
APPENDIX C. FOREST ROADLESS AREA INVENTORY AND EVALUATION

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C. I. Introduction

The National Forest System Management Act, 36 CFR 219.17(b), and FSM (Forest Service Manual) 1923 require and describe the process for roadless areas to be identified, evaluated, and considered for recommendation as wilderness study areas during the forest planning process. As a part of the Forest Plan revision process, the Chippewa and Superior National Forests completed a Roadless Area Inventory and Evaluation. This appendix displays the process that the Chippewa and Superior National Forests used for their Roadless Area Inventory and Wilderness Evaluation along with the results of the analysis.

This appendix is divided into six sections. Section C.II provides information on past Forest Service roadless inventories as well as more information on the Roadless Area Conservation Rule (RACR). That section also includes a summary of legislation and other events related to the Boundary Water Canoe Area Wilderness (BWCAW), Section C.III describes the Chippewa and Superior NF Forest Plan revision Roadless Area Inventory and evaluation process with results of the analysis. Section C.IV includes the inventory and evaluation information for the individual Chippewa NF Forest Plan revision roadless areas. Section C.V. includes the inventory and evaluation information for the individual Superior NF Forest Plan revision roadless areas. Section C.VI includes maps of each Forest Roadless Area Inventory area.

C.II. Background

Roadless Area Review and Evaluation I and II

In 1972 the Forest Service initiated a review of National Forest System (NFS) areas that were unroaded and larger than 5,000 acres, known as the Roadless Area Review and Evaluation I (RARE I). The purpose of the review was to determine the areas' suitability for inclusion in the National Wilderness Preservation System (NWPS). The second and final review process, RARE II, resulted in a nation-wide inventory of roadless areas (Final Environmental Impact Statement, Roadless Area Review and Evaluation, January 1979). RARE II was also an assessment of undeveloped land within national forests as potential wilderness study areas, as required by the Wilderness Act of 1964.

Boundary Waters Canoe Area Wilderness

The 1964 Wilderness Act (PL 88-577) incorporated the Boundary Waters Canoe Area into the National Wilderness Preservation System, but the language also included special provisions. Exceptions were made for limited logging, motor boat use, and other previously established uses. The use of motorboats, restricted for the first time in BWCA history, was limited to specific lakes. All of the motor lakes together comprised 60% of the total BWCA lake surface.

The 1978 BWCA Wilderness Act (PL95-495) modified the official name for the BWCA by adding the word "Wilderness", added 56,914 acres, prohibited all logging, and established a Mining Protection Area (MPA) adjacent to the BWCAW. The federal government was given concurrent jurisdiction with the State to regulate the use of motorboats on BWCAW water. The amount of BWCAW water surface open to use of motorboats was reduced to 33 percent, with specified phase outs reducing that to 24% by 1999. The legislation also phased out large motor towboats and most snowmobile use, set maximum horsepower limits on lakes still open for motor use, and directed establishment of quotas for motorboat use.

In adding acreage to the BWCAW, the Congress examined the 13 RARE II areas. Portions of all RARE II areas adjacent to the BWCAW (9 areas) were included in the Wilderness. Of the 52,433 acres of National Forest System (NFS) lands within these 9 areas, 14,638 acres were included within the Wilderness. This left 37,795 NFS acres within these areas and all 23,007 NFS acres in the 4 RARE II areas not adjacent to the BWCAW that Congress chose not to designate as Wilderness.

In 1996, the Federal Mediation and Conciliation Service, at the request of US Senator Paul Wellstone and under the sponsorship of the US Forest Service, convened a panel to identify and resolve long-standing disputes involving the administration and utilization of the BWCAW. The panel consensus recommendations are summarized in their May 16, 1997 report. Those recommendations were primarily involved with how the BWCAW should be managed. Although, the panel discussed additions or deletions to the BWCAW, there were no consensus recommendations to add or subtract land to the BWCAW.

Section 1212, 105-178, of the 1998 Transportation Equity Act amended the 1978 Act (PL 95-495) and removed Canoe and Alder Lakes in Cook County from the list of lakes where motorized use is allowed. It also stated that effective 1999 nothing in this Act (PL 95-495) shall be construed to prevent the operation of motorized portage vehicles to transport boats across the portages between the Moose Lake Chain and Basswood Lake and between Vermilion Lake and Trout Lake.

The 1986 Forest Plan

During the analysis for the 1986 Forest Plans, all of the RARE II areas not already designated as Wilderness (77 NFS acres on the Chippewa and 60,802 acres on the Superior) were once again evaluated as potential wilderness study areas as required by the planning regulations at 36 CFR 219.17. None of the areas were recommended for Wilderness in the 1986 Forest Plan Record of Decision, which stated: “The Forest Service concludes that additions to the wilderness component of the Superior National Forest are inappropriate at this time, and the areas will not be recommended for further study.” The 1986 Plan allocated these areas to other uses, with several being assigned to semi-primitive motorized management.

Roadless Area Conservation Rule

The Forest Service Roadless Area Conservation Final EIS was published in November 2000. In January 2001, the Final Roadless Area Conservation Rule (RACR) (*Special Areas; Roadless Area Conservation; 36 CFR Part 294; 66 Federal Register 3244; January 12, 2001*) was published. The Chippewa and Superior NFs RARE II inventory was used in the analysis of the RACR Final EIS. The prohibitions included in the RACR were designed to stay in effect from January 2001 onward into the future. Subsequent Forest Plan revisions or amendments would not be allowed to revisit the decisions made in response to the RACR. In brief, the RACR included the following:

1) Prohibit new road construction and reconstruction in inventoried roadless areas on National Forest System lands, except:

- To protect health and safety in cases of an imminent threat of flood, fire, or other catastrophic event that, without intervention, would cause the loss of life or property.
- To conduct environmental clean up required by federal law.
- To allow for reserved or outstanding rights provided for by statute or treaty.
- To prevent irreparable resource damage by an existing road.
- To rectify existing hazardous road conditions.
- Where a road is part of a Federal Aid Highway project.
- Where a road is needed in conjunction with the continuation, extension, or renewal of a mineral lease on lands that are under lease, or for new leases issued immediately upon expiration of an existing lease.

2) Prohibit cutting, sale, and removal of timber in inventoried roadless areas, except:

- For the cutting, sale, or removal of generally small diameter trees which maintains or improves roadless characteristics and:
 - To improve habitat for threatened, endangered, proposed, or sensitive species, or
 - To maintain or restore ecosystem composition and structure, such as reducing the risk of uncharacteristic wildfire effects.
- When incidental to the accomplishment of a management activity not otherwise prohibited by this rule.
- For personal or administrative use.
- Where roadless characteristics have been substantially altered in a portion of an inventoried roadless area due to the construction of a classified road and subsequent timber harvest occurring after the area was designated an inventoried roadless area and prior to the publication date of this rule.

The RACR was originally scheduled to take effect on March 12, 2001; however, the Secretary of Agriculture extended the effective date until May 12, 2001, to permit the incoming Bush Administration to review the rule. On June 7, 2001, the Chief of the Forest Service and Secretary of Agriculture issued a letter concerning interim

protection of inventoried roadless areas (RACR areas), stating that, “the Forest Service is committed to protecting and managing roadless areas as an important component of the National Forest System. The best way to achieve this objective is to ensure that we protect and sustain roadless values until they can be appropriately considered through forest planning” (Bosworth 2001). In July 2003, a District of Wyoming court decision enjoined implementation of the RACR nationwide. The final legal disposition (final arrangement) of the RACR continues to be in question and remains within the court system. Depending upon the ultimate resolution, there is on-going legal uncertainty of implementing the RACR in the future.

Regardless of the final outcome of the RACR, the starting point for the Chippewa and Superior National Forests Plan revision Roadless Area Inventory, as required by 36 CFR 219.17 and FSM 1923, was the 16 RARE II areas also identified in the RACR. The Plan Revision process also looked at other essentially roadless areas that meet current roadless criteria but had not been previously inventoried in the RARE II process. Some of the RARE II areas no longer meet the current roadless criteria. This appendix describes the Forest Roadless Area Inventory process, evaluation of capability and availability for each area, and discusses the need for recommended wilderness.

If the RACR becomes effective, its direction would apply only to the original 16 “old” RARE II areas and not to new areas on both Forests that met the Forest Plan Revision Roadless Area Inventory criteria. Management of the areas in the Forest Roadless Area Inventory would be managed by direction developed through this plan revision process.

Table C-1 summarizes the number and acres of identified Chippewa and Superior NF roadless areas based on the November 2000 Roadless Area Conservation FEIS. Table C-2 provides data for the specific areas including acres, ownership, theoretical annual sale quantity, and estimated acres of National Forest System land suitable for timber management.

Table C-1. Summary of Roadless Areas Chippewa and Superior NF (Roadless Area Conservation Final EIS)			
Chippewa NF		Superior NF	
Number of Areas	Acres of NFS lands	Number of Areas	Acres of NFS lands
3	77	13	61,456

Table C-2. Chippewa and Superior National Forest Areas in Roadless Area Conservation Final EIS					
	NFS Acres	Total Acres	NFS % Ownership	Theoretical annual sale quantity (MMBF) *	Estimated acres of NFS lands suitable for timber mgt.*
Chippewa NF					
Big Island	28	28	100	0	0
Elmwood Island	39	39	100	0	0
Potato Island	10	10	100	0	0
Total	77	77	100	0	0
Superior NF					
Little Indian Sioux	995	995	100	negligible	900
Baldpate Lake	485	485	100	negligible	480
Moose Portage III	81	81	100	negligible	80
Hegman Lakes	673	832	81	negligible	600
Mississippi Creek	5,712	7,419	78	0.8	5,100
Cabin Creek	6,068	7,414	84	1.0	6,000
Tait Lake	6,272	7,747	88	0.9	5,400
Phantom Lake	6,516	8,549	77	1.1	6,300
Wood Lake	568	621	94	negligible	500
South Kawishiwi River	135	135	100	negligible	0
Brule Lake-Eagle Mountain	12,302	15,135	87	1.9	12,200
Kawishiwi Lake to Sawbill	14,942	15,778	97	2.6	14,000
Baker-Homer-Brule	6,707	8,565	82	1.2	6,000
Total	61,456	73,756	86	Rough Estimate 9.5	Rough Estimate 57,560
* Data from 1986 Forest Plan EIS Appendix C.					

C.III Forest Plan Revision Roadless Area Inventory

Process for Forest Plan Revision Roadless Area Inventory

The Forest Plan revision process required an up-to-date inventory to address the ongoing roadless area management issues. According to 36 CFR 219.17 and FSM 1923, all national forests when revising Forest Plans must inventory, evaluate, and consider for wilderness recommendation existing RARE II areas and other areas that may not have been previously inventoried in RARE II. The Forest Plan revision Roadless Area Inventory and evaluation process included three phases: inventory, evaluation, and alternative development.

1. Inventory

The first phase was to establish an inventory of lands available to be considered as roadless areas. An in depth inventory of potential roadless areas (including existing RARE II areas) was conducted on both the Chippewa and Superior National Forests. The inventory included lands that met the FSM criteria outlined below. Areas selected for evaluation also met inventory advice in the Regional Forester memo of August 13, 1997 titled "Roadless Area Inventory for Forest Plan Revision".

Vegetation:	No more than 20 percent of the area harvested in the past 10 years.
Setting/Solitude:	At least about 2,500 acres of semi-primitive area if not adjacent to existing wilderness. No acre limit adjacent to existing wilderness.
Ownership:	At least 70 percent federal ownership. No future non-federal land access needs.
Roads:	No more than ½ mile of improved roads per 1,000 acres. No roads not under Forest Service jurisdiction.
Shape:	A manageable area without narrow, elongated, or gerrymandered boundaries.

Areas eliminated from further analysis did not have enough acreage of SPNM; had more than 20 percent harvested land; included other property ownership that prevented a future semi-primitive setting and that created access issues; had irregular property shape or configuration; and/or included too many improved roads. Areas were also excluded from the inventory if they contained reservoirs, utility corridors, electronic sites, developed recreation sites, or current mining activity. However, some improvements were deemed acceptable. If motorized trails, fences, outfitter camps, or historical mining or timber activities were present, the area still was considered physically undeveloped.

In Forest Service Region 9 an improved road is defined as: "Any constructed or existing feature or facility created on the land for the purpose of travel by passenger vehicles (four wheeled, two wheel drive) which are legally allowed to operate on forest roads or public roads and highways, and vehicles are greater than 50 inches in width. Said facility will have an area for vehicles to travel on and will incorporate some manner for the disposal of surface runoff."

For the revision of the Chippewa and Superior NF Forest Plans, the Forest Roadless Area Inventory was completed using the above criteria to determine areas eligible for consideration as wilderness study areas. The Forest Roadless Area Inventory, based upon criteria provided by and a process approved by the Forest Service Eastern Regional Office, is summarized in Table C-3. There is a total of approximately 66,820 acres meeting the roadless inventory criteria on the Chippewa and Superior National Forests. On the Superior NF, the inventory included 20 new areas ** (43,632 NFS acres), parts of 8 of the RARE II areas from the 1986 Plan (16,531 NFS acres), and completely eliminated 5 of the RARE II areas from the 1986 Plan (19,610 NFS acres). On the

Chippewa NF, the inventory included two new areas (6,657 NFS acres) and eliminated three of the RARE II areas from the 1986 Plan (77 NFS acres).

	Number of areas meeting RARE II criteria	Number of areas meeting revision criteria	NFS acres meeting revision criteria
Chippewa NF			
RARE II areas from the 1986 Forest Plan (included in the RACR EIS)*	3	0	0
Additional areas inventoried for Forest Plan revision	not applicable	2	6,213
Total		2	6,213
Superior NF			
RARE II areas from the 1986 Forest Plan (included in the RACR EIS)*	13	8**	16,531
Additional areas inventoried for Forest Plan revision	not applicable	20	43,632
Total		30**	60,163
*Also called 'existing RARE II areas'			
**One area has three separate parts that meet the current inventory criteria			

Table C-4 lists the RARE II areas from both Forests that did not meet the forest plan revision Roadless Area Inventory criteria and a short explanation.

RARE II Areas Dropped from the Inventory	Explanation
Chippewa NF	
Big Island	Does not meet inventory criteria for semi-primitive acres.
Elmwood Island	Does not meet inventory criteria for semi-primitive acres.
Potato Island	Does not meet inventory criteria for semi-primitive acres.
Superior NF	
Moose Portage III	Harvested area exceeds 20 percent.
Hegman Lakes	Does not meet inventory criteria for semi-primitive acres (only 170 acres are semi-primitive). Unmanageable shape.
Cabin Creek	Not enough semi-primitive acres that will not be affected by other ownership access needs
Tait Lake	Miles of roads exceed criteria.
Phantom Lake	Does not meet inventory criteria for semi-primitive acres (only 1,000 acres semi-primitive).

On the Chippewa NF, none of the three RARE II areas are considered suitable for timber management in any of the alternatives. On the Superior NF, only Alternative D placed all of the remaining eight existing RARE II areas in management areas that are not suitable for timber management.

2. Evaluation

In carrying out the evaluation of the areas in the Forest Roadless Area Inventory, the Forests chose to carry forward all candidate areas which met the initial Phase One physical inventory criteria. While each area was looked at in terms of capability, availability, and need, the Planning team did not attempt to “screen out” candidates in the Phase Two step. The intent was to bring forward a range of potential roadless areas for consideration as recommended wilderness in the alternative development phase of the planning process.

Each area in the Forest Roadless Area Inventory was analyzed based on *capability*, *availability*, and *need* that assessed each area's potential wilderness characteristics, its value relative to other resources, and the perceived need to add the site to the National Wilderness Preservation System (NWPS). Forest Service Handbook (FSH) 1909.12 (USDA 1992) outlines how to evaluate roadless areas for potential wilderness study recommendation.

Capability: The capability of a potential wilderness study area is defined in FSH 1909.12-7.21 as “the degree to which the area contains the basic characteristics that make it suitable for wilderness designation without regard to its availability or need as wilderness.” Among the characteristics analyzed were environment, user challenge, outdoor recreation opportunities, special features, and manageability.

Availability: All National Forest System land found to meet wilderness capability requirements is generally available for consideration as wilderness. However, this availability is constrained by a determination of the value of and need for the wilderness resource relative to the value of and need for other resources from the site. To be available for wilderness, the wilderness values of the resource, both tangible and intangible, should exceed the value of other resources that formal wilderness designation would preclude. In addition, constraints and encumbrances on land may govern the availability of lands for wilderness. The Forest Service should have sufficient control to prevent development of irresolvable, incompatible uses that would lessen wilderness character and potential.

Need: FSH 1909.12-7.23 directs the Forest Service to “determine the need for an area to be designated as wilderness through an analysis of the degree to which it contributes to the local and national distribution of wilderness.” There should be clear evidence of current or future public need for additional designated wilderness in the general area under consideration. Need should also be addressed on a national basis and evaluated in terms such as the geographic distribution of areas, representation of landforms and ecosystems, and the presence of wildlife expected to be visible in the potential wilderness study area setting.

The following overall discussion on the need for wilderness includes public recreational demand for and supply of existing wilderness and of existing designated Semi-primitive recreation Management Areas, as well as other values of designated wilderness. Need is also addressed in the Evaluation for each individual inventoried roadless area.

Public Demand for Designated Wilderness

Visitor use of wilderness areas in the National Forest System is expected to grow about 0.5 percent annually for the next 50 years. Generally, designating additional wilderness acres shifts the pattern of use upwards. (Cordell, 1999) Current designated wilderness recreation use in the Minnesota National Forests occurs in the Boundary Waters Canoe Area Wilderness (BWCAW).

BWCAW overnight paddle, overnight motor, and day motor use is regulated through a permit quota system from May 1 until September 30 each year. In 2001, the BWCAW had an estimated 1,350,000 Recreation Visitor Days

(RVDs). An RVD represents one person recreating in an activity for 12 hours. Use within the BWCAW fluctuates from year to year but has remained fairly stable over the past 10 years. Use may fluctuate each year depending upon such variables as gasoline prices, insect activity, weather, fire danger, etc.

Historically and currently, many entry points into the BWCAW are full during most of July and August as well as other key week-ends such as fishing opener, Memorial Day, and Labor Day. Although Cordell predicts national increases in wilderness use, potential for growth in the BWCAW is limited seasonally and geographically. Areas of the wilderness and times of year where there is potential for growth (i.e. quotas are available) may not meet people's needs and preferences.

Public Demand for Designated Semi-primitive Management Areas

A discussion of public demand for and use of designated Semi-primitive recreation opportunities provides a perspective on the demand for and range of remote and primitive kinds of recreation opportunities. The following information concentrates on management areas that have few or no roads, with either semi-primitive motorized or semi-primitive non-motorized ROS objectives. Federal lands are often the only source of remote recreation opportunities, such as those found in designated Semi-primitive MAs.

The scarcity of federal lands in the eastern United States implies even more limited opportunities for remote recreational experiences. Access to private land for public recreation is expected to decrease in the future; so public lands are likely to be the destination of choice for increasing numbers of people looking for high-quality recreation experiences in natural settings. (RACR 2000)

Regional trends indicate slow but steady growth in demand for unroaded recreation opportunities. (Cordell, 1999) Although demand for other recreation activities will increase more rapidly in the future, the availability of opportunities for remote recreation activities may be a limiting factor in meeting future demand. (RACR 2000)

Currently, the Chippewa NF sees relatively low current overall use of designated Semi-primitive Non-motorized Management Areas. Public use in these areas increases in the spring and fall when insect populations are low. Areas with groomed cross-country ski trails are well used by the public in the winter. Participants in unroaded recreation opportunities on the Chippewa NF include a high percentage of local residents within an hour's drive of the Forest, although there is also a noticeable percentage traveling from the Twin Cities metropolitan area. Forest users are attracted to the Chippewa NF instead of other government land ownerships due to locality, tradition, and family values. (HRDC 2002a).

Outside the BWCAW on the Superior NF, there are Semi-primitive Motorized Management Areas where use is generally lower than other more roaded areas of the forest. The areas contain backcountry camping sites and trails. Use of these dispersed sites and trails is also estimated to be low to moderate. Some areas that offer a primitive experience that is similar to the BWCAW receive heavy use in July and August as well as on key week-ends. Many of the dispersed sites provide opportunities similar to the BWCAW without the need for obtaining a permit or complying with other wilderness regulations. However, because timber harvest and other management activities can occur within these Semi-primitive Management Areas, visitors cannot always expect a wilderness type of experience (solitude or natural setting). The amount of use is also not limited, so visitors may encounter more users or types of uses that would conflict with a wilderness type of experience.

Public Demand Summary

In summary, current Semi-primitive Management Areas could meet some of the projected recreational demand for primitive type recreational experiences. The BWCAW has the capacity to meet much of the demand; however, at many entry points there are periods of time throughout the year (particularly on key week-ends and most of July and August) where demand exceeds the available number of entry permits.

Cordell's research does not include the availability and use of wilderness outside the United States. Nevertheless,

it is important to note that just to the north in Canada lies another nearly one million acres of wilderness in Quetico Provincial Park. Quetico Park is similar to the BWCAW in environment and management, but with a much lower density of visitors because the Park has lower quotas than the BWCAW. Use is currently at or near capacity in Quetico Park.

