA	21	40.00	00	3	00	00000	00000	1	6	6	3	0	C	
69	066	14W	36	SESE	243	AA	21	40.00	00	3	00	00000	00000	1	6	6	3	9	C	
69	066	15W	06	03	243	BJ	20	53.80	00	4	01	00000	00000	4	5	5	3	2	C	

CO	TWP	RGE	SE	QSEC	RAD	ST	AD	ACRES	CF	N	SF	PARK	FWMAC	M	1	2	D	W	L	COMMENT
69	066	15W	06	04	243	BJ	20	43.60	00	4	01	00000	00000	4	5	5	3	2	C	Q (Loon Falls Portage)
69	066	15W	10	NENE	243	CA	21	40.00	00	3	00	00000	00000	1	5	5	3	0	C	
69	066	15W	10	NWNE	243	CA	21	40.00	00	3	00	00000	00000	1	5	5	3	0	C	
69	066	15W	11	NWNW	243	CA	21	40.00	00	3	00	00000	00000	1	5	5	3	0	C	
69	066	15W	16	NENE	243	AA	21	40.00	00	4	00	00000	00000	1	5	5	3	0	C	
69	066	15W	16	NWNE	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	066	15W	16	SWNE	243	AA	21	40.00	00	4	00	00000	00000	1	5	5	3	0	C	
69	066	15W	16	SENE	243	AA	21	40.00	00	4	00	00000	00000	1	5	5	3	5	C	
69	066	15W	16	NENW	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	066	15W	16	NWNW	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	066	15W	16	SWNW	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	9	C	
69	066	15W	16	SENW	243	AA	21	40.00	00	4	00	00000	00000	1	5	5	3	9	C	
69	066	15W	16	02	243	AA	21	40.00	00	3	00	00000	00000	1	5	5	3	2	C	
69	066	15W	16	NWSW	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	066	15W	16	SWSW	243	AA	21	40.00	00	4	00	00000	00000	1	6	6	3	9	C	
69	066	15W	16	SESW	243	AA	21	40.00	00	3	00	00000	00000	1	5	5	3	9	C	
69	066	15W	16	NESE	243	AA	21	40.00	00	3	00	00000	00000	1	5	5	3	5	C	
69	066	15W	16	01	243	AA	21	20.90	00	3	00	00000	00000	1	5	5	3	2	C	
69	066	15W	16	03	243	AA	21	16.75	00	3	00	00000	00000	1	5	5	3	2	C	
69	066	15W	16	04	243	AA	21	25.85	00	3	00	00000	00000	1	5	5	3	2	C	
69	066	15W	18	10	243	CA	21	35.75	00	4	00	00000	00000	1	5	5	3	2	C	
69	066	15W	20	NWNE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	066	15W	20	NENW	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	066	15W	20	NWNW	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	066	15W	24	NENE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	9	C	
69	066	15W	24	SWNE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	9	C	
69	066	15W	24	SENE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	9	C	
69	066	15W	24	NESE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	066	15W	24	NWSE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	9	C	
69	066	15W	24	SESE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	066	15W	25	NENE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	066	15W	25	NWNE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	9	C	
69	066	15W	25	SWNE	243	CA	21	40.00	00	4	00	00000	00000	1	6	5	3	3	C	
69	066	15W	25	SENE	243	CA	21	40.00	00	4	00	00000	00000	1	6	5	3	3	C	
69	066	15W	25	SENW	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	066	15W	25	NESW	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	066	15W	25	NWSW	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	066	15W	25	SWSW	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	066	15W	25	SESW	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	066	15W	25	NESE	243	CA	21	40.00	00	4	00	00000	00000	1	6	5	3	3	C	
69	066	15W	25	NWSE	243	CA	21	40.00	00	4	00	00000	00000	1	6	5	3	3	C	
69	066	15W	25	SWSE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	066	15W	25	SESE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	066	15W	28	NENW	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	9	C	
69	066	15W	28	NWNW	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	9	C	
69	066	15W	28	SWNW	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	066	15W	28	SENW	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	9	C	
69	066	15W	28	NESW	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	9	C	
69	066	15W	28	NWSW	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	5	C	
69	066	15W	28	NESE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	5	C	
69	066	15W	28	NWSE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	3	0	C	
69	066	15W	36	NENW	243	AA	21	40.00	00	5	00	00000	00000	1	6	6	3	0	C	

CO	TWP	RGE	SE	QSEC	RAD	ST	AD	ACRES	CF	N	SF	PARK	FWMAC	M	1	2	D	W	L	COMMENT
69	066	15W	36	01	243	AA	21	39.85	00	5	00	00000	00000	1	6	5	3	7	C	
69	066	15W	36	02	243	AA	21	24.40	00	5	00	00000	00000	1	5	5	3	7	C	
69	066	15W	36	SE	243	AA	21	40.00	00	5	00	00000	00000	1	6	6	3	5	C	
69	066	15W	36	03	243	AA	21	49.90	00	5	00	00000	00000	1	6	5	3	7	C	
69	066	15W	36	04	243	AA	21	26.65	00	5	00	00000	00000	1	5	6	3	7	C	
69	066	15W	36	05	243	AA	21	16.00	00	5	00	00000	00000	1	5	5	3	7	C	
69	066	15W	36	06	243	AA	21	17.30	00	5	00	00000	00000	1	5	5	3	7	C	
69	066	15W	36	SE	243	AA	21	40.00	00	5	00	00000	00000	1	6	6	3	9	C	
69	066	16W	01	01	243	BJ	20	39.50	00	3	01	00000	00000	4	5	5	5	7	C	Q (Loon Falls Portage)
69	066	16W	01	02	243	BJ	20	41.50	00	3	01	00000	00000	4	5	5	5	7	C	
69	066	16W	01	03	243	BJ	20	38.25	00	3	01	00000	00000	4	5	5	5	7	C	
69	066	16W	01	04	243	BJ	20	18.00	00	3	01	00000	00000	4	5	5	5	7	C	
69	066	16W	01	SW	243	CJ	20	40.00	00	3	01	00000	00000	4	5	5	5	7	C	
69	066	16W	01	SE	243	CJ	20	40.00	00	3	01	00000	00000	4	5	5	5	7	C	
69	066	16W	01	NW	243	CJ	20	40.00	00	4	01	00000	00000	4	5	6	5	0	C	
69	066	16W	01	SW	243	CJ	20	40.00	00	4	01	00000	00000	4	5	6	5	0	C	
69	066	16W	03	01	243	BJ	20	54.20	00	3	01	00000	00000	4	5	5	5	7	C	
69	066	16W	11	NE	243	CJ	20	40.00	00	3	01	00000	00000	4	5	5	5	0	C	
69	066	16W	11	01	243	BJ	20	38.00	00	3	01	00000	00000	4	5	5	5	7	C	
69	066	16W	11	SW	243	CJ	20	40.00	00	3	01	00000	00000	4	5	5	5	0	C	
69	066	16W	11	SE	243	CJ	20	40.00	00	3	01	00000	00000	4	5	5	5	0	C	
69	066	16W	13	SE	243	CA	21	40.00	00	4	00	00000	00000	1	6	6	5	8	C	
69	066	16W	24	NE	243	CA	21	40.00	00	5	00	00000	00000	1	6	6	5	9	C	
69	067	13W	04	01	243	BA	21	21.00	00	3	00	00000	00000	1	5	5	5	1	C	
69	067	13W	04	03	243	BA	21	22.25	00	3	00	00000	00000	1	5	5	5	1	C	
69	067	13W	04	02	243	BA	21	33.50	00	3	00	00000	00000	1	5	5	5	1	C	
69	067	13W	04	04	243	BA	21	26.25	00	3	00	00000	00000	1	5	5	5	1	C	
69	067	13W	04	NW	243	BA	21	40.00	00	3	00	00000	00000	1	5	5	5	1	C	
69	067	13W	04	05	243	BA	21	33.50	00	3	00	00000	00000	1	5	5	5	1	C	
69	067	13W	05	02	243	BA	21	18.00	00	3	00	00000	00000	1	5	5	5	1	C	
69	067	13W	05	01	243	BA	21	34.25	00	3	00	00000	00000	1	5	5	5	1	C	
69	067	13W	05	04	243	BA	21	22.75	00	3	00	00000	00000	1	5	5	5	1	C	
69	067	13W	05	03	243	BA	21	28.75	00	3	00	00000	00000	1	5	5	5	1	C	
69	067	13W	05	NE	243	BA	21	40.00	00	3	00	00000	00000	1	5	5	5	1	C	
69	067	13W	05	NW	243	BA	21	40.00	00	3	00	00000	00000	1	5	5	5	1	C	
69	067	13W	05	05	243	BA	21	31.75	00	3	00	00000	00000	1	5	5	5	1	C	
69	067	13W	05	SE	243	BA	21	40.00	00	3	00	00000	00000	1	5	5	5	1	C	
69	067	13W	05	NE	243	BA	21	40.00	00	3	00	00000	00000	1	5	5	5	1	C	
69	067	13W	05	NW	243	BA	21	40.00	00	3	00	00000	00000	1	5	5	5	1	C	
69	067	13W	05	SW	243	BA	21	40.00	00	3	00	00000	00000	1	5	5	5	1	C	
69	067	13W	05	SE	243	BA	21	40.00	00	3	00	00000	00000	1	5	5	5	1	C	
69	067	13W	06	11	243	BA	21	26.75	00	3	00	00000	00000	1	5	5	5	1	C	
69	067	13W	06	12	243	BA	21	48.00	00	3	00	00000	00000	1	5	5	5	1	C	
69	067	13W	06	NW	243	BA	21	40.00	00	3	00	00000	00000	1	5	5	5	1	C	
69	067	13W	06	13	243	BA	21	42.75	00	3	00	00000	00000	1	5	5	5	1	C	
69	067	13W	16	01	243	AA	21	16.25	00	3	00	00000	00000	1	5	5	5	2	C	
69	067	13W	16	02	243	AA	21	12.75	00	3	00	00000	00000	1	5	5	5	1	C	
69	067	13W	28	03	243	BA	21	12.00	00	3	00	00000	00000	1	5	5	5	1	C	
69	067	13W	28	04	243	BA	21	1.75	00	3	00	00000	00000	1	5	5	5	1	C	
69	067	13W	28	05	243	BA	21	13.75	00	3	00	00000	00000	1	5	5	5	1	C	
69	067	13W	29	01	243	BA	21	9.25	00	3	00	00000	00000	1	5	5	5	1	C	
69	067	13W	29	04	243	BA	21	51.25	00	3	00	00000	00000	1	5	5	5	2	C	

CO	TWP	RGE	SE	QSEC	RAD	ST	AD	ACRES	CF	N	SF	PARK	FWMAC	M	1	2	D	W	L	COMMENT
69	067	13W	29	02	243	BA	21	1.00	00	3	00	00000	00000	1	5	5	5	1	C	
69	067	13W	29	05	243	BA	21	53.75	00	3	00	00000	00000	1	5	5	5	2	C	
69	067	13W	32	SWSW	243	BA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
69	067	13W	32	SESW	243	BA	21	40.00	00	3	00	00000	00000	1	5	5	5	3	C	
69	067	13W	32	04	243	BA	21	40.25	00	3	00	00000	00000	1	5	5	5	2	C	
69	067	13W	33	03	243	BA	21	19.75	00	3	00	00000	00000	1	5	5	5	2	C	
69	067	13W	33	05	243	BA	21	32.00	00	3	00	00000	00000	1	5	5	5	2	C	
69	067	13W	33	11	243	BA	21	31.50	00	3	00	00000	00000	1	5	5	5	2	C	
69	067	13W	34	03	243	BA	21	16.25	00	3	00	00000	00000	1	5	5	5	2	C	
69	067	13W	34	02	243	BA	21	2.87	00	3	00	00000	00000	1	5	5	5	2	C	
69	067	13W	34	07	243	BA	21	22.50	00	3	00	00000	00000	1	5	5	5	2	C	
69	067	13W	34	04	243	BA	21	45.25	00	3	00	00000	00000	1	5	5	5	2	C	
69	067	13W	35	01	243	BA	21	31.50	00	3	00	00000	00000	1	5	5	5	2	C	
69	067	13W	35	02	243	BA	21	43.75	00	3	00	00000	00000	1	5	5	5	2	C	
69	067	13W	35	04	243	BA	21	33.00	00	3	00	00000	00000	1	5	5	5	2	C	
69	067	13W	35	03	243	BA	21	51.25	00	3	00	00000	00000	1	5	5	5	2	C	
69	067	13W	35	05	243	BA	21	47.25	00	3	00	00000	00000	1	5	5	5	2	C	
69	067	13W	35	06	243	BA	21	30.00	00	3	00	00000	00000	1	5	5	5	2	C	
69	067	14W	01	04	243	BA	21	37.37	00	3	00	00000	00000	1	5	5	5	1	C	
69	067	14W	01	SWNW	243	BA	21	40.00	00	3	00	00000	00000	1	5	5	5	1	C	
69	067	14W	01	SWSW	243	BA	21	40.00	00	3	00	00000	00000	1	5	5	5	1	C	
69	067	14W	02	01	243	BA	21	37.18	00	3	00	00000	00000	1	5	5	5	2	C	
69	067	14W	02	02	243	BA	21	19.00	00	3	00	00000	00000	1	5	5	5	2	C	
69	067	14W	02	03	243	BA	21	34.00	00	3	00	00000	00000	1	5	5	5	2	C	
69	067	14W	02	04	243	BA	21	24.50	00	3	00	00000	00000	1	5	5	5	2	C	
69	067	14W	02	05	243	BA	21	5.75	00	3	00	00000	00000	1	5	5	5	2	C	
69	067	14W	07	04	243	CA	21	43.16	00	3	00	00000	00000	1	5	5	5	0	C	
69	067	14W	10	SWSE	243	CA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
69	067	14W	16	NENE	243	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
69	067	14W	16	NWNE	243	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	3	C	
69	067	14W	16	SWNE	243	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	2	C	
69	067	14W	16	01	243	AA	21	39.25	00	3	00	00000	00000	1	5	5	5	2	C	
69	067	14W	16	NENW	243	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	3	C	
69	067	14W	16	NWNW	243	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	3	C	
69	067	14W	16	SWNW	243	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	3	C	
69	067	14W	16	SENW	243	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	3	C	
69	067	14W	16	NESW	243	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	3	C	
69	067	14W	16	NWSW	243	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	3	C	
69	067	14W	16	SWSW	243	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
69	067	14W	16	SESW	243	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
69	067	14W	16	02	243	AA	21	30.00	00	3	00	00000	00000	1	5	5	5	2	C	
69	067	14W	16	SWSE	243	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
69	067	14W	16	03	243	AA	21	50.00	00	3	00	00000	00000	1	5	5	5	2	C	
69	067	14W	17	SWNE	243	BA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
69	067	14W	17	08	243	BA	21	53.25	00	3	00	00000	00000	1	5	5	5	2	C	
69	067	14W	20	SESW	243	CA	21	40.00	00	3	00	00000	00000	1	5	5	5	3	C	
69	067	14W	24	NENE	243	BA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
69	067	14W	24	01	243	BA	21	28.50	00	3	00	00000	00000	1	5	5	5	2	C	
69	067	14W	24	02	243	BA	21	51.75	00	3	00	00000	00000	1	5	5	5	2	C	
69	067	14W	24	SENE	243	BA	21	40.00	00	3	00	00000	00000	1	5	5	5	2	C	
69	067	14W	24	03	243	BA	21	53.00	00	3	00	00000	00000	1	5	5	5	2	C	
69	067	14W	27	NWNW	243	CA	21	40.00	00	3	00	00000	00000	1	5	5	5	5	C	

CO	TWP	RGE	SE	QSEC	RAD	ST	AD	ACRES	CF	N	SF	PARK	FWMAC	M	1	2	D	W	L	COMMENT
69	067	14W	29	NENW	243	CA	21	40.00	00	3	00	00000	00000	1	5	5	5	3	C	
69	067	14W	34	SWSW	243	CA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
69	067	14W	34	SESW	243	CA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
69	067	14W	36	NENE	243	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
69	067	14W	36	NWNE	243	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	3	C	
69	067	14W	36	SWNE	243	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	3	C	
69	067	14W	36	SENE	243	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
69	067	14W	36	NENW	243	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
69	067	14W	36	NWNW	243	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	9	C	
69	067	14W	36	SWNW	243	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	9	C	
69	067	14W	36	SENW	243	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
69	067	14W	36	NESW	243	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	9	C	
69	067	14W	36	NWSW	243	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	9	C	
69	067	14W	36	SWSW	243	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
69	067	14W	36	SESW	243	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
69	067	14W	36	NESE	243	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
69	067	14W	36	NWSE	243	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	3	C	
69	067	14W	36	SWSE	243	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	3	C	
69	067	14W	36	SESE	243	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	3	C	
69	067	15W	04	01	243	BA	21	42.67	00	3	00	00000	00000	1	5	5	5	0	C	
69	067	15W	04	02	243	BA	21	42.42	00	3	00	00000	00000	1	5	5	5	3	C	
69	067	15W	04	03	243	BA	21	42.27	00	3	00	00000	00000	1	5	5	5	3	C	
69	067	15W	14	02	243	BA	21	37.75	00	3	00	00000	00000	1	5	5	5	2	C	
69	067	15W	14	SWNE	243	BA	21	40.00	00	3	00	00000	00000	1	5	5	5	3	C	
69	067	15W	14	SENE	243	BA	21	40.00	00	3	00	00000	00000	1	5	5	5	9	C	
69	067	15W	14	NESE	243	BA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
69	067	15W	14	NWSE	243	BA	21	40.00	00	3	00	00000	00000	1	5	5	5	5	C	
69	067	15W	15	NENE	243	BA	21	40.00	00	3	00	00000	00000	1	5	5	5	5	C	
69	067	15W	15	02	243	BA	21	41.00	00	3	00	00000	00000	1	5	5	5	2	C	
69	067	15W	15	SENE	243	BA	21	40.00	00	3	00	00000	00000	1	5	5	5	9	C	
69	067	15W	15	NESE	243	BA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
69	067	15W	15	03	243	BA	21	25.25	00	3	00	00000	00000	1	5	5	5	2	C	
69	067	15W	15	SESE	243	BA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
69	067	15W	16	NENE	243	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	9	C	
69	067	15W	16	NWNE	243	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
69	067	15W	16	SWNE	243	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
69	067	15W	16	SENE	243	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
69	067	15W	16	NENW	243	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
69	067	15W	16	01	243	AA	21	37.50	00	3	00	00000	00000	1	5	5	5	2	C	
69	067	15W	16	02	243	AA	21	29.50	00	3	00	00000	00000	1	5	5	5	2	C	
69	067	15W	16	SENW	243	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
69	067	15W	16	NESW	243	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
69	067	15W	16	NWSW	243	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
69	067	15W	16	SWSW	243	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	3	C	
69	067	15W	16	SESW	243	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
69	067	15W	16	NESE	243	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
69	067	15W	16	NWSE	243	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	9	C	
69	067	15W	16	SWSE	243	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	9	C	
69	067	15W	16	03	243	AA	21	39.00	00	3	00	00000	00000	1	5	5	5	2	C	
69	067	15W	20	01	243	CJ	20	26.75	00	3	01	00000	00000	4	5	5	5	2	C	Q (Beatty Portage)
69	067	15W	20	02	243	BJ	20	14.00	00	3	01	00000	00000	4	5	5	5	2	C	Q (Beatty Portage)
69	067	15W	20	03	243	BJ	20	42.25	00	3	01	00000	00000	4	5	5	5	2	C	