Ecosystem Representation

On a regional or state level, the location of wilderness is distributed unevenly across the nation in terms of population. The majority of federal wilderness lands are located in the western states and Alaska. While these states account for only about 20 percent of the nation's population, they hold more than 95 percent of the wilderness areas. (Cordell, 1990) Even though approximately 37 percent of the federal land in the Superior National Forest is designated wilderness, only 5 percent of the National Wilderness Preservation System (NWPS) is found in the Eastern United States.

The NWPS covers almost 104 million acres in about 130 areas on lands managed by the U.S. Forest Service, National Park Service, U.S. Fish and Wildlife Service, and the Bureau of Land Management. Although the Forest Service manages only 33 percent of the total NWPS acreage; 62 percent of the wilderness acreage in the lower 48 states is managed by the agency.

Cordell's (1999) research shows an imbalance of ecosystem representation in designated wilderness. Particularly under-represented are prairie grassland ecoregions of the Great Plains. Hill and mountain landforms account for about three-fourths of all wilderness areas. Plains and tablelands make up less than five percent. Cordell's research shows a need for more representation in the Laurentian Mixed Forest Province. The Chippewa and Superior NFs lie within that province.

For the most part, the biological need for ecosystem representation was addressed in the Forest Plan revision process through the potential Research Natural Area (pRNA) analyses conducted by both Forests. (EIS section 3.7.2) Special wildlife habitat or ecosystem features information is provided in the description of each inventoried roadless area in this appendix. However, the pRNA analysis identified the need for ecosystem representation based on many ecological features and not just the attribute of being roadless. A potential Wilderness Study Area MA allocation does allow natural processes to occur, but it may not provide the options necessary to provide for all ecosystem representation (an example would be Jackpine regeneration in the BWCAW without prescribed fire)

There are many other values of wilderness designation in addition to recreation and ecosystem representation. The Wilderness Act of 1964 states as its purpose: "To insure that an increasing population accompanied by expanding settlement and growing mechanization, does not occupy or modify all areas... leaving no lands designated for preservation and protection in their natural state." The other values that may be provided by designated wilderness (recognized in the Act) include scientific, educational, scenic, and historic. With few exceptions, designated wilderness does not have temporary or permanent roads; use of motor vehicles, motorized equipment or motorboats; landing of aircraft; other form of mechanical transport; and structures or installations.

3. Alternative Development

This phase included incorporating none, some, or all of the Forest Plan inventoried roadless areas into the alternatives and analyzing the potential effects. The summary of the Forest's Roadless Area Inventory and wilderness evaluation as part of the alternative allocation process are described below.

RARE II and Forest Roadless Inventory areas were allocated to alternatives differently based on the theme of the alternative and the characteristics of each area. Alternatives A, C, Modified E, and F make no allocation to the Wilderness Study Area Management Area (MA) because potential additional wilderness does not contribute to their themes.

Distribution of Wilderness Study Area MAs by Alternative

Chippewa NF

Alternatives B and D include both Forest Roadless Area Inventory areas as Wilderness Study Area MAs for the Chippewa NF, because they fit with the themes of these alternatives. Alternative G includes one area (Winter Area) as a Wilderness Study MA. This area would fill a niche in Alternative G's emphasis of providing a range of management opportunities for young, older and old growth forests, and a balance of motorized and undeveloped, non-motorized recreation settings. The Winter Area was identified because it would maintain the area's terrestrial and riparian ecologic systems, as well as recreational opportunities.

Superior NF

After reviewing the capability, availability, and evaluation for wilderness of each area in the Forest Roadless Area Inventory, the Superior National Forest sorted the areas as to their relative potential contributions to wilderness and how they could best align with alternative themes. Factors that described areas in the first group (Group 1) included one hundred percent federal ownership, waterways that could connect to the BWCAW, potential for additional campsites, and creating boundaries that would provide a more immediate wilderness experience. Factors that described areas in the third group (Group 3) included not being adjacent to the BWCAW, no special recreation opportunities or unique biological attributes and existing special use or mining encumbrances. Areas in the second group (Group 2) met most but not all of group 1 descriptions. The alternative grouping is listed below and is also identified in Table C-5.

Grouping of Forest Roadless Inventory Areas on the Superior National Forest

Group 1

South Kawishiwi River
Cucumber Lake
Mine Lake
East Otter Lake

Group 2

North Arm Burntside Lake
Greenstone Lake East
Greenstone Lake West
Big Lake
Wood Lake
Baker/Homer/Brule
Magnetic Lake
Gunflint Lake SE

Group 3

Seven Beaver
Picket Lake
Wolf Lake
Echo River
Beaver Stream
Lake Jeanette
Meander Lake
Urho Creek
Little Indian Sioux
Agassa Lake
Baldpate Lake
Hog Lake
Brule Lake Eagle Mt K1
Brule Lake Eagle Mt K2
Kawishiwi Lake to Sawbill
Mitt Lake
Mississippi Creek
Brule Lake Eagle Mt K3

Three Forest Plan Alternatives (B, D, and G) include Wilderness Study Area MAs. The two areas in the Forest Plan revision Roadless Area Inventory for the Chippewa NF were included in those three alternatives. On the Superior NF, the allocation was as follows:

In Alternative G, all Group 1 areas were included. The recreation theme for Alternative G is to provide a variety of recreation opportunities in a semi-primitive setting, where activities such as hiking, canoeing, backpacking, and some motorized travel would be common. A small addition of wilderness would meet the theme of Alternative

G. These four areas have qualities that would contribute to wilderness such as one hundred percent federal ownership, waterways that connect to the BWCAW, additional campsite potential, and/or boundaries that would provide more immediate wilderness experience. There would also be opportunities to resolve some current wilderness management concerns.

In Alternative B, the four Group 1 and eight Group 2 areas were included. The recreation theme for Alternative B is to emphasize a variety of recreation opportunities in predominately semi-primitive settings. Some of these activities would include hiking, canoeing, backpacking, and some RMV use. This alternative emphasizes semi-primitive recreation to a lesser degree than that of Alternative D, and so the Group 1 and 2 areas were included. The additional eight areas (compared to Alternative G) offer some degree of suitability for wilderness by providing a high percentage of federal ownership, some recreational potential, and are not encumbered to any great degree with special use or mining potential. The areas are all adjacent to the BWCAW creating a moderate increase in landline establishment and maintenance.

In Alternative D, all of the areas in the Forest Roadless Area Inventory were included. The recreation theme for Alternative D is to provide recreation opportunities primarily in semi-primitive non-motorized settings, where activities such as hiking, canoeing, and backpacking would be common. This alternative maximizes remote recreation opportunities. It includes all of the areas that met the inventory criteria, although some are not adjacent to the existing wilderness, have no special recreation opportunities or unique biological attributes, and have some encumbrances such as special uses and mining potential.

Management Area Allocation

In the Forest Plan Revision process, if an inventoried roadless area was not identified as a Wilderness Study Area MA within an alternative, then that area was assigned a management area based on the theme of the alternative, roadless characteristics each area contained, and other resource values. Roadless characteristics considered include:

- Soil, water, and air resources
- Biodiversity
- Habitat for threatened, endangered, proposed, candidate, and sensitive species and for those species dependent on large undisturbed areas of land
- Recreation opportunities in the primitive, semi-primitive non-motorized, and semi-primitive motorized classes
- Reference landscapes
- Scenic integrity
- Traditional cultural properties
- Sacred sites
- Other unique characteristics.

Modified Alternative E Allocation of Forest Roadless Inventory Areas

On the Chippewa NF, Modified Alternative E allocates one Forest Roadless Inventory Area to the Unique Biological, Aquatic, Geological, or Historical Area Management Area (MA) and the other as a Candidate Research Natural Area MA.

On the Superior NF, Modified Alternative E allocates the Forest Roadless Inventory Areas as follows: Group 1 and 2 roadless areas on the Superior NF were assigned to the Semi-primitive Non-motorized, Semi-Primitive Motorized, or Recreation Use in a Scenic Landscape Management Areas because they had attributes that fit both with these MAs and also with the theme of Modified Alternative E.

Group 3 roadless areas on the Superior NF were largely assigned to the General Forest and General Forest - Longer Rotation Management Areas because they had characteristics and values that fit with these management areas. Parts of two areas, however, would be allocated to Semi-primitive Motorized Recreation and Recreation Use in a Scenic Landscape Management Area.

Table C-5 lists the distribution of the Forest Roadless Area Inventory areas within Modified Alternative E.

Once the new roadless area inventory is finalized, any proposed site-specific projects within an inventoried area will require an environmental analysis which considers effects of the project proposal on the roadless characteristics in the area. The effects analysis must consider the entire inventoried area, not just the project area. (FS Regional Forester, August 13, 1997 direction to Forest Supervisors)

Table C-5. Modified Alternative E – Forest Roadless Area Inventory Management Area Allocations				
		Number	NFS Acres	Management Area Allocation in Modified Alternative E
Chippewa NF				
North Fork		0301	3,486	Unique Biological, Aquatic, Geological, or Historical Area
Winter Area		0302	2,727	Riparian Area
Superior NF	Group			
Seven Beavers	3	0912	5,174	Riparian Area, Candidate Research Natural Area
Picket Lake	3	0902	4,097	Semi-primitive Motorized Recreation
Wolf Lake	3	0903	2,661	General Forest - Longer Rotation
Echo River	3	0904	1,900	General Forest - Longer Rotation, Recreation Use in a Scenic Landscape
Beaver Stream	3	0905	1,277	General Forest - Longer Rotation
Lake Jeanette	3	0906	1,793	General Forest - Longer Rotation
Meander Lake	3	0907	753	General Forest - Longer Rotation
Urho Creek	3	0908	3,573	General Forest - Longer Rotation
*Little Indian Sioux	3	09A	995	General Forest - Longer Rotation E
Agassa Lake	3	0918	2,641	General Forest - Longer Rotation, Semi-primitive Motorized Recreation
*Baldpate Lake	3	09B	485	Longer Rotation
North Arm Burntside Lake	2	0917	2,285	Semi-primitive Motorized Recreation
Greenstone Lake East	2	0915	1,476	Semi-primitive Motorized Recreation
Greenstone Lake West	2	0916	1,353	Semi-primitive Motorized Recreation
Big Lake	2	0926	1,079	Semi-primitive Non-motorized Recreation
*Wood Lake	2	09I	544	Recreation Use in a Scenic Landscape
*South Kawishiwi River	1	09J	211	Recreation Use in a Scenic Landscape
Hog Lake	3	0919	7,035	General Forest, Semi-primitive Motorized Recreation
*Brule Lake Eagle Mountain K1	3	09K1	589	General Forest - Longer Rotation
*Brule Lake Eagle Mountain K2	3	09K2	1,035	General Forest - Longer Rotation
*Kawishiwi Lake to Sawbill	3	09L	1,486	General Forest and General Forest - Longer Rotation
*Baker-Homer-Brule	2	09M	4,963	Semi-primitive Motorized Recreation, General Forest - Longer Rotation
Mit Lake	3	0920	961	General Forest - Longer Rotation

Table C-5. Modified Alternative E – Forest Roadless Area Inventory Management Area Allocations				
		Number	NFS Acres	Management Area Allocation in Modified Alternative E
*Mississippi Creek	3	09E	5,152	General Forest - Longer Rotation
Magnetic Lake	2	0923	1,119	Recreation Use in a Scenic Landscape
Gunflint Lake SE	2	0927	1,003	Recreation Use in a Scenic Landscape
*Brule Lake Eagle Mountain K3	3	09K3	1,071	General Forest - Longer Rotation
Cucumber Lake	1	0921	1,801	Semi-primitive Non-motorized Recreation
Mine Lake	1	0922	1,129	Recreation Use in a Scenic Landscape
East Otter Lake	1	0925	522	Recreation Use in a Scenic Landscape
* Areas that are part or all of a RARE II/RACR area.				

Table C-5 shows the RARE II areas management area allocation in the Modified Alternative E. These are areas within the RACR and may be subject to that direction if it is resolved.

Table C-5. Modified Alternative E – RACR/RARE II Management Area Allocations		
	NFS Acres	Management Area Allocation in Modified Alternative E
Chippewa NF		
Big Island	28	General Forest
Elmwood Island	39	Unique Biological, Aquatic, Geological, or Historical
Potato Island	10	Unique Biological, Aquatic, Geological, or Historical
Total	77	
Superior NF		
Little Indian Sioux	995	General Forest - Longer Rotation
Baldpate Lake	485	General Forest - Longer Rotation
Moose Portage III	81	General Forest - Longer Rotation
Hegman Lakes	673	General Forest - Longer Rotation
Mississippi Creek	5,712	General Forest - Longer Rotation
Cabin Creek	6,068	Candidate Research Natural Area, Semi-Primitive Motorized Recreation, General Forest
Tait Lake	6,272	General Forest - Longer Rotation
Phantom Lake	6,516	General Forest
Wood Lake	568	Recreation Use in a Scenic Landscape
South Kawishiwi River	135	Recreation Use in a Scenic Landscape
Brule Lake-Eagle Mountain	12,302	General Forest, General Forest - Longer Rotation
Kawishiwi Lake to Sawbill	14,942	General Forest
Baker-Homer-Brule	6,707	Semi-primitive Motorized Recreation, General Forest - Longer Rotation
Total	61,456	

C. IV. Roadless Area Inventory Evaluations – Chippewa NF

North Fork (0301)

North Fork - Description

The North Fork has been identified as a potential wilderness study area via an inventory and evaluation of the social, economic and resource considerations that exist within the area. The following table summarizes basic information on the North Fork area.

Ownership, vegetation, improvements and roads.

Inventory For Potential Wilderness Study Area							
Site	Total Acres	Ownership: % Federal Ownership; % other ownership	Vegetation: % regen harvested since 1990	Vegetation: % non- native, planted vegetation	Setting: 2,000 + Acres of Semi- primitive non- motorized	Improve- ments:	Roads: Less than .5 mile of improved road/1,000 acres
North Fork	3,486	94% Federal; 4% State; 2% county	2% Federal ownership	0	2,318 SPMN	None	0 in SPMN

Location, Acres and Ownership:

Acres and Ownership		
Site	Total Acres	% Federal Ownership (% Other Ownership)
North Fork	3,486	94% FS (4% State, 2% County)

Location: The North Fork area is located wholly within the Chippewa National Forest boundary, within T42N, R25W, and within all or portions of Sections 12, 13, 23, 24, 25, and 26 within Cass County. The area is approximately 1.25 miles by 3 miles in a rectangular configuration. It lies along the eastern border of the Chippewa National Forest, five miles northeast of Remer and between MN Highways 6 and 200.

The North Fork boundary reflects a cohesive and functional area. The boundary overlays (for the most part) a potential special management complex, and since the primary value of the area is ecological, it seems logical to include most of a pre-identified special area. The boundary also follows political boundaries.

Access:

Miles of Roads and Designated Trails within the North Fork Area		
Improved Roads	Unimproved Roads	Designated Trails
0	0	0

The closest road is improved road FR2319. This road is further than 0.25 miles from the area. MN Highway 6 lies northwest of the area approximately one to 1.5 miles. To the east, on Blandin property, there are a variety of low standard forest access roads. Within North Fork, there are remnants of uninventoried winter logging roads

(unimproved roads) and skid trails. All are very much grown in and impassable to anything but foot traffic.

Watershed and Landtype Association: Watersheds and Landtype Associations provide baseline information on a landscape level to describe the ecological setting context of the of the North Fork area. The North Fork area lies within the Willow River Watershed, and Hill City Till Plain (Htp) Landtype Association (LTA). The Willow River Watershed contains 60,342 acres, with the North Fork area at 6% of the total. The following information is within the context of LTA and watershed information.

Glacial events have left the watershed with medium textured tills overlain with a thin mantle of wind deposited silt. The glacier left behind a low relief landscape with many shallow depressions that are now wetlands. One-third of the watershed is wetland, in addition to 87 lakes and 118 miles of streams.

The historic vegetation is spruce/fir, lowland conifer, lowland hardwood, aspen, and pine and is reflected in the current vegetation across the watershed. There is now more aspen and hardwoods with less of the other species.

Vegetation Information:

Vegetation % regeneration harvested since 1990	Vegetation: % non-native, planted vegetation	Majority age of vegetation
2%	0	100+ years

Acres by Species Group and Age*					
Age Group	Black Spruce	Northern White Cedar	Mixed Swamp Conifer	Sugar Maple and Basswood	Aspen
0-40	0	0	0	0	247
41- 99	62	51	113	0	194
100+	50	245	430	0	0
Total Acres	112	304	543	0	441

*The table includes only species groups that were larger than 100 acres total over the area.

Appearance and Characteristics of the area and surrounding landscape: The North Fork area, like much of northern Minnesota, is low-lying with many wetlands. These wetlands have been the primary reason that the area has not been developed with access roads over the years. To date, people have found little reason to venture into the area for recreational purposes aside from an occasional deer hunter in the fall. In comparison to much of the Chippewa NF, the area is remote in terms of road access. It is a rare two thousand acre landscape on the Chippewa NF that does not have improved roads meandering through it.

The surrounding landscape is very similar, with low wet ground, few high and dry areas, and little discernable topography. This landscape is also remote, with little access, and not much recreational use. The area lies on the eastern edge of the Forest boundary, adjacent to land owned by Blandin Corporation.

The North Fork River meanders through the area, connecting to the Willow River in the north. There has not been any identifiable use of the North Fork and Willow Rivers within the area.

Key attractions: The primary attraction to this area is the remoteness from improved roads and other developments, and hence, the opportunity for solitude and challenge, and the opportunity to experience a relatively unmanaged area.

North Fork - Wilderness Capability

Natural integrity and appearance: This area is currently minimally affected by outside forces. The amount of timber harvested since 1990 meets minimum requirements. The appearance is also natural, mimicking the landscape around the area with similar vegetation; landforms; and lack of cutting and development evidence.

Opportunities for wilderness experiences: The opportunity for solitude, remoteness, and personal challenge are all a part of wilderness experiences. The North Fork area provides for each of these characteristics based on the lack of motorized accessibility and no developments. Visitors would be able to get away from the sights and sounds of others.

Special Features: A small river, the North Fork, meanders through and connects with the Willow River in the northwest corner of the area.

Size/shape/manageability and external influences: The area is well suited for wilderness in terms of size and shape. There may be external influences in the future as there are three miles of the eastern boundary that are adjacent to private land, owned by Blandin, a company that relies on timber for their local product. The size meets and exceeds the minimum standards set by Region 9 with Federal ownership in a consolidated shape.

Boundary management needs: Approximately 7.5 miles of boundary would have to be maintained.

North Fork - Availability for Wilderness

Recreation/ tourism: This area has been used primarily for deer hunting, although not a lot of people use it because of its limited accessibility due to lack of roads and wet conditions. Tourism is not an existing use.

Wildlife: There are no known Threatened, Endangered, or Sensitive (TES) species within the area. Lynx analysis unit 19 overlays it and currently no lynx have been located within the area.

Water Availability and Use: Lakes and navigable streams are what draw people into an area and the shorelines and water surface is where the majority of use occurs. There are no lakes or navigable streams within the area, and therefore, no associated use.

Livestock: There are no grazing permits or other associated livestock uses.

Timber: The area contains 1,028 acres of suitable timber land. Within the last ten years, less than three percent of the timber has been harvested.

Minerals: There are no existing permits for minerals, oil, or gas within or immediately adjacent to the area.

Heritage resources: There have been three heritage sites identified within the survey area. Not all of the area has been surveyed.

Land uses: There may be an occasional hunter using the area for deer hunting.

Management Considerations (fire, insects/disease, non-federal lands): Existing accessibility to fight fire, apply insect/disease control, etc. is limited. Within the last planning period there has not been a need to enter the area

for these management activities.

The area overlays Special Management Complex 25 and is 65 percent of the potential SMC total acreage. The defining characteristics include old growth; wetlands, streams, and associated riparian areas; and threatened and endangered species representation. The SMC is ranked first out of four in the LTA Htp. The potential SMC area also contains a potential candidate research natural area that represents Lt 75 (conifer swamp). Part of the potential SMC overlaps the State of Minnesota DNR cooperative deer study area.

North Fork - Wilderness Evaluation

Because of the rarity of unroaded areas on the Chippewa NF, the area could fulfill wilderness values of solitude, ecosystem, wildlife, and watershed. The area has been identified as a high value SMC, as a potential RNA, and contains old growth. These ecosystem values may enhance the recreation/social values of exploration and appreciation of place. Conversely, because of the wetland condition and lack of scenic quality, the attractiveness of the recreation opportunities is very limited and public use would probably not increase.

North Fork - Environmental Consequences

Wilderness study designation: There are a number of consequences of potential wilderness designation, including:

- Trees would not be available for harvest.
- There would be more miles of landline to maintain.
- Eventually there would be a loss of aspen, and associated species, as the vegetation evolves over time.
- The area would continue to have low recreational use.
- The area would not be available for potential SMC designation.
- The Chippewa NF would have a wilderness, potentially resulting in some social and economic benefits to surrounding communities.
- Blandin's neighboring ownership and future activities may affect the wilderness setting.
- Biological and ecological values would be derived from wilderness designation as per the Wilderness Act.

Non-wilderness study designation: There are also a number of consequences in non-wilderness study designation, including:

- Possible wilderness study designation and the values the areas may bring, as per the Wilderness Act (such as remote, challenging settings; and providing for ecological framework and evolution without "interference") would be lost.
- The opportunity to designate and manage the area as an SMC would continue.
- The opportunity to designate and manage the area as an RNA would continue.
- Designation as a Semi-primitive Management Area would provide solitude and backcountry experiences and possibly still allow for motorized use.
- Timber harvesting as an option could continue.
- The area may become roaded, further decreasing areas with limited roads on the Chippewa NF.

Winter Area (0302)

Winter Area - Description

The Winter Area has been identified as a potential wilderness study area via an inventory and evaluation of the social, economic, and resource considerations that exist within the area. The following table summarizes basic information on the Winter area.

Ownership, vegetation, improvements, and roads:

Inventory For Potential Wilderness Study Areas							
Site	Total Acres	Ownership: % Federal Ownership; % other ownership	Vegetation: % regen harvested since 1990	Vegetation: % non-native, planted vegetation	Setting: 2,000 + Acres of Semi-primitive non-motorized	Improvements:	Roads: Less than .5 mile of improved road/1,000 acres
Winter	2,727	FS 93.1%; Cass County 6.9%	2.9%	0	2,114 SPNM	None	0 in SPNM

Location, acres and ownership:

Acres and Ownership		
Site:	Total Acres	% Federal Ownership (% Other Ownership)
Winter	2,727	93% Federal (7% Cass County)

Location: The Winter area is located wholly within the Chippewa National Forest boundary, within T55N, R27 W, and within all or portions of Sections 1, 2, 10, 11, 12, and 13 within Cass County. The area is approximately two by two miles in a triangular configuration. It is just south of the Leech Lake Reservation boundary as it lies along the Leech Lake River, and is westerly adjacent to the Minnesota Department of Natural Resources' Mud-Goose Lake Wildlife Management Area. Ball Club and Bena are the closest communities at six to eight miles northeast and northwest respectively, while Remer is ten miles southeast. It lies between US Highway 2 and Minnesota State Highway 200.

The Winter Area boundary reflects a cohesive and functional area. The boundary overlays (for the most part) a potential special management complex and since the primary value of the area is ecological, it seems logical to include most of a pre-identified special area.

Access:

Miles of Roads and Designated Trails within the Winter Area		
Improved Roads	Unimproved Roads	Designated Trails
0	0	0

The closest roads are improved roads FR3725 and FR2250B. Neither road directly accesses the site, however, the final 3.25 miles of FR3725 continues as a winter only access road, (an unimproved road), to the edge of the area.

Within the Winter area, there are uninventoried winter logging roads (unimproved roads) and skid trails. All are very much grown in and impassable to anything but foot traffic. The unimproved, winter only access road is a DNR constructed road and accesses State land in T144N, R27W, Section 36 just north of the Winter area. This road had been utilized by Cass County in a 1991 ten-acre harvest.

There is a gravel county road (County 135) 0.5 miles to the south. From the north, there is an improved road, FR 2260, which intersects the Leech Lake River's riparian area and is 0.5 miles away. To the east, there are no roads for at least three miles.

Watershed and Landtype Association: Watersheds and Landtype Associations provide baseline information on a landscape level to discuss the ecological setting context of the Winter area. The Winter area lies within the Leech Lake River Watershed; and the Bena Dunes and Peatlands Landtype Association (LTA) and Rosey Lake Plain LTA. The Leech Lake Watershed contains 106,830 acres, with the Winter area at 3 percent of the total. The following information is within the context of LTA and watershed information.

Glacial events have left the Leech Lake River watershed with dunes, peatlands, and lake plains. The landscape is flat to gently rolling and fully half of the watershed is considered wetland, in addition to 177 lakes and 57 miles of streams.

The historic vegetation of spruce/Fir, lowland conifer, lowland hardwood, aspen/birch, northern hardwood, jack pine, and re/white pine, is reflected in the current vegetation across the watershed. There are now fewer conifers and a larger hardwood/aspen component.

Vegetation within Winter Area	
Vegetation % regeneration harvested since 1990	Vegetation: % non-native, planted vegetation
3%	0

Appearance and Characteristics of the area and surrounding landscape: The Winter area, like much of northern Minnesota is low-lying with many wetlands. These wetlands have been the primary reason that the area has not been developed with access roads over the years. To date, people have found little reason to venture into the area for recreational purposes aside from an occasional deer hunter in the fall. In comparison to much of the Chippewa NF, the area is remote in terms of road access. It is a rare two thousand acre landscape on the Chippewa NF that does not have improved roads in it.

The surrounding landscape is very similar, with low wet ground, few high and dry areas, and little discernable topography. This landscape is also remote, with little access, and not much recreational use of the land. The DNR Mud-Goose Wildlife Management Area lies to the east and north, providing thousands of wildlife habitat and refuge acres. There are approximately 90 acres of Cass County land within the Winter area. This land is similar to the federal ownership in terms of vegetation, topography and uses. The Leech Lake Reservation boundary lies 0.5 miles north along the Leech Lake River, and includes many acres of mixed ownerships, including tribal lands, public, and private ownerships.

As the closest water body, the Leech Lake River is 0.5 miles north of the Winter area. The Army Corp of Engineers has channeled the river, disconnecting many side channels, with the intention of increasing the flow to provide for electric power. Two dams, one on each end, control the water flow. Currently, the Leech Lake Tribe has a proposal to restore the river toward its natural state. Small motorized and non-motorized boats are able to use the river, primarily to fish.

Key attractions: The primary attraction to this area is the remoteness from improved roads and other developments, and hence, the opportunity for solitude and challenge, and the opportunity to experience a

relatively unmanaged area.

Winter Area - Wilderness Capability

Natural integrity and appearance: This area is currently minimally affected by outside forces. The amount of vegetation harvested since 1990 meets minimum requirements. The appearance is also natural, mimicking the landscape around the area with similar vegetation; landforms; and lack of cutting and development evidence.

Opportunities for wilderness experiences: The opportunity for solitude, remoteness, and personal challenge are all a part of wilderness experiences. The Winter area provides for each of these characteristics based on the lack of motorized accessibility and no developments. Visitors would be able to get away from the sights and sounds of others with little effort.

Special Features: The Winter area is approximately 0.5 miles south of the Leech Lake River.

Size/shape/manageability and external influences: The area meets and exceeds minimum requirements as established by Region 9 for wilderness study. Federal ownership and the consolidated shape also meet minimum requirements. External influences may occur due to adjacent State and county owned land.

Boundary management needs: Approximately ten miles of boundary would have to be maintained.

Winter Area - Availability for Wilderness

Recreation/ tourism: This area has been used primarily for deer hunting, although not a lot of people use it because of its limited accessibility due to lack of roads and wet conditions. Tourism is not an existing use.

Wildlife: There are no known TES occurrences within the area. It does lie within Lynx Analysis Unit 20, indicating the area has potential lynx habitat. No lynx have been sighted within the area. Westerly and adjacent is the Minnesota Department of Natural Resources' Mud-Goose Lake Wildlife Management Area.

Water Availability and Use: Lakes and navigable streams are what draw people into an area and the shorelines and water surface are where the majority of use occurs. There are no lakes or navigable streams within the area, and therefore, no associated use.

Vegetation within Winter Area: There are no grazing permits or other associated livestock uses.

Timber: Within the last ten years, less than one percent of the timber has been harvested.

Minerals: There are no mineral permits or active operations of gravel, oil, or gas within or immediately adjacent to the area.

Heritage Resources: The Winter area has had three heritage surveys completed in portions of the area. No sites were found in any of the survey area.

Land uses: There probably is occasional deer hunting.

Management Considerations (fire, insects/disease, non-federal lands): Cass County last accessed their holdings in 1991 with a ten-acre harvest in the NENE of Section 12. They are not planning to be aggressive about pursuing

timber harvesting within the remaining area because there is mostly small tamarack, black spruce, and balsam poplar (balsam aspen).

The DNR has constructed a winter only access road within the northwest portion of the area that accesses their land north of the area. The road is currently impassable, even in the winter.

Existing accessibility to fight fire, apply insect/disease control, etc. is limited. Within the last planning period there has not been a need to enter the area for these management activities.

The Winter area is just south of the Leech Lake Reservation boundary as it lies along the Leech Lake River, and is westerly adjacent to the Minnesota Department of Natural Resources' Mud-Goose Lake Wildlife Management Area.

The area overlays Special Management Complex 30 and is 33 percent of the potential SMC total acreage. The potential SMC's defining characteristics include old growth; wetlands, streams and associated riparian areas; and threatened and endangered species representation. The potential SMC is ranked third out of seven potential SMCs in the Bena Dunes and Peatlands LTA; and second out of 14 in the Rosey Lake Plain LTA. This results in an overall "moderate" rating that compares relative potential contribution to ecosystem diversity of other potential SMCs in the same LTAs.

Winter Area - Wilderness Evaluation

Because of the rarity of unroaded areas on the Chippewa NF, the area as a wilderness could fulfill both a recreational opportunity for solitude, and also provide for other wilderness values including wildlife, vegetation, and watershed. Conversely, because of the wetland condition and lack of scenic quality, the attractiveness of the recreation opportunity is very limited and visitor use would probably not increase much.

Winter Area - Environmental Consequences

Wilderness study designation: There are a number of consequences of wilderness study designation, including:

- Trees would not be available for harvest.
- There would be more miles of landline to maintain.
- Cass County owns 85 acres of in holdings; therefore there may be future expenses in land exchange/purchasing.
- Eventually there would be a loss of aspen, and associated species, as the vegetation evolves over time.
- There may be associated economic and social benefits to surrounding communities and visitors with wilderness designation.
- The area would not be available for potential SMC designation.
- State and Cass County neighboring ownership and future activities may affect the wilderness setting.
- Biological and ecological values would be derived from wilderness study designation as per the Wilderness Act

Non-wilderness study designation: There are also a number of consequences in non-wilderness study designation, including:

- Possible wilderness study designation and the values the areas may bring, as per the Wilderness Act (such as remote, challenging settings; and providing for ecological framework and evolution without "interference") would be lost.

- The opportunity to designate and manage the area as an SMC would continue.
- Designation to a Semi-primitive Motorized and Non-motorized Management Area would provide solitude and back country experiences and possibly still allow for motorized use.
- Timber harvesting as an option could continue
- The area may become roaded, further decreasing areas with limited roads on the Chippewa NF.

C.V. Roadless Area Inventory Evaluations – Superior NF

Agassa Lake (0918)

Agassa Lake - Description

Acres: 2,871 acres (2,641 National Forest System, 158 non-federal, 72 water)

Location and Access: Agassa Lake area is located just southeast of Big Lake in T64N, R13W in St. Louis County. It is just west of the Echo Trail (FR 116). There is a portage trail to Agassa Lake from the Echo Trail. There are 2.3 miles of unimproved roads within the evaluated area.

Geography and Topography: The evaluated area is natural appearing and there is moderate variation in topography ranging from 1,420 to 1,580 feet above sea level.

Vegetation: Approximately one-third of the area is lowland. It is in the Jack pine-Black Spruce ecosystem type.

Acres in each age class by forest cover type. Percentage of area over 70 years old by cover type.

Age	J Pine	RW Pine	LC	UC	LH	UH	Total
0-19		18				120	138
20-69	156	336	95	577		86	1250
70+		32	8	60		100	200
Total	156	386	103	637		306	1588
% 70+		8%	8%	9%		33%	

Cover Type Key: J pine=Jack Pine, RW Pine=Red/White Pine, LC =Lowland conifers, UC=Upland conifers (Upland Black Spruce and white spruce) LC=Lowland hardwoods, and UH=Upland Hardwoods (Aspen, birch)

Current uses of the area: Viewing scenery, hunting, canoeing, and recreational cabin use.

Appearance and surroundings: Extensive timber harvest and related activities have occurred within the last 35 years. The area is adjacent to the BWCAW on the south and west, and far enough from the Echo trail on the east to be away from most human caused sounds. There are two privately owned cabins located near Hunch Lake with a driveway to the Echo Trail.

Key attractions: Agassa Lake

Agassa Lake - Wilderness Capability

Natural integrity and appearance: The area has been modified over time, but is essentially natural appearing. It is in scenic class 2, which has high public value.

Opportunities for wilderness experiences: There are opportunities to explore nature and test outdoor skills.

Special features: Agassa Lake

Size/shape/external influences: The boundary is definable and is adjacent to the BWCAW on the south and west.

Boundary management needs: Several miles of boundary line would need to be maintained.

Agassa Lake - Availability for Wilderness

Recreation/tourism: Recreational use would not be expected to change as a result of wilderness designation. There is a proposal to extend the North Country Trail along the Echo Trail, but with no specific location sited.

Wildlife: No special wildlife habitats are known.

Water availability and use: Approximately one sixth of the area is within the city of Ely watershed. Agassa Lake has one backcountry campsite.

Livestock operations: None.

Timber: Fifty-five percent of the area is suitable for timber harvest. Trees species are predominately conifers with a variety of age classes.

Minerals: All minerals are reserved. There is no known mineral potential in the area.

Heritage Resources: The area has been surveyed and no sites were found.

Authorized and potential land uses: There are no known existing special use permits. There are 1.3 miles of unimproved road in the area. The State of Minnesota had a permit for access, which expired in May of 1999. It is probable that the State might request access to land to the west in the future.

Management considerations: Wilderness designation would prevent future road access to the State of Minnesota lands to the west of this area.

Agassa Lake - Wilderness Evaluation

The primary attraction for wilderness recreation is Agassa Lake itself. However, the existing BWCAW is water oriented and this area would not provide more recreational use capacity because it does not currently connect with BWCAW lakes. There are no other known key values that would contribute to wilderness study designation.

Agassa Lake - Environmental Consequences

Wilderness study designation:

- About 1,500 acres of land would be removed from the Forest's suitable timber harvest base.
- Management activities would be limited that could contribute to meeting vegetation objectives.
- There would be more miles of landline to maintain.

- The city of Ely watershed may be more protected. However, management actions to maintain the water quality following natural events may be limited to non-motorized means.
- There could be additional wilderness recreation opportunities particularly if additional portages were built to connect to existing BWCAW routes.

Non-wilderness study designation:

- Possible loss of wilderness associated values without wilderness study designation.
- Designation in one of the recreation related management areas could provide solitude and a backcountry experience and still possibly allow some motorized use.
- Timber harvest and associated road construction would be an option in meeting vegetation objectives.
- A wider array of management actions would be available to maintain water quality for Ely's watershed.

Baker-Homer-Brule (09M)

Baker-Homer-Brule - Description

Acreege: 5,627 acres (4,963 National Forest System, 304 non-federal, and 360 water)

This area is within a RARE II area of the same name (#9140).

Location and Access: The evaluated area is located approximately 18 miles north of Lutsen, Minnesota in T63N, R3W and T62N, R3W. Forest Road (FR) 326 is the eastern boundary. Roads leading into the unit from FR 326 are overgrown and fade out within several hundred feet with the exception of one road that was re-opened during the South Temperance fire in 1996 and travels through the unit for two miles. This road was blocked after the fire and is revegetating with no evidence of recent use. An old winter logging road that heads north off of the fire access road is also inaccessible with no signs of use. There is private land and two associated spur roads on the north side of Jock Mock Lake on the southern end that are included because they are within the original RARE II area.

Geography: The evaluated area contains lakes that are part in and part out of the wilderness. All non-federal ownership is county and State land with the exception of the private land described under Location and Access.

Topography: Most of the area is relatively flat with some small steep areas. Elevations vary from 1,800 to 2,000 feet above sea level.

Vegetation: The north half of the area is within the Jack Pine – Black Spruce landscape ecosystem type. The south half is within the Aspen-Spruce-fir landscape ecosystem type.

Acres in each age class by forest cover type. Percentage of area over 70 years old by cover type.							
Age	J Pine	RW Pine	LC	UC	LH	UC	Total
0-19						32	32
20-69		27	405	94		1606	2132
70+	7	216	358	141		962	1684
% 70+	100%	89%	47%	60%		37%	
Other							*1115
Total	7	243	763	235		2600	4963

*acres non-suitable for timber (some wetlands)

Cover Type Key: J pine=Jack Pine, RW Pine=Red/White Pine, LC =Lowland conifers, UC=Upland conifers (Upland Black Spruce and white spruce) LC=Lowland hardwoods, and UH=Upland Hardwoods (Aspen, birch)

Current uses of the area: Current uses include fishing, hunting, sightseeing, berry picking, wilderness access, and dispersed camping on Homer Lake. One maintained and two user-developed campsites exist on Homer Lake. There is a user-developed portage between Homer and Axe Lakes (about 800 feet). Homer Lake is used by boaters with motors as well as those without motors.

Appearance of the area: Most of the area is natural appearing. There is a back down boat access on Homer Lake and a 40-50 year old pine plantation in the southern one-third of the area.

Surroundings: The BWCAW is west (adjacent) of the area; Brule Lake is on the north, FR326 on the east, and Gust Lake on the south. The only activity would be from travel along FR326, and the boat launch on Homer Lake. The area is relatively unaffected by surroundings.

Key attractions: Homer Lake provides good walleye fishing and ties into other water bodies to form a travel route in the BWCAW.

Baker Homer Brule - Wilderness Capability

Natural integrity and appearance: The area is basically natural appearing. It was logged in the early 1900s and much of it was burned in extensive fires in 1936, and little logging has been done since with the exception of an area in the southern part of the unit, which is now a 40 to 50 year old pine plantation. This area contains scenic classes 1 and 2, which have high public value.

Opportunities for wilderness experiences: There are opportunities to experience solitude, challenge, and risk. If this were added as wilderness, more campsites could be created on Homer Lake to increase capacity of the BWCAW.

Special features: It has the only upland cedar within this Landtype Association.

Size/shape/external influences: This is generally a manageable size and shape for an addition to the existing BWCAW. Boundaries would be mostly manageable, although an opportunity to add the NWNW of Section 25 and NENE of Section 26 (former Sky Blue Waters Lodge that was left out of the original RARE II area, now in federal ownership) would make them even more manageable. Influences from the external areas would be very minimal.

Boundary management needs: The only additional boundary that would have to be run or maintained would be around the forties in Sections 25 and 26 mentioned in the previous section (if not added to the area) which would be about 0.75 mile; and 0.5 mile on the southeastern end along the boundary with private land. FR 326 and FR170 would be boundaries as well as Gust Lake shoreline and the drainage to the east tying into the existing Wilderness boundary.

Baker Homer Brule - Availability for Wilderness

Recreation/tourism: This area provides the semi-primitive recreation opportunities the Superior National Forest is

noted for. BWCAW Entry Point (EP) 40 Homer is within the area and EP 41 Baker is adjacent to the northwest tip of the area. There is one maintained dispersed campsite on Homer Lake in the evaluated area along with two user-developed campsites. Existing semi-primitive opportunities could be enhanced by wilderness designation. Campsites could be added to Homer Lake.

Wildlife: There are no known special habitat needs. Moose, eagles, and ospreys are common in this area. The evaluated area is within potential SMC # 159. This area is also in lynx analysis area #716. Wilderness designation would favor lynx habitat.

Water availability and use: Besides being a good walleye lake, Homer Lake flows into a travel route system in the BWCAW as does East Pipe Lake. Axe Lake is good for northern pike, and a portage from Homer could be maintained.

Livestock operations: None.

Timber: 3,848 acres or 78 percent of National Forest System acreage is classified as suitable timberland.

Minerals: There are 800 acres that have no mineral reservations. In the balance of the area, minerals are reserved. The area contains extensive copper-nickel deposits. Future development is possible.

Heritage Resources: The area has been surveyed and two sites were found.

Authorized and potential land uses: There are no known special use permits in the area. Future requests from the State are possible, to access their holdings for harvesting timber.

Management considerations: Because of traditional motorized use of Homer Lake, if this area were recommended to Congress as additional wilderness, people who have been used to motorized use would be displace. Opportunities for timber harvest and possibly future mineral development would be foregone.

Baker-Homer-Brule - Wilderness Evaluation

Designating the evaluated area as wilderness could increase the capacity of the BWCAW by adding campsites on Homer and Axe Lakes. Designation could also preserve the upland cedar. Some drawbacks associated with wilderness designation might include the State of Minnesota losing access to some land for harvesting forest products and displacement of visitors who have historically used motors on the lakes.

Baker-Homer-Brule - Environmental Consequences

Wilderness study designation:

- About 3,848 acres of land would be removed from the Forest's suitable timber harvest base.
- Management activities would be limited that could contribute to meeting vegetation objectives.
- There would be a few more miles of landline to maintain.
- There would be additional wilderness recreation opportunities.

Non-wilderness study designation:

- Possible loss of wilderness associated values without wilderness designation.

- Designation in one of the recreation related management areas could provide solitude and a backcountry experience and still possibly allow some motorized use.
- Timber harvest and associated road construction would be an option in meeting vegetation objectives.

Baldpate Lake (09B)

Baldpate Lake - Description

Acres: The original RARE II area contained this unit. The lake and 160 acres were added to the BWCAW in 1978, leaving 485 acres outside the BWCAW. The 485 acres are in National Forest System ownership.

Location and access: The evaluated area is located approximately 14 miles north of Ely, Minnesota. It borders the BWCAW and is northeast of Big Lake, all in Section 23 of T65N, R13W in St. Louis County. There are no roads within the evaluated area.

Geography: About one-half of the area is lowland swamp with some black spruce.

Topography: There is very little variation in elevation from 1,420 to 1,500 feet above sea level.

Vegetation: This unit is in the Jack Pine – Black Spruce landscape ecosystem type.