CO	TWP	RGE	SE	QSEC	RAD	ST	AD	ACRES	CF	N	SF	PARK	FWMAC	M	1	2	D	W	L	COMMENT
69	067	15W	20	04	243	CJ	20	31.25	00	3	01	00000	00000	4	5	5	5	2	C	
69	067	15W	20	SESE	243	CJ	20	40.00	00	3	01	00000	00000	4	5	5	5	0	C	
69	067	15W	22	NENE	243	BA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
69	067	15W	22	01	243	BA	21	39.25	00	3	00	00000	00000	1	5	5	5	2	C	
69	067	15W	22	SWNE	243	BA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
69	067	15W	22	SENE	243	BA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
69	067	15W	22	02	243	BA	21	39.25	00	3	00	00000	00000	1	5	5	5	7	C	
69	067	15W	22	03	243	BA	21	35.75	00	3	00	00000	00000	1	5	5	5	2	C	
69	067	15W	22	05	243	BA	21	54.75	00	3	00	00000	00000	1	5	5	5	2	C	
69	067	15W	22	SESW	243	BA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
69	067	15W	28	02	243	CA	20	36.75	00	3	01	00000	00000	1	5	5	5	2	C	
69	067	15W	28	03	243	CA	20	22.50	00	3	01	00000	00000	1	5	5	5	2	C	
69	067	15W	29	01	243	CA	20	27.00	00	3	01	00000	00000	1	5	5	5	2	C	
69	067	15W	31	03	243	BA	20	32.00	00	3	01	00000	00000	1	5	5	5	2	C	
69	067	15W	31	02	243	BA	20	26.00	00	3	01	00000	00000	1	5	5	5	2	C	
69	067	15W	35	NWSW	243	CA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
69	067	15W	35	SWSW	243	CA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
69	067	15W	36	01	243	AA	21	30.00	00	3	00	00000	00000	1	5	5	5	2	C	
69	067	15W	36	NWNE	243	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	3	C	
69	067	15W	36	SWNE	243	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	3	C	
69	067	15W	36	SENE	243	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
69	067	15W	36	NENW	243	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	3	C	
69	067	15W	36	NWNW	243	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
69	067	15W	36	SWNW	243	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
69	067	15W	36	SENW	243	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	3	C	
69	067	15W	36	NESW	243	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
69	067	15W	36	NWSW	243	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
69	067	15W	36	SWSW	243	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
69	067	15W	36	SESW	243	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
69	067	15W	36	02	243	AA	21	49.00	00	3	00	00000	00000	1	5	5	5	2	C	
69	067	15W	36	NWSE	243	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
69	067	15W	36	03	243	AA	21	25.25	00	3	00	00000	00000	1	5	5	5	2	C	
69	067	15W	36	04	243	AA	21	15.00	00	3	00	00000	00000	1	5	5	5	2	C	
69	067	16W	16	01	243	AA	21	18.25	00	5	00	00000	00000	1	5	5	5	2	C	
69	067	16W	20	01	243	BJ	20	39.25	00	5	01	00000	00000	1	5	5	5	2	C	
69	067	16W	20	02	243	BJ	20	22.75	00	5	01	00000	00000	4	5	5	5	2	C	
69	067	16W	21	01	243	BJ	20	35.00	00	5	01	00000	00000	4	5	5	5	2	C	
69	067	16W	21	02	243	BJ	20	47.75	00	5	01	00000	00000	4	5	5	5	2	C	
69	067	16W	21	SWSW	243	CJ	20	40.00	00	5	01	00000	00000	4	5	6	5	5	C	
69	067	16W	28	03	243	BJ	20	19.75	00	5	01	00000	00000	4	5	5	5	2	C	
69	067	16W	28	01	243	BJ	20	35.00	00	5	01	00000	00000	4	5	5	5	2	C	
69	067	16W	28	SENW	243	CJ	20	40.00	00	5	01	00000	00000	4	5	5	5	0	C	
69	067	16W	28	NESW	243	CJ	20	40.00	00	5	01	00000	00000	4	5	5	5	0	C	
69	067	16W	28	NWSW	243	CJ	20	40.00	00	5	01	00000	00000	4	5	5	5	0	C	
69	067	16W	34	02	243	BJ	20	43.00	00	5	01	00000	00000	4	5	5	5	7	C	
69	067	16W	34	03	243	BJ	20	53.75	00	5	01	00000	00000	4	5	5	5	7	C	
69	067	16W	34	04	243	BJ	20	29.75	00	5	01	00000	00000	4	5	5	5	7	C	
69	068	14W	36	01	243	AA	21	39.25	00	3	00	00000	00000	1	5	5	5	1	C	
69	068	14W	36	02	243	AA	21	19.00	00	3	00	00000	00000	1	5	5	5	1	C	
69	068	14W	36	SENE	243	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	1	C	
69	068	14W	36	07	243	AA	21	5.25	00	3	00	00000	00000	1	5	5	5	1	C	
69	068	14W	36	05	243	AA	21	25.50	00	3	00	00000	00000	1	5	5	5	1	C	

CO	TWP	RGE	SE	QSEC	RAD	ST	AD	ACRES	CF	N	SF	PARK	FWMAC	M	1	2	D	W	L	COMMENT
69	068	14W	36	06	243	AA	21	54.50	00	3	00	00000	00000	1	5	5	5	1	C	
69	068	14W	36	SESW	243	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	1	C	
69	068	14W	36	NESE	243	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	1	C	
69	068	14W	36	03	243	AA	21	26.50	00	3	00	00000	00000	1	5	5	5	1	C	
69	068	14W	36	04	243	AA	21	38.25	00	3	00	00000	00000	1	5	5	5	1	C	
69	068	14W	36	SESE	243	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	1	C	
69	068	15W	33	12	243	BA	21	24.50	00	3	00	00000	00000	1	5	5	5	2	C	
69	068	15W	33	13	243	BA	21	17.00	00	3	00	00000	00000	1	5	5	5	2	C	
69	068	15W	33	14	243	BA	21	5.75	00	3	00	00000	00000	1	5	5	5	2	C	
69	068	15W	36	01	243	AA	21	27.50	00	3	00	00000	00000	1	5	5	5	2	C	
69	068	15W	36	02	243	AA	21	17.25	00	3	00	00000	00000	1	5	5	5	2	C	
69	068	15W	36	08	243	AA	21	39.50	00	3	00	00000	00000	1	5	5	5	2	C	
69	068	15W	36	SENE	243	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	5	C	
69	068	15W	36	03	243	AA	21	22.75	00	3	00	00000	00000	1	5	5	5	2	C	
69	068	15W	36	05	243	AA	21	3.00	00	3	00	00000	00000	1	5	5	5	1	C	
69	068	15W	36	04	243	AA	21	6.25	00	3	00	00000	00000	1	5	5	5	1	C	
69	068	15W	36	06	243	AA	21	12.00	00	3	00	00000	00000	1	5	5	5	2	C	
69	068	15W	36	07	243	AA	21	22.25	00	3	00	00000	00000	1	5	5	5	2	C	
69	068	15W	36	10	243	AA	21	38.50	00	3	00	00000	00000	1	5	5	5	2	C	
69	068	15W	36	NWSW	243	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
69	068	15W	36	SWSW	243	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	0	C	
69	068	15W	36	11	243	AA	21	34.50	00	3	00	00000	00000	1	5	5	5	2	C	
69	068	15W	36	NESE	243	AA	21	40.00	00	3	00	00000	00000	1	5	5	5	5	C	
69	068	15W	36	09	243	AA	21	37.00	00	3	00	00000	00000	1	5	5	5	2	C	
69	068	15W	36	12	243	AA	21	14.50	00	3	00	00000	00000	1	5	5	5	2	C	
69	068	15W	36	13	243	AA	21	39.50	00	3	00	00000	00000	1	5	5	5	2	C	

TOTAL

ACRES 56,030.17
 1569 of the 2085 records

LANDS TO BE RETAINED IN STATE FOREST STATUS

All state administered lands within the Boundary Waters Canoe Area Wilderness should be exchanged for lands outside of the wilderness area, except for lands also within the boundary of the Burntside State Forest. These lands will be retained by the state under Division of Forestry administration.

There are 19,000 acres of state owned land within the boundaries of Burntside State Forest which should be retained in state ownership and in state forest status.

LANDS FOR TRANSFER OF TRUST STATUS

CO	TWP	RGE	SE	QSEC	RAD	ST	AD	ACRES	CF	N	SF	PARK	FWMAC	M	1	2	D	W	L	COMMENT
69	063	13W	05	SENE	245	BA	20	40.00	00	4	11	00000	00000	1	6	6	1	0	F	0
69	063	14W	14	04	245	BA	20	9.75	00	4	11	00000	00000	1	5	5	1	2	F	0

CO	TWP	RGE	SE	QSEC	RAD	ST	AD	ACRES	CF	N	SF	PARK	FWMAC	M	1	2	D	W	L	COMMENT
69	063	14W	15	02	245	BA	20	11.10	00	4	11	00000	00000	1	5	6	1	2	F	O
69	063	14W	15	03	245	BA	20	10.70	00	4	11	00000	00000	1	5	6	1	2	F	O
69	063	14W	15	05	245	BA	20	14.25	00	4	11	00000	00000	1	5	6	1	2	F	O
69	063	14W	15	06	245	BA	20	3.25	00	4	11	00000	00000	1	5	6	1	2	F	O
69	063	14W	16	NENE	245	AA	20	40.00	00	4	11	00000	00000	1	6	6	1	0	F	O
69	063	14W	16	NWNE	245	AA	20	40.00	00	4	11	00000	00000	1	6	6	1	0	F	O
69	063	14W	16	SWNE	245	AA	20	40.00	00	4	11	00000	00000	1	6	6	1	0	F	O
69	063	14W	16	SENE	245	AA	20	40.00	00	4	11	00000	00000	1	6	6	1	0	F	O
69	063	14W	16	NENW	245	AA	20	40.00	00	4	11	00000	00000	1	6	6	1	0	F	O
69	063	14W	16	NWNW	245	AA	20	40.00	00	4	11	00000	00000	1	6	6	1	0	F	O
69	063	14W	16	SWNW	245	AA	20	40.00	00	4	11	00000	00000	1	6	6	1	0	F	O
69	063	14W	16	SENW	245	AA	20	40.00	00	4	11	00000	00000	1	6	6	1	0	F	O
69	063	14W	16	NESW	245	AA	20	40.00	00	4	11	00000	00000	1	6	6	1	0	F	O
69	063	14W	16	NWSW	245	AA	20	40.00	00	4	11	00000	00000	1	6	6	1	0	F	O
69	063	14W	16	SWSW	245	AA	20	40.00	00	4	11	00000	00000	1	6	6	1	0	F	O
69	063	14W	16	SESW	245	AA	20	40.00	00	4	11	00000	00000	1	6	6	1	0	F	O
69	063	14W	16	NESE	245	AA	20	40.00	00	4	11	00000	00000	1	6	6	1	0	F	O
69	063	14W	16	NWSE	245	AA	20	40.00	00	4	11	00000	00000	1	6	6	1	0	F	O
69	063	14W	16	SWSE	245	AA	20	40.00	00	4	11	00000	00000	1	6	6	1	0	F	O
69	063	14W	16	SESE	245	AA	20	40.00	00	4	11	00000	00000	1	6	6	1	0	F	O
69	063	14W	18	03	245	CA	20	39.63	00	4	11	00000	00000	1	6	6	1	0	F	O
69	063	14W	23	04	245	BA	20	6.90	00	4	11	00000	00000	1	5	5	1	2	F	O
69	063	14W	23	02	245	BA	20	40.25	00	4	11	00000	00000	1	5	6	1	2	F	O
69	063	14W	23	08	245	BA	20	30.85	00	4	11	00000	00000	1	5	6	1	2	F	O
69	064	13W	05	02	M45	CA	20	39.00	00	4	11	00000	00000	1	5	6	1	2	F	O
69	064	13W	05	03	245	CA	20	47.33	00	4	11	00000	00000	1	5	5	1	2	F	O
69	064	13W	05	04	245	CA	20	56.13	00	4	11	00000	00000	1	5	5	1	8	F	O
69	064	13W	05	SESW	245	CA	20	40.00	00	4	11	00000	00000	1	5	5	1	8	F	O
69	064	13W	06	05	245	CA	20	28.85	00	4	11	00000	00000	1	6	6	1	0	F	O
69	064	13W	06	06	245	CA	20	28.37	00	4	11	00000	00000	1	6	6	1	0	F	O
69	064	13W	07	02	245	CA	20	27.05	00	4	11	00000	00000	1	6	6	1	0	F	O
69	064	13W	08	NENW	245	CA	20	40.00	00	4	11	00000	00000	1	5	6	1	8	F	O
69	064	13W	16	NENE	245	AA	20	40.00	00	4	11	00000	00000	1	6	6	1	0	F	O
69	064	13W	16	NWNE	245	AA	20	40.00	00	4	11	00000	00000	1	6	6	1	0	F	O
69	064	13W	16	SWNE	245	AA	20	40.00	00	4	11	00000	00000	1	6	6	1	9	F	O
69	064	13W	16	SENE	245	AA	20	40.00	00	4	11	00000	00000	1	6	6	1	9	F	O
69	064	13W	16	NENW	245	AA	20	40.00	00	4	11	00000	00000	1	6	6	1	9	F	O
69	064	13W	16	NWNW	245	AA	20	40.00	00	4	11	00000	00000	1	6	6	1	0	F	O
69	064	13W	16	SWNW	245	AA	20	40.00	00	4	11	00000	00000	1	6	6	1	0	F	O
69	064	13W	16	SENW	245	AA	20	40.00	00	4	11	00000	00000	1	6	6	1	0	F	O
69	064	13W	16	NESW	245	AA	20	40.00	00	4	11	00000	00000	1	6	6	1	0	F	O
69	064	13W	16	NWSW	245	AA	20	40.00	00	4	11	00000	00000	1	6	6	1	0	F	O
69	064	13W	16	SWSW	245	AA	20	40.00	00	4	11	00000	00000	1	6	6	1	0	F	O
69	064	13W	16	SESW	245	AA	20	40.00	00	4	11	00000	00000	1	6	6	1	0	F	O
69	064	13W	16	NESE	245	AA	20	40.00	00	4	11	00000	00000	1	6	6	1	0	F	O
69	064	13W	16	NWSE	245	AA	20	40.00	00	4	11	00000	00000	1	6	6	1	0	F	O
69	064	13W	16	SWSE	245	AA	20	40.00	00	4	11	00000	00000	1	6	6	1	0	F	O
69	064	13W	16	01	245	AA	20	30.25	00	4	11	00000	00000	1	6	5	1	2	F	O

TOTAL

ACRES 1,783.66
50 of the 2085 records



ORR AREA FOREST RESOURCE MANAGEMENT PLAN

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INTRODUCTION

For administrative purposes the Orr Area is divided into four geographic districts. There are four administrative office locations. The Area office and District office for the Orr District are located at Orr. The remaining field stations are located at Tower, Cook, and on U.S. Highway 53 just south of Lake Kabetogama (Kabetogama District). Each of the four administrative sites has a number of buildings. The Area also maintains fire towers and miscellaneous buildings at various locations. This appendix includes a description of each building and proposed repairs or improvements. The Regional Field Services Supervisor estimated the current cost of the proposals. Proposed improvements to buildings located at state forest recreation areas are included in Appendix A.

ORR AREA / DISTRICT HEADQUARTERS

OFFICE BUILDING

The Orr Area office is a 28' by 40' wood frame structure containing five offices, a lobby reception area, two bathrooms, two closets, and a full basement. The office houses the Area Forester, Area Staff Forester, Siviculturist, PFM Specialist, Area Repairman, Area Office Assistant, District Forester, Assistant District Forester, and two Technicians. Space is inadequate for existing staff and much repair work is needed on this building. Parking space for visitors is limited.

Repair and Improvement Needs

The office requires major remodeling and expansion including new wiring, replacement of all doors and windows, a handicapped accessible entrance, basement waterproofing and renovation. Expansion needs include creation of more space for files and office machines, a public reception area, a map and work room, and three more individual offices to house area staff. Additional parking space should be provided. Estimated cost is \$110,000.

RESIDENCE

The residence is a 24' by 46' wood frame structure.

Repair and Improvement Needs

The basement should be repaired and refinished because of dampness which causes a musty smell in the house. The door sills require replacement because they are rotting. Estimated cost is \$10,000.

REPAIR SHOP

The repair shop is a 26' by 40' wood frame structure. It is heated to allow equipment repair during cold weather. Space for the repair of large equipment in this building is inadequate.

Repair or Improvement Needs

New siding and roofing are needed due to age and deterioration and insulation is needed to make the building more energy efficient. The building should be expanded on the south end to provide adequate work space. A hydraulic lift should be installed for the servicing of area vehicles. Estimated cost is \$40,000.

WAREHOUSE FOR CRANE LAKE DISTRICT

The warehouse for the former Crane Lake District is located at the Orr Area office site. It is 24' by 36' and contains one stall.

Repair and Improvement Needs

New siding and roofing are needed because of age related deterioration. The building should be wired to provide electricity for lighting and power tool operation. Estimated cost is \$4,000.

ORR WAREHOUSE

The Orr warehouse is a 30' by 60' wood frame structure containing five unheated stalls.

Repair and Improvement Needs

No repairs are needed.

SEED HOUSE

The seed house is a 10' by 12' wood frame structure which is used for seed storage.

Repair and Improvement Needs

New roofing and siding are needed because of age caused deterioration. Estimated cost is \$1,000.

TREE BUNKER

The tree bunker is an underground storage building used to keep seedlings cool before planting.

Repair and Improvement Needs

The bunker should be wired for lighting and a new wider door that opens outward is needed for easier access. The south exposure should be insulated to keep the building cooler. Estimated cost is \$1,500.

OIL HOUSE

The oil house is a 10' by 12' wood frame structure used for the safe storage of oil and paint. The adjacent above ground gas tank should be buried because it is a safety hazard.

Repair and Improvement Needs

New siding and roofing needed because of age caused deterioration. An underground gas tank should be installed. Estimated cost is \$1,500.

RESIDENCE GARAGE

The residence garage is a 12' by 22' wood frame structure.

Repair or Improvement Needs

The garage needs new roofing and wiring. Estimated cost is \$5,000.

NEW WAREHOUSE

An additional large warehouse with at least six stalls is needed to store area equipment. Estimated cost is \$50,000.

COOK FIELD STATION

OFFICE

The Cook office is an 18' x 26' structure with a full basement. The building houses the offices of the District Forester, and two Technicians. The office has three rooms. The main room, which is the largest, is used as the primary office space for the district personnel. The other rooms are used for storage and additional working space. The

basement contains the bathroom, furnace, base radio, and additional storage facilities.