Acres in each age class by forest cover type. Percentage of area over 70 years old by cover type.							
Age	J Pine	RW Pine	LC	UC	LH	UH	Total
0-19							
20-69	100	38		17			155
70+			187	133			320
Other							*10
Total	100	38	187	150			485
% 70+	0	0	100%	89%			

Cover Type Key: J Pine= Jack Pine, RW Pine= Red/White Pine, LC= lowland conifers, UC, upland conifers (upland black spruce and white spruce) LH= lowland hardwoods, UH= upland hardwoods (Aspen, birch). * Wetlands and water

Surroundings: There is evidence of past harvest activity, and there has been some seeding to jack pine.

Key attractions: The evaluated area is currently being used for cross-country skiing with ties to trails at Big Lake resort. Trails are occasionally groomed by snowmobile. Hunting and blueberry picking are also popular activities.

Baldpate Lake - Wilderness Capability

Natural integrity and Appearance: The area has a natural appearance, and signs of past human activity are not easily evident. Most of the young age classes are the result of timber harvest in the early 1970s. It is in scenic class 2, which has high public value.

Opportunities for wilderness experiences: Chances for challenge and risk are few with a major road, the Echo Trail, a short distance away.

Special features: None

Size/shape/external influences: The size and shape of the area is conducive to providing for a buffer to the BWCAW boundary. Sounds of human activity from the Echo Trail may be evident in a portion of the area.

Boundary management needs: The proposed boundary would neither add nor eliminate an additional amount of boundary to maintain.

Baldpate Lake - Availability for Wilderness

Recreation/tourism: Currently the area is being used for dispersed recreation activities such as hunting, blueberry picking, and cross-country skiing. This fits the Forest's niche for providing recreation activities in a semi-primitive environment.

Wildlife: There are no known special habitats. This is in lynx analysis area 503.

Water availability and use: There are no navigable lakes or streams in the evaluated area.

Livestock operations: None.

Timber: 475 acres or 98% of the land area is classified as suitable timber land.

Minerals: Mineral rights are reserved by non-federal owners. There is no known mineral potential in this area.

Heritage Resources: There are no known sites in the area.

Authorized and potential land uses: None

Management considerations: Ski trail grooming would be incompatible with wilderness management. There are no other known plans or considerations that would prevent recommendation for wilderness.

Baldpate Lake - Wilderness Evaluation

The values this area provides, skiing, hunting, and berry picking, could be protected under a wilderness designation. However, most of these uses could be also managed under other management area designations. The existing BWCAW is water oriented and this area would provide very little additional recreation use capacity because it does not connect with BWCAW lakes. There are no other known key values that would contribute to potential wilderness study designation.

Baldpate Lake - Environmental Consequences

Wilderness study designation:

- About 338 acres of land would be removed from the Forest's suitable timber harvest base.
- Management activities would be limited that could contribute to meeting vegetation objectives.
- There would be no change in maintenance of wilderness boundary lines.
- The existing cross-country ski trails in the area would not be able to be mechanically groomed.

Non-wilderness study designation:

- Possible loss of wilderness associated values without wilderness study designation.
- Designation in one of the recreation related management areas could provide solitude and a backcountry experience and still possibly allow some motorized use.
- Timber harvest and associated road construction would be an option in meeting vegetation objectives.

Beaver Stream (0905)

Beaver Stream - Description

Acreage: 1,317 acres (1,277 National Forest System, 40 water - an un-named lake)

Location and access: The area is located in T66N, R16W in St. Louis County, approximately 5 miles southeast of Crane Lake, Minnesota. The area can be accessed from FR 199 on the Southwest corner and on unimproved roads by 4 wheelers and snowmobiles. There are 0.3 mile of improved roads and 1 mile of unimproved roads in the area.

Geography: This area is somewhat natural with signs of human activity from roads and cutting units within the last four years.

Topography: This area is relatively flat with elevations ranging from 1,300 to 1,400 feet above sea level.

Vegetation: It is in the Dry-Mesic White Pine-Red Pine landscape ecosystem type.

Acres in each age class by forest cover type. Percentage of area over 70 years old by cover type.							
Age	J Pine	RW Pine	LC	UC	LH	UH	Total
0-19						203	203
20-69				37	1	474	512
70+						113	113
% 70+						14%	
Other							449*
Total				37	1	790	1277

Cover Type Key: J Pine=Jack Pine, RW Pine=Red/White Pine, LC=lowland conifers, UC=upland conifers (upland black spruce and white spruce), LH=lowland hardwoods, UH=upland hardwoods (Aspen, birch). *Water and wetlands

Current Uses: Deer, moose, and partridge hunting; berry picking, leech collection, and trapping.

Appearance of the area: The area appears somewhat natural with signs of human activity from roads and cutting units within the last four years.

Surroundings: The surrounding area is fairly remote and there is very little human activity.

Key attractions: The evaluated area is a popular area for hunting (deer, grouse, and moose) and for berry picking.

Beaver Stream - Wilderness Capability

Natural integrity: Fifteen percent of the area (203 acres) has been harvested in the last 10 years and there are 0.2 miles of improved road and 0.6 miles of unimproved road. In a short time most of the harvested area will be substantially unnoticeable through the process of natural regeneration.

Natural appearance: The area currently shows signs of human activities and will not appear natural until another 10 to 20 years. It is in scenic class 2, which has a high public value.

Opportunities for wilderness experiences: The area is suited to solitude and chances to test outdoor skills but is lacking in attractiveness or special features.

Special features: None noted.

Size/shape/external influences: The area is bordered on the north and east side by the BWCAW. No activities are planned from these sides. There will likely be some occasional harvesting activity and possibly some dispersed recreation use on State land to the west and federal land to the south, but not to a degree that it would affect the area's wilderness potential.

Boundary management needs: Boundaries would follow land and section lines, and there would be a about the same amount of line to maintain as there is now.

Beaver Stream - Availability for Wilderness

Recreation/tourism: The area does not have any trails or interconnecting water bodies, but does provide a place to find solitude and test outdoor skills. It is also popular in the fall for moose and deer hunting.

Wildlife: There are no known special wildlife habitat needs in this area. Wilderness designation would not adversely affect TES species.

Water availability and use: There is a 40-acre unnamed lake in the evaluated area that is not connected to any navigable waterway. It is unlikely that the lake would get use because it is away from other water travel routes.

Livestock operations: None.

Timber: 828 acres or 63% of National Forest System acreage is on suitable timberland. Reforestation was accomplished by natural regeneration.

Minerals: Mineral rights are owned by the federal government for 85 percent of the area. There is no known

mineral potential in the area.

Heritage Resources: The entire area has been surveyed and no heritage resource sites were found.

Authorized and potential land uses: None known. It appears the State would be able to access their adjacent ownership from existing roads outside of the evaluated area.

Management considerations: There are no known plans or considerations that would prevent recommendation for wilderness.

Beaver Stream - Wilderness Evaluation

The values this area provides, hunting, and berry picking, could be protected under a wilderness designation. However, most of these uses could be also managed under other management area designations. The existing BWCAW is water oriented and this area would not provide additional recreation use capacity because it does not connect with BWCAW lakes. There are no other known key values that would contribute to potential wilderness study designation.

Beaver Stream - Environmental Consequences

Wilderness study designation:

- About 1277 acres of land would be removed from the Forest's suitable timber harvest base.
- Management activities would be limited that could contribute to meeting vegetation objectives.
- There would be little change in maintenance of wilderness boundary lines.

Non-wilderness study designation:

- Possible loss of wilderness associated values without wilderness study designation.
- Designation in one of the recreation related management areas or as a Unique Area could provide solitude and a backcountry experience and still possible allow some motorized use.
- Timber harvest and associated road construction would be an option in meeting vegetation objectives.

Big Lake (0926)

Big Lake - Description

Acreage: 1,194 acres (1,079 National Forest System, 115 non-federal)

Location and access: The evaluated area is west of Big Lake and south of the Echo Trail (FR 116) in T65N, R13W in St. Louis County. There are 1.6 miles of improved roads within the area.

Geography: Much of the evaluated area's boundary is the Portage River.

Topography: There is very little difference in elevation, from 1,400 to 1,450 feet.

Vegetation: The entire area is within the White Pine-Red Pine landscape ecosystem type.

Acres in each age class by forest cover type. Percentage of area over 70 years old by cover type.							
Age	J Pine	RW Pine	LC	UC	LH	UH	Total
0-19							
20-69	156	353	8			39	556
70+	17	63	79			73	232
Other							291*
Total	173	416	87			112	1194
% 70+	10%	15%	91%			65%	

Cover Type Key: J Pine=Jack Pine, RW Pine=Red/White Pine, LC=lowland conifers, UC=upland conifers (upland black spruce and white spruce), LH=Lowland hardwoods, UH=upland hardwoods (Aspen, birch) * unsuitable timber types

Current uses of the area: The evaluated area receives very little use because of its location between the Portage River and the BWCAW boundary on the south. It is likely visitors have a semi-primitive to primitive experience.

Appearance of the area: The area is relatively flat, mostly high ground, and well stocked with vegetation. Signs of human activity are rare.

Surroundings: The evaluated area is bordered by the Portage River on the east and north and the BWCAW on the south. It is also bordered by State of Minnesota land to the east and west.

Key attractions: None

Big Lake - Wilderness Capability

Natural integrity and appearance: The area is basically naturally appearing. It is in scenic class 1 which has high public value.

Opportunities for wilderness experiences: This area is well suited to finding opportunities for solitude, self-reliance, and testing outdoor skills because of its remoteness.

Special features: None

Size/shape/external influences: It is small and of a manageable shape. Very little disturbance is expected from external influences.

Boundary management needs: If this area were added, little boundary work would be required because the Portage River, a natural feature, would border most of the area.

Big Lake - Wilderness Availability

Recreation/tourism: Not much recreation occurs in the area now, and more is not anticipated.

Wildlife: There are no known special wildlife habitats. The area is in lynx analysis unit 503.

Water availability and use: The Portage River is the only navigable water in the area and serves as a travel route.

Livestock operations: None.

Timber: 1,079 acres or 90 percent of the National Forest acreage is classified as suitable timberland. Extensive timber harvest with associated activities and reforestation occurred in the late 1960s.

Minerals: There are no mineral reservations. There is no known mineral potential in this area.

Heritage Resources: The area has been surveyed and no sites were found.

Authorized and potential land uses: There was a road access special use permit issued to the State of Minnesota to access their land adjacent to the evaluated area, which expired in June of 2000. It is likely that the State may request access again some time in the future.

Management considerations: Other than the State's needs to access their adjacent lands, there are no known plans or considerations that would prevent recommendation for wilderness.

Big Lake - Wilderness Evaluation

Big Lake could provide additional wilderness recreation use capacity because the Portage River is a good travel route, campsites could be constructed along the river, and it connects with existing BWCAW canoe routes. The evaluated area also has a very manageable boundary with the Portage River and State land. Access to manage timber resources in the area would require crossing the Portage River or State land.

Big Lake - Environmental Consequences

Wilderness study designation:

- About 1,079 acres of land would be removed from the Forest's suitable timber harvest base.
- Management activities would be limited that could contribute to meeting vegetation objectives.
- No additional boundary line would have to be maintained.
- The Portage River is navigable and adding a few campsites could expand the capacity for wilderness use.

Non-wilderness study designation:

- Possible loss of wilderness associated values without wilderness study designation.
- Designation in one of the recreation related management areas could provide solitude and a backcountry experience and still possible allow some motorized use.
- Timber harvest and associated road construction would be an option in meeting vegetation objectives. However, access would require crossing the Portage River or State land.

Brule Lake-Eagle Mountain (09K1, 09K2, and 09K3)

Brule Lake-Eagle Mountain – Description

Acreeage: An original RARE II area of the same name (#9138) was divided up into three smaller areas within the original boundary. They total 2,745 acres as follows:

	National Forest System land	Non-federal land	Water acres	Total
K1	589	40	1	630
K2	1035	0	0	1035
K3	1071	0	9	1080
Total	2695	40	10	2745

Location and access: These units are adjacent to the BWCAW, approximately 12 miles northwest of Grand Marais, Minnesota, in T63N, R2W and T62N, R2W. They are referred to by letter and number combination. No roads or motorized trails exist within the three units. Unit K1 can be accessed by foot from the northeast corner of Star Lake or from Forest Road 326D (about 0.4 miles from the unit at the closest point). The edge of K2 can be reached by water from Tomash Lake on the northwest end or possibly from the Cascade River on the southeast end. Forest Road 327 approaches unit K3 from the east, but does not enter it.

Geography and Topography:

K1 – Very flat with elevations ranging from 1900-1920 feet.

K2 – Some variability with elevations ranging from 1800 to 2100 feet.

K3 – A lot of variation with elevations ranging from 1860 to 2160 feet.

Vegetation: All three areas are within the Aspen-Spruce-Fir landscape ecosystem type.

Acres in each age class by forest cover type for all three areas. Percentage of area over 70 years old by cover type.

Age	J Pine	RW Pine	LC	UC	LH	UH	Total
0-19		9	40	83		86	218
20-69	20		41	482		419	962
70+	126		32	466		185	809
% 70+	86%		28%	45%		27%	
Other*							706
Total	146	9	113	1031		690	2695

Cover Type Key: J Pine=Jack Pine, RW Pine=Red/White Pine, LC=lowland conifers, UC=upland conifers (upland black spruce and white spruce), LH=lowland hardwoods, UH=upland hardwoods (Aspen, birch) * Unsuitable timber types

Current uses of the area: Fishing, hunting, hiking, sightseeing, and camping.

Appearance of the area: The evaluated areas appear very natural.

Surroundings: With the exception of the BWCAW, which is adjacent to all three, there are major roads near these areas that receive extensive recreation and logging related traffic. Logging operations occur on adjacent and nearby federal and non-federal lands.

Key attractions: Eagle Mountain, which is between all of these areas and within the BWCAW.

Brule Lake-Eagle Mountain - Wilderness Capability

Natural integrity and appearance: Most of the past disturbance has been from natural forces like fire. There has been some timber harvest but not a significant amount. The areas are in scenic class 2 which have high public value.

Opportunities for wilderness experiences: There are opportunities for solitude, challenge, and risk.

Special features: K2 has some upland cedar, which is relatively rare on the Superior NF.

Size/shape/external influences: The size and shape of K1 area is conducive to management as wilderness. Area K2 and K3 would add area on to a piece of existing Wilderness that already extends out from the main area. External influences include nearby recreation traffic and logging operations.

Boundary management needs:

K1 – ½ mile of additional boundary to maintain

K2 – 3 ¾ miles of additional boundary to maintain

K3 – 3 miles of additional boundary to maintain

Brule Lake-Eagle Mountain - Availability for Wilderness

Recreation/tourism: It is unlikely that the use in all three areas would change much regardless what management is selected for them.

Wildlife: There are no known special wildlife habitats. These areas are in Lynx Analysis Units, K1-#716, K2-#717, and K3-#213. A portion of K2 is within potential SMC # 159.

Water availability and use: The western tip of Eagle Lake extends into unit K1. At the southern end of K2 is a small backwater of the Cascade River that may be navigable. K3 contains some water routes, probably non-navigable, which enter the BWCAW.

Livestock operations: None.

Timber: These areas contain 1,989 acres or 74 percent of the National Forest acreage classified as suitable timberland.

Minerals:

K1 – 320 acres no mineral reservations, 269 acres minerals are reserved

K2 – 472 acres no mineral reservations, 563 acres minerals are reserved

K3 – 552 acres no mineral reservations in the south end, 579 acres minerals are reserved.

All three of these areas contain small low-grade titanium deposits. There is little potential for development.

Heritage Resources: All areas were surveyed and no sites were found.

Authorized and potential land uses: There are no special use permits and none are anticipated.

Management considerations: There are no known management considerations to prevent designation as wilderness.

Brule Lake - Eagle Mountain - Wilderness Evaluation

Brule Lake-Eagle Mountain areas would not provide additional wilderness recreation use capacity because they do not contain water routes or other opportunities to connect with the BWCAW. There are no other known key values that would contribute to potential wilderness study designation.

Brule Lake - Eagle Mountain - Environmental Consequences

Wilderness study designation:

- About 1,989 acres of land would be removed from the Forest's suitable timber harvest base.
- Management activities would be limited that could contribute to meeting vegetation objectives.
- There would be little change in boundary line maintenance.
- The upland cedar on K2 would be protected allowing natural processes to occur.

Non-wilderness study designation:

- Possible loss of wilderness associated values without wilderness study designation.
- Designation in one of the recreation related management areas could provide solitude and a backcountry experience and still possibly allow some motorized use.
- The upland cedar in K2 could be managed under a special or research related management area.
- Timber harvest and associated road construction would be an option in meeting vegetation objectives.

Cucumber Lake (0921)

Cucumber Lake - Description

Acreage: 1,896 acres (1,801 National Forest System, 95 water)

Location and access: This area is located in Sections 14, 22, and 23 of T64N, R1E in Cook County approximately 20 miles north of Grand Marais, Minnesota. It is accessible by waterways from lakes and rivers both inside and outside of the BWCAW. A user-developed ATV trail accesses Cucumber Lake from Forest Road 313I to the east of the area. There are no roads within the area.

Geography: The area is very similar to that of the BWCAW because it has connecting lakes and waterways. There are no maintained trails, campsites, or portages in the area.

Topography: The area is moderately steep with elevations ranging from 2000 to 2160 feet.

Vegetation: This area is within the Aspen-Spruce-Fir landscape ecosystem type. 175 acres were harvested in the

last ten years.

Acres in each age class by forest cover type. Percentage of area over 70 years old by cover type.							
Age	J Pine	RW Pine	LC	UC	LH	UH	Total
0-19				113		62	175
20-69	105			317		345	767
70+	36		19	123		104	282
Other							577*
Total	141		19	553		511	1801
% 70+	26%		100%	22%		20%	

Cover Type Key: J Pine=Jack Pine, RW Pine=Red/White Pine, LC=lowland conifers, UC=upland conifers (black spruce and white spruce), LH=lowland hardwoods, UH=upland hardwoods (Aspen, birch) *Unsuitable timber type

Current uses of the Area: The area receives very little use, with the exception of some walleye fishing in Cucumber Lake.

Appearance and Surroundings: The evaluated area looks very similar to the adjacent BWCAW with many lakes and connecting waterways. The surrounding area has no permanent roads and there is very little activity with the exception of occasional logging, fishing, and some hunting.

Key attractions: The key attraction to this area is that it is very similar to and adjacent to the BWCAW.

Cucumber Lake - Wilderness Capability

Natural integrity and appearance: Outside of a few past timber sales, there has been very little use by humans resulting in a natural appearance. The subsequent reforestation was primarily through natural processes and leaves the area highly rated for natural integrity. The scenic class ratings for this area recognize moderate to high public value.

Opportunities for wilderness experiences: The area is well suited to finding opportunities for solitude and self-reliance and testing outdoor skills.

Special features: Six small lakes are within the area.

Size/shape/external influences: The evaluated area is adjacent to the BWCAW to the east and the other boundaries follow section lines. External influences are rare and generally unnoticeable.

Boundary management needs: About five additional miles of boundary would need to be marked, but would be only an additional two miles to maintain over what exists now.

Cucumber Lake - Wilderness Availability

Recreation/tourism: The evaluated area supplies the remoteness and solitude aspects of the recreation experience that the Superior National Forest is noted for. Existing opportunities would still be available through wilderness designation, except for ATV access to Cucumber Lake.

Wildlife: There are no known special wildlife habitats.

Water availability and use: There are six small lakes in the evaluated area that are either connected by waterways or a portage away from another lake. None of them have been classified by the DNR for fisheries potential, but four out of the six lakes have enough depth to support a fish population. Cucumber Lake is known to have a walleye fishery.

Livestock operations: None.

Timber: 1,335 acres or 74% of the National Forest System acreage is on suitable timberland.

Minerals: There are no mineral reservations. Section 14 contains small low-grade titanium deposits, but there is little potential for development. In the balance of the area, there is no known mineral potential.

Heritage Resources: The entire area, with the exception of shorelines on Onion and Cucumber Lakes, was surveyed and no sites were found.

Authorized and potential land uses: There are no special uses and none are anticipated.

Management considerations: There are no known plans or considerations that would prevent recommendation for wilderness.

Cucumber Lake - Wilderness Evaluation

This area could provide extensive wilderness values as an addition to the BWCAW. The area contains six lakes most of which are accessible from connecting waterways or to which portages could be developed. Such connections would offer additional recreational use capacity with small lake experiences not found in that part of the BWCAW. There are no mineral reservations and no expected special use access requests so there is little likelihood of proposals that would change the existing character of the area.

Cucumber Lake - Environmental Consequences

Wilderness study designation:

- About 1,355 acres of land would be removed from the Forest's suitable timber harvest base.
- Management activities would be limited that could contribute to meeting vegetation objectives.
- Some additional boundary line would have to be maintained.
- Additional wilderness recreation use capacity could be added to the BWCAW.
- Current motorized users accessing Cucumber Lake would be displaced.

Non-wilderness study designation:

- Possible loss of wilderness associated values without wilderness study designation.
- Management areas which emphasize conservation and special features may not provide recreational use, which is a key attraction. Designation in one of the recreation related management areas could provide solitude and a backcountry experience and possibly allow some motorized use, but would allow timber harvest that could detract from future potential consideration as wilderness.
- Timber harvest and associated road construction would be an option in meeting vegetation objectives.

East Otter Lake (0925) - Description

East Otter Lake - Description

Acreage: 556 acres (522 National Forest System, 34 water)

Location and access: This area is located approximately 30 miles northwest of Grand Marais, Minnesota in Cook County in Sections 31 and 32 of T65N, R1W. It can be accessed from the South Lake Trail or Birch Lake or Moss Lake. There are no roads within the area. There is 0.7 mile of the South Lake trail within the area, and 0.4 mile of portage between Birch and Moss Lakes.

Geography: The South Lake trail runs through the middle of the area and is used as an access point to get on the Border Route Trail. The trail also continues to South Lake.

Topography: The area has many elevation changes ranging from 1,700 to 1,965 feet above sea level. Some slopes are fairly steep.

Vegetation: The area is in the Jack Pine-Black Spruce landscape ecosystem type.

Acres by forest cover type							
J Pine	RW Pine	LC	UC	LH	UH	Other	Total
94	82	15	0	0	319	46*	556
Cover Type Key: J Pine=Jack Pine, RW Pine=Red/White Pine, LC=lowland conifers, UC=upland conifers (upland black spruce and white spruce), LH=lowland hardwood, UH=upland hardwoods (Aspen, birch) *water, wetlands, open, etc.							

Current uses of the area: The South Lake Trail is used by hikers to either access the Border Route Trail or go all the way to South Lake. The trail in this area gets some snowmobile use in the winter but is not groomed. There is a lightly used portage between Birch and Moss Lakes on the southern edge of the unit that may also get some snowmobile use.

Appearance of the area: Most of the area is natural appearing with some nice views along the South Lake Trail. The area was heavily impacted by the July 4, 1999 windstorm. The scenic class is rated as high public value.

Surroundings: The area is nestled between Birch Lake to the southwest and Moss Lake to the southeast, and the existing BWCAW to the north. Birch Lake is developed with private cabins and is heavily used for fishing and snowmobiling. Moss Lake is fairly well used in both winter and summer. The Forest Service campsite on the northeastern shore is occupied most of the summer. Motors and boats are carried in. In winter, the lake receives moderate snowmobile use by anglers fishing for trout.

Key attractions: South Lake Trail (EP 59) and East Otter Lake.

East Otter Lake - Wilderness Capability

Natural Integrity and appearance: The area is naturally appearing with the exception of the South Lake Trail, which has little impact.

Opportunities for wilderness experiences: The evaluated area, even though small, has potential for solitude and testing outdoor skills. Motorized use on adjacent Birch Lake would impact solitude in the southwestern portion of the unit.

Special Features: This area is within potential SMC #189. This potential SMC had extensive forest over 100 years old (mostly primary forest) before the 1999 windstorm and represents the vegetative community associations typical of this Land Type Association.

Size/shape/external influences: Although the size is small, the shape and external influences make this a possible addition to the BWCA Wilderness. Motorized access to the adjacent State land to the east as well as motorized use allowed on their portion of East Otter would have an impact on a wilderness type of experience. Motorized use on the adjacent Birch and Moss lakes would also have an impact on a type of wilderness experience.

Boundary Management Needs: The only new boundary needed would be about three-fourths mile from the BWCAW boundary by East Otter Lake south to Birch Lake. The rest of the potential new boundary would be the natural features of lakeshores and the water connection between Birch and Moss Lakes. This would be a more definite line and not requiring as much maintenance as the present BWCAW boundary.

East Otter Lake - Wilderness Availability

Recreation/tourism: The South Lake Trail would continue to be used even if the area was designated as wilderness, but enforcement would be needed to keep snowmobiles out of the area. Snowmobile and motorboat use would continue on the east long narrow portion of East Otter and on nearby Birch and Moss Lakes.

Wildlife: There are no known special habitat needs. Remaining old growth, especially the red and white pine, provide places for eagles to nest in. This area is in lynx analysis unit #203. Rare plants may occur in the area.

Water availability and use: The area provides a connection for many lakes. There is also a water route between East Otter Lake and Duncan Lake.

Livestock operations: None.

Timber: There are 131 acres of suitable timber land.

Minerals: There are about 59 acres north of Moss Lake where there are no mineral reservations. The remainder of the area minerals is reserved. There is no known mineral potential in this area.

Heritage Resources: There are no documented heritage resource sites.

Authorized and potential land uses: There are no special use permits and none are anticipated.

Management considerations: There are no management considerations known that would prevent this area from becoming wilderness, aside from some existing snowmobile use. The northern edge of the unit will be treated

with understory/patch burns (Gunflint Corridor Fuel Reduction EIS).

East Otter Lake - Wilderness Evaluation

This area could provide extensive wilderness values as an addition to the BWCAW. There is potential to add entry points and some capacity for hikers on the South Lake Trail and for canoeists traveling to other lakes in the BWCAW. The remaining old growth not affected by the 1999 storm would be protected allowing natural processes to occur.

East Otter Lake - Environmental Consequences

Wilderness study designation:

- About 131 acres of land would be removed from the Forest's suitable timber harvest base.
- Management activities would be limited that could contribute to meeting vegetation objectives.
- There would be less wilderness boundary line to maintain.
- Additional wilderness recreation use capacity could be added to the BWCAW with lakes tied together with entry points and travel routes.
- The few current motorized users accessing the area would be displaced.
- The remaining old growth not affected by the 1999 storm would be protected allowing natural processes to occur.

Non-wilderness study designation:

- Possible loss of wilderness associated values without wilderness study designation.
- Management areas which emphasize conservation and special features may not provide recreational use, which is a key attraction. Designation in one of the recreation related management areas could provide solitude and a backcountry experience and still possibly allow some motorized use, but would allow timber harvest that could detract from future potential consideration as wilderness.
- The remaining old growth not affected by the 1999 storm could be maintained through one of the special or research related management areas.
- Timber harvest and associated road construction would be an option in meeting vegetation objectives.

Echo River (0904)

Echo River – Description

Acreage: 1,900 acres (all National Forest System)

Location and access: The area is located in T66N and T67N, R16W in St. Louis County, approximately 2 miles southeast of Crane Lake, Minnesota. Access is from County Road 424 to a parking area and then on the Herriman Lake Trail, or by canoe or boat from Echo Lake along the Echo River, or by walking the existing road off the Nelson Road, which becomes part of the Herriman Lake Trail. There are 1.3 miles of unimproved road within the area.

Geography: The evaluated area is natural appearing. It has a trail system beginning at a parking area just off county road 424 called the Herriman Lake Trail. There are some areas that have been harvested in the last two years (110 acres). There are also some scenic overlooks along the trail.

Topography: The area is rolling with elevations ranging from 1,200 to 1,400 feet above sea level.

Vegetation: The area is in the dry-mesic White Pine-Red Pine landscape ecosystem type.

Acres in each age class by forest cover type. Percentage of area over 70 years old by cover type.							
Age	J Pine	RW Pine	LC	UC	LH	UH	Total
0-19						36	36
20-69	58	57					115
70+	58		87		33	630	808
Other							941*
Total	116	57	87		33	666	1900
% 70+	50%		100%		100%	95%	

Cover Type key: J Pine=Jack Pine, RW Pine=Red/White Pine, LC=lowland conifers, UC=upland conifers (upland black spruce and white spruce), LH=lowland hardwoods, UH=upland hardwoods (Aspen birch). *Wetlands and water

Current uses of the area: Hikers and some cross-country skiers use the Herriman Lake Trail. Deer, grouse, and duck hunting are also popular activities.

Appearance of the area and surroundings: Because of the elevation changes, there are some scenic views. There is a snowmobile trail west of Echo River and there are occasional timber harvest activities west of the area. The BWCAW borders the east side.

Key attractions: The scenic overlooks and the Herriman Lake Trail (EP 13).

Echo River - Wilderness Capability

Natural integrity: Most of the past use has been hikers on the Herriman Lake Trail. There have been a few units harvested, but harvest effects will not be noticeable for long due to the natural regeneration occurring.

Natural appearance: The area is basically natural appearing with very little sign of humans with the exception of recent harvest units and the hiking trail. The scenic class for this area is rated as high public value.

Opportunities for wilderness experiences: The area is well suited to finding opportunities for solitude, self-reliance, and chances to test outdoor skills. Some sounds of humans are occasionally heard from the Voyageur Snowmobile Trail and occasionally motorboat and float plane use on Crane Lake.

Special features: The age of vegetation could provide old growth habitat for some wildlife species. There are no inventoried old growth stands.

Size/shape/external influences: The area by itself is oddly shaped, but as an addition to the BWCAW with the Echo River making up most of the boundary, it is a more manageable area than what currently exists. No activities from external influences are expected to adversely affect the potential wilderness quality of this area.

Boundary management needs: Using the Echo River as a large part of the boundary would reduce the cost of land-line maintenance and be more easily recognizable as a boundary by most people.

Echo River - Availability for Wilderness

Recreation/tourism: The area provides the remoteness and solitude aspects of the recreation experience that the Superior National Forest is noted for. Existing opportunities would be available through potential wilderness designation.

Wildlife: There are no known special habitat needs for this area. Wilderness designation would not adversely affect any threatened, endangered or sensitive species. The area is in lynx analysis unit #603.

Water availability and use: The Echo River on the west boundary can be used for access at high water.

Livestock operations: None.

Timber: 957 acres (50 percent) suitable timberland.

Minerals: Mineral rights are reserved in about 80 percent of the evaluated area. There is no known mineral potential in this area.

Heritage Resources: Most of the area has been surveyed with the exception of a band along the east side of Echo River. One site was found within the area.

Authorized and potential land uses: None known.

Management considerations: There are no known plans or considerations that would prevent recommendation for wilderness.

Echo River - Wilderness Evaluation

The area's hiking and scenic values would fit very well as additional wilderness; however those values could remain available under a different management option. This area would not add any substantial capacity to potential use, since the area does not have connecting water routes to the BWCAW. Boundary lines would be very manageable because using a natural feature like the Echo River would be easily recognizable by people and would not require maintenance of a wilderness landline.

Echo River - Environmental Consequences

Wilderness study designation:

- About 957 acres of land would be removed from the Forest's suitable timber harvest base.
- Management activities would be limited that could contribute to meeting vegetation objectives.
- There would be no wilderness boundary line to maintain because it follows the Echo River.
- More hikers may use the Herriman Lake Trail if it were all in designated wilderness.
- Unsurveyed cultural resources along the Echo River would be well protected from earth disturbing activities.

Non-wilderness study designation:

- Possible loss of wilderness associated values without wilderness study designation.
- Management areas which emphasize conservation and special features may not provide recreational use, which is a key attraction. Designation in one of the recreation related management areas could provide solitude and a backcountry experience and still possibly allow some motorized use.
- Timber harvest and associated road construction would be an option in meeting vegetation objectives.

Greenstone Lake East (0915)

Greenstone Lake East - Description

Acreage: 1,629 acres (1,476 National Forest, 130 non-federal, 23 water)

Location and access: The area is located approximately 14 miles east of Ely, Minnesota, south of the Fernberg Trail in Sections 13, 14, 15, 22, 23, and 24 of T63N, R10W and Section 18 of T63N, R9W. The north boundary is on the south shoreline of Triangle Lake. The evaluated area can be accessed by water on Triangle Lake. There are no roads within the evaluated area.

Geography: The area is natural appearing. A portage runs from Triangle Lake south to the Kawishiwi River.

Topography: The area is relatively flat with the exception of the area in Section 18 where elevations range from 1,540 to 1,730 feet above sea level.

Vegetation: This unit is in the dry-mesic White Pine-Red Pine landscape ecosystem type.

Acres by forest cover type.							
J Pine	RW Pine	LC	UC	LH	UH	Other	Total
35	78	40	0	9	1214	253*	1629
Cover Type Key: J Pine= Jack Pine, RW Pine=Red/White Pine, LC=lowland conifers, UC=upland conifers (upland black spruce and white spruce), LH=lowland hardwoods, UH=upland hardwoods (Aspen, birch) *water, wetland, open, non-federal, etc.							

Current uses of the area: The portage that passes through the area serves as an entry point to the BWCAW from Triangle Lake. There are commercial cabins with a short trail system on the private land along Lark Lake.

Appearance of the area: The majority of the area is basically natural appearing with the exception of human influences visible from the portage from Triangle Lake to the Kawishiwi River and the private land between the portage and Lark Lake.

Surroundings: The surrounding land on the north and west side of the area are fairly well developed and have a high degree of human activity on private and state ownerships. The area borders the BWCAW on the south and the east is all National Forest System ownership.

Key attractions: The BWCAW entry point (EP 29, North Kawishiwi River) is along the portage from Triangle

Lake to the Kawishiwi River.

Greenstone Lake East - Wilderness Capability

Natural integrity and appearance: Little of the land in the area has been disturbed since the pine logging days of the early 1900s. The portage is actively used. There are 130 acres of private land in the center of the area. The entire area is currently basically natural appearing. The scenic class is rated as moderate public value.

Opportunities for wilderness experiences: The area provides little opportunity for solitude because of surrounding human influences.

Special features: None known.

Size/shape/external influences: The size and shape of the area are conducive to be classified as potential wilderness because it is directly adjacent to the BWCAW. External influences would not disturb the wilderness character of the area, with the exception of the sounds of motorboats on Triangle Lake.

Boundary management needs: The new boundary would be one and one-half to two miles longer than the current boundary; the majority of that difference would be because the lakeshore of Triangle Lake would be the line.

Greenstone Lake East - Availability for Wilderness

Recreation/tourism: Use of the area and BWCAW EP point will not likely change as a result of wilderness designation. Existing recreation opportunities will still be available through wilderness designation.

Wildlife: There are no known special habitat needs. The area is in lynx analysis area 504.

Water availability and use: The three small lakes in the area would likely be less intensively managed for fish.

Livestock operations: None.

Timber: 267 acres or 18 percent of National Forest System acreage is on suitable timberland.

Minerals: Mineral rights are outstanding on about one-third of the area. There is potential for small, high-grade copper-lead-zinc silver deposits.

Heritage Resources: The entire area was surveyed, and one historical site was found.

Authorized and potential land uses: The trail system mentioned under current uses is under special use permit for skiing and hiking. Future uses being considered by the permittee are for mountain biking.

Management considerations: Part of the evaluated area, about 153 acres in Section 18, was on a five-year timber sale plan but analysis has been delayed until the Forest Plan revision is completed.

Greenstone Lake East - Wilderness Evaluation

This area could be a logical addition to the BWCAW because of its three lakes and the ability to provide a larger buffer to the Kawishiwi River. However, external influences (private land uses and other motorized activity) would affect the quality of the wilderness experience. Also, it is unlikely BWCAW use would increase because the entry by the existing portage would likely remain the same.

Greenstone Lake East - Environmental Consequences

Wilderness study designation:

- About 267 acres of land would be removed from the Forest's suitable timber harvest base.
- Management activities would be limited that could contribute to meeting vegetation objectives.
- There would be a little more wilderness boundary line to maintain.
- The private land in the center would affect the quality of a wilderness experience.

Non-wilderness study designation:

- Possible loss of wilderness associated values without wilderness study designation.
- Designation in one of the recreation related management areas could provide solitude and a backcountry experience and still possibly allow some motorized use.
- Timber harvest and associated road construction would be an option in meeting vegetation objectives.

Greenstone Lake West (0916)

Greenstone Lake West - Description

Acres: 1,904 acres (1,353 National Forest System, 83 non-federal, and 467 water)

Location and access: The area is located approximately 8 miles east of Ely Minnesota, south of the Fernberg road in Sections 17, 19, 20, and 21 of T63N, R10W, and Sections 23 and 24 of T63N, R11W. Access to the evaluated unit can be made from Greenstone Lake. There are no roads within the evaluated area.

Geography: The area is natural appearing with a portage running from Greenstone Lake to the Kawishiwi River in the BWCAW.

Topography: The area is relatively flat with elevations varying from only 1,450 to 1,505 feet above sea level.

Vegetation: The area is in the dry-mesic White Pine-Red Pine landscape ecosystem type.

Acres by forest cover type.							
J Pine	RW Pine	LC	UC	LH	UH	Other	Total
15	108	144	0	13	1037	586*	1903
Cover Type Key: J Pine=Jack Pine, RW Pine=Red/White Pine, LC=lowland conifers, UC=upland conifers (upland black spruce and white spruce), UH=upland hardwoods (Aspen birch) *water, wetland, open, non-federal, etc.							

Current uses of the area: The area includes a portage from Greenstone Lake to the Kawishiwi River. Outward Bound and others currently use campsites on Greenstone Lake, but these are outside of the evaluated area boundary. Some people also camp on the northwest side of Greenstone Lake. There is snowmobile activity in the area between Pickerel and Greenstone Lakes.

Appearance of the area: The area is basically natural appearing, with over 300 acres of very old trees, (over 100 years old). There are a variety of lake types in the evaluated area.

Surroundings: With the exception the BWCAW on the southern border, the area is surrounded by a variety of ownerships that are developed with roads and facilities and have a high degree of human activity including recreational pursuits. There is a resort on Greenstone Lake as well as other private developments. There is road access near Pickerel Lake and the Minnesota DNR has proposing a boat access site on that lake.

Key attractions: There are 327 acres of very old forest. The portage from Greenstone Lake to the Kawishiwi River in the BWCAW also cuts across this area.

Greenstone Lake West - Wilderness Capability

Natural integrity: The area is basically under the influence of natural processes.

Natural appearance: The area is natural appearing except the portage from Greenstone Lake to the Kawishiwi River that cuts across the southeast portion of the area for a very short distance. The scenic class is rated as moderate public value.

Opportunities for wilderness experiences: The area provides few opportunities for solitude due to surrounding developments.

Special features: Old growth and the portage from Greenstone Lake to the Kawishiwi River.

Size/shape/external influences: The southern boundary is adjacent to the BWCAW, and other boundaries follow lakeshore and State land. External influences come from recreational use of adjacent areas on a mixed mosaic of ownership. These influences would be effectively screened from the area by the boundary location. Greenstone Lake would be outside the potential wilderness boundary.

Boundary management needs: The new boundary would require an additional four miles of boundary to maintain, a mile of which, however, follows Greenstone lakeshore.

Greenstone Lake West - Availability for Wilderness

Recreation/tourism: The area provides water-based recreation, which people tend to seek on the Superior

National Forest. It can be managed to continue to do so with or without potential wilderness designation.

Wildlife: No known special wildlife habitats are in the area. The area is in the lynx analysis unit # 504.

Water availability and use: The area is rich in water resources. Pickerel Lake is predominant, but there are also other small lakes and some streams. Pickerel Lake connects to the Kawishiwi River which ties to BWCAW lakes and rivers.

Livestock operations: None.

Timber: 506 acres or 37 percent of National Forest System acreage is on suitable timberland. Basically, there has been no timber harvest since the pine logging days of the early 1900s.

Minerals: Mineral rights are reserved on about 25 percent of the area. There is potential for small, high-grade copper-lead-zinc silver deposits.

Heritage Resources: The entire area was surveyed with the exception of five 40-acre Sections that are south and west of Pickerel Lake. No sites were found on the surveyed area.

Authorized and potential land uses: There are no special use permits for this area, and none are anticipated.

Management considerations: There are no additional known plans or considerations that would prevent recommendation for wilderness.

Greenstone Lake West - Wilderness Evaluation

This area could make a logical addition to the BWCAW because it is adjacent. It would tie Pickerel Lake to the other lake and river chains already a part of the BWCAW and provide a little additional recreation use capacity. The natural appearing landscape as well as the opportunities for solitude would also provide wilderness values.

Greenstone Lake West - Environmental Consequences

Wilderness study designation:

- About 506 acres of land would be removed from the Forest's suitable timber harvest base.
- Management activities would be limited that could contribute to meeting vegetation objectives.
- There would be about 3 additional miles of wilderness boundary line to maintain.
- The two forty-acre sections in other government ownership would become a high priority for exchange in the Forest land adjustment plan. (Actual purchase or exchange is dependent on a willing landowner).
- The 327 acres of old growth would be protected allowing natural processes to occur.

Non-wilderness study designation:

- Possible loss of wilderness associated values without wilderness study designation.
- Designation in one of the recreation related management areas could provide solitude and a backcountry experience and still possibly allow some motorized use.
- Timber harvest and associated road construction would be an option in meeting vegetation objectives.
- The 327 acres of old growth could be maintained through other one of the special or research related management areas

Gunflint Lake SE (0927)

Gunflint Lake SE - Description

Acreage: 1,003 acres (all National Forest System)

Location and access: This area is located on the southeastern portion of Gunflint Lake (which is a boundary lake between Minnesota and Canada), in Cook County, parts of Sections 19 and 30 in T65N, R2W, and parts of sections 24 and 25 of T65N, R3W. The evaluated area is accessible by water from Gunflint Lake or via Crab Lake. It is also accessible on land from a power line that is a part of the southwest boundary of the area, and from the Border Route Trail. There are no roads within the area.

Geography: There are two campsites on the south side of Gunflint Lake within the area (three more are located on islands on Gunflint Lake nearby). There is also a waterway running from Crab Lake through the center of the area exiting at Gunflint Lake.

Topography: The area is rugged with elevations ranging from 1,600 to 1,800 feet above sea level.

Vegetation: This area is in the White Pine-Red Pine landscape ecosystem type. The area was heavily impacted by the July 4, 1999 windstorm.

Acres by forest type							
J Pine	RW Pine	LC	UC	LH	UH	Other	Total
0	127	21	30	0	739	*86	1003

Cover Type Key: J Pine=Jack Pine, RW Pine=Red/White Pine, LC=lowland conifers, UC=upland conifers (upland black spruce and white spruce), UH=upland hardwoods (Aspen, birch) *water, wetland, open, etc.