Repair or Improvement Needs

The building is in need of residing. The existing siding is starting to show dry rot and paint refuses to stick to the old banana oil base paint. The building has been painted twice and touched up once since 1979. Shingles on the roof have never been replaced and the roof is overdue for new shingles. The entire structure is in need of electrical rewiring because it does not meet state code and electrical outlets are too few and poorly spaced. All interior rooms are in need of paint and should be repainted on a five year schedule. Windows should be replaced with more energy efficient windows because of excessive heat loss. The toilet is deteriorating and will be in need of replacement in the near future. Estimated cost is \$13,000.

WAREHOUSE

The warehouse is a 26'x 54' structure. There are four stalls, the west stall is insulated and heated by an oil furnace. The work bench and shop tools are located in the insulated stall. The remaining stalls are use to store district vehicles and equipment.

Repair or Improvement Needs

The warehouse is in need of residing for the same reasons as the office structure. The roof is also in need of shingles as it has been patched on numerous occasions. A winch is need for loading and unloading slip on units. These heavy units are presently being handled by hand. Windows are rotting and need to be replaced. The concrete apron in front of the building is cracked and requires repair or replacement. Estimated cost is \$9,000.

OIL HOUSE

Current storage for flammable materials is inadequate for safety and to meet OSHA standards. There are existing space limitations which make the construction of a structure for this purpose impossible on the current grounds.

Repair and Improvement Needs

A vacant lot behind the warehouse should be purchased or land across the road leased for construction of the storage shed as well as for additional parking area. Estimated cost is \$1,500.

PARKING AREA

The parking area at this administrative site is too small to accommodate area equipment and the staff's personal vehicles. Expansion room is necessary.

Repair and Improvement Needs

A vacant lot behind the warehouse should be leased or purchased or land across the road leased or purchased to increase parking space and allow construction of a storage shed for flammable materials. Estimated cost is \$5,000.

KABETOGAMA FIELD STATION

KABETOGAMA OFFICE - WAREHOUSE

The combination office - warehouse for the Kabetogama District is a 36' by 68' structure. The office portion of the structure contains three rooms; two offices and a bathroom. Office dimensions are 15' by 36'. The office contains adequate space for the present staff complement of the District Forester and three Technicians. The dimensions of the warehouse are 52' by 36'. It contains one insulated and heated stall.

Repair and Improvement Needs

The office - warehouse is in good condition with only scheduled maintenance necessary.

RESIDENCE

The residence for the Kabetogama District is a 28' by 40' structure. It contains a living room, kitchen, dining room, bathroom, three bedrooms, and a full basement.

Repair and Improvement Needs

The residence is fair condition but a number of minor problems exist. Poor insulation or vapor barriers in the walls have caused the sheet rock to deteriorate around windows and at outside wall corners. Insulation and vapor barriers should be added to correct this situation and the sheet rock should be replaced. Estimated cost is \$8,000.

RESIDENCE GARAGE

The garage is a 16' by 24' structure.

Repair and Improvement Needs

Squirrels have made holes in the Insulite siding of the garage and these panels need replacing. Electrical work is needed because outlets do not work. Estimated cost is \$300.

BUNKHOUSE

The bunkhouse is a 14' by 18' structure. In the past it has been used as temporary housing for new employees and persons visiting the district. The bunkhouse at Kabetogama has been especially useful because of the remote location of the district.

Repair and Improvement Needs

The condition of this building is fair for its present use. If increased use is anticipated however, the building requires a new chimney, insulation, new windows and work on the interior walls. Another possible use for this building would be to move it to the Wooden Frog Campground to house a full time caretaker.

OIL HOUSE

Oil and gas storage facilities at this field station are inadequate for safety reasons and to meet OSHA standards.

Repair and Improvement Needs

Construct a oil and gas storage building. Estimated cost is \$1,500.

TOWER FIELD STATION

OFFICE

The Tower office is a one story wooden structure with a full basement and an attic. Dimensions of the office are 24' by 32'. The office contains four rooms which house the District Forester, Assistant District Forester, and two technicians. Space is adequate for the existing complement.

Repair or Improvement Needs

Windows and screens in the office need replacement because of dry rot. Combination windows should be installed. There

is 6" of insulation in the attic. Six more inches should be added for energy efficiency. Estimated cost is \$3,500.

WAREHOUSE

The warehouse is a 28' by 82' one story wooden structure. It contains 6 stalls. None of the stalls are insulated or heated.

Repair and Improvement Needs

New siding (sea - foam in color) is necessary for the warehouse. The old siding is constantly blistering paint and parts of the old wooden boards are rotting. Some of the garage doors are warping and rotting requiring replacement. The concrete apron in front of the doors should be replaced as it is settling and buckling. One stall should be insulated and a furnace added so that it can be heated on an as needed basis for cold weather repair work. Estimated cost is \$12,000.

OIL HOUSE

The oil house is a 12' by 14' one story concrete block structure.

Repair or Improvement Needs

None.

PARKING LOT

The parking lot at Tower should be blacktopped because of dust problems and continuing maintenance needs caused by erosion. Estimated cost is \$10,000.

FIRE TOWERS AND BUILDINGS NOT LOCATED AT FIELD STATIONS

CRANE LAKE FIRE TOWER

The Crane Lake Fire Tower is a ladder type tower which is no longer in use

Repair and Improvement Needs

This tower should be removed.

ELEPHANT LAKE FIRE TOWER

The Elephant Lake Fire Tower is an 80' ladder type tower. It is currently being used by the telephone company as a relay station.

Repair and Improvement Needs

The Division of Forestry no longer uses this tower. It and the land on which it sits should be sold.

GHEEN FIRE TOWER

The Gheen Fire Tower is a 100' stairway type tower which is used during periods of fire danger.

Repair and Improvement Needs

No repairs are needed.

JASPER PEAK FIRE TOWER

The Jasper Peak fire tower is manned during periods of high fire danger.

Repair or Improvement Needs

Only normal maintenance is required.

KABETOGAMA FIRE TOWER

This is a steel step type tower.

Repair and Improvement Needs

Only normal maintenance is required.

VERMILION DAM FIRE TOWER

The Vermillion Dam Fire Tower is located in the SW 1/4 NW 1/4 of section 2 T63N - R17W. The 80 foot tower was erected in 1934 by the Civilian Conservation Corp. It was not used from 1976 to 1983. It is currently used as the Orr Area now uses aircraft for backup rather than primary detection.

Repair and Improvement Needs

Steps, floor boards, and windows require replacement regularly and maintenance is ongoing. The road to the tower needs continuing maintenance to insure access.

WAREHOUSE AT CRANE LAKE

The warehouse at the former Crane Lake District Office is a 24' by 40' wood frame structure which is used by forestry and the Division of Enforcement to store equipment. Other buildings at this site are also being used by Enforcement. The former field station site is proposed for use as a public water access site.

Repair and Improvement Needs

This facility is no longer necessary for the needs of the Division of Forestry. The building should be removed if an access is developed.

CRANE LAKE BOATHOUSE

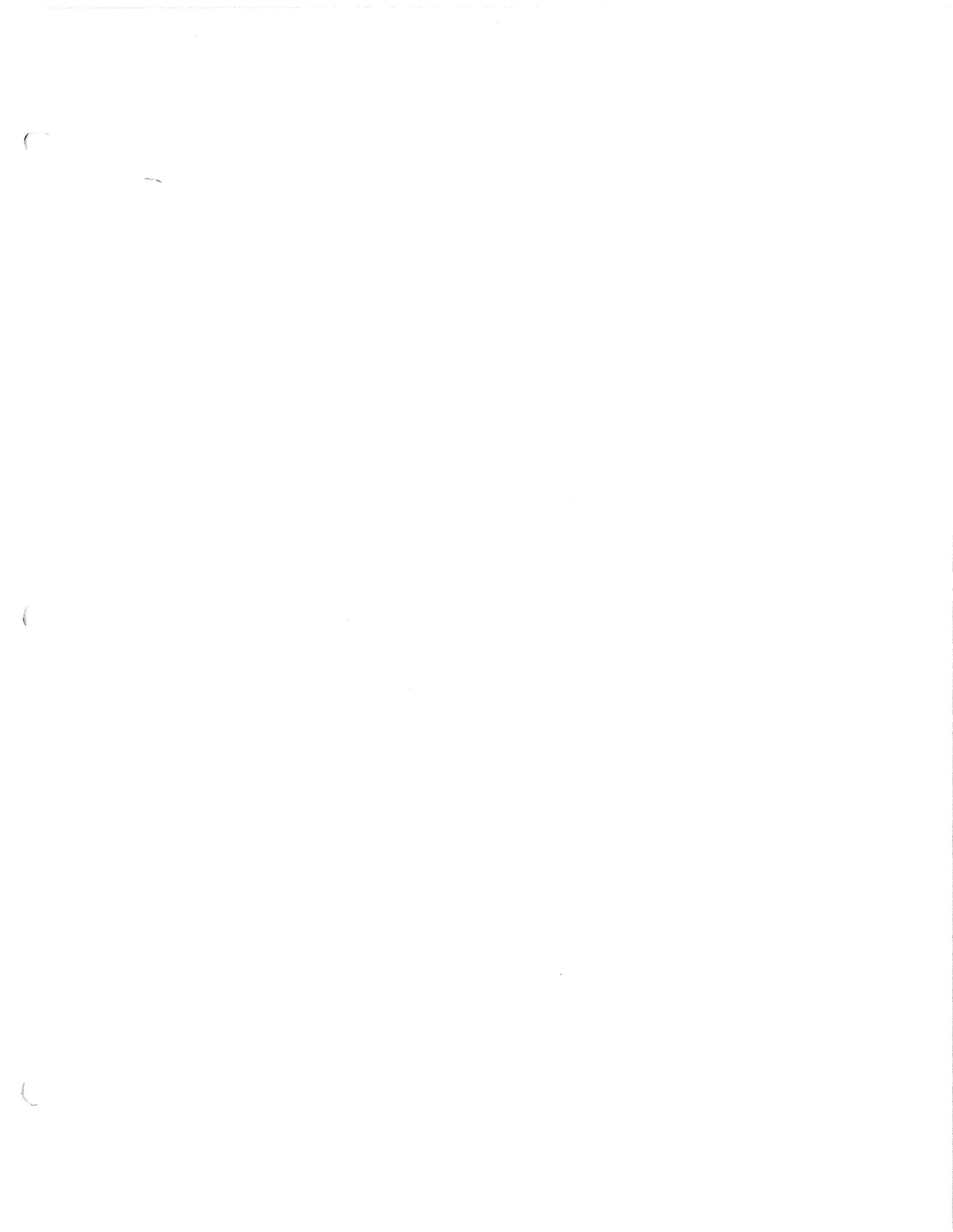
The Division of Forestry stores a boat at this facility for fire fighting purposes.

Repair and Improvement Needs

Facilities for boat storage at this site would have to be relocated if the proposed public access is constructed. Construction of new facilities or rental of a boat house would then be necessary to fulfill Division fire responsibilities.

OLD RANGER STATION ON STATE POINT ON LAKE KABETOGAMA

This station is currently being leased to Voyageurs National Park and will be purchased by the park when appropriate legislation is passed. The state does not have responsibility for the maintenance of this facility.



ORR AREA FOREST RESOURCE MANAGEMENT PLAN

Appendix F. Soil Management Guidelines

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INTRODUCTION

This appendix presents a soils based ecological land classification for the Orr Area. It was prepared by the Regional Forest Soils Specialist and is based on the Ecological Land Classification developed for the Superior National Forest (USDA Forest Service, unpublished). Foresters and others can use the guidelines in this appendix to ensure that proposed management activities are appropriate for a given site and its soils.

ECOLOGICAL LANDTYPES

The basic units in this classification are Ecological Landtypes (ELTs). ELTs are defined in terms of landscape position (upland or lowland), soil texture and depth, and moisture (and acidity for organic soils). The following ELT descriptions include information on the location of the unit in the Orr Area and within the landscape, soils found in the unit, productivity ratings for vegetation and wildlife, equipment operability restrictions, and recommended site preparation and artificial regeneration methods.

UPLAND SHALLOW COARSE LOAMY DRY

Landscape

Upland Shallow Coarse Loamy Dry is found in resource management units 2, 3, 5, 9, and 10. Minor inclusions are found in most other resource management units. It occupies side slopes and crest positions of bedrock controlled hills. Slopes are strongly convex and irregular in shape. Slope gradients range from 6 to 35 percent. Bedrock outcrops occur in less than one percent of the area.

Soil

The soils are formed in 20 to 40 inches of sandy loam and/or gravelly sandy loam over bedrock. Pebbles, cobbles, and boulders occupy 25 to 35 of the soil. The surface may have up to 10 percent cobbles and boulders. A discontinuous dense layer may be present in some areas. It occurs from 10 to 20 inches below the surface and continues to bedrock. The natural fertility is low.

Inclusions of soils with bedrock less than 20 inches or greater than 40 inches occur in this unit.

Soil Moisture

These soils are well drained. Water movement into and through the soil is moderate. Movement in the dense layer is slow. The majority of the water moves laterally

downslope at the interface with the dense layer or bedrock. The amount of water potentially available for plant use is low.

Vegetation

Upland Shallow Coarse Loamy Dry supports plant communities that tolerate low moisture and fertility. Common shrubs include beaked hazel, honeysuckle, and blueberry. Common forbs include sarsaparilla, big leaf aster, bunch berry, Canada mayflower, and some mosses. Grasses are uncommon. The potential community structure and density is shown in Table F.1.

Table F.1 Plant Community and Density on Upland Shallow Coarse Loamy Dry

Timber Type	(Percent of Ground Shaded)		
	Overstory	Shrub	Forb
Mature Hardwoods	40-70	10-40	<10
Immature Hardwoods	>70	<10	10-40
Juvenile Hardwoods	0	>70	<10
Mature Conifers	40-70	10-40	<10
Immature Conifers	>70	0	<10
Juvenile Conifers	0	>70	0

Source: USFS Superior National Forest

Timber

The effective rooting depth is moderately deep. The presence of bedrock 20 to 40 inches below the surface is the limiting factor.

Table F.2 Estimated Potential Productivity for Upland Shallow Coarse Loamy Dry

Species	Site Index
Aspen	55-60
Paper Birch	35-45
R. Pine	45-50
J. Pine	50-55
W. Pine	40-50
Balsam Fir	55-65
W. Spruce	50-60
B. Spruce	30-40

Equipment Operability

The moderate internal drainage and coarse loamy texture make this soil suitable for year around equipment operation. Saturated conditions during spring thaw may delay operations for a short time. Lower slope positions will stay wet longer in the spring and following heavy summer rains. This is due to the lateral movement of water down hill. This soil is susceptible to compaction when moist. The potential for erosion is low.

Site Preparation

Plant competition is low to moderate in managed stands. Shrubs will respond vigorously (>70% of ground shaded) when the overstory is removed. However, mature shrubs commonly are less than 4.5 feet. Suitable site preparation methods include discing, patch scarification, roller chopping, or herbicides. Topsoil and duff should be left in place to maintain site productivity. Hot summer burns will have a long term adverse impact on productivity.

Artificial Regeneration

These soils will dry out and warm up quickly in the spring. Droughty conditions may occur in mid summer, particularly on steep south-facing slopes. Planting on this unit should occur early in the spring to take advantage of soil moisture. Plantations may require one release from competition.

Wildlife

The diversity of shrub and forb species is moderate. The density of shrubs and forbs will be moderate and low respectively under a closed overstory. The understory density will increase as stands reach and surpass maturity.

UPLAND VERY SHALLOW COARSE LOAMY DROUGHTY

Landscape

Upland Very Shallow Coarse Loamy Droughty is found in resource management units 2, 3, 5, 9, and 10. Minor inclusions also occur in most other resource management units except 6. It occupies side slopes and crest positions of bedrock controlled hills. Slopes are strongly convex and irregular in shape. Slope gradients range from 6 to 50 percent. Bedrock outcrops commonly occur at ridge tops and at major slope breaks.

Soil

The soils are formed in 8 to 20 inches of gravelly loamy sand or gravelly sandy loam over bedrock. Pebbles, cobbles, and boulders occupy 10 to 25 of the soil. Less than 5 percent of the surface is occupied by cobbles and boulders. The natural fertility is very low.

Inclusions of soils with bedrock at less than 8 inches or greater than 20 inches below the surface occur in this unit.

Soil Moisture

These soils are well drained. Water movement into and through the soil is moderately rapid. The majority of the water moves laterally downslope at the bedrock interface. The amount of water potentially available for plant use is very low.

Vegetation

Upland Very Shallow Coarse Loamy Droughty supports plant communities that tolerate a shallow rooting zone, low moisture, and very low fertility. Common shrubs include honeysuckle, sweet fern, blueberry and beaked hazel. Common forbs include sarsaparilla, big leaf aster, bunch berry, Canada mayflower, and some mosses. Grasses are uncommon. The potential community structure and density is shown in Table F.3.

Table F.3 Plant Community and Density on Upland Very Shallow Coarse Loamy Dry

Timber Type	(Percent of Ground Shaded)		
	Overstory	Shrub	Forb
Mature Hardwoods	10-40	40-70	<10
Immature Hardwoods	10-40	40-70	<10
Juvenile Hardwoods	0	40-70	0
Mature Conifers	40-70	0	40-70
Immature Conifers	40-70	0	40-70
Juvenile Conifers	0	>70	0

Source: USFS Superior National Forest

Timber

The effective rooting depth is very shallow. The presence of bedrock 8 to 20 inches below the surface is the limiting factor.

Table F.4 Estimated Potential Productivity for Upland Very Shallow Coarse Loamy Dry

<u>Species</u>	<u>Site Index</u>
Aspen	45-50
Paper Birch	35-45
R. Pine	40-45
J. Pine	45-50
W. Pine	40-50
Balsam Fir	50-60
W. Spruce	45-55
B. Spruce	30-40

Equipment Operability

The irregular slopes and steep gradients are the most limiting factors for operability. The moderate rapid internal drainage and coarse loamy texture make this soil suitable for year around equipment operation. Saturated conditions during spring thaw may delay operations for a short time. Lower slope positions will stay wet longer in the spring and following heavy summer rains. This is due to the lateral movement of water down hill. The potential for compaction is low. The potential for erosion is moderate to high, particularly when the duff is removed.

Site Preparation

Plant competition is low in managed stands. Shrubs will respond vigorously (>70% of ground shaded) when the overstory is removed. However, mature shrubs commonly are less than 2 feet, but some may range up to 4 feet. Site preparation may not be necessary depending on stand conditions and the amount of disturbance from harvesting. Suitable site preparation methods include disc trencher, patch scarification, barrel scarification, or herbicides. Topsoil and duff must be left in place to maintain site productivity. Hot summer burns will have a long term adverse impact on productivity.

Artificial Regeneration

These soils will dry out and warm up quickly in the spring. Droughty conditions are likely to occur in mid summer, particularly on steep south-facing slopes. Planting on this unit should occur early in the spring to take advantage of soil moisture. Seedlings should be planted at or above the original ground surface to prevent further reduction of the very shallow rooting zone. Plantations should not require a release from competition.