Current uses of the area: There are two dispersed campsites located on the south shore of Gunflint Lake. About two miles of the Border Route Trail (EP 81) runs through the area. The trail is lightly used and lightly maintained. The western portion of it within this unit was heavily damaged by the 1999 windstorm. There is a well-used, user-developed foot trail (0.4 mile) running from Gunflint Lake to Bridal Falls in the center of the area. Bridal Falls is a popular side trip for both canoeists and motorboat users. An old railroad grade (1.3 miles) that runs from Crab Lake to the northeastern corner of the unit gets light to moderate snowmobile use in the winter; it is not groomed. There is some incidental dispersed recreational use such as hunting and berry picking.

Appearance of the area: The area is very natural appearing, with the campsites and trails the only sign of human activity. The area was impacted by the 1999 windstorm. Most trees were blown down with the exception of some large white pine trees still standing.

Surroundings: The area is bordered by Gunflint Lake on the north, the BWCAW on the east, Crab Lake and a power line on the south, and all National Forest System land on the west. Crab Lake gets winter snowmobile use from both Gunflint and Loon Lakes, and light fishing pressure in the summer. Gunflint Lake is a large and popular motorized fishing lake.

Key attractions: These include the two campsites on the shoreline of Gunflint Lake, Bridal Falls, and the old railroad grade. Bridal Falls is approximately 30 feet in height and is particularly impressive in the spring at high water. There are still areas on the railroad grade where you can see steel rails and ties. An interesting feature is a

stack of logs used to bridge a gap for the railroad. The decked wood is about 30 feet high and 130 feet in length.

Gunflint Lake SE - Wilderness Capability

Natural integrity and appearance: Signs of human activity include the two campsites on Gunflint Lake, the trail to Bridal Falls, the Border Route Trail, snowmobile use on the old railroad grade and the power line along the southern border. The rest of the area is natural appearing. Scenic classes 1 and 2 offer a high public benefit.

Opportunities for wilderness experiences: The area is well suited to providing opportunities for solitude, self-reliance, and chances to test outdoor skills. The location on an unlimited motor lake would affect solitude and naturalness of a wilderness experience.

Special features: A former potential SMC # 190 was part of this area. It contained high quality old-growth red and white pine. It was removed from the inventory, however, because of the July 4, 1999 storm damage. The remaining old white pines are special features, along with Bridal Falls.

Size/shape/external influences: The size and shape of the area are conducive to management as wilderness and it is adjacent to the BWCAW. External influences include unlimited motorized recreation on Gunflint Lake, which is not expected to change.

Boundary management needs: There would be about 3 additional miles of wilderness boundary, but only about 1-¾ miles would have to be marked and maintained, the rest bordering Crab Lake and the outflow.

Gunflint Lake SE - Availability for Wilderness

Recreation/tourism: With established dispersed campsites on Gunflint Lake, this area as an addition would increase the capacity of wilderness use, but would decrease non-wilderness dispersed use opportunities.

Wildlife: This area is in lynx analysis unit # 203. There is an osprey nest in Section 30. There are three known occurrences of rare plants within the unit.

Water availability and use: Crab Lake is on the south border and an outlet all the way through the center of the area goes to Gunflint Lake.

Livestock operations: None.

Timber: There is no data to support that any of the area is suitable for timber management.

Minerals: There are about 110 acres in the eastern portion of this area where no minerals are reserved. All minerals in the balance of the area are reserved. There is mineral potential, but very little chance of production from the Gunflint Iron formation.

Heritage Resources: There are two known sites in this area.

Authorized and potential land uses: There are no known special uses and none are anticipated.

Management considerations: There are two areas, polygons 136 and 138 that are scheduled for machine piling and burning in the Gunflint EIS in order to reduce the fuel load. The BWCAW Fuel Treatment EIS covers

additional prescribed burning in this area. There are no other known management considerations that would preclude potential wilderness designation.

Gunflint Lake SE - Wilderness Evaluation

This area could make a good addition to the existing BWCAW because it would protect the known cultural resource sites and allow natural process to affect the remaining old growth red and white pine. A wilderness study designation would also increase the capacity for wilderness recreation use with the existing campsites on Gunflint Lake.

Gunflint Lake SE - Environmental Consequences

Wilderness study designation:

- There would be no known suitable timber land affected.
- Management activities would be limited that could contribute to meeting vegetation objectives.
- There would be some additional maintenance of wilderness boundary line.
- The old growth would be protected allowing natural processes to occur.
- The area would offer additional travel routes and entry points from Loon to Crab to Gunflint Lake. The five campsites on Gunflint Lake would increase the BWCAW capacity.

Non-wilderness study designation:

- Possible loss of wilderness associated values without wilderness study designation.
- Designation in one of the recreation related management areas could provide solitude and a backcountry experience and still possibly allow some motorized use.
- Timber harvest and associated road construction would be an option in meeting vegetation objectives.
- The old growth could be maintained through other one of the special or research related management areas management areas.
- People could continue to use the campsites on Gunflint Lake without complying with BWCAW wilderness regulations.

Hog Lake (0919)

Hog Lake – Description

Acres: 7,209 acres (7,035 National Forest System, 174 water)

Location and access: The evaluated area is located approximately 14 miles northwest of Tofte, Minnesota, and just northeast of the adjacent Timber-Frear area, currently a Semi-primitive Motorized recreation Management Area. The area is in Section 32 of T62N, R5W, and Sections 3, 4, 5, 7, 8, 9, 10, 14, 15, 16, 18, 21, 22, 23, 26, 27, and 28 of T61N, R5W. It is accessible from FR 348, and Timber, Hog, and Plouff Creeks. There are also old roads and trails off of County Road 3, and Forest Roads 347, 1238, and 170 that enter the unit. Some of these are only drivable by ATV. There are a total of 7.5 miles of unimproved roads and 0.6 miles of improved road within

the unit, starting from eight different locations.

Geography: The area is relatively natural except for 236 acres that have been harvested in the last 10 years, numerous older harvest units, and the road and trail mileage mentioned previously.

Topography: There is a moderate amount of variation in topography with elevations ranging from 1,700 to 2,000 feet above sea level. The majority of the area is on high ground.

Vegetation: This area is within the White Pine-Red Pine landscape ecosystem type.

Acres in each age class by forest cover type. Percentage of area over 70 years old by cover type.							
Age	J Pine	RW Pine	LC	UC	LH	UH	Total
0-19	51	39		198		92	380
20-69	1	466	674	577		949	2667
70+		1	559	380		966	1906
% 70+	0%	0%	45%	33%		48%	
Other							*2082
Total	52	506	1233	1155		2007	7035

Cover Type Key: J Pine=Jack Pine, RW Pine=Red/White Pine, LC=lowland conifers, UC=upland conifers (upland black spruce and white spruce), LH=lowland hardwood (Aspen, birch) *14 acres upland brush and 2068 acres in unsuitable timber classes

Current uses of the area: There is fairly high use on the ATV route to Hog Lake, and recreational camping (and an illegally stored boat) on Big Snow Lake. Berry picking is popular within the area. People also gather fuel wood and hunt grouse in the area.

Appearance of the area: The area is natural appearing but signs of human activity include recently logged areas, older harvest units, and numerous old roads and trails. There are additional roads visible that are not overgrown with vegetation but do not receive any use.

Surroundings: The Timber-Frear area is just to the southwest of this area, and although well used, does not offer much in terms of disturbance. Main county roads border the rest of the area, but the distance from them to the boundary is far enough so that sights and sounds of humans are not noticeable.

Key attractions: Big Snow and Hog Lake are attractions. The area is within a potential SMC (#141) and has over 200 acres of forest over 100 years old and several lake types. A very small portion in the eastern part of the area overlaps with a potential research natural area (Timber Frear PRNA)).

Hog Lake - Wilderness Capability

Natural integrity and appearance: Outside of a few past timber sales and roads and trails left open, there has been fairly low use by humans, resulting in a natural appearance. The subsequent reforestation was primarily through natural processes and the evaluated area is highly rated for natural integrity. The scenic class in the north half of the area offers low to moderate public value and in the south half the area, high public value.

Opportunities for wilderness experiences: This area is well suited to finding opportunities for solitude, self-reliance, and testing outdoor skills, especially if unclassified roads and trails were closed.

Special features: Old growth and several lake types.

Size/shape/external influences: The shape and size are suited to providing a wilderness experience, though the area is small in comparison to the BWCAW and not adjacent to it. External influences are minimal.

Boundary management needs: Boundaries follow section and 40-acre parcels for the most part. There would be about 18 miles of boundary to mark and maintain.

Hog Lake - Availability for Wilderness

Recreation/Tourism: This area supplies the remoteness and solitude aspects of the recreation experience that the Superior National Forest is noted for. Existing non-motorized opportunities would still be available through wilderness designation, but existing motorized opportunities would not be available.

Wildlife: No special wildlife habitat other than potential lynx habitat, which would not be adversely affected by wilderness designation.

Water availability and use: There are five lakes. Hog Lake and Big Snow Lake have potential for fisheries management for northern pike, perch, and suckers. The other three lakes are currently unclassified.

Livestock operations: None.

Timber: 4,953 acres or 70 percent of National Forest System acreage is on suitable timberland.

Minerals: 3,400 acres of land, mostly in the eastern portion of the area, have the mineral rights reserved. The area contains small low-grade titanium deposits, but there is little potential for development.

Heritage Resources: The entire area has been surveyed and one site was found.

Authorized and potential land uses: There are no known special uses in this area and none are anticipated.

Management considerations: There are no known plans or considerations that would prevent recommendation of this area for wilderness, aside from foregone opportunities for future timber management and motorized recreation.

Hog Lake - Wilderness Evaluation

The area by itself would offer some wilderness values such as the ability to find solitude and test outdoor skills. Its 7,000 acres would not contribute directly to BWCAW capacity because it is separated from that million acre wilderness by two miles. The current recreation uses and potential for scientific study could be accomplished by assigning this area to a management area with research, or recreation emphasis.

Hog Lake - Environmental Consequences

Wilderness study designation:

- About 4,953 acres of land would be removed from the Forest's suitable timber harvest base.
- Management activities would be limited that could contribute to meeting vegetation objectives.

- There would be a very large increase in boundary line maintenance, about 18 miles.
- For the most part, recreational use of the area would likely not change regardless of designation. However, the existing motorized recreationists accessing Hog Lake would be displaced.

Non-wilderness study designation:

- Possible loss of wilderness associated values without wilderness study designation.
- Designation in one of the recreation related management areas could provide solitude and a backcountry experience and still possibly allow some motorized use.
- The special features could be maintained under a special or research related management areas.
- Timber harvest and associated road construction would be an option in meeting vegetation objectives.

Kawishiwi Lake to Sawbill (09L)

Kawishiwi Lake to Sawbill - Description

Acreage: 1,566 acres (1,486 National Forest System, 80 water)
This area is within a RARE II area of the same name (#9139).

Location and access: This area is located approximately 20 miles northwest of Tofte, Minnesota, in T62N, R6W and is located immediately adjacent and south of the BWCAW. It is accessible from FR 354 to the west. Forest Road 353 leaves 354 and goes thru Section 27 right up to the BWCAW boundary. About 0.85 miles of the road is within this area. The area is also accessible on the east from FR 168J, which ends about at the southern tip of Cook Lake; depending on surveyed boundaries a short stretch at the end of this road may be within the evaluated area. Temporary logging roads (about 0.8 miles total) from a timber sale south and west of Cook Lake are revegetating, as is an old winter road (pre-1978) approaching the north side of Cook Lake from the BWCAW (about 0.1 miles within the area).

Geography: The three main features are Cook Lake on the east side with road access to it, a recently logged area southwest of Cook Lake, and FR 353 that runs from FR 354 through Section 27 to the BWCAW line.

Topography: The area is relatively flat with little variation in elevation from 1,700 to 1,800 feet above sea level. Part of the area is wetlands and there are several small ponds mostly in the west side.

Vegetation: This area is within the Jack Pine-Black Spruce landscape ecosystem type.

Acres in each age class by forest cover type. Percentage of area over 70 years old by cover type.							
Age	J Pine	RW Pine	LC	UC	LH	UH	Total
0-19	8					76	84
20=69	109	2	141	85		496	833
70+	13		49	9		260	331
% 70+	10%		26%	10%		31%	
Other							234*
Total	130	2	190	94		832	1482

Cover Type Key: Pine=Jack Pine, RW Pine=Red/White Pine, LC=lowland conifers, UC=upland conifers (upland black spruce and white spruce), LH=lowland hardwoods, UH=upland hardwoods (Aspen, birch) *Unsuitable timber types

Current uses of the area: Use is very light in this area and consists mainly of fishing, hunting, and dispersed camping. There are several user-developed campsites along Forest Road 353 in the area, probably used by hunters.

Appearance of the area: The area is fairly natural appearing with some sign of past timber harvest and some remaining signs of old roads not completely revegetated. There is a 30 to 40 year old red pine plantation located along FR 353.

Surroundings: The road to Kawishiwi Lake is half a mile to the west going to Kawishiwi Lake Campground and entry point to the BWCAW. The BWCAW is the north boundary and State of Minnesota land lies to the south.

Key attractions: Cook Lake

Kawishiwi Lake to Sawbill - Wilderness Capability

Natural integrity and natural appearance: The evaluated area is natural appearing with a few old logging roads which show some signs of humans. An area south and west of Cook Lake was harvested about six years ago. The scenic class in this area offers high public value.

Opportunities for wilderness experiences: The area provides some chance to experience solitude, challenge, and risk.

Special features: Cook Lake

Size/shape/external influences: The area has sufficient size and shape as a potential wilderness addition, because it is adjacent to the BWCAW. Access through this area is not needed to reach adjacent State land.

Boundary management needs: This area would need two more miles of boundary line to maintain.

Kawishiwi Lake to Sawbill - Availability for Wilderness

Recreation/tourism: Under wilderness designation, the evaluated area would be available for most uses that now exist. Forest Road 353 would have to be obliterated at the area boundary if the area were designated wilderness. Depending on surveyed boundaries, the road to Cook Lake might need to be closed at a further distance from the

lake if the area were designated wilderness, and the lake would no longer be available for motorized use. It is not expected that use would increase much as a result of potential wilderness designation.

Wildlife: There are no known special wildlife habitats. This area is in lynx analysis unit # 706.

Water availability and use: Cook Lake provides for good northern pike fishing. There are several small ponds in the area. Portions of Hog Creek and Bill Creek are also in the area.

Livestock operations: None.

Timber: 1,248 acres or 84 percent of the National Forest System acreage is classified as suitable timberland.

Minerals: There are no mineral reservations. There is no known minerals potential in the area.

Heritage Resources: The area has been surveyed, but no sites were found.

Authorized and potential land uses: There are no special use permits for the area and none are anticipated.

Management considerations: Traditional motorized use of Cook Lake would likely be an issue if this area were designated as potential wilderness.

Kawishiwi Lake to Sawbill - Wilderness Evaluation

The evaluated area could be incorporated into the BWCAW because it is adjacent; however, the area would not provide additional wilderness recreation use capacity because it does not contain water routes or other opportunities to connect with the BWCAW. There are no other known key values that would contribute to potential wilderness study designation

Kawishiwi Lake to Sawbill - Environmental Consequences

Wilderness study designation:

- About 1,248 acres of land would be removed from the Forest's suitable timber harvest base.
- Management activities would be limited that could contribute to meeting vegetation objectives.
- There would be about two more miles of boundary line to establish and maintain.
- Semi-primitive recreation opportunities would continue to be offered. There would be very little increase in the capacity of the BWCAW, with just campsites that could be constructed on Cook Lake.
- Current motorized users on Cook Lake would be displaced.

Non-wilderness study designation:

- Possible loss of wilderness associated values without wilderness study designation.
- Designation in one of the recreation related management areas could provide solitude and a backcountry experience and still possibly allow some motorized use.
- Timber harvest and associated road construction would be an option in meeting vegetation objectives.

Lake Jeanette (0906)

Lake Jeanette - Description

Acreage: 1,793 acres (all National Forest System)

Location and access: The area is located in T66N, R15W in St. Louis County, between Lake Jeanette and BWCAW. Access to the area could be from the northern tip of Lake Jeanette. There are no roads within the area.

Geography: There are about 60 acres of water surface in ponds scattered throughout the area. These ponds are connected by non-navigable waterways. About 20 percent of the land area is in lowland swamp.

Topography: The area is relatively flat with elevations ranging from 1,400 to 1,500 feet above sea level.

Vegetation: This area is within the Jack Pine-Black Spruce landscape ecosystem type.

Acres in each age class by forest cover type. Percentage of area over 70 years old by cover type.							
Age	J Pine	RW Pine	LC	UC	LH	UH	Total
0-19	518					60	578
20-69						114	114
70+	228					482	710
Other							*391
Total	746					656	1793
% 70+	31%					73%	

Cover Type Key: J Pine=Jack Pine, RW Pine=Red/White Pine, LC=lowland conifers, UC=upland conifers (upland black spruce and white spruce), LH=lowland hardwoods, UH=upland hardwoods (Aspen, birch). *Wetlands and water

Current uses of the area: Periodic timber harvest (one-third of the area has been harvested since 1980), and hunting for deer, grouse, bear, and moose. There is a small amount of ATV use on winter routes.

Appearance of the area: The area is relatively natural with a few harvest units from the 1980's totaling about 209 acres. Some disturbance is noticeable from previous timber activities.

Surroundings: The BWCAW is directly north. The area does not connect to any BWCAW water travel routes. To the south, Lake Jeanette receives moderate to heavy recreational use.

Key attractions: There are no real attractions from water-based resources. Big game hunting is popular.

Lake Jeanette - Wilderness Capability

Natural integrity and appearance: Outside of a few timber sales, there has been very little human use. The subsequent reforestation was primarily natural, leaving the area highly rated for natural integrity. In ten years, the area should look like a young, managed forest. The scenic class offers high public value.

Opportunities for wilderness experiences: Remoteness due to lack of access could provide a wilderness experience or value as wilderness.

Special Features: None

Size/shape/external influences: The area is large enough, well shaped for an addition using corners and landlines that could easily be marked. External influences are possible future sales on National Forest System land to the east.

Boundary management needs: Boundary line establishment and maintenance would be about the same as the current condition.

Lake Jeanette - Availability for Wilderness

Recreation/tourism: The area would provide a chance to experience remoteness and solitude, but there are no water travel routes or trails.

Wildlife: There are no known special wildlife habitat needs in this area.

Water availability and use: There are some small ponds and streams that are not navigable.

Livestock operations: None.

Timber: 1,402 acres or 78 percent of National Forest System acreage is on suitable timberland.

Minerals: All of the mineral rights are federally owned. There is no known mineral potential in this area.

Heritage Resources: The entire area has been surveyed and there are no known sites.

Authorized and potential land uses: None known

Management considerations: There are no known plans or considerations that would prevent recommendation for wilderness.

Lake Jeanette - Wilderness Evaluation

The evaluated area could be incorporated into the BWCAW because it is adjacent; however, the area would not provide additional wilderness recreation use capacity because it does not contain water routes or other opportunities to connect with the BWCAW. There are no other known key values that would contribute to potential wilderness study designation

Lake Jeanette - Environmental Consequences

Wilderness study designation:

- About 1,402 acres of land would be removed from the Forest's suitable timber harvest base.
- Management activities would be limited that could contribute to meeting vegetation objectives.

- There would not be an increase in miles of boundary line to establish and maintain.
- Semi-primitive recreation opportunities would continue to be offered.

Non-wilderness study designation:

- Possible loss of wilderness associated values without wilderness study designation.
- Designation in one of the recreation related management areas could provide solitude and a backcountry experience and still possibly allow some motorized use.
- Timber harvest and associated road construction would be an option in meeting vegetation objectives.

Little Indian Sioux (09A)

Little Indian Sioux - Description

This area was identified as Rare II # 9132 and includes 995 acres, all National Forest System land.

Location and access: The area is located just north of the Echo Trail (County Road 116) approximately two miles northeast of Lake Jeanette and is adjacent to the BWCA Wilderness. It is located in parts of Sections 34 and 35 in T 66N, R15W and Sections 1, 2, and 3 of T65N, R15W. Access to the area is primarily from CR 116 on a trail that is no longer maintained. There are no roads within the evaluated area.

Geography: The area is relatively natural with signs of human occupancy from an abandoned hiking trail and harvest of 114 acres within the last ten years.

Topography: The area is relatively flat with elevations ranging from 1,360 to 1,400 feet above sea level. There are a couple of natural drainages, but most of the area is high ground.

Vegetation: It is in the Jack Pine-Black Spruce landscape ecosystem type.

Acres in each age class by forest cover type. Percentage of area over 70 years old by cover type.							
Age	J Pine	RW Pine	LC	UC	LH	UH	Total
0-19	149					138	287
20-69			5	352		81	438
70+	21		8	23			52
% 70+	12%		62%	6%			
Other							*218
Total	170		13	375		219	995

Cover Type Key: J Pine= Jack Pine, RW Pine= Red/White Pine, LC=lowland conifers, UC=upland conifers (upland black spruce and white spruce), LH=lowland hardwoods, UH=upland hardwoods (Aspen, birch) *Water and wetlands

Current uses of the area: Current uses are primarily berry picking, and hunting for moose, deer, bear, and grouse. The abandoned hiking trail is closing in and may get light use by an occasional partridge hunter.

Appearance of the area: The majority of the area is natural appearing with the exception of a small area west of Jeanette Creek, approximately 114 acres that was harvested in the last ten years.

Surroundings: This area is adjacent to the BWCAW. With the exception of the southern border, the surrounding area is quite remote and there is little human activity. The major road CR116 parallels the southern boundary.