Wildlife

The diversity and density of shrub and forb species is low. Conifer stands with a closed canopy commonly have understories composed only of forbs. Hardwood stands will have moderate to high amounts of shrubs but low amounts of forbs. Mosses are very common under mature conifer stands.

UPLAND EXTREMELY SHALLOW COARSE LOAMY DROUGHTY

Landscape

Upland Extremely Shallow Coarse Loamy Droughty occupies side slopes and crest positions of bedrock controlled hills in the Canadian Shield. It is present in all resource management units except 6.

Slopes are strongly convex and irregular in shape. Slope gradients range from 18 to 50 percent. Bedrock outcrops occur on 5 to 30 percent of the area. They are commonly associated with ridge tops and major slope breaks.

Soil

The soils are formed in less than 8 inches of loam or sandy loam over bedrock. Pebbles, cobbles, and boulders occupy 5 to 20 percent of the soil. Up to 5 percent of the surface is occupied by cobbles and boulders. The natural fertility is very low.

Inclusions of soils with bedrock at a depth greater than 8 inches occur in this unit.

Soil Moisture

These soils are excessively well drained. Water movement into and through the soil is moderate. The majority of the water moves laterally downslope at the bedrock interface. The amount of water potentially available for plant use is very low.

Vegetation

Upland Extremely Shallow Coarse Loamy Droughty supports plant communities that tolerate a shallow rooting zone, droughty conditions, and very low fertility. Common shrubs include honeysuckle, sweet fern, and blueberry. Common forbs include sarsaparilla, big leaf aster, bunch berry, Canada mayflower, bracken fern, ground pine, lichens, and mosses. Grasses are uncommon. The potential community structure and density is shown in table F.5.

Table F.5 Plant Community and Density on Upland Extremely Shallow Coarse Loamy Dry

Timber Type	(Percent of Ground Shaded)		
	Overstory	Shrub	Forb
Mature Hardwoods	<10	10-40	>70
Immature Hardwoods	<10	<10	10-20
Juvenile Hardwoods	0	40-70	<10
Mature Conifers	10-40	0	40-70
Immature Conifers	10-40	0	40-70
Juvenile Conifers	0	10-40	10-40

Source: USFS Superior National Forest

Timber

The effective rooting depth is extremely shallow. Bedrock at a depth of 8 inches or less is the limiting factor.

Table F.6 Estimated Potential Productivity for Upland Extremely Shallow Coarse Loamy Dry

Species	Site Index
Aspen	35-45
Paper Birch	30-40
R. Pine	35-40
J. Pine	40-45
W. Pine	30-40
Balsam Fir	40-50
W. Spruce	35-45
B. Spruce	30-40

Equipment Operability

The irregular slopes and steep gradients severely limit operability. The moderate rate of internal drainage and coarse loamy texture are suitable for year around equipment operation. Saturated conditions during spring thaw may delay operations for a short time. The potential for compaction is moderate. The potential for erosion is high, particularly when the duff is removed.

Site Preparation

Plant competition is low in managed stands. Shrubs will not respond vigorously when the overstory is removed. Mature shrubs commonly are less than 2 feet. Site preparation is usually not necessary. Most mechanical site preparation methods are not suited due to the thin soil and steep slopes. Topsoil and duff must be left in place to maintain site productivity. Hot summer burns will have a long term adverse impact on productivity. Slash should be left on the site to reduce the amount of nutrients removed.

Artificial Regeneration

Successful regeneration of these soils may be difficult due to the fragile nature of the site. These soils will dry out and warm up quickly in the spring. Droughty conditions will occur by mid summer, particularly on steep south-facing slopes. Planting should occur early in the spring to take advantage of soil moisture. Seedlings should be planted at or above the original ground surface to prevent further reduction of the extremely shallow rooting zone. Plantations should not require a release from competition. Windthrow is common in mature stands.

Wildlife

The diversity and density of shrub and forb species is low. Mature stands are very open and park-like. Conifer stands commonly have understories composed only of forbs. Hardwood stands will have low to moderate amounts of shrubs and moderate to high amounts of forbs. Mosses and lichens are very common under mature conifer stands.

UPLAND SANDY DRY

Landscape

Upland Sandy Dry occurs primarily in resource management unit 7. Minor amounts also occur in resource management units 1 and 6. It occupies mid to upper slope and crest positions of slightly convex hills. Slopes gradients range from 0 to 10 percent. Local relief is low.

Soil

The soils included in this landscape unit have formed in deep acid sand. The content of gravel is usually low, less than 10 percent, but may range up to 35 percent in small local areas. The surface generally has very few if any cobbles and boulders. Natural fertility is low.

Inclusions of somewhat poorly drained and poorly drained sand may occur on 5 to 15 percent and 10 percent of the area respectively.

Water

These soils are moderately well or well drained. Water movement into and through the soil is very rapid. A large percentage of the water reaches the ground water system. There is normally no runoff or ponding. The amount of water potentially available for plant use is low. The depth to water saturated soil fluctuates between 40 to 60 inches.

Vegetation

Upland Sandy Dry supports plants with low moisture and nutrient requirements. Common trees include paper birch, jack pine, red pine, and less commonly balsam fir and aspen. Shrubs include beaked hazel, honeysuckle, and juneberry. There is a small variety of broadleaf forbs and a few sedges and grasses. The potential community structure and density is shown in Table F.7.

Table F.7 Plant Community Structure and Density on Upland Sandy Dry

Timber Type	(Percent of the Ground Shaded)		
	Overstory	Shrub	Forb
Mature Hardwoods	>70	0	<10
Immature Hardwoods	>70	0	<10
Juvenile Hardwoods	0	>70	0
Mature Conifers	>70	0	<10
Immature Conifers	>70	0	<10
Juvenile Conifers	0	>70	0

Source: USFS Superior National Forest

Timber

There are no limiting factors for effective rooting depth.

Table F.8 Estimated Potential Productivity for Upland Sandy Dry

Species	Site Index
Aspen	50-60
Paper Birch	45-55
Jack Pine	60-65
Red Pine	55-60
Balsam Fir	50-55

Equipment Operability

The rapid internal drainage and high sand content make this landscape unit suitable for year around equipment operation. A brief delay may occur during spring thaw. Potential for erosion is low.

Site Prep

Plant competition is low to moderate in managed stands. Topsoil and the litter layer should be left in place or mixed with mineral soil to maintain site productivity. Most mechanical methods are feasible to use because of the lack of surface cobbles and boulders. Hot summer prescribed burns will have a long term adverse impact on productivity.

Artificial Reforestation

These soils dry out and warm up quickly in the spring. Planting on this unit should occur early in the spring season to take advantage of soil moisture. Plantations may require one release from competition.

Wildlife

The diversity of shrub and forb species is usually low. The density of shrubs and forbs under closed tree canopies will be very low. Openings will remain free of brush for moderate length of time.

UPLAND COARSE LOAMY OVER SANDY DRY

Landscape

Upland Coarse Loamy Over Sandy Dry occurs on moraines and outwash plains in resource management units 3, 5, 8, 9, and 10. It occupies side slopes and ridges of low convex hills, and basins. Slope gradients range from 5 to 25 percent. Local relief is low.

Soil

The soils are formed in less than 20 inches of sandy loam or loamy sand over gravelly sand, gravelly loamy sand, or gravelly sandy loam. The content of gravel averages about 35 percent but may range from 25 to 85 percent. The surface may have up to 10 percent cobbles and boulders. Natural fertility is low.

Water

These soils are well drained. Water movement into and through the soil is moderate in the upper 20 inches and very rapid below. A large percentage of the water reaches the ground water system. There is normally no runoff or ponding. The amount of water potentially available for plant use is low.

Vegetation

Upland coarse loamy over sandy dry supports plants that have adapted to a shallow effective rooting zone with a porous subsoil. Most of the roots are concentrated in the upper 20 inches, but a few do penetrate the subsoil. Common trees include aspen, paper birch, jack pine, red pine, and less commonly balsam fir. Shrubs include beaked hazel, honeysuckle, and juneberry, sweet fern, and blueberry. There is a small variety of broadleaf forbs and a few mosses and grasses. The potential community structure and density is shown in Table F.9.

Table F.9 Plant Community Structure and Density on Upland Coarse Loamy Over Sandy Dry

Timber Type	(Percent of Ground Shaded)		
	Overstory	Shrub	Forb
Mature Hardwoods	>70	<10	<10
Immature Hardwoods	>70	0	10-40
Juvenile Hardwoods	0	>70	10-40
Mature Conifers	>70	<10	<10
Immature Conifers	>70	0	0-40
Juvenile Conifers	0-10	>70	0-10

Source: USDA Superior National Forest

Timber

The effective rooting depth is shallow. Moisture is the most limiting factor. Most roots will not grow into the gravelly subsoil because it does not hold water for plant use.

Table F.10 Estimated Potential Productivity for Upland Coarse Loamy Over Sandy Dry

Species	Site Index
Aspen	55-65
Paper Birch	45-55
Jack Pine	55-60
Red Pine	50-55
Balsam Fir	50-60
Black Spruce	40-45
White Spruce	55-65

Equipment Operability

The rapid internal drainage and high sand content make this landscape unit suitable for year around equipment operation. A brief delay may occur during spring thaw. Potential for erosion is low.

Site Prep

Plant competition is low in managed stands. One release may be required when establishing new stands. Topsoil and the litter layer should be left in place or mixed with mineral soil to maintain site productivity. Removal of the topsoil will further reduce the already shallow effective rooting depth. Most mechanical methods are feasible to use because of the lack of surface cobbles and boulders. Hot summer prescribed burns will have a long term adverse impact on productivity.

Artificial Reforestation

These soils dry out and warm up quickly in the spring. Seedling survival may be reduced by moisture stress during dry summer months. Planting on this unit should occur early in the season to take advantage of soil moisture.

Wildlife

The diversity of shrub and forb species is usually low. The density of shrubs and forbs under closed tree canopies will be very low. Openings will remain free of brush for moderate length of time. Mature stands will be open and park-like.

UPLAND GRAVELLY SAND DROUGHTY

Landscape

Upland Gravelly Sand Droughty occurs in resource management unit 8 and on end moraines in 7. This landscape unit occupies mid to upper slopes and crest positions of convex hills. Slope gradients commonly range from 10 to 35 percent. Local relief is about 50 to 100 feet.

Soil

The soils included in this landscape unit have developed in gravel and sand. The upper two to six inches of soil is commonly gravelly coarse sandy loam. Pebbles and cobbles occupy up to 35 to 90 percent of the soil. The surface may have 10 to 25 percent cobbles and boulders. The natural fertility is low.

Water

Water movement into and through the soil is very rapid. A large percentage of the water reaches the ground water system. There is normally no runoff or ponding. The amount of water potentially available for plant use is very low. The depth to water saturated soil is greater than 5 feet.

Vegetation

Upland Gravelly Sand supports plants that tolerate low moisture and nutrient levels. Common trees include jack pine, red pine, paper birch, and occasionally balsam fir and aspen. Shrubs include hazel, honeysuckle, sweet fern and some blueberry. There is a small variety of broadleaf forbs and a few mosses. The potential community structure and density is shown in Table F.11.

Table F.11 Plant Community Structure and Density on Upland Gravelly Sand Droughty

Timber Type	(Percent of Ground Shaded)		
	Overstory	Shrub	Forb
Mature Hardwoods & Pines	>70	<10	<10
Immature Hardwoods & Pines	>70	0	<10
Juvenile Hardwoods	0	>70	<10
Juvenile Conifers	0	>70	0

Source: USFS Superior National Forest

Timber

There are no factors to limit the effective rooting depth.

Table F.12 Estimated Potential Productivity for Upland Gravelly Sand Droughty

<u>Species</u>	<u>Site Index</u>
Red Pine	50-55
Jack Pine	55-60
Aspen	45-55
Paper Birch	45-55
Balsam Fir	40-50

Equipment Operability

The rapid internal drainage and high sand and gravel content make this landscape unit suitable for year around equipment operation. A brief delay may occur during spring thaw. Potential for erosion is low.

Site Prep

Plant competition is very low. Site preparation for the purpose of removing competition is not needed. No release should be required when establishing new plantations. Topsoil and litter must be left in place or mixed with mineral soil to maintain site productivity. The presence of surface cobbles and boulders limits mechanical methods to rock raking or patch scarification. Soil active herbicides are not recommended due to the very rapid movement of water through the soil. Hot summer burns will have a long term adverse impact on productivity.

Artificial Reforestation

These soils dry out and warm up quickly in the spring. Planting on this unit should occur early in the spring season to take advantage of soil moisture. Seedling survival and growth may be low due to low nutrient levels and droughty conditions.

Wildlife

The diversity of shrub and forb species is very low. The density of shrubs and forbs under tree canopies will be low. Openings will remain free of brush for a relatively long period of time.

UPLAND MEDIUM LOAMY DRY

Landscape

Upland Medium Loamy Dry is found in resource management units 3, 5, 9, and 10. It occupies side slopes and crest positions of hills in ground moraines within the Canadian Shield. Slopes are convex and irregular in shape. Slope gradients range from 6 to 35 percent. Bedrock outcrops usually do not occur.

Soil

The soils are formed in more than 40 inches of sandy loam, fine sandy loam, very fine sandy loam, loam, or silt loam over gravelly sandy loam, gravelly loamy sand, or occasionally silty clay, silty clay loam, or clay. Pebbles, cobbles, and boulders occupy 10 to 35 of the soil. The surface has less than 5 percent cobbles and boulders. A continuous dense layer may be present in some areas. It occurs within 15 to 30 inches of the surface. The natural fertility is moderate.

Soil Moisture

These soils are well drained. Water movement into and through the soil is moderate. Movement in the dense layer is slow. The majority of the water moves laterally downslope at the interface with the dense layer. The capacity to store water for plant use is moderate

Vegetation

Upland Medium Loamy Dry supports plant communities that have relatively high moisture and nutrient requirements. Common shrubs include beaked hazel, mountain maple, and occasionally elderberry. Common forbs include sarsaparilla, big leaf aster, bunch berry, Canada mayflower, and some mosses. The potential community structure and density is shown in Table F.13.

Table F.13 Plant Community and Density on Upland Medium Loamy Dry

Timber Type	(Percent of Ground Shaded)		
	Overstory	Shrub	Forb
Mature Hardwoods	>70	40-70	40-70
Immature Hardwoods	>70	10-40	10-40
Juvenile Hardwoods	0	>70	10-40
Mature Pines	>70	40-70	40-70
Immature Pines	>70	10-40	10-40
Mature Spruce/Fir	>70	<10	10-40
Immature Spruce/Fir	>70	<10	<10
Juvenile Conifers	0	>70	<10

Source: USFS Superior National Forest

Timber

The effective rooting depth is variable. The dense layer, when present, may restrict roots to the upper 15 to 30 inches of soil.

Table F.14 Estimated Potential Productivity for Upland Medium Loamy Dry

Species	Site Index
Aspen	65-70
P. Birch	50-60
R. Pine	55-60
J. Pine	60-65
W. Pine	40-50
B. Fir	55-60
W. Spruce	50-60
B. Spruce	30-40

Equipment Operability

The hardpan will cause saturated conditions in the upper 30 inches during the spring, fall, and following periods of heavy summer rains. Lower slope positions will stay wet longer in the spring and following heavy summer rains. This is due to the lateral movement of water down hill. This soil is susceptible to compaction when moist and rutting when wet. Operations should be timed to occur during dry conditions; June, July, or August if possible. The potential for erosion is moderate.

Site Preparation

Plant competition is moderate in managed stands. Shrubs will respond vigorously (>70% of ground shaded) when the overstory is removed. Mature shrubs commonly are more than 4.5 feet tall. Suitable site preparation methods include discing, disc trenching, patch scarification, roller chopping, or herbicides. Topsoil and duff should be left in place to maintain site productivity. Hot summer burns will have a long term adverse impact on productivity.

Artificial Regeneration

These soils will dry out and warm up slowly in the spring. Planting on this unit should occur in the mid to late part of the spring season to allow the soil to warm up. Plantations may require two releases from competition.

Wildlife

Upland Medium Loamy Dry supports a wide diversity of plant species and a variety of preferred browse for deer and bear. Shrub and forb densities often remain high under mature overstories. However, densities will be lower under mature spruce and fir overstories. It is capable of supporting stands of both intolerant hardwoods and conifers. Openings will be invaded relatively fast by brush and aspen.

UPLAND CLAYEY DRY

Landscape

Upland Clayey Dry is found primarily in resource management units 1, 2, 3, 4, 5, and 6. Small areas may be found in

resource management units 9 and 10. It occupies the mid-slope, upper slope, and crest positions of slightly convex hills. Slope gradients commonly range from 6 to 12 percent. Local relief is usually low, 5 to 15 feet.

Soil

The soils are formed in grayish silty clay loam, silty clay, or clay that is high in calcium. The gravel content is less than 5 percent. The surface generally has no cobbles or boulders. The natural fertility is high.

Water

These soils are moderately well drained. Movement of water into and through the soil is very slow. The majority moves laterally through the upper 20 inches of soil to lower areas of the landscape. Surface runoff and ponding may occasionally occur during spring runoff and following periods of heavy rain. The amount of water potentially available for plant use is moderate to high.

Vegetation

Upland Clayey Dry supports plants with moderate to high moisture and nutrient requirements. Common trees include aspen, balsam fir, and white spruce. Shrubs include mountain maple, hazel, dogwood, arrowwood, chokecherry, bush honeysuckle and juneberry. Shrub heights range from 6 to 8 feet in mature stands and respond vigorously to overstory removal. There is a wide variety of forbs commonly found including: sarsaparilla, black snake root, twisted stalk, yellow clintonia, naked bishops cap and dewberry. Grasses and sedges will quickly form a heavy cover on areas of exposed mineral soil. Potential community structure and density is shown in Table F.15.

Table F.15 Plant Community Structure and Density on Upland Clayey Dry

Timber Type	(Percent of Ground Shaded)		
	Overstory	Shrub	Forb
Mature Hardwoods and Pine	>70	>70	40-70+
Mature Fir and/or Spruce	>70	10-40	40-70
Immature Hardwoods and Pine	>70	40-70	40-70
Immature Fir and/or Spruce	>70	<10	10-40
Juvenile Hardwoods	0	>70	10-40
Juvenile Conifers	0	>70	<10

Source: USFS Superior National Forest

Timber

Upland Clayey Dry is one of the most productive soil landscape units in the Orr Area. These sites are capable of supporting vigorous growth of suitable species at densities higher than other soil landscape units. Good quality pulp,

bolt and saw material can be produced on shorter rotations. It may also be possible to hold aspen stands for longer periods of time without rapid deterioration, other factors equal.

Table F.16 Estimated Potential Productivity Upland Clayey Dry

<u>Species</u>	<u>Site Index</u>
Aspen	80-90
White Spruce	58-64
Balsam Fir	58-64
Red Pine	50-55
Jack Pine	55-65
White Pine	55-60
Black Spruce	42-48

Equipment Operability

Upland Clayey Dry is susceptible to severe compaction when moist, and rutting when wet due to the high silt and clay content and slow permeability. The preferred time for equipment operation is the summer dry period (normally July and August) and winter. Delays of a week or so may be required during summer operations to prevent excess compaction and rutting. Skidding should be concentrated to as few trails as possible to minimize the extent of compaction.