Key attractions: The Sioux Hustler Trail east of the river is a moderately used hiking trail. An old portion of the Sioux Hustler Trail passing through the area is no longer maintained as it dead-ends at the river.

Little Indian Sioux - Wilderness Capability

Natural integrity and appearance: Outside of the 114 acres harvested within the last ten years, use by humans has been confined primarily to hiking on the Sioux Hustler Trail. The subsequent reforestation has been through natural processes and has left the area rated high for natural integrity. The area is natural appearing with very little sign of humans. The scenic class provides for a high public value.

Opportunities for wilderness experiences: The area is well suited to finding opportunities for solitude, self-reliance, and chances to test outdoor skills.

Special features: None

Size/shape/external influences: The shape of the area is well suited to wilderness designation. The north and east are adjacent to the BWCAW, and the south boundary is far enough from the Echo Trail (CR116) that there is a buffer from sights and sounds of humans.

Boundary management needs: Changing boundaries to add this area to the BWCAW would result in about one-half more mile of wilderness boundary to maintain. All new boundaries would be adjacent to National Forest System land.

Little Indian Sioux - Availability for Wilderness

Recreation/tourism: This area supplies remoteness and solitude aspects of recreation experiences that the Superior NF is noted for. Existing opportunities would still be available through wilderness designation.

Wildlife: There are no known special wildlife habitat needs for this area.

Water availability and use: Jeanette Creek is not navigable.

Livestock operations: None.

Timber: 777 acres or 78 percent of National Forest System acreage is on suitable timberland.

Minerals: There are no outstanding mineral rights. There is no known mineral potential in this area.

Heritage Resources: The entire area has been surveyed, and no sites were found.

Authorized and potential land uses: There are no uses authorized now, and none are foreseen.

Management considerations: There are no known plans or considerations that would prevent recommendation for wilderness.

Little Indian Sioux - Wilderness Evaluation

The evaluated area could be incorporated into the BWCAW because it is adjacent; however, the area would not provide additional wilderness recreation use capacity because it does not contain water routes or other opportunities to connect with the BWCAW. There are no other known key values that would contribute to potential wilderness study designation

Little Indian Sioux - Environmental Consequences

Wilderness study designation:

- About 777 acres of land would be removed from the Forest's suitable timber harvest base.
- Management activities would be limited that could contribute to meeting vegetation objectives.
- There would be a small increase in miles of boundary line to maintain.
- A few more hikers may use the Sioux-Hustler Trail if it were all in designated wilderness.

Non-wilderness study designation:

- Possible loss of wilderness associated values without wilderness study designation.
- Designation in one of the recreation related management areas could provide solitude and a backcountry experience and still possibly allow some motorized use.
- Timber harvest and associated road construction would be an option in meeting vegetation objectives.

Magnetic Lake (0923)

Magnetic Lake (0923) - Description

Acreage: 1133 acres (1,119 National Forest System, 14 water)

Location and access: The area is located approximately 45 miles northwest of Grand Marais, Minnesota, in Sections 23 and 24 of T65N, R4W. On the southeast side the area can be accessed by FR 1347 and on the west side by the Magnetic Rock Trail, which begins at the Gunflint Trail (County Road 12). A newly constructed road, authorized under special use permit, travels through the eastern end of the area for about 0.1 miles.

Geography: The evaluated area is named for the glacial rock that exhibits strange magnetic attractions. It is immediately adjacent to the BWCAW. It contains one small lake and several small ponds.

Topography: There are changes in elevation from 1,570 to 1,800 feet above sea level.

Vegetation: This area is within the Jack Pine-Black Spruce landscape ecosystem type.

Acres by forest cover type							
J Pine	RW Pine	LC	UC	LH	UH	Other	Total
1011	0	0	0	0	104	18*	1133
Cover Type Key: J Pine=Jack Pine, RW Pine=Red/White Pine, LC=lowland conifers, UC=upland conifers (upland black spruce and white spruce), LH=lowland hardwoods, UH=upland hardwoods (Aspen, birch) *Water and wetlands							

Current uses of the area: Hiking, berry picking, and hunting. The portion of the Magnetic Rock Trail within the unit (2.2 miles) gets very little use; most hikers use only the western section to the rock. Before the 1999 storm, the trail within this unit was used for cross-country skiing but skiers no longer use the trail in this area. Magnetic Lake is popular for fishing and motor use. There is little interior use of the area; Pogo Lake is not a destination for users because the area's landscape is rocky and difficult to traverse.

Appearance of the area: The area is natural appearing with bare rock outcrops. There are a variety of berries to pick and wildflowers to view. Section 24 has dozer constructed fire breaks established after the July 4th 1999 storm in preparation for prescribed burning, and most of the unit was a part of the Magnetic Rock burn completed in September 2002. Mechanical cleaning and pile burning occurred on the eastern end of the area. The scenic class offers high public value.

Surroundings: The BWCAW borders the area on the north. The area bordered by all National Forest System land except for the east end where there is private land. The area is away from high-speed roads.

Key attractions: Magnetic Rock Trail.

Magnetic Lake - Wilderness Capability

Natural integrity and appearance: The area is natural appearing with only traces of a hiking trail and a sign at Magnetic Rock, except at the eastern end of the area where mechanical clearing and fire line construction have occurred, and where a special use road has been constructed.

Opportunities for wilderness experiences: The evaluated area offers opportunities for solitude and for testing outdoor skills.

Special features: Unique geology with huge boulders and magnetic anomalies.

Size/shape/external influences: The size and shape of this area makes a manageable addition to the BWCAW. External influences are mainly in control of the Forest Service since the area is surrounded by National Forest System land, except on the east end where the area borders private land.

Boundary management needs: Adding this area would require an additional mile of boundary to maintain.

Magnetic Lake - Availability for Wilderness

Recreation/tourism: Hiking to Magnetic Rock would still be available under wilderness designation. The motorboats and private land on Magnetic Lake and roads used to access them would affect the wilderness experience inside the area.

Wildlife: There are no known special habitat needs. This area is in lynx analysis unit #202. Since the September 2002 prescribed burn, black-backed woodpeckers have moved into the area, attracting birders.

Water availability and use: The primary lake in the area, Pogo Lake, is 14 acres and only 5 feet deep. It does not have any fisheries potential but may serve as wildlife habitat as well as the small ponds in the area.

Livestock operations: None.

Timber: No data is available on suitable acres of timber land. Most of the area appears too rocky to be suitable. A large prescribed burn was completed for the down timber.

Minerals: There are no mineral reservations. There is mineral potential, but little chance of production from the Gunflint Iron formation.

Heritage Resources: No heritage resource sites are recorded.

Authorized and potential land uses: There is an easement for both a road and power line in Section 24, which is inside the southeastern boundary as now proposed.

Management considerations: A large prescribed burn has recently been completed in this area. The eastern end of the area contains the road and power line easement mentioned above.

Magnetic Lake - Wilderness Evaluation

This area could make a good addition to the existing BWCAW because it has a manageable boundary and a key feature in the Magnetic Rock Trail. Use of the trail could increase with wilderness study designation.

Magnetic Lake - Environmental Consequences

Wilderness study designation:

- There is no known suitable timber land affected.
- Management activities would be limited that could contribute to meeting vegetation objectives.
- There would be some additional maintenance of wilderness boundary line.
- The area would not offer additional canoe travel routes and BWCAW capacity since it does not have a connecting waterway.

Non-wilderness study designation:

- Possible loss of wilderness associated values without wilderness study designation.
- Designation in one of the recreation related management areas could provide solitude and a backcountry experience and still possibly allow some motorized use.
- Timber harvest and associated road construction would be an option in meeting vegetation objectives.
- People could continue to use the Magnetic Rock Trail without complying with BWCAW wilderness regulations.

Meander Lake (0907)

Meander Lake - Description

Acreage: 753 acres (all National Forest System)

Location and access: The area is located approximately one mile northwest of Meander Lake in Section 32, T66N, R14W. It can be accessed by water from Ramshead Lake in the BWCAW to Meander Creek. There are no roads within the evaluated area.

Geography: The area is natural appearing with little sign of human activity. Areas harvest and areas affected by the Little Indian Sioux fire are regenerating.

Topography: The area is undulating and elevations vary from 1,300 to 1,400 feet above sea level. Over half of the area is high ground.

Vegetation: It is in the Jack Pine-Black spruce landscape ecosystem type.

Acres in each age class by forest cover type. Percentage of area over 70 years old by cover type.							
Age	J Pine	RW Pine	LC	UC	LH	UH	Total
0-19						7	7
20-69	88	13				330	431
70+	68		26			48	142
% 70+	44%		100%			12%	
Other							*173
Total	156	13	26			385	753

Cover Type Key: J Pine=Jack Pine, RW Pine=Red/White Pine, LC=lowland conifers, UC=upland conifers (upland black spruce and white spruce), LH=lowland hardwoods, UH=upland hardwoods (Aspen, birch). *Wetlands and water

Current uses of the area: Hunting.

Appearance of the area: The area is natural appearing with no known signs of human activity. Part of the area contained some of the Little Indian Sioux fire. Areas affected by harvesting and the fire are regenerating.

Surroundings: Some private land exists on the south and east sides, but the majority of surrounding land is in National Forest System ownership. The north and majority of the east boundaries are adjacent to the BWCAW. Year-round private landowners reside near portions of the southern border.

Key attractions: None known.

Meander Lake – Wilderness Capability

Natural integrity and appearance: The area shows little sign of human disturbance. Areas salvaged following the fire are now regenerating and are natural appearing. The scenic class offers a high public value.

Opportunities for wilderness experiences: The area is well suited to finding opportunities for solitude, self-reliance, and chances to test outdoor skills.

Special features: None known.

Size/shape/external influences: Although small in size, the area is a solid block of federal ownership adjacent to the BWCAW. There is potential for some adverse effect from adjacent private ownership to the boundary, but no more than other private ownerships adjacent to the BWCAW.

Boundary management need: Proposing this area as wilderness would add an additional one-half mile of wilderness boundary to maintain.

Meander Lake - Availability for Wilderness

Recreation/tourism: The area provides remoteness and solitude aspects of the recreation experience that the Superior NF is noted for. Existing opportunities would still be available if the evaluated area were designated.

Wildlife: No known special wildlife habitats are known. The area is currently in lynx analysis unit #503.

Water availability and use: There is very little water in the area.

Livestock operations: None.

Timber: 580 acres or 77 percent of National Forest System acreage is on suitable timberland.

Minerals: Most of the mineral rights are reserved by Potlatch, about 80 percent of the area. There is no known mineral potential in the area.

Heritage Resources: The area has been surveyed and no heritage resources were found.

Authorized and potential land uses: None known.

Management considerations: There are no known plans or considerations that would prevent recommendation for wilderness.

Meander Lake - Wilderness Evaluation

The evaluated area could be incorporated into the BWCAW because it is adjacent; however, the area would not provide additional wilderness recreation use capacity because it does not contain water routes or other opportunities to connect with the BWCAW. There are no other known key values that would contribute to potential wilderness study designation

Meander Lake - Environmental Consequences

Wilderness study designation:

- About 580 acres of land would be removed from the Forest's suitable timber harvest base.

- Management activities would be limited that could contribute to meeting vegetation objectives.
- There would be a small increase in miles of boundary line to maintain.

Non-wilderness study designation:

- Possible loss of wilderness associated values without wilderness study designation.
- Designation in one of the recreation related management areas could provide solitude and a backcountry experience and still possibly allow some motorized use.
- Timber harvest and associated road construction would be an option in meeting vegetation objectives.

Mine Lake (0922)

Mine Lake – Description

Acreage: 1,209 acres (1,129 National Forest System, 80 water)

Location and access: The evaluated area is located near the end of the Gunflint Trail in Cook County, Minnesota. It is adjacent to the BWCAW in T65N, R4W. Access is by foot on the Kekekabic Trail from the Gunflint Trail. The area can also be accessed by water from Round Lake to West Round to Edith Lake to other lakes already in the BWCAW. Although maps show Forest Road 321 accesses the area, it is overgrown and blocked by windfalls half a mile from the area.

Topography: The topography is moderate to steep with elevations ranging from 1,760 to 1,900 feet.

Vegetation: This area is within the Jack Pine-Black spruce landscape ecosystem type.

Acres by forest cover type.

J Pine	RW Pine	LC	UC	LH	UH	Other	Total
166	0	15	161	0	381	486*	1209

Cover Type Key: J Pine=Jack Pine, RW Pine=Red/White Pine, LC=lowland conifers, UC=upland conifers (upland black spruce and white spruce), LH=lowland hardwoods, UH=upland hardwoods (Aspen, birch) *Water, wetlands, open, non-federal, etc.

Current uses of the area: The Kekekabic Trail is a popular and historical hiking trail. It has been cleared of debris from the July 4th, 1999 storm. It is an overnight hiking entry point (EP 56) into the BWCAW, but most use is by day hikers. About 1.75 miles of the trail are within this area. It gets light snowmobile use to the wilderness boundary, with people snow shoeing in to Bingshick Lake within the BWCAW to fish. This use has declined along with the brook trout fishery. West Round and Edith Lakes and associated portages are along a popular canoe route into the BWCAW and also get some winter use. The area has 0.3 miles of portages.

Appearance of the area: The majority of the area was heavily affected by the July 4th storm, and downed trees are common throughout the area.

Surroundings: The south and west border are the BWCAW. East of the evaluated area is Round Lake where signs of humans are more prevalent. North of the area is county land and it is similar to the area in terms of development.

Key attractions: Lake access (Mine, West Round, and Edith Lakes) to the BWCAW, the Kekekabic Trail, and the historical Paulson mine site.

Mine Lake - Wilderness Capability

Natural integrity and appearance: The historical mine sites may require fencing and signing for visitor safety. The appearance of the area, drastically changed by the 4th of July storm, is certainly natural though may not currently be pleasing to some visitors. The scenic class for this area provides for high public value.

Opportunities for wilderness experiences: There are opportunities to test outdoor skills in a semi-primitive setting.

Special features: Mine, West Round, and Edith Lakes, Kekekabic Trail, and BWCAW EP 52 Brant.

Size/shape/external influences: The proposed boundary would square up the wilderness boundary. The possible external influences from activity would be on the east boundary between the Gunflint Trail and Round Lake, and on county land in Section 20 to the north.

Boundary management needs: Length of boundary line to maintain would be about the same, but the new boundary would be easier to mark and follow on the ground. Approximately 3 ¾ miles would need to be run.

Mine Lake - Availability for Wilderness

Recreation/tourism: The amount of recreational use capacity would be slightly increased for the existing BWCAW. Current winter motorized use of the area would no longer be available under wilderness designation.

Wildlife: Due to the blowdown, the Kekekabic Trail is now a major travel way for wildlife, with a lot of wolf sign in the area. There are two documented and one undocumented occurrences of rare plants in the unit.

Water availability and use: Additional lakes are connected and could provide for camping capacity.

Livestock operations: None.

Timber: 44 acres or 4 percent of National Forest System is classified as suitable timberland.

Minerals: Fifty-four percent of the land has mineral reservations, but there are no reservations on the portions where the Kekekabic Trail crosses and the Paulson Mine is located. There is potential, but very little chance for production from the Gunflint Iron formation.

Heritage Resources: The entire area was surveyed and two sites were found. .

Authorized and potential land uses: There are no special uses and none are foreseen.

Management considerations: The portion of the unit north of the Kekekabic Trail is in prescribed burn unit 248 (BWCAW Fuel Treatment EIS). This burn is likely to occur in 2003.

Mine Lake - Wilderness Evaluation

This area could provide extensive wilderness values as an addition to the BWCAW. It contains three lakes most of which are accessible from connecting waterways or to which portages could be developed. This would offer additional recreational use capacity with small lake experiences that are not found in this part of the BWCAW. The boundary would be squared up and perhaps more manageable. There are no mineral reservations and no expected special use access requests so there is little likelihood of proposals that would change the existing character of the area.

Mine Lake - Environmental Consequences

Wilderness study designation:

- About 44 acres of land would be removed from the Forest's suitable timber harvest base.
- Management activities would be limited that could contribute to meeting vegetation objectives.
- About 3 ½ miles of additional boundary line would have to be established and maintained.
- Additional wilderness recreation use capacity could be added to the BWCAW.
- The few current motorized users accessing this area would be displaced.

Non-wilderness study designation:

- Possible loss of wilderness associated values without wilderness study designation.
- Management areas which emphasize conservation and special features may not provide recreational use, which is a key attraction. Designation in one of the recreation related management areas could provide solitude and a backcountry experience and still allow some motorized use, but would allow timber harvest that could detract from future potential consideration as wilderness.
- Timber harvest and associated road construction would be an option in meeting vegetation objectives. However, it will be several years before any timber would be available to be harvested due to the affects of the 1999 storm.

Mississippi Creek (09E)

Mississippi Creek - Description

Acres: 5,710 acres (5,152 acres National Forest System, 518 non-federal, 40 water)

This area is within a RARE II area of the same name (#9117).

Location and access: The evaluated area is located approximately 8 to 10 miles northwest of Grand Marais, Minnesota in T62N, R2W. It is bordered on the north by FR 170, the east by an old railroad grade, the south by a stream that parallels Mississippi Creek to the north and feeds into the Cascade River, and the west by County Road 4. Old logging roads into the unit have grown over and do not provide access into the interior.

Geography: There are numerous small interconnected bodies of water in the northwest portion of the area.

Topography: The south central portion of the area is relatively flat, and the northwest portion has some differences in elevation. Elevation in the area varies from 1,700 to 1,950 feet above sea level.

Vegetation: The area is within the Aspen-Spruce-Fir landscape ecosystem type.

Acres in each age class by forest cover type. Percentage of area over 70 years old by cover type.							
Age	J Pine	RW Pine	LC	UC	LH	UH	Total
0-19						16	16
20-69				704		365	1069
70+	221	20	318	145		422	1126
% 70+	100%	100%	100%	17%		53%	
Other							*2941
Total	221	20	318	849		803	5152

Cover Type Key: J Pine=Jack Pine, RW Pine=Red/White Pine, LC=lowland conifers, UC=upland conifers (upland black spruce and white spruce), LH=lowland hardwoods, UH=upland hardwoods (Aspen, birch) *Unsuitable timber types

Current uses of the area: There is very little recreational use of this area. The only trail within the area is a 0.1-mile user developed ATV route that accesses Babble Lake in the northwest corner. There may be some occasional hunting or trapping.

Appearance of the area: The evaluated area is natural appearing with only a few visible remnants of old logging roads and some aspen regeneration adjacent to some of the beaver ponds.

Surroundings: The area is surrounded by major roads on three sides. It is also bordered by State land, which occasionally has timber sale activity. The majority of the area, however, is relatively quiet in nature and provides a semi-primitive environment.

Key attractions: Swamp Lake, which the area borders, has potential for recreational use.

Mississippi Creek - Wilderness Capability

Natural integrity and appearance: The area is mostly very natural appearing with the exception of remnants of a few old logging roads and some aspen regeneration adjacent to some beaver ponds. The scenic class for the area provides high public value.

Opportunities for wilderness experiences: This area is very conducive to providing opportunities for challenge, risk, and solitude.

Special features: One half of the suitable timber land is in the 70+ age category, and about one-third of that is in lowland conifers which includes some cedar and for that reason has been considered as a potential SMC (#160).

Size/shape/external influences: The area is of an adequate size and manageable shape. External influences from road traffic and occasional timber sales are insignificant for the majority of the area.

Boundary management needs: New boundaries would require 1 ¼ fewer miles of line to be maintained than in the original RARE II area. None of the RARE II area boundary was ever marked, so if it were designated wilderness there would be about 13 miles of boundary to establish and maintain.

Mississippi Creek – Availability for Wilderness

Recreation/tourism: The existing very light use would likely continue.

Wildlife: There are no known special habitats for wildlife other than this area has older timber stands. It is also in lynx analysis unit #717. The area also includes a preliminary PRNA (Cascade Lake) that was not carried forward into the final Forest Plan Revision group of PRNAs.

Water availability and use: The area includes Babble Lake, which does not support a fish population because the deepest spot is eight feet and it is a winterkill lake. It borders Swamp Lake, which does support a fishery. In the northwest portion of the area, there are scattered small ponds used by beaver.

Livestock operations: None.

Timber: 2,111 acres or 43 percent of the National Forest System land is classified as suitable timberlands.

Minerals: The minerals are reserved by non-federal owners on 4,072 acres, and there are no reservations on 1,080 acres. The area contains scattered occurrences of native copper that may be of exploration interest in the distant future.

Heritage Resources: The entire area has been surveyed, and two sites were found.

Authorized and potential land uses: There is one special use permit in the northwest corner of the area for a sign for a local resort. There is a possibility the State of Minnesota may request access to their land for harvest. All of the non-federal land is State of Minnesota.

Management considerations: There is nothing planned at this time, which would preclude wilderness designation, however, designation would hamper management of State lands unless a land exchange was completed.

Mississippi Creek - Wilderness Evaluation

The area by itself would offer some wilderness values such as the ability to find solitude and test outdoor skills. Its 5,710 acres would not contribute directly to BWCAW capacity because it is separated from that million acre wilderness. The existence of State land in the center of the area could impact wilderness values by their activities and potential need for future access. The current recreation uses and potential for scientific study (such as the cedar) could be accomplished by assigning this area to a management area with research, or recreation emphasis.