Site Prep

Shrubs, forbs, and grasses will respond vigorously to canopy removal. Intensive site preparation is required when converting from hardwoods to softwoods. Methods that leave the litter layer and topsoil in place should be used such as discing, patch scarifying, winter raking, or roller chopping. A crust will form quickly on bare mineral soil which will decrease infiltration and increase surface runoff and erosion.

Artificial Reforestation

Soil temperature will rise slowly in the spring due to the slow water movement. If possible, these sites should be timed for the mid to latter part of the planting season to allow the soil to dry out and warm up. Scarifier patches or micro depressions may collect and hold water for brief periods. Seedlings should be planted at or near the original ground surface. The incidence of frost heaving will be higher for seedlings planted on bare mineral soil.

Wildlife

Upland Clayey Dry supports a wide diversity of plant species and a variety of preferred browse for bear and deer. Shrub and forb densities often remain high under mature overstories. It is capable of supporting stands of both intolerant hardwoods and conifers. Openings will be invaded relatively fast by brush and aspen.

LOWLAND CLAYEY MOIST

Landscape

Lowland Clayey Moist occurs in resource management units 1, 2, 3, 4, 5, and 6. It occupies lower side slopes, nearly level areas and slight depressions. Slope gradients commonly range from 2 to 5 percent. Local relief is usually very low.

Soil

The soils are developed in grayish silty clay loam, silty clay, or clay that is high in calcium. The gravel content is less than 5 percent. The surface generally has very few cobbles or boulders. The natural fertility is moderate due to cool soil temperature.

Water

These soils are somewhat poorly drained. The soil will be saturated within 12 to 20 inches of the surface from spring to midsummer, following heavy summer rains, and in the fall. Movement of water into and through the soil is very slow. The majority moves laterally through the upper 20 inches of soil to lower areas of the landscape. Surface runoff and ponding may occasionally occur during spring runoff and following periods of heavy rain. Intermittent streams are common during wet seasons. The amount of water potentially available for plant use is moderate to high.

Vegetation

Lowland Clayey Moist supports plants that have high moisture requirements and can tolerate cool soil temperatures. Common tree species include: aspen, balsam fir, and white spruce. Black ash, white pine, and cedar may occur occasionally. The understory vegetation is often a mixture of upland and lowland plants. Shrubs commonly include red osier dogwood, speckled alder, willow with small amounts of mountain maple and hazel. Shrub heights range from 5 to 7 feet in mature stands. A wide variety of forbs are found and may include: naked bishops cap, goldthread, coltsfoot, rough bedstraw, bunchberry and shining clubmoss. Grasses and sedges may form a heavy cover on areas of exposed mineral soil. Potential community structure and density is shown in Table F.17.

Table F.17 Plant Community Structure and Density on Lowland Clayey Moist

Timber Type	(Percent of Ground Shaded)		
	Overstory	Shrub	Forb
Mature Hardwoods	>70	10-40	40-70
Mature Spruce-Fir	>70	<10	10-40
Immature Hardwoods	>70	<10	10-40
Immature Spruce-Fir	>70	0	<10
Juvenile Hardwoods	0	>70	40-70
Juvenile Spruce-Fir	0	>70	<10

Source: USFS Superior National Forest

Timber

The effective rooting depth is relatively shallow. The saturated conditions within 12 to 20 inches of the surface is the limiting factor. Windthrow is common.

Table F.18 Estimated Potential Productivity for Lowland Clayey Moist

<u>Species</u>	<u>Site Index</u>
Aspen	70-75
White Spruce	55-65
Balsam Fir	50-55
Black Ash	50-60
White Pine	35-45
Black Spruce	40-50

Equipment Operability

The high silt and clay content and slow permeability give Lowland Clayey Moist a low bearing strength for the majority of the growing season. The soil will be saturated within 12 to 20 inches of the surface from spring to midsummer, following heavy summer rains, and in the fall. Operation of heavy equipment during wet conditions will cause severe rutting which will restrict lateral drainage and damage tree roots. The soils are also very susceptible to compaction when moist. Compacted soils will increase runoff and reduce seedling growth.

Operations should be timed to occur during the summer dry period (normally July and August) or winter to reduce rutting and compaction problems. Delays of a week or more may be required during summer operations to prevent excessive compaction and rutting. Skidding should be concentrated to as few trails as possible to minimize the extent of compaction.

Site Prep

A moderate amount of competition from shrubs, forbs, and grasses can be expected. Intensive site preparation will be required when converting from hardwoods to softwoods. Methods that leave topsoil and litter in place such as winter shearing or raking, should be favored. Bare mineral soil will quickly form a crust which would decrease infiltration and increase runoff and/or erosion.

Artificial Regeneration

Snow and frost will remain longer in Lowland Clayey Moist than in the adjacent uplands. Soil temperature will rise very slowly in the spring due to saturated conditions and slow water movement. Planting should be delayed until later in the season, if possible, to allow the soil to dry out and warm up. Movement of cold air from the uplands will cause openings to be susceptible to late/early frosts. Scarifier patches or micro depressions will collect and hold water for relatively long periods of time. The incidence of frost

heaving will be high, particularly for seedlings planted on bare mineral soil.

Wildlife

The diversity of shrub and forb species is moderate. Shrub and forb densities are usually low under closed tree canopies. It is capable of supporting stands of both shade tolerant hardwoods and conifers. Openings will be invaded by brush and aspen relatively fast.

LOWLAND CLAYEY WET

Landscape

Lowland Clayey Wet occurs in resource management units 1, 2, 3, 4, 5, and 6. It occupies concave slopes, depressions and drainageways. Slope gradients commonly range from 1 to 4 percent. Local relief is usually very low.

Soil

The soils are developed in grayish silty clay loam, silty clay, or clay that is high in calcium. A thin layer (<18 inches) of peat may be found at the surface. The gravel content is less than 5 percent. The surface generally has no cobbles or boulders. The natural fertility is low due to wetness.

Water

These soils are poorly and very poorly drained. Movement of water into and through the soil is very slow. Water from the adjacent uplands collects in Lowland Clayey Wet. The majority moves laterally from higher areas through the upper 20 inches or on surface. Surface ponding and intermittent streams occur during spring runoff and following periods of heavy rain.

Vegetation

Lowland Clayey Wet supports plants that tolerate wet cold soil conditions. Common trees species include: Black ash, balsam poplar, black spruce, tamarack, and white cedar. Shrubs commonly include: speckled alder, willow, alder-leaved buckthorn and red osier dogwood. Shrub heights range from 3 to 6 feet. Forbs commonly found include: gold thread, rough bedstraw, sedges, and a variety of mosses. Potential community structure and density is shown in Table F.19.

Table F.19 Plant Community Structure and Density on Lowland Clayey Wet

Timber Type	(Percent of Ground Shaded)		
	Overstory	Shrub	Forb
Mature Hardwoods	40-70	10-40	10-40
Immature Hardwoods	40-70	0	10-70
Juvenile Hardwoods	0	>70	10-40
Mature Conifers	>70	0	40-70
Immature Conifers	>70	0	10-40
Juvenile Conifers	0	>70	<10

Source: USFS Superior National Forest

Timber

The effective rooting depth is extremely shallow. Saturated conditions within 10 inches of the surface during the growing season is the most limiting factor. Windthrow problems often occur.

Table F.20 Estimated Potential Productivity Lowland Clayey Wet

Species	Site Index
Aspen	45-55
Balsam Fir	35-45
Black Spruce	35-40
Cedar	30-35
Tamarack	45-55
Black Ash	50-60

Equipment Operability

The high silt and clay content and wet conditions give Lowland Clayey Wet a low bearing strength. The soil will be saturated within 10 inches of the surface for the entire growing season. Operation of heavy equipment during wet conditions will cause severe rutting which will restrict lateral drainage and damage tree roots. The soils are also very susceptible to compaction when moist. Compacted soils will increase runoff and reduce seedling growth. Timing operations to occur when soil is frozen will prevent rutting and compaction problems. Summer operations on Lowland Clayey Wet should be avoided if at all possible to protect the site productivity.

Site Prep

Shrubs, forbs, and grasses will respond vigorously to canopy removal. Site preparation methods are limited to winter shearing or raking due to wet summer conditions. The litter layer and topsoil should be left in place to prevent further reduction of the shallow effective rooting depth. A crust will form quickly on bare mineral soil which will decrease infiltration and increase surface ponding and runoff.

Artificial Reforestation

Soil temperature will rise slowly in the spring due to the slow water movement. If possible, these sites should be timed for the mid to latter part of the planting season to allow the soil to dry out and warm up. Micro depressions will collect and hold water for long periods. Seedlings should be planted at or near the original ground surface. The potential for frost heaving will be high particularly for seedlings planted on bare mineral soil.

Wildlife

The diversity of shrub and forb species is low. Shrub and forb densities are low under mature overstories. Permanent openings will not be invaded quickly by brush and aspen when grass cover is established.

LOWLAND ORGANIC ACID TO NEUTRAL

Landscape

Lowland Organic Acid to Neutral is found in all resource management units. It occupies depressions, drainways, and bogs. Slope gradients are less than five percent. Local relief is very low.

Soil

The soils are developed in thick deposits (more than 5 feet) of highly or moderately decomposed organic material derived from woody plants and/or herbaceous plants. The pH ranges from strongly acid (5.1) to neutral (7). Inclusions that commonly occur are: acid peat 10 to 30 percent, shallow peat 10 to 25 percent, and poorly drained mineral soil 5 to 15 percent.

Water

These soils are very poorly drained. Water from surrounding uplands collects in this landscape unit. The majority flows as surface runoff in the spring. Movement of water through the peat, either laterally or vertically is very slow. Surface ponding often occurs year around.

Vegetation

Lowland Organic Acid to Neutral supports plants which have adapted to permanently wet cool soils. Black spruce is the most commonly occurring tree species. Balsam fir, tamarack, white cedar, and black ash stands are occasionally found. Shrubs include speckled alder, willow, ribes, labrador tea, leather leaf and less commonly red osier dogwood and bog birch. Shrub heights ranges from 2 to more than 4.5 feet. Herbaceous plants consist of a variety of broadleaf plants, mosses and sedges. Potential community structure and density is shown in Table F.21.

Table F.21 Plant Community Structure and Density on Lowland Organic Acid to Neutral

Timber Type	(Percent of Ground Shaded)		
	Overstory	Shrub	Forb
Mature Lowland Hardwoods	10-40	10-40	>70
Immature Lowland Hardwoods	40-70	<10	>70
Juvenile Lowland Hardwoods	0	>70	40-70
Mature Lowland Conifers	>70	10-40	>70
Immature Lowland Conifers	>70	0	>70
Juvenile Lowland Conifers	0	>70	10-40

Source: USFS Superior National Forest

Timber

The effective rooting depth is very shallow. Saturated conditions at or near the surface during the growing season is the most limiting factor. Windthrow is very common, particularly in open stands.

Table F.22 Estimated Potential Productivity for Lowland Organic Acid to Neutral

Species	Site Index
Black Spruce	35-40
Tamarack	40-50
White Cedar	25-30
Black Ash	40-50
Balsam Fir	40-45

Equipment Operability

The permanently saturated conditions and low bearing strength limit the operation of heavy equipment to periods of frozen soil with conventional equipment. Special equipment, such as wide pad tracks or high flotation tires, is required to operate equipment during the growing season.

Site Prep

A low amount of competition from shrubs can be expected. Mechanical methods are limited primarily to winter shearing. Prescribed burning can also be an effective tool when adequate fuel is present. Creating raised beds may improve the micro climate and tree growth.

Reforestation

Lowland Organic Acid to Neutral will be the last areas for snow and frost to disappear; late spring or early summer. Soil temperature rises very slowly in the spring. Cold air will often collect in this landscape unit from the adjacent uplands. Frost pockets are very common. Seeding, either naturally or artificially, is a common method of reforestation. Planting is feasible but should be planned for early to mid summer to allow for the soil to warm up.

Wildlife

The diversity of shrub and forb species is moderate to low, depending on the density of the overstory. Stands with an open overstory will have a larger variety of shrubs and forbs.

LOWLAND ORGANIC ACID

Landscape

Lowland Organic Acid is found in all resource management units in the Orr Area. It occupies depressions, drainways, and bogs. Slope gradients are less than five percent. Local relief is very low.

Soil

The soils in this unit are developed in undecomposed sphagnum and moderately decomposed organic material derived from woody plants and/or herbaceous plants. The thickness of the sphagnum ranges from 1 foot to over 5 feet. The pH ranges from strongly acid to extremely acid (<4.5). Inclusions that commonly occur are: acid to neutral peat 10 to 30 percent and poorly drained mineral soil 5 to 15 percent. Natural fertility is very low.

Water

These soils are very poorly drained. Water from surrounding uplands collects in this landscape unit. The majority flows as surface runoff in the spring. Movement of water through the peat, either laterally or vertically is very slow to stagnant. Surface ponding often occurs year around.

Vegetation

Lowland Organic Acid to Neutral supports plants which have adapted to permanently wet, cool, very acid soils. Black spruce is the most commonly occurring tree species. Tamarack is occasionally found. Shrubs include labrador tea and leather leaf. Shrub heights are less than two feet. Herbaceous plants consist of sphagnum and feather mosses, cranberries, and occasionally cotton grass and pitcher plant. Potential community structure and density is shown in Table F.23.

Table F.23 Plant Community Structure and Density on Lowland Organic Acid

Timber Type	(Percent of Ground Shaded)		
	Overstory	Shrub	Forb
Mature Lowland Conifers	40-70	0	>70
Immature Lowland Conifers	40-70	0	>70
Juvenile Lowland Conifers	0	<10	>70

Source: USFS Superior National Forest

Timber

The effective rooting depth is very shallow. Saturated conditions at or near the surface during the growing season is the most limiting factor. Windthrow is very common, particularly in open stands.

Table F.24 Estimated Potential Productivity for Lowland Organic Acid

<u>Species</u>	<u>Site Index</u>
Black Spruce	20-25
Tamarack	25-30

Equipment Operability

The permanently saturated conditions and low bearing strength limit the operation of heavy equipment to periods of frozen soil with conventional equipment. Special equipment, such as wide pad tracks or high flotation tires, is required to operate equipment during the growing season.

Site Prep

A low amount of competition from shrubs can be expected. Mechanical methods are limited primarily to winter shearing. Prescribed burning can also be effective when adequate fuel is present. Creating raised beds may improve the micro climate and tree growth.

Reforestation

Lowland Organic Acid to Neutral will be the last areas for snow and frost to disappear; late spring or early summer. Soil temperature rises very slowly in the spring. Cold air will often collect in this landscape unit from the adjacent uplands. Frost pockets are very common. Seeding, either naturally or artificially, is a common method of reforestation. Planting is feasible but should be planned for early to mid summer to allow for the soil to warm up.

Wildlife

The diversity of shrub and forb species is low.

LOWLAND ORGANIC UNDIFFERENTIATED

Landscape

Lowland Organic Undifferentiated is found in resource management units 6 and 8. It occupies depressions, drainways and bogs. Slope gradients are less than 5 percent. Local relief is very low.

Soil

The soil composition of this landscape unit is only generally defined. It includes very poorly drained soils formed in organic material. Thickness of organic material, pH, or degree of decomposition was not determined. Roughly

10 to 25 percent is shallow peat, 20 to 50 percent is very acid deep peat, and 5 to 10 percent is poorly drained mineral soil.

LOWLAND LOAMY MOIST

Landscape

Lowland Loamy Moist occurs in resource management units 5, 7, 8, and 9. It occupies the lower side slopes adjacent to swamps, depressions, and drainways. Slope gradients are less than 6 percent. Slopes are slightly concave or simple in shape. Micro depressions and mounds formed by wind thrown trees are common.

Soil

The soils have developed in sandy loam, loam, clay loam, or silt loam. The gravel and cobble content is 5 to 20 percent. Less than 10 percent of the surface is occupied by cobbles or boulders. The natural fertility is moderate due to cool soil temperature.

Water

These soils are somewhat poorly drained. Saturated conditions occur within 12 to 20 inches of the surface in the spring, early summer, fall, and following heavy summer rains. The movement of water into and through the soil is moderate. The majority moves laterally through the upper 20 inches of soil to lower areas of the landscape. Surface runoff and ponding may occasionally occur during spring runoff and following periods of heavy rain. Intermittent streams are common during wet seasons. The amount of water potentially available for plant use is moderate to high.

Vegetation

Lowland Loamy Moist is a transition zone between upland soils and poorly drained soils. It supports plants that have high moisture requirements and can tolerate cool soil temperatures. Common tree species include most upland species except red pine. The understory vegetation is often dominated by lowland species. Some upland species may occasionally be present; often on tree tip mounds. Shrubs commonly include red osier dogwood, speckled alder, willow with small amounts of mountain maple and hazel. Shrub heights range four feet or more in mature stands. A wide variety of forbs are found and may include: naked bishops cap, goldthread, coltsfoot, rough bedstraw, bunchberry and shining clubmoss. Grasses and sedges may form a heavy cover on areas of exposed mineral soil. Potential community structure and density is shown in Table F.25.

Table F.25 Plant Community Structure and Density on Lowland Loamy Moist

Timber Type	(Percent of Ground Shaded)		
	Overstory	Shrub	Forb
Mature Hardwoods	>70	<10	10-40
Mature Spruce-Fir	70	0	<10
Mature Pine	>70	<10	10-40
Immature Hardwoods	>70	<10	10-40
Immature Spruce-Fir	>70	0	0
Immature Pine	>70	0	<10
Juvenile Hardwoods	0	>70	40-70
Juvenile Conifers	0	>70	0

Source: USFS Superior National Forest

Timber

The effective rooting depth is shallow. This is due to the water saturated conditions occurring at 12 to 20 inches below the surface during portions of the growing season.

Table F.26 Estimated Potential Productivity for Lowland Loamy Moist

Species	Site Index
Aspen	55-65
White Spruce	45-55
Balsam Fir	50-55
Black Ash	50-60
White Pine	35-45
Black Spruce	35-45

Equipment Operability

The high silt and clay content and seasonally saturated conditions give Lowland Loamy Moist a low bearing strength for the majority of the growing season. Saturated conditions occur within 12 to 20 inches of the surface in the spring, early summer, fall, and following heavy summer rains. It will remain wet for longer periods than adjacent uplands due to lateral water movement. Operation of heavy equipment during wet conditions will cause severe rutting. Ruts will restrict lateral drainage and damage tree roots. The soils are also very susceptible to compaction when moist. Compacted soils will increase runoff and reduce seedling growth.

Operations should be timed to occur during the summer dry period (normally July and August) or winter to reduce rutting and compaction problems. Delays of a week or more may be required during summer operations to prevent excessive compaction and rutting. Skidding should be concentrated to as few trails as possible to minimize the extent of compaction.

Site Prep

A moderate amount of competition from shrubs, forbs, and grasses can be expected. Intensive site preparation will be required when converting from hardwoods to softwoods. Methods that leave topsoil and litter in place such as winter shearing or raking, should be favored. Bare mineral soil will quickly form a crust which would decrease infiltration and increase runoff and/or erosion.

Artificial Regeneration

These soils dry out and warm up slowly in the spring, due to saturated conditions. Planting should be delayed until late spring, if possible, to allow the soil to dry out and warm up. Movement of cold air from the uplands will cause openings to be susceptible to late/early frosts. Scarifier patches or micro depressions will collect and hold water during wet periods. The incidence of frost heaving will be high, particularly for seedlings planted on bare mineral soil.

Wildlife

The diversity of shrub and forb species on Lowland Loamy Moist is moderate. Shrub and forb densities are usually low under closed tree canopies. It is capable of supporting stands of both shade tolerant hardwoods and conifers. Openings will be invaded by brush and aspen relatively fast.

ORR AREA FOREST RESOURCE MANAGEMENT PLAN

Appendix G. Water Management Guidelines

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PROTECTED WATERS

INVENTORY

Protected waters include: (a) waterbasins assigned a shoreland management classification, (b) waters that have been declared public or navigable by a court, (c) meandered lakes that have not been legally drained, (d) designated trout and game lakes, (e) waterbasins in Scientific and Natural Areas, (f) waterbasins surrounded by public land, (g) waterbasins where the state or federal government owns any of the beds or shores, and (h) waterbasins with public water accesses. Protected watercourses are those natural or altered natural watercourses that have a total drainage area in excess of two square miles, except that officially designated trout streams are protected waters regardless of size. Protected wetlands are Type 3, 4, and 5 wetlands as defined in US Fish and Wildlife Service Circular No. 39, not included in the definition of protected waters, which are 10 acres or larger in unincorporated areas or 2.5 acres or larger in incorporated areas.

The DNR has completed an inventory of protected waters and wetlands consisting of descriptive lists and maps. Copies of the Protected Waters Inventory have been distributed to Area and District forestry offices.

REGULATION

Any person or agency proposing to alter the course, current or cross-section of protected waters or wetlands must first obtain a permit from the Department of Natural Resources - Division of Waters. Activities described in the following list are exempt from the permit requirements.

1. Beach Sand Blankets

*Clean, inorganic sand or gravel free of pollutants and nutrients.

*No more than 6 inches thick, 50 feet wide along the shore or one-half the lot width (whichever is less), and 10 feet waterward of the Ordinary High Water Mark.

*Local watershed district and zoning officials given at least 7 days prior notice.

*Site is not a posted fish spawning area.

*Installation of sand or gravel is repeated only once at same location, not exceeding same amount and dimensions of the original sand blanket.

2. Rock Riprap (for shore protection)
 - *Natural rock only (at least 12 inches or larger).
 - *No more than 5 feet waterward of the Ordinary High Water Mark.
 - *Conforms to natural alignment of shore and does not obstruct flow of water.
 - *Minimum finished slope no steeper than 3:1 (horizontal to vertical).
 - *Site is not a posted fish spawning area, designated trout stream, nor along the shores of Lake Superior.

3. Streams with a watershed less than 5 square miles (3,200 acres)
 - *No permit is required to construct a bridge or culvert, or to fill or excavate the bed of a protected watercourse having a total drainage area, at its mouth, of 5 square miles or less, provided:
 - County zoning officials and local Soil and Water Conservation District are given at least 7 days prior notice and determine the project will not result in downstream erosion or sedimentation.
 - The project will not divert the water to a different watershed.
 - The project will not impound water by damming the watercourse.
 - The watercourse is not an officially designated trout stream.

4. Debris Removal
 - *No permit is required to remove debris such as trees, logs, stumps and trash as long as the original alignment, slope or cross-section of the lake, marsh or stream bed is not altered.

5. Repair of Public Drainage Systems
 - *No permit is required to repair a lawfully established public drainage system (Judicial Ditch, County Ditch, etc.) provided:
 - The repair complies with the definition set forth in Minnesota Statutes, Section 106.471, Subdivision 1 (Public Ditch Law).
 - The repair does not affect significant fish and wildlife habitat or protected vegetation (such as state or federal wildlife management areas, designated scientific and natural areas, etc.).

6. Seasonal Docks and Floating Structures
 - *Removal from water on a seasonal basis (before winter freeze-up).
 - *All components removable from lake or stream bed by nonmechanized means.
 - *Will not be a hazard to navigation or endanger public health and safety.
 - *Site is not a posted fish spawning area.

- *Will not include fuel handling or sewage facilities.
- *Is not used or intended to be used for human habitation, as boathouse or as a marina.
- *Allows for free flow of water beneath it.

7. Permanent Docks (on lakes only)

- *Dock is a single linear structure not more than 6 feet wide.
- *Does not exceed 50 feet in length, or extend into water that is more than 4 feet deep, whichever is less.
- *No more than one dock per waterfront lot.
- *Will not obstruct navigation or create a water safety hazard.
- *Is not used or intended to be used for human habitation, as a boathouse, or as a marina.
- *Allows for free flow of water beneath it.
- *Lake must be 500 acres or larger if dock is built on wood pilings.
- *Lake must be 2,500 acres or larger, and site must preclude the use of a dock on wood pilings if dock is built on rock filled cribs.

8. Boat Ramps

- *Privately owned ramps:
 - Site can support ramp without pilings, dredging, or other special site preparations.
 - Constructed only of gravel, natural rock, concrete, steel matting, or other durable inorganic material.
 - No more than 6 inches thick, 12 feet wide along shore, and 10 feet waterward of the Ordinary High Water Mark or into water depth of 4 feet, whichever is less.
 - No more than 5 cubic yards of fill or excavation allowed for a stable base.
 - Site is not a posted fish spawning area.

9. Removal of Existing Structures

- *The original lake, marsh or stream bed is restored.
- *All parts of the structure, including footings or pilings, are removed.
- *The structure is not a water level control device and is not on an officially designated trout stream.

10. Water Level Control Structures (on streams only)

- *Contributing watershed above the structure is 300 acres or less.
- *Structure is not considered a "dam" under State Dam Safety rules.
- *Structure is not on an officially designated trout stream.

11. Low Water Ford Crossings (on streams only)
 - *No special site preparation necessary.
 - *Normal summer flow does not exceed 2 feet in depth.
 - *Normal low flow is not restricted or reduced.
 - *Crossing conforms to the shape of the natural stream channel.
 - *Original stream bank no higher than 4 feet.
 - *Constructed only of gravel, natural rock, concrete, steel matting or other durable inorganic material not more than 1 foot thick.
 - *Graded finished slope no steeper than 5:1 (horizontal to vertical).
 - *Graded banks must be seeded or mulched.
 - *Site is not an officially designated trout stream; wild, scenic or recreational river; or officially designated canoe and boating route.

12. Temporary Bridges (on streams only)
 - *Stream bank can support bridge without pilings, foundations, culverts, excavation, or other special site preparations.
 - *Nothing is placed in the bed of the stream.
 - *Capable of removal for maintenance and flood damage prevention.
 - *Bridge is firmly anchored at one end and can swing away during flooding.
 - *Minimum 3 feet of clearance between lowest portion of bridge and normal summer stream flow.

13. Maintenance of Storm Sewers, Agricultural Drain Tile and Ditch Outlets
 - *Outlet must have been maintained and functioning within the last 5 years.
 - *Maintenance work does not alter the original course, current or cross-section of the lake, marsh or stream bed.

14. Installation or Agricultural Drain Tile Outlets
 - *Outlet involves no construction of an open ditch and is not intended to drain a protected water or wetland.
 - *Bank is restored to the natural slope.
 - *Installation does not require channelization, dredge or filling.
 - *Except for the tile, no permanent structure is placed in the lake, marsh or stream bed.

The Division of Forestry will contact the Area Hydrologist when proposing management activities or developments not included in the above list to determine if a permit is required.

FLOOD PLAIN AND SHORELAND MANAGEMENT

FLOOD PLAIN MANAGEMENT

Flood plain management is concerned with fills and placement of structures and sanitary facilities within flood plains. Public safety in stream valleys subject to flash floods or below dams is also a consideration. Review of project proposals for campgrounds, boat landings, or other development will take these factors into account.

Placement of slash in areas subject to flooding should be avoided so as to not add to the debris carried by a flooding stream. Failures of bridges, culverts, and other structures is often caused by buildup of debris.

SHORELAND MANAGEMENT

Most lakes over 25 acres in size are subject to shoreland development regulations covering lot sizes, building setbacks, sanitary facility placement, vegetation removal, and grading and filling. These standards are administered by county zoning officials, subject to DNR monitoring. Shorelands include all land within 1,000 feet of lakes and within 300 feet of streams.

The shoreland program currently classifies lakes as Natural Environment (NE), Recreational Development (RD), or General Development (GD) and streams as NE or GD. Structure setback standards for the three classifications are 200, 100, and 75 feet, respectively. Listings of the classification of lakes in the Orr Area are available from the Regional Hydrologist.

The statewide standards and criteria for managing shoreland areas are currently being revised. The standards and criteria list uses and activities that are permitted, conditional, or prohibited under the various shoreland classifications. The draft proposed rules prohibit clear cutting within the shore impact zone which is defined as land located between the ordinary high water level and a line parallel to it at a setback of 50 percent of the structure setback.

SHIPSTEAD-NEWTON-NOLAN PROTECTION AREA

BACKGROUND

The federal Shipstead-Newton-Nolan Act (SNN) and a similar state law often referred to as Little Shipstead-Newton-Nolan were designed to prohibit alteration of natural water levels and to preserve the scenic beauty of the shores of lakes and streams in a portion of northeastern Minnesota. The following excerpts from Minnesota Lands (Dana, et al, 1960) explain the reasons for passage of these laws:

A new hazard to the preservation of natural conditions in the canoe country appeared in 1925, when E.W. Backus, President of the Minnesota and Ontario Paper Company, presented a plan for controlling the waters of the Rainy Lake watershed on both sides of the international boundary. The plan called for damming Rainy Lake and Namakan Lake and for building storage dams at the outlets of Lac la Croix, Iron, Crooked, Basswood, Birch, Knife, and Saganaga lakes. It would have raised the water level as much as 88 feet in places, submerged innumerable islands, destroyed many waterfalls and streams, and killed the timber on hundreds of thousands of acres. Flood control and power development were the stated objectives of the plan, with the government to pay half the cost.

...a storm of opposition to the proposed raising of the lake levels developed. A meeting at Duluth in November 1927 urged the United States and Canada to negotiate a treaty making the Quetico-Superior Wilderness an international park. This meeting was followed by the organization of the Quetico-Superior Council, headed by Ernest C. Oberholzer, with the objectives of maintaining parklike conditions free from exploitation on all visible shore lines, of preventing further material changes in natural water levels, of allowing the fullest utilization of timber resources not visible from the waterways, and of developing fish and game for maximum natural production.

In the spring of 1928 a bill aimed at preserving the natural, wilderness character of the region was introduced in Congress by Senator Shipstead and Congressman Newton of Minnesota. After Congressman Newton was succeeded by Congressman Nolan, it became known as the Shipstead-Nolan bill or the Shipstead-Newton-Nolan bill. Strongly endorsed by the Minnesota legislature and by state and national organizations, the measure was passed unanimously by both houses of Congress and became a law on July 10, 1930. In its report on the bill, the House Committee on Agriculture stated that "this area in Minnesota,

combined with the Quetico Provincial Park in Ontario, comprises the greatest and most picturesque wilderness in the central part of the North American Continent. It is hoped that this region may ultimately become a great international recreational area to be used jointly by the people of the two countries, and thereby promote peace and better understanding."

In 1933 the Minnesota legislature enacted legislation applying the same general principles to state-owned land within the area.

STATUTES

Federal

The federal SNN Act (P.L. 71-539, 46 Stat. 1020) approved on July 10, 1930 reads:

An Act To promote the better protection and highest public use of lands of the United States and adjacent lands and waters in northern Minnesota for the production of forest products, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That all public lands of the United States situated north of township 60 north in the Counties of Cook and Lake, State of Minnesota, including the natural shore lines of Lake Superior within such area: all public lands of the United States situated in that part of St. Louis County, State of Minnesota, lying north of a line beginning at the northeast corner of Township 63 North, Range 12 West, 4th P.M., thence westerly along the township line to the southwest corner of Township 64 North, Range 18 West, 4th P.M., thence northerly to the northwest corner of Township 65 North, Range 18 West, 4th P.M., thence westerly to the southwest corner, Township 66 North, Range 21 West, 4th P.M., thence northerly along the Township line to its intersection with the international boundary between the United States and the Dominion of Canada; all public lands of the United States on the shore lines of the lakes and streams forming the international boundary, so far as such lands lie within the areas heretofore described in this Act; all public lands of the United States in that part of the Superior National Forest located in Townships 61 and 62, Ranges 12 and 13 West, 4th P.M.; and all public lands of the United States on the shore lines of Burntside Lake and Lake Vermilion, State of Minnesota, are hereby withdrawn from all forms of entry or appropriation under the public land laws of the United

States, subject to prior existing legal rights initiated under the public land laws, so long as such claims are maintained as required by the applicable law or laws and subject to such permits and licenses as may be granted or issued by the Department of Agriculture under laws or regulations generally applicable to national forests.

Sec. 2. That the principle of conserving the natural beauty of shore lines for recreational use shall apply to all Federal lands which border upon any boundary lake or stream contiguous to this area, or any other lake or stream within this area which is now or eventually to be in general use for boat or canoe travel, and that for the purpose of carrying out this principle logging of all such shores to a depth of four hundred feet from the natural water line is hereby forbidden, except as the Forest Service of the Department of Agriculture may see fit in particular instances to vary the distances for practical reasons: Provided that in no case shall logging of any timber other than diseased, insect infested, dying, or dead be permitted closer to the natural shore line than two hundred feet, except where necessary to open areas for banking grounds, landings, and other uses connected with logging operations.

Sec. 3. That in order to preserve the shore lines, rapids, waterfalls, beaches, and other natural features of the region in an unmodified state of nature, no further alteration of the natural water level of any lake or stream within or bordering upon the designated area shall be authorized by any permit, license, lease, or other authorization granted by any official or commission of the United States, which will result in flooding lands of the United States within or immediately adjacent to the Superior National Forest, unless and until specific authority for granting such permit, license, lease, or other authorization shall have first been obtained by special Act from the Congress of the United covering each such project: Provided, That nothing in this section shall be construed as interfering with the duties of the International Joint Commission created pursuant to the convention concerning the boundary waters between the United States and Canada and concluded between the United States and Great Britain on January 11, 1909, and action taken or to be taken in accordance with provisions of the convention protocol and agreement between the United States and Canada, which were signed at Washington on February 24, 1925, for the purpose of regulating the levels of the Lake of the Woods: Provided, That with the written approval and consent of the Forest Service of the Department of Agriculture,

reservoirs not exceeding one hundred acres in area may be constructed and maintained for the transportation of logs or in connection with authorized recreational uses of national forest lands, and maximum water levels not higher than the normal high water mark may be maintained temporarily where essential strictly for logging purposes, in the streams between lakes by the construction and operation of small temporary dams: Provided, however, That nothing herein shall be construed to prevent the Secretary of Agriculture from listing for homestead entry under the provisions of the Act of June 11, 1906 (34 Stat. 233), any of the above described lands found by him to be chiefly valuable for agriculture and not needed for public purposes: Provided further, That the provisions of this section shall not apply to any proposed development for water power purposes for which an application for license was pending under the terms of the Federal Water Power Act on or before January 1, 1928.

State

The Minnesota SNN law was enacted as 1933 Minnesota Laws, Chapter 412. It is incorporated in 1980 Statutes, Sections 92.45 and 110.13.

MS 92.45 State Land on Meandered Lakes Withdrawn from Sale; Exception

All state lands bordering on or adjacent to meandered lakes and other public waters and watercourses and the live timber growing or being thereon hereby are withdrawn from sale except as hereinafter provided. The commissioner of natural resources may sell any such timber as otherwise provided by law for cutting and removal under such conditions as he shall prescribe in accordance with approved, sustained-yield forestry practices. He shall reserve such timber and impose such other conditions as he deems necessary for the protection of watersheds, wildlife habitat, shorelines, and scenic features. Within the area in Cook, Lake, and St. Louis counties described in the Act of Congress approved July 10, 1930, (46 Stat. 1020), the timber on state lands shall be subject to like restrictions as are now imposed by said act on federal lands.

MS 110.13 Control of Shore Lines; Violation

In order to preserve shore lines, rapids, waterfalls, beaches, and other natural features in an unmodified state of nature, no dam and no addition to any existing dam shall hereafter be constructed in or across any public stream or body of water within or bordering upon

those portions of the area of Cook, Lake, and St. Louis counties designated in the act of congress of July 10, 1930 (Chapter 880), and no alteration of the natural water level or volume of flowage of any such stream or body of water shall be made and no easement for flooding or overflowing or otherwise affecting lands of the state of Minnesota adjacent thereto shall be granted, unless and until specific authority shall have first been obtained by an act of the legislature. With the written approval and consent of the department of natural resources, together with the signed authority of the executive council, dams for public recreational uses or dams essential for logging or for logging reservoirs that do not exceed 100 acres in extent may be constructed to maintain temporarily water levels not higher than the normal highwater marks. Every such approval shall be subject to suitable charges, time limitation, and other conditions designed fully to protect the public interest in the intent of this section. The provisions of this section shall not apply to that portion of any proposed development for water-power purposes now or heretofore actually occupied and maintained by any applicant for license to make such development under the terms of the federal water power act if the application for such license was pending on or before January 1, 1928. Such occupancy is hereby legalized and confirmed and such occupant is hereby granted the right to occupy and use for water-power purposes, and so long as required and used for such purposes, the state lands and waters now or heretofore so occupied and used up to an elevation not exceeding two feet above the lowest crest of the spillway or overflow dam of such occupant as now constructed; provided, that no water control structures shall be used higher than those now or heretofore used. The occupant shall pay to the state annually reasonable compensation for the use of the state lands affected, to be determined by the commissioner of natural resources after investigation. The occupant shall comply with the following requirement:

To pay the state promptly reasonable compensation for any further damage to state lands or timber heretofore or hereafter caused by such development, other than such as is covered by the compensation paid for the use of the lands as hereinbefore provided.

Any person who shall willfully or knowingly violate any of the provisions of this section or of any order made thereunder by the department of natural resources shall be guilty of a gross misdemeanor.

CRITERIA FOR DETERMINING SNN PROTECTION AREA

The US Forest Service developed the following criteria to determine which waters are subject to SNN protection guidelines (USDA Forest Service - Superior National Forest, 1984). The DNR decided to use the same criteria to determine which waters and land under its jurisdiction are subject to SNN guidelines because the legislative intent of the state SNN statute was to provide the same level of protection as found on federal lands.

The Forest Service SNN criteria are being challenged as part of an administrative appeal of the Superior National Forest Plan. The DNR is an intervenor in that appeal. Pending resolution of the appeal, the 1984 Forest Service criteria will continue to be used to determine which lakes and streams are subject to SNN logging restrictions. The DNR will review any proposed changes in the criteria (or list of lakes and streams subject to SNN protection) and will most likely adopt any new criteria agreed to by the Forest Service and appellants.

Lakes

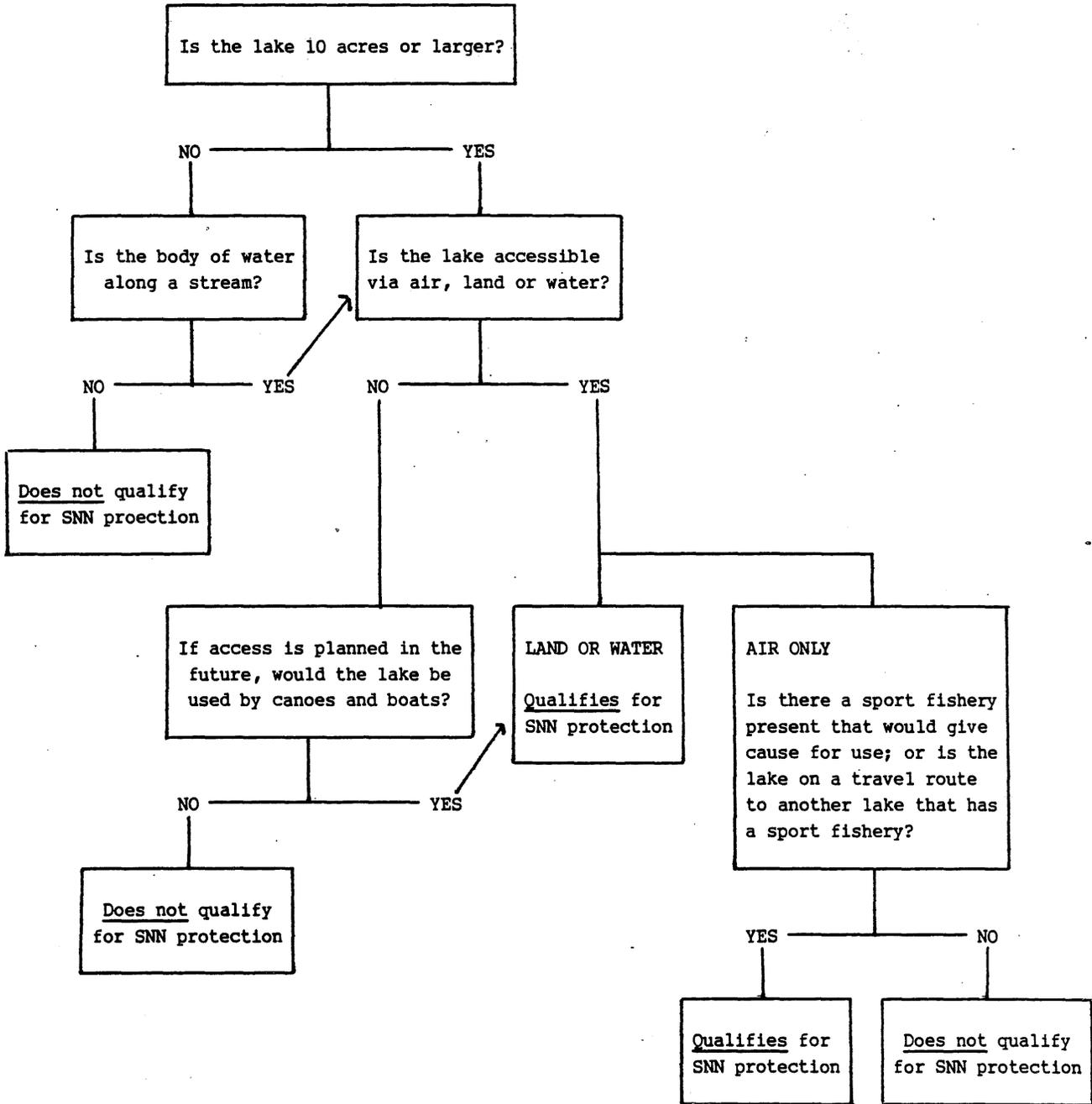
The Shipstead-Newton-Nolan Act implies that a lake must receive general use by canoe or boat travel to qualify for SNN protection. To determine whether or not a lake should have a SNN zone, process criteria were developed. The first criteria considers size of the lake. In Minnesota, a body of water greater than 10 acres in size is classified as a lake. Therefore, bodies of water less than 10 acres in size do not qualify for SNN protection. The second criteria considers accessibility. Does the lake have access by trail, road or navigable stream? Do not consider a stream only if it is navigable near the lake, but has no access and/or is not navigable near the access. If there is no access by boat, foot, or road, determine if the lake is accessible by aircraft (fixed wing). Items to consider when determining this are size, depth, and shape of the lakes; and presence or absence of shoals, reefs and/or boulders near the surface.

The final criteria considers use of the lake. If a lake is accessible only by aircraft, it must be assumed that the reason someone would want to fly into the lake, is to fish. Therefore, those lakes accessible only by aircraft must have a viable sport fishery present (i.e., walleye, trout, bass, northern) to qualify for SNN. Also, if the lake provides travel route to another lake that has a sport fishery, then the lake qualifies for SNN protection.

A schematic of the criteria is attached.

PROCESS CRITERIA FOR LAKES

For each lake ask the following questions to determine if the lake qualifies for SNN protection.



Streams

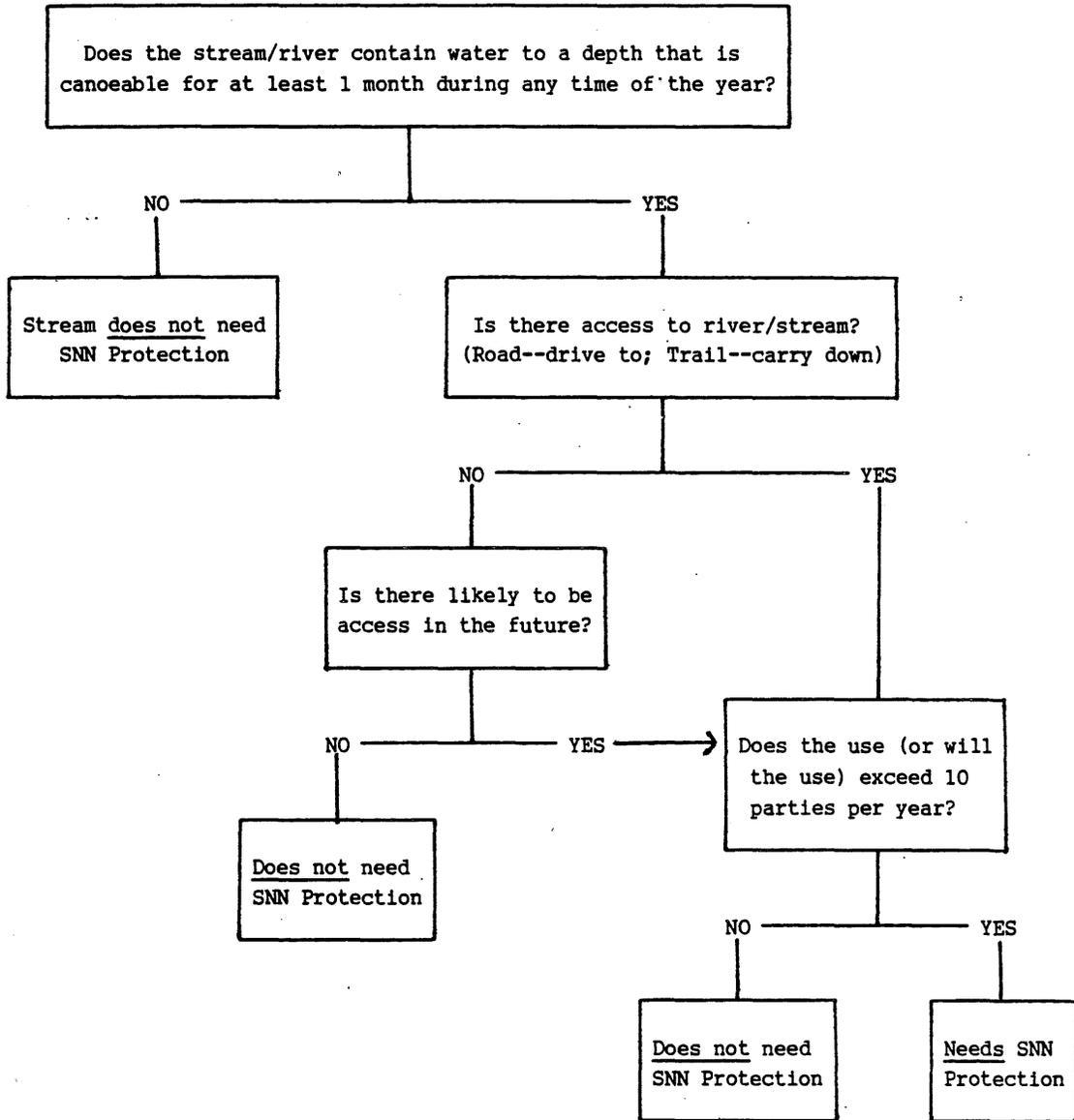
The Shipstead-Newton-Nolan Act states that a stream/river must receive general use by canoe/boat travel to qualify for protection. Process criteria were developed with this objective in mind. For a stream to be used it must be canoeable/boatable. To be canoeable/boatable, the stream must be able to sustain a certain volume of water for extended periods of time during the year. The first criteria deals with determining whether a stream/river is canoeable/boatable. Do not consider those streams whose channels are only canoeable for 1-2 weeks during spring runoff.

The second criteria deals with accessibility of the stream. If the stream is inaccessible and likely to remain that way for the next 10 years, then SNN protection is not needed. If the stream is accessible is it used by more than 10 parties per year? While it is impossible to determine actual use rates, it was felt that personnel from each district should be able to estimate how much use a stream receives or is likely to receive. The value was set at 10 parties per year to eliminate those streams that are used by an occasional canoeist.

A schematic of the criteria is attached. If the stream has similar channel and flow pattern characteristics throughout its reach, then consider the entire length as either needing or not needing SNN protection. But, if the channel characteristics and flow pattern change, making some stretches canoeable and others not, then consider each section separately.

PROCESS CRITERIA FOR STREAMS/RIVERS

For each stream/river ask the following questions to determine if the stream qualifies for SNN protection. If the channel and bed are not uniform for the entire length, divide the stream into sections and address each section separately.





ORR AREA FOREST RESOURCE MANAGEMENT PLAN

Appendix H. Rare or Unique Natural Features

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INTRODUCTION

The Natural Heritage Program of the DNR Section of Wildlife has compiled the most complete single source of existing data on Minnesota's rare, endangered, or otherwise significant plant and animal species, plant communities, and other natural features. While this information is comprehensive, it cannot be considered a substitute for an on-site survey. A review of the Natural Heritage data base indicates that there are a number of significant occurrences of rare plants, animals, and plant communities within the Orr Area.

NATURAL COMMUNITIES

The Natural Heritage Program (NHP) gathers statewide data on the location and status of natural communities which have been little modified by man's activities. Occurrences of natural communities that have maintained (or regained) their presettlement features have been greatly reduced in extent and now represent only a small fraction of the Minnesota landscape. To date, twenty-two natural community types have been identified as ecologically sensitive (i.e., high quality occurrences of the community type are now rare and are in jeopardy of being destroyed or degraded). These community types, called elements, are ranked by the NHP according to their relative rarity and endangerment throughout their range. Elements are ranked as follows:

- Critically endangered throughout range
- Endangered throughout range
- Critically state endangered
- State endangered
- State threatened
- Possibly in peril

Rank for natural community types are program defined and do not represent an official federal or state status.

The original vegetation of the Orr Area was a mosaic of five major vegetative types: Aspen-Birch Forest, Boreal Forest, Great Lakes Pine Forest, Swamp, and Bog. These natural communities and associated physiographic features are well represented in protected areas - notably the Boundary Waters Canoe Area (BWCA) and Voyageurs National Park. In fact, this area is one of the best preserved landscape regions in the state. The BWCA alone contains over 400,000 acres of virgin (uncut) forest. Outside the parks, most of the area has been extensively logged and is now dominated by successional forests of aspen and birch.

The natural communities within the Orr Area are considered well protected and have not been classified as protection priorities relative to communities in more threatened parts of the state. However, further work in this area is needed in recognizing and dedicating exemplary occurrences of selected forest cover types for research purposes. To date two areas within the Orr Area, administered by the Superior National Forest, have been designated as Research Natural Areas (RNA's); these are the Lac La Croix RNA and the Keeley Creek RNA. Both these sites represent virgin examples of Great Lakes Pine Forest, Boreal Forest, and Bog Forest. Inventories for type localities of other forest types within the Orr Forestry Area, such as Upland White Cedar Forest, have not been conducted as of this date. The Natural Heritage Program recommends a more systematic inventory of virgin forest types within the area. Outstanding examples of ecosystem types should then be considered candidates for inclusion within the Scientific and Natural Area system or other appropriate programs.

There are two excellent areas where rare plant species are concentrated which are owned (in part) or managed by the Division of Forestry. Both these areas are of SNA quality, and should be considered for SNA designation.

LOST LAKE PEATLAND

The Lost Lake Peatland is located in St. Louis County:
T62N R16W sec. 17-21, 28-32.
T62N R17W sec. 13, 23-26, 35-36.
T61N R16W sec. 5-6.

This is a relatively small peatland situated between the large peatland area of the Agassiz Lowlands and the Sand Lake Peatland. This peatland contains both bog and ribbed fen patterns, including an incipient ovoid island. These patterns are interrupted by a large lake (Lost Lake) and mineral islands. There are excellent examples of two rare plant species there: Carex exilis (sedge) and Juncus stygius (Bog-rush).

The Lost Lake Peatland was nominated for protection by the Task Force on Peatlands of Special Interest and is described in the preliminary report on Protection of Ecologically Significant Peatlands In Minnesota (MN DNR, 1984). The 1985 Legislature was supposed to have dealt with the issue of protecting several large, ecologically significant peatlands. As a result of decreasing pressures for peatland development, there has not been any legislative action on this issue and the DNR has decided not to pursue major peatland protection without legislative direction.

The state administers only 28 percent of the land in the Lost Lake Peatland, all of which is trust fund land. Most of the state land is in the watershed protection portion of the peatland. The majority of the land in the core area is county administered. The Division of Forestry will not manage state land in the core area pending possible SNA designation. Similarly, management activities on state land in the watershed protection area will be designed to avoid impacts on peatland hydrology pending legislative action on peatland protection. The Division of Forestry will consult with the SNA Program (Regional Nongame Specialist) before undertaking management activities to ensure protection of the peatland hydrology.

WAHLSTEN STATION PEATLAND

The Wahlsten Station Peatland is located in St. Louis County: T61N R15W sec. 29.

This site is a small isolated peatland consisting of a sedge mat surrounding a bog lake. It is the site of three rare plant species: Rhychospora fusca (Beak-rush), Triglochin palustris (marsh arrow-grass), and Eleocharis pauciflora (spike-rush). The site has been known botanically since the early 1940's when the rare species were first reported. A preliminary survey in 1983 relocated all the rare species except Eleocharis pauciflora, although that species is still believed to occur there.

The Wahlsten Station Peatland covers approximately 80 acres of county administered land and contains three rare plant species. This site has been nominated as an SNA but has not been evaluated by the Natural Heritage Program as to statewide significance.

The SNA program within the Division of Fish and Wildlife will be responsible for SNA planning and designation based on the results of a Natural Heritage evaluation.

PLANTS

As a region of the state, the Orr Area has received considerable attention by botanists over the last 50 years. Most of this research has been conducted in the unusual habitats in the Border Region. This region may have the highest concentration of rare and disjunct plant species in the Midwest. Consequently, the Heritage Program database contains a disproportionate number of rare plant records from this area. However, most of the records are from federally owned or managed land, and relatively few are on state owned or managed land.

MT. KATAHDIN SEDGE AND AMERICAN SHORE-PLANTAIN

In addition to the rare plant species in the Lost Lake Peatland and the Wahlsten Station Peatland, there are two rare species known to occur on forestry land elsewhere in the Orr Area. These species are Carex katahdinensis (Mt. Katahdin sedge) and Littorella americana (American shore-plantain). The Littorella is currently listed as endangered in Minnesota, and the Carex is proposed to be listed as endangered. Both are shoreline plants, occurring on wet, sandy beaches in the western part of the Border Lakes Region. Most of the sites of these two species occur on federal land, and are managed under the Forest Service's sensitive plant species program. There are, however, three sites that appear to be owned or managed by the Division of Forestry. One site of Carex katahdinensis occurs on the beach at campsite #3 on Iron Lake (St. Louis County, T67N R13W, SW 1/4 SW 1/4 sec. 35). There is also a population of Littorella on the beach at Beatty Portage (on Lac La Croix side) and on the beach at Curtain Falls Portage (Iron Lake side). It is no coincidence that these species occur at campsites and portages. The sandy beaches that are attractive for recreational development are the only habitats suitable for these species. Fortunately, normal activity at these sites does not appear to threaten these species. For example, the population of Littorella at Beatty Portage has been there for at least 30 years and does not appear to have suffered from the heavy boat traffic. For that reason, there may be no need for special management of these sites. Increased use of these beaches, or new developments affecting the beaches could have a negative impact. Any such event that would degrade the shoreline habitat should be avoided if at all possible.

ADDITIONAL SPECIES

In addition to these two species, there are six rare plant species known to occur in the Orr Area that are on federal or Indian land, which may also occur on state land. If these species are found on state managed land, a special effort should be made to assure their survival. The species are listed below with a brief description of their preferred habitat.

Arethusa bulbosa (Dragon's mouth), Special Concern.
Occurs in Sphagnum bogs and floating mats.

Caltha natans (floating marsh marigold), Proposed Endangered. Slow moving streams, creeks, and quiet bays.

Pyrola minor (small shinleaf), Proposed Threatened.
Bogs and moist woods.

Ranunculus lapponicus (Lapland buttercup), Special Concern. Sphagnum bogs.

Arenaria macrophylla (large-leaved sandwort), Threatened. North-facing cliffs and ledges.

Geocaulon lividum (northern comandra). Black spruce bogs with deep Sphagnum hummocks.

ANIMALS

Department staff have not conducted any intensive or systematic inventory of the non-game resource within the Orr Area. Data on rare and endangered species has been compiled primarily from reports made available by staff on the Superior National Forest and Voyageurs National Park. Incidental observations on species of concern also have been submitted by field staff in the Department of Natural Resources, the U.S. Forest Service and National Park Service and have contributed significantly to the Natural Heritage database. The information that follows is based upon these resources and upon an assessment of what may likely occur in the area.

GRAY WOLF (Canis lupus)

The eastern timber wolf (Canis lupus lycaon) is a subspecies of the gray wolf. Originally, the eastern timber wolf occurred throughout most of the eastern United States and southeastern Canada. The eastern timber wolf is a state and federal threatened species.

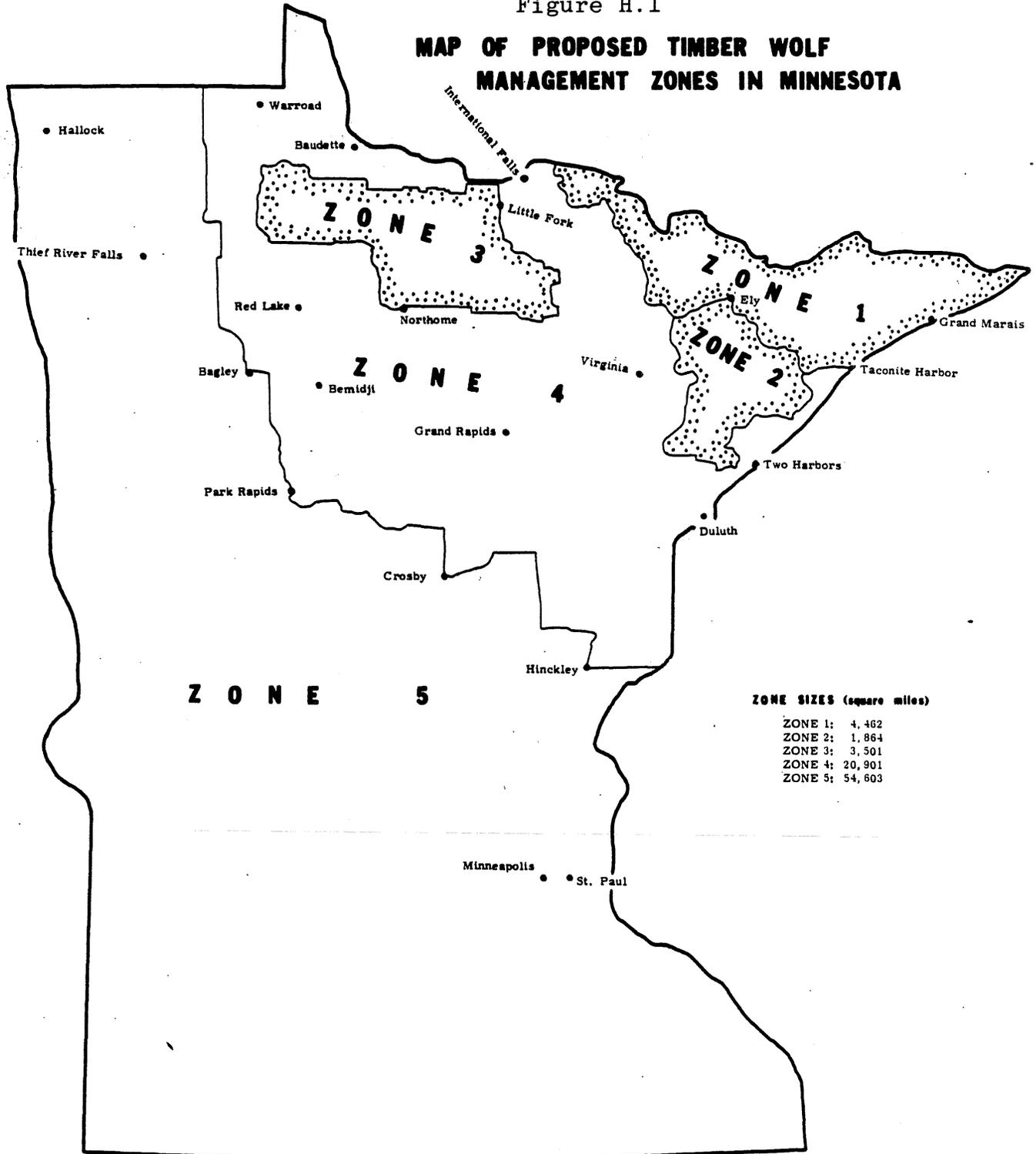
The Recovery Plan for the Eastern Timber Wolf (Bailey, 1978) lists the following four factors as critical to the long-range survival of the wolf:

1. Availability of adequate wild prey.
2. Large tracts of wild land with low human densities and minimal accessibility.
3. Ecologically sound management.
4. Adequate understanding of wolf ecology and management.

The plan also proposed wolf management zones for Minnesota (see Figure H.1). Zone 1 is a wilderness sanctuary, roughly coincident with the BWCAW and Voyageurs National Park, where wolves will be allowed to exist in a near natural state. Zones 2 and 3 are managed sanctuaries. Zone 4 is a periphery zone where wolf populations are lower than in the sanctuaries. The majority of the Orr Area is in zones 1 and 4 with smaller portions of the Area in zones 2 and 3. The Wolf Recovery Team is currently updating the recovery plan.

Figure H.1

MAP OF PROPOSED TIMBER WOLF MANAGEMENT ZONES IN MINNESOTA



Source: Recovery Plan for the Eastern Timber Wolf
(Bailey, 1978).

In Minnesota wolf populations are most affected by prey availability and human-caused mortality. Management programs designed to increase deer, moose, and beaver populations often, but not always, have provided adequate prey for wolves. Human-caused mortality of wolves, though prohibited by law in most circumstances, is difficult to monitor and restrict. Recent studies indicate that road density is related to human impact on wolf populations. There are currently two publications (Theil, 1985 and Jensen et al., 1986) and one submitted manuscript (Mech et al.) that address the subject of road densities. Each suggests that wolf survival is lower and few wolves reside in areas where road densities exceed about 0.6 kilometers/square kilometer (roughly 1 linear mile/square mile). The limiting factor is not the roads per se, but rather accessibility by humans that kill wolves.

The impact of proposed forest management activities on wolf population must be monitored. Efforts of the various resource management agencies in habitat manipulation and road construction should be coordinated to ensure adequate wolf management throughout its range. The DNR will cooperate with other agencies and land owners to limit average road density in areas of actual or potential wolf habitat to no more than 1 mile of road per square mile [see "Road Densities and Wolf Populations - Guidelines for Management (MN DNR - Wildlife, 1987)]. Continued public education is also necessary to reduce human caused wolf mortality.

PINE MARTEN (*Martes americana*)

Although once common in Minnesota, this species was extirpated or nearly so as a result of habitat loss and trapping. Complete protection of the pine marten and regrowth of coniferous forests has resulted in re-establishment of populations in some areas. Marten populations should continue to be carefully monitored in Minnesota.

HEATHER VOLE (*Phenacomys intermedius*)

The heather vole is poorly known in Minnesota. It was probably never common in the state. The regional distribution of the species reaches its southernmost limit along the northern border of the state. The only specimen known from Minnesota was collected near Ely in 1940. The heather vole prefers undisturbed and unsettled areas, suggesting a high susceptibility to human disturbance. It occurs in open and forested habitats dominated by conifers and ericaceous shrubs. Efforts to document the current status of this species should continue.

ROCK VOLE (Microtus chrotorrhinus)

The rock vole is classified as a species of Special Concern in Minnesota. Until recently it was known from only a few sites in Cook County and St. Louis counties. A recent increase in records, however, suggests that rock vole populations may undergo dramatic, cyclic fluctuations in abundance. The past few years (1982-1984) might represent a peak in the cycle. Most intensive collecting efforts have been underway in Cook County but recent field work in eastern Lake County has revealed new locations just outside of the eastern boundary of the Orr Area and it is very likely that suitable habitat is present within the Area boundaries. An old record (1921) is available from Burntside Lake in St. Louis County but recent attempts to find the vole there again have been unsuccessful.

BAT HIBERNACULUM

A major winter hibernaculum for Minnesota bats was recently discovered within the Tower - Soudan Mine. It is believed that the old mine shafts support the largest known winter concentration of Keen's Myotis (Myotis keenii) in North America. This species' rarity statewide was the primary reason for its being designated as a Special concern species in Minnesota in 1984. The total number of wintering Keen's Myotis in the mine may number into the hundreds of thousands. The mine also supports a very large wintering population of the little brown bat, Myotis lucifugus.

COLONIAL WATERBIRD NESTING SITES

A total of 33 colonial waterbird nesting sites are known in the Orr Area. At least 11 of these are confirmed as inactive Great Blue Heron colonies and one inactive Common Tern colony. Of the remaining 21 active colonies, 19 are occupied by Great Blue Herons, and two by Herring Gulls. Access to many of these sites is difficult and most are field checked only once every few years.

The Common Tern is classified as a species of Special Concern in Minnesota. Only four sites in the state are known to support active colonies: Duluth Harbor, Mille Lacs Lake, Leech Lake, and Lake of the Woods. Reproductive success of at least two of these colonies has been drastically low for several years now. Because of the species overall demise, future success at the Shipwreck Islands would be very important.

As the numbers above indicate, Great Blue Herons are the most common colonial waterbird in this part of the state. Most colonies, however, are relatively small and rarely support more than 50 nesting pairs. It also appears that there may be a fair amount of movement of colonies from one site to another over the years. Information on the location and size of inactive sites are kept in the Heritage data files on the premise that it indicates potentially suitable habitat that could once again be reoccupied.

INACTIVE COLONIES (all formerly Great Blue Heron colonies)

Name	County	Location	Size	Last Checked
August Lake	Lake	SESE 16 T61N R10W	3 nests-1978	1980-inactive
Boulder Lake	Lake	NWSE 20 T64N R6W	4 nests	1980-inactive
Lake Three	Lake	NWNW 2 T62N R9W	unknown	1980-inactive
Turtle Lake	Lake	SWNW 13 T62N R10W	unknown	1978-inactive
200 Road	St. Louis	SE 25 T65N R16W	20 nests-1981	1983-inactive
Chippewa Lake	St. Louis	SESE 36 T66N R12W	6 nests-1980	1983-inactive
Narrows Pond	St. Louis	NWNW 22 T68N R17W	unknown	1981-inactive
Rush Lake	St. Louis	NESW 14 T66N R13W	16 nests-1978	1979-inactive
Loon Lake East	St. Louis	SWNW 35 T65N R15W	5 nests-1980	1983-inactive
Picket Lake	St. Louis	SWNE 25 T65N R16W	8 nests-1976	1978-inactive
Norwegian Bay	St. Louis	NWNW 13 T63N R17W	unknown	1977-inactive

INACTIVE COLONIES (Common Tern)

Name	County	Location	Size	Last Checked
Shipwreck Islands	St. Louis	W 3 T69N R21W	13 nests-1980	1984-inactive

ACTIVE COLONIES (Great Blue Heron)

Name	County	Location	Size	Last Checked
Insula Lake	Lake	NENE 26 T63N R8W	75 nests	1984
Moose Lake	Lake	T64N R9W	unknown	1977
Fall Lake	Lake	NWNE 35 T64N R11W	102 nests	1983
Black Duck Lake	St. Louis	NWNE 21 T66N R19W	233 nests	1981
Vermilion Lake	St. Louis	SWSW 36 T63N R16W	239 nests	1984
Johnson Lake	St. Louis	1 T67N R18W	unknown	
Papoose Lake	St. Louis	SENE 36 T66N R12W	10 nests	1983
Blue Fen Bay	St. Louis	N 1/2 18 T69N R20W	60 nests	1982
North Mukooda	St. Louis	NWSW 23 T68N R17W	9 nests	1982
Southwest Mukooda	St. Louis	SE 34 T68N R17W	6 nests	1982
Crane Lake	St. Louis	NW 14 T67N R17W	7 nests	1982
Big Lake	St. Louis	NWNW 27 T65N R13W	7 nests	1983
Loon Lake West	St. Louis	NWNE 5 T66N R15W	20 nests	1984
Birch Lake	St. Louis	SWNW 30 T61N R12W	74 nests	1983
Burntside Lake	St. Louis	SESE 13 T63N R13W	1 nest	1984
25 Island	St. Louis	SENE 26 T68N R14W	50 nests	1984
Ash Lake	St. Louis	NWNE 1 T66N R21W	4 nests	1983
Little Elbow	St. Louis	NENE 36 T64N R19W	2 nests	1983
Ban Lake	St. Louis	SENW 13 T64N R19W	4 nests	1983

* this colony may be inactive; could not be located during 1984 aerial survey

ACTIVE COLONIES (Herring Gull)

Name	County	Location	Size	Last Checked
Potato Island	St. Louis	NWNW 16 T62N R15W	unknown	1981
High Lake	St. Louis	SWSW 34 T63N R12W	2 nests	1977

OSPREY (Pandion haliaetus)

The osprey is officially listed as a species of Special Concern in Minnesota. Sensitivity to DDT contamination was the principal reason for its decline in the 1950's and 1960's. Recent data from both the Superior and Chippewa National Forests indicate that, overall, ospreys are on the increase statewide. The average number of young produced per nest, however, is still below that needed to maintain a stable population.

The locations of all osprey nests within the Orr Area are not available in the Natural Heritage database. The Superior National Forest monitors all known osprey nests on the forest each year, but this data is not maintained by the Heritage Program. Instead, the Heritage Program catalogs all known nest sites outside the Chippewa and Superior

National Forests; sites which are annually monitored by the U.S. Fish and Wildlife Service. Incidental observations of nests that may be within the national forests are also catalogued.

BALD EAGLE (Haliaeetus leucocephalus)

The bald eagle is officially classified as both a State Threatened and Federally Threatened species. Like the osprey discussed earlier, recent data indicates that the bald eagle is on the increase statewide. In the past few years new territories have been established in some portions of the state from which eagles have been absent since the turn of the century.

Once again, as was the case with the osprey, the locations of all bald eagle nests within the Orr Area are not available from the Natural Heritage database. Information on nests located within the Superior National Forest are maintained by the Forest Service office in Duluth. Information on nest sites outside of the national forest, however, are maintained within the Heritage database. Furthermore, incidental observations of nests within the national forest that are submitted by visitors to the area are also catalogued by the state. Present management efforts are directed toward increasing the nesting population. This requires an adequate supply of suitable nest trees. Guidelines for reserving potential nest trees are found in the Forestry - Wildlife Guidelines to Habitat Management (MN DNR, 1985).

PEREGRINE FALCON (Falco peregrinus)

The peregrine falcon is a State and Federally Endangered species in Minnesota. Before its extirpation from the state in the 1960's, the total statewide population probably numbered approximately 40 pairs and was distributed along the Mississippi River, the St. Croix River, and the North Shore of Lake Superior. Although most of the birds in northeastern Minnesota were along the high granite cliffs bordering the lake, some inland cliffs provided suitable habitat as well. At least one pair was known to have established a territory on a prominent rock face bordering Crooked Lake in T66N R12W. The general area throughout this locality may provide good habitat as young falcons disperse from the new reintroduction area near Tofte, Minnesota.

YELLOW RAIL (Coturnicops noveboracensis)

The yellow rail is distributed primarily across southern Canada, from Quebec to the prairie provinces, and across the Great Lakes states to North Dakota. It breeds very locally within this range. Sedge meadows and grassy marshes are preferred. It will use marshes with patches of cattails and bulrushes, but generally prefers open marshes with water conditions ranging from moist soil surface to eight to ten inches of standing water. These marshes are vulnerable to drought and unusually wet years. Management to protect and perpetuate yellow rail habitat involves maintaining the open aspect of the wetland. Invasion of woody vegetation could eventually render the area unsuitable for the species.

Documented nesting for yellow rails is available only in a few counties in Minnesota. Never more than a few presumed breeding sites are reported in any given year. It probably always has been ephemeral in distribution. Because of its secretive habits, this rail is easily overlooked. An inventory of breeding sites and an identification of critical aspects of this species habitat are needed.

AMERICAN BITTERN (Botaurus lentiginosus)

Formerly common in suitable marshes throughout the state, the bittern has been absent in recent years from many places which appear to offer excellent habitat. Although the bittern is most common in the central part of the state, during summer it may be found in any of the counties which have marshes.

The recent decline of this species can be attributed only in part to loss of habitat. A large decline in the number of frogs, a preferred food over large parts of the species' range, may also be partially responsible. The fact remains that much habitat which appears suitable has been unoccupied by bitterns in recent years. In view of the uncertainty as to the cause of their decline, a careful study of the requirements of this bird is in order. Any efforts to preserve, restore or create large marshes should be a plus for bitterns, but a better understanding of their needs is a prerequisite to improved management.

SHORT-EARED OWL (Asio flammens)

The short-eared owl was a common and widespread summer resident in the first half of this century, when it occurred widely throughout the state. Now this species is uncommon, with almost all the records limited to the northwestern corner of the state.

The preferred habitat of this owl is native grasslands, marshes, open peatlands, and grain fields for hunting and nesting. All of these habitats have been reduced in extent by cultivation and drainage. These birds will nest in grain fields, but are then vulnerable to disturbance by agricultural activities. Like other raptors, it is also vulnerable to illegal shooting.

WOOD TURTLE (Clemmys insculpta)

Minnesota is on the western periphery of this species' range. The loss of forested stream habitat due to agriculture, especially in southern Minnesota has greatly decreased the available habitat for the wood turtle in the state. This turtle is vulnerable to collection for pet trade and is collected for biological supply houses. Currently it is not protected in Minnesota. Wood turtles have been found in the Cloquet River, and may occur in other northern streams.

The wood turtle is semi-terrestrial, and will wander a considerable distance from water to feed and nest. Therefore management of the adjacent terrestrial river corridor is important. These turtles prefer small fast moving rivers with hard bottoms of sand and gravel with very little silt. Sandy or gravelly areas along rivers like gravel pits, cutbanks, and highway bridge and railroad embankments are used for nesting.

While the wood turtle habitat is extensively forested, this species uses areas where there are breaks in the forest canopy. Thus their terrestrial habitat is best characterized as forest edge. This edge preference is likely due to the availability of favored foods like berries, and violet and Virginia creeper leaves found on floodplains.

Forest management practices along streams and rivers with potential wood turtle habitat should not increase silting, extensively diminish forest cover, or reduce food plants for one quarter mile on either side of the channel.

VERTEBRATE SPECIES LIST

The remaining pages of this appendix contain the vertebrate species list for Region II. The list indicates special habitat requirements, protection status, and habitats used for breeding and feeding for each species.

The following key explains codes used in the species list:

KEY TO COLUMN HEADINGS AND LETTER CODES

SPECIAL REQUIREMENTS:

Human	(H)	Associated with humans
Snag	(S)	Snag dependent species
Edge	(E)	Edge dependent species
Log	(D)	Use decaying logs
Mast	(M)	Feed on mast, e.g. acorns, chokecherries, etc.
Bank	(B)	Use bank or bare ground
Threatened	(T)	Species that might become endangered
Endangered	(E)	Species threatened with extinction
Special Concern	(C)	Species that might become threatened
Sens	(S)	Sensitive species

EXPLOITED:

Game (G) Game species

OPEN WATER:

Lake - self explanatory
Pond - self explanatory
Stream - self explanatory

SWAMPS:

ENW - Emergent non-persistent aquatics
EPW - Emergent persistent aquatics
SMW - Sedge meadow
SSW - Shrub swamp
OHB - Open heath bog

OPENINGS:

PO - Permanent opening

COMMUNITY ORIENTATION:

Feeds (F)
Breeds (B)
Feeds & Breeds (X)

FORESTED COMMUNITIES:

SSO - Shrub sapling opening
YDU - Young deciduous upland
MDU - Mature deciduous upland
ODU - Old growth deciduous upland
YCU - Young coniferous upland
MCU - Mature coniferous upland
OCU - Old growth coniferous upland
YMU - Young mixed upland
MMU - Mature mixed upland
OMU - Old growth mixed upland
SIC - Semi-open lowland conifer
CLC - Closed canopy lowland conifer
YLD - Young lowland deciduous
MLD - Mature lowland deciduous
OLD - Old growth lowland deciduous