Mississippi Creek - Environmental Consequences

Wilderness study designation:

- About 2,111 acres of land would be removed from the Forest's suitable timber harvest base.
- Management activities would be limited that could contribute to meeting vegetation objectives.
- There would be a very large increase in boundary line maintenance, about 14 miles.
- For the most part, recreational use of the area would likely not change regardless of designation because there are no special features. However, the existing motorized recreationists accessing Babble Lake would be displaced.

Non-wilderness study designation:

- Possible loss of wilderness associated values without wilderness study designation.
- Designation in one of the recreation related management areas could provide solitude and a backcountry experience and still possibly allow some motorized use.
- The special features (cedar and old growth) could be maintained through allocation to one of the special or research related management areas.
- Timber harvest and associated road construction would be an option in meeting vegetation objectives.
- State of Minnesota land could be accessed with temporary roads and still manage to maintain the semi-primitive recreation experience.

Mit Lake (0920)

Mit Lake - Description

Acreage: 973 acres (961 National Forest System, 12 water)

Location and access: The evaluated area is located in Sections 22 and 27 of T63N, R1W in Cook County, approximately 13 miles northwest of Grand Marais, Minnesota. It is immediately adjacent to the BWCAW and is at one point about one-quarter mile from Forest Road 152. Access is by foot, except for a trespass road (scheduled for closure) that passes through the southeast corner of the area.

Geography: The evaluated area is relatively undisturbed except for 43 acres of timber harvested in the last 10 years. There are no facilities or structures in the area.

Topography: The evaluated area is moderately steep with elevations ranging from 1,960 to 2,220 feet above sea level. Brule Mountain peak is in the area.

Vegetation: This area is within the Aspen-Spruce-Fir landscape ecosystem type.

Acres by forest cover type.							
J Pine	RW Pine	LC	UC	LH	UH	Other	Total
7	0	114	105	0	717	30*	973
Cover Type Key: J Pine=Jack Pine, RW Pine=Red/White Pine, LC=lowland conifers, UC=upland conifers (upland black spruce and white spruce), LH=lowland hardwoods, UH=upland hardwoods (Aspen, birch) *Water, wetlands, open, non-federal, etc.							

Current uses of the area: There is very little use. Some hunting may occur. There is an unauthorized access road to a private property on the north end of Kemo Lake; about 0.2 miles of the road is within this area.

Appearance of the area: The evaluated area is relatively undisturbed. The area is fairly remote with little to no human use. There is one small lake, Bulb Lake, within the area.

Surroundings: The west side is the BWCAW and the other surrounding land is also all National Forest System ownership with very little activity, including periodic timber harvest. There is a small block of private ownership on the south side of the area that has shore land on Kemo Lake. Two private landowners have cabins on that side

of Kemo Lake.

Key attractions: Brule Mountain and Bulb Lake may have some attraction; the area is remote and relatively undisturbed.

Mit Lake - Wilderness Capability

Natural integrity and appearance: Outside of the 43 acres that were harvested in the last 10 years, there has been very little use by humans. The subsequent reforestation is primarily through natural processes, resulting in a high rating for natural integrity. The scenic class for this area is high.

Opportunities for wilderness experiences: This area provides opportunities for solitude, self-reliance, and testing outdoor skills.

Special features: Brule Mountain and Bulb Lake.

Size/shape/external influences: The size and shape would fit as an extension of BWCAW. The private holdings on the north end of Kemo Lake could adversely affect wilderness character.

Boundary management needs: An additional three miles of boundary lines that follow section lines would need to be established and maintained.

Mit Lake - Availability for Wilderness

Recreation/tourism: This area supplies the remoteness and solitude aspects of the recreation experience that the Superior NF is noted for. Existing opportunities would still be available if designated as potential wilderness.

Wildlife: No known special wildlife habitat.

Water availability and use: The one lake in the area is only 12 acres and 4 feet deep. The lake does not provide much opportunity for recreation or fisheries management.

Timber: 96 acres or 10 percent of the National Forest System acreage is on suitable timberland.

Minerals: Mineral rights have been reserved on two-thirds of the area. The area contains small low-grade titanium deposits, but there is little potential for development.

Heritage Resources: The entire area has been surveyed and no sites were found.

Authorized and potential land uses: There are no special uses and none are anticipated. There is an approved special use road just outside the area to the southeast.

Management considerations: There are no known plans or considerations that would prevent recommendation for wilderness.

Mit Lake - Wilderness Evaluation

This area would not provide additional wilderness recreation use capacity because it does not contain water routes or other opportunities to connect with the BWCAW. There are no other known key values that would contribute to potential wilderness study designation.

Mit Lake - Environmental Consequences

Wilderness study designation:

- About 96 acres of land would be removed from the Forest's suitable timber harvest base.
- Management activities would be limited that could contribute to meeting vegetation objectives.
- There would be about three additional miles of boundary line maintenance.

Non-wilderness study designation:

- Possible loss of wilderness associated values without wilderness designation.
- Designation in one of the recreation related management areas could provide solitude and a backcountry experience and still possibly allow some motorized use.
- Timber harvest and associated road construction would be an option in meeting vegetation objectives.

North Arm of Burntside Lake (0917)

North Arm of Burntside Lake - Description

Acreage: 2,743 acres (2,285 National Forest System, 445 non-federal, 13 water)

Location and access: The evaluated area is located west of the North Arm of Burntside Lake between the lake and the BWCAW in sections 3, 4, 8, 9, 16, 17, and 19 of T63N, R13W. It can be accessed from Burntside Lake and Crab Creek from the BWCAW. There are no roads within the evaluated area.

Geography: The area is adjacent to the BWCAW on the west, and much of the east boundary is the North Arm of Burntside Lake.

Topography: The area is made up a number of very steep areas even though the elevations range from only 1,400 to 1,500 feet above sea level.

Vegetation: This area is within the Jack Pine-Black Spruce landscape ecosystem type.

Acres by forest cover type.							
J Pine	RW Pine	LC	UC	LH	UH	Other	Total
67	679	169	12	5	1249	562*	2743
Cover Type Key: Pine=Jack Pine, RW Pine=Red/White Pine, LC=lowland conifers, UC=upland conifers (upland black spruce and white spruce), LH=lowland hardwoods, UH=upland hardwoods (Aspen, birch). * Water, wetland, open, non-federal, etc.							

Current uses of the area: There are four backcountry campsites in the area.

Appearance of the area and surroundings: The area is generally very natural appearing with very few signs of human activity. The evaluated area is away from roads.

Key attractions: Access is by water only. The area is adjacent to the BWCAW and includes a portion of the Crab Lake portage (EP 4).

North Arm of Burntside Lake - Wilderness Capability

Natural integrity and appearance: The area shows very little sign of disturbance by humans. The scenic class for the area provides for high public value.

Opportunities for wilderness experiences: The evaluated area provides opportunities for solitude and chances to test outdoor skills.

Special features: About one-third of the area has red and white pine old-growth forest.

Size/shape/external influences: External influences come from motorized use of Burntside Lake.

Boundary management needs: Since the lakeshore would be the boundary and would not need marking, about three miles less of landline would have to be maintained.

North Arm of Burntside Lake - Availability for Wilderness

Recreation/tourism: Recreational use of the area would likely not change if it were designated as potential wilderness.

Wildlife: There are no known special habitats for wildlife other than this area has older timber stands. The area has portions of potential SMC # 44 and Birch Lake PRNA.

Water availability and use: Almost all of the area (95%+) is inside the city of Ely watershed. Access to Crab Lake in the BWCAW is from Burntside Lake through this area.

Livestock operations: None.

Timber: 334 acres or 15 percent of National Forest System ownership is in suitable timberland.

Minerals: Twenty percent of the minerals are reserved by non-federal owners on approximately 480 acres. There is no known mineral potential in the evaluated area.

Heritage Resources: The area has not been surveyed, but there are two known sites.

Authorized and potential land uses: None known.

Management considerations: There are two private 40-acre parcels one of which is very near the Crab Lake portage.

North Arm of Burntside Lake - Wilderness Evaluation

This area would make a good addition to the BWCAW, because it is immediately adjacent to the Wilderness, would allow natural processes to affect the old growth, and reduce land line maintenance. Wilderness management would begin at the shoreline of the North Arm of Burntside Lake.

North Arm of Burntside Lake - Environmental Consequences

Wilderness study designation:

- About 334 acres of land would be removed from the Forest's suitable timber harvest base.
- Management activities would be limited that could contribute to meeting vegetation objectives.
- There would be a reduction in maintenance of wilderness boundary line.
- The area would not offer additional canoe travel routes and BWCAW capacity since it does not have a connecting waterway.
- The city of Ely watershed may be more protected. However, management actions to maintain the water quality following natural events may be limited to non-motorized means.
- The old growth would be protected allowing natural processes to occur.

Non-wilderness study designation:

- Possible loss of wilderness associated values without wilderness study designation.
- Designation in one of the recreation related management areas could provide solitude and a backcountry experience and still possibly allow some motorized use.
- The special features (old growth) could be maintained through allocation to one of the special or research related management areas.
- Timber harvest and associated road construction would be an option in meeting vegetation objectives.
- A wider array of management actions would be available to maintain water quality for Ely's watershed.

Picket Lake (0902)

Picket Lake - Description

Acreeage: 4,480 acres (4,097 National Forest System, 383 water)

Location and access: The area is located in T65N, R16W in St. Louis County, approximately 10 miles north of Lake Vermilion, 15 miles east of Orr, and 3 miles south of the Echo Trail. It is located between the Vermilion River on the west and FR 200 on the east. Access would be primarily from FR 477 where there is a small parking

area at the end of the road where there is a carry down access to a beaver pond, which leads to Picket Lake. There is 0.5 mile of improved road and 1.0 mile of unimproved road within the evaluated area.

Geography: There are two lakes in the evaluated area: Picket Lake and Finstad Lake.

Topography: The area is undulating with elevations varying from 1350 to 1500 feet above sea level. There are a couple of natural drainages, but most of the area is on high ground.

Vegetation: This area is within the Jack Pine-Black Spruce landscape ecosystem type.

Acres in each age class by forest cover type. Percentage of area over 70 years old by cover type.							
Age	J Pine	RW Pine	LC	UC	LH	UH	Total
0-19							
20-69	481					327	808
70+	536	44	33			1665	2278
Other							*1011
Total	1017	44	33			1992	4097
70 %+	53%	100%	100%			80%	

Cover Type key: J Pine= Jack Pine, RW Pine=Red/White Pine, LC=lowland conifers, US=upland conifers (Upland black spruce and white spruce), LH=Lowland Hardwoods, UH=upland hardwoods (Aspen, birch)
*Water and wetlands

Current uses of the area: Primary use of the area is fishing on Picket Lake, camping, hunting, trapping, and use of the area by ATV riders on old winter routes. An unauthorized ATV trail goes to the end of the lake. There is also an occasional fly-in to Picket Lake.

Appearance and Surroundings: The evaluated area and surroundings are remote but at times have a fair amount of human activity. There are three backcountry campsites on Picket Lake. About 15 acres on the west side of the area were harvested within the last ten years.

Key attractions: Attractions include fishing on Picket Lake and the first half-mile of Picket River, remote camping opportunities, and big and small game hunting.

Picket Lake - Wilderness Capability

Natural integrity and appearance: Because of past timber sales, there is evidence of human activity, especially in the fall. The subsequent reforestation was done with burning and aerial seeding, red and jack pine underplantings, and some natural regeneration. The evaluated area appears as a managed forest. The Scenic Class for the area provides for moderate public value.

Opportunities for wilderness experiences: The evaluated area is well suited to opportunities for solitude and self-reliance and for testing outdoor skills, especially along the river and lakes. There is a moderate level of motorized use during the fall and winter months.

Special features: There are two lakes in the northern portion of the area. There is one old-growth stand in the southwest portion of the area that is approximately 50 acres.

Size/shape/external influences: The evaluated area is 100 percent federally owned, and the boundaries follow

section lines and the edge of Picket Lake. Continued forest management is expected in adjacent areas.

Boundary management needs: Approximately 12 miles of boundary would have to be marked and maintained.

Picket Lake - Availability for Wilderness

Recreation/tourism: This area supplies the remoteness and solitude of recreational experiences along water bodies that the Superior NF is noted for, especially during the summer. There is more ATV use associated with hunting and trapping in the fall and winter than other times of the year.

Wildlife: There are no known special wildlife habitat needs for the evaluated area. This area is in Lynx analysis unit # 604 and includes much of potential SMC #27.

Water availability and use: There are two lakes in the evaluated area. Picket Lake is managed for fisheries and has backcountry camping sites. Finstad Lake is relatively inaccessible and is not managed for fisheries. These lakes would likely be the focal point for use by potential wilderness visitors.

Livestock operations: None.

Timber: 3,086 acres or 75 percent of National Forest System acreage is on suitable timberland. Within the last 30 years, extensive logging has taken place in the evaluated area.

Minerals: The majority of mineral rights are owned by the federal government (80 to 90 percent). The area adjacent to FR 200 is a good source of gravel. There is no known potential for hard rock minerals in the area.

Heritage Resources: The entire area has been surveyed. Two sites were found.

Authorized and potential land uses: None known.

Management considerations: The Minnesota Department of Natural Resources Trails and Waterways division were looking for areas in northeastern Minnesota that might have some possible opportunities for development of OHV trails. Parts of the evaluated area have been recommended as having potential for ATV development because of current use. There is State land adjacent to the evaluated area. The area is within the Echo Trail mid-level assessment.

Picket Lake - Wilderness Evaluation

The area by itself would offer some wilderness values such as the ability to find solitude and test outdoor skills. Its 4,480 acres would not contribute directly to BWCAW capacity because it is separated from that million acre wilderness by many miles. The area has also been recommended for ATV development based upon current use. If wilderness were proposed, current ATV users would be displaced. There would continue to be affects to potential wilderness experiences due to management on National Forest System and non-federal lands in the surrounding areas for timber harvest and gravel extraction for road maintenance.

Picket Lake - Environmental Consequences

Wilderness study designation:

- About 3,086 acres of land would be removed from the Forest's suitable timber harvest base.
- Management activities would be limited that could contribute to meeting vegetation objectives. There may be a loss of the jack pine component for species diversity over time as natural succession occurs.
- There would be a very large increase in boundary line maintenance, about 12 miles.
- Providing non-motorized recreation opportunities would change current public use patterns, displacing existing motorized users to other areas.

Non-wilderness study designation:

- Possible loss of wilderness associated values without wilderness study designation.
- Designation in one of the recreation related management areas could provide solitude and a backcountry experience and still possibly allow some motorized use.
- Timber harvest and associated road construction would be an option in meeting vegetation objectives.

Seven Beaver Lake (0912)

Seven Beaver Lake - Description

Acreage: 6916 acres (5,174 acres National Forest System, 286 non-federal, 1,456 water)

Location and access: The Seven Beaver area is located approximately 20 miles east of Aurora, Minnesota. It is in Section 31 of T59N, R11W, Sections 6, 7, 18, and 19 of T58N, R11W, and Sections 1, 2, 3, 10, 11, 12, 13, 14, and 24 of T58N, R12W. Access is by the St. Louis River, Big Lake, an ATV trail to Round Lake and then into Seven Beaver Lake, and a Snowmobile Trail on the southeast side of Seven Beaver Lake that is not within the evaluated area. There are no roads within the evaluated area.

Geography: The evaluated area is located in a remote and relatively undeveloped area. The only development aside from the nearby railroad tracks, are the snowmobile trail and two dispersed campsites, one on the southeast side of Seven Beaver Lake and one on the southeast side of Big Lake.

Topography: The area is very flat with little variation. Elevation ranges from 1,620 to 1,730 feet above sea level, and the majority of the area is lowland.

Vegetation: This area is within the Jack Pine-Black Spruce landscape ecosystem type.

Acres in each age class by forest cover type. Percentage of area over 70 years old by cover type.							
Age	J Pine	RW Pine	LC	UC	LH	UH	Total
0-19							
20-69			244			271	515
70+		11	1035	218		874	2138
Other			2521*				2521
Total	0	11	3800	218	0	1145	5174
% 70+		100%	84%	100%		76%	

Cover Type key: J Pine=Jack Pine, RW Pine=Red/White Pine, LC=lowland conifers, UC=upland conifers(upland black spruce and white spruce), LH=Lowland hardwoods, UH=upland hardwoods (Aspen, birch) *Stagnant Spruce and miscellaneous conifers

Current uses of the area: Primary use of the area is fishing and some camping.

Appearance of the area: The area appears natural, isolated, with very little visibility of man-made structures.

Surroundings: The area is surrounded by predominately State land on the east and railroads on the north and west. There is very little human activity in the surrounding area.

Key attractions: The fishing opportunity is the biggest attraction, and due to limited access most watercraft are small boats or canoes.

Seven Beaver Lake - Wilderness Capability

Natural integrity and appearance: The area is basically natural with very little evidence of humans such as a few campsites, historic sites, and traces of a few trails. The scenic class for the area provides low public value.

Opportunities for wilderness experiences: This area provides opportunities for solitude, self-reliance, and to test outdoor skills.

Special features: This area is part of potential special management complex (SMC # 161), primarily because it is a highly valued peat land, adjacent to the Minnesota DNR Sand Lake Peat land Scientific and Natural Area. It also includes more than 74 percent of a small Natural Resource Conservation Service watershed and several lake types including the only representative on the forest of lake type 2. It is also valued because of the large amount of older vegetation 70 years plus. It is clearly ecologically unique and offers different characteristics than other areas on the Forest. Part of the area is also currently under consideration as a potential Research Natural Area.

Size/shape/external influences: The size and shape of this area is conducive to providing for the kind of solitude expected in a wilderness area. There would be very little sights and sounds of humans from the surrounding areas.

Boundary management needs: With the exception of some lakeshore on both Seven Beaver and Big Lakes, the majority of landlines are on sections and 40-acre parcel lines. There would be approximately 18 - 20 miles of landline to mark and maintain as a Wilderness boundary.

Seven Beaver Lake - Availability for Wilderness

Recreation/tourism: This area supplies the remoteness and solitude aspects of the recreation experience that the Superior NF is noted for. Existing opportunities, with the exception of snowmobileing would still be available through wilderness designation.

Wildlife: A great preponderance of the vegetation is very old. This area is in lynx analysis unit 106.

Water availability and use: Seven Beaver Lake and Big Lake offer excellent fisheries. Although Seven Beaver Lake is shallow and was aerial seeded with wild rice about 15 years ago, both lakes are being managed for walleye. Seven Beaver Lake is also the headwaters of the St. Louis River, which provides an excellent fishery all the way to Lake Superior.

Livestock operations: None.

Timber: 2,653 acres or 51 percent of the National Forest System acreage is classified as suitable timberland.

Minerals: The entire area has outstanding mineral rights, which are owned by other entities than the federal government. There is no known mineral potential in this area.

Heritage Resources: The entire area has been surveyed and three sites have been located.

Authorized and potential land uses: There are no special use permits now, and none are anticipated for potential uses in the future.

Management considerations: There is currently an effort to produce a memorandum of understanding for cooperative management of this area. Organizations involved are The Nature Conservancy, Lake County, St. Louis County, Minnesota Department of Natural Resources, and the Superior National Forest.

Seven Beaver Lake - Wilderness Evaluation

The values of this area for remote recreation experiences, old growth, peat land, type 2 lakes, and heritage resource sites could all be maintained under a wilderness designation. However, its nearly 7,000 acres would not contribute directly to BWCAW capacity because it is separated from that million acre wilderness by many miles. Current snowmobile users would be displaced to other areas.

Seven Beaver Lake - Environmental Consequences

Wilderness study designation:

- About 2,653 acres of land would be removed from the Forest's suitable timber harvest base.
- Management activities would be limited that could contribute to meeting vegetation objectives.
- There would be a very large increase in boundary line maintenance, about 18 miles.
- Providing non-motorized recreation opportunities would not change current public use patterns with the exception of displacing some existing snowmobile use.

Non-wilderness study designation:

- Possible loss of wilderness associated values without wilderness study designation.

- Designation in one of the recreation related management areas could provide solitude and a backcountry experience and still possibly allow some motorized use.
- Designation in one of the special or research related management areas could maintain the area's special features, the peatlands and type 2 lakes, and older vegetation.
- Timber harvest and associated road construction would be an option in meeting vegetation objectives.

South Kawishiwi River (09J)

South Kawishiwi River - Description

Acreage: 211 acres (all National Forest System)

This area is within a RARE II area of the same name (#9137).

Location and access: The area is an expanded RARE II area about seven to eight miles southeast of Ely, Minnesota bordering the existing BWCAW by the South Kawishiwi River in sections 12 and 13 of T62N, R11W. It can be accessed from the South Kawishiwi River. There are no roads within the evaluated area.

Geography and Topography: The area does not vary much in elevation from 1450 to 1500 feet above sea level. It is immediately west of the BWCAW boundary and the South Kawishiwi River.

Vegetation: This area is within the Jack Pine-Black Spruce landscape ecosystem type.

Acres in each age class by forest cover type. Percentage of area over 70 years old by cover type.							
Age	J Pine	RW Pine	LC	UC	LH	UH	Total
0-19							
20-69						66	66
70+					7	138	145
Total					7	204	211
%70+					100%	68%	

Cover Type Key: J Pine=Jack Pine, RW Pine=Red/White Pine, LC=lowland conifers, UC=upland conifers (upland black spruce and white spruce) LH=lowland hardwoods, UH=upland hardwoods (Aspen, birch)

Current uses of the area: Not much use occurs because land access is blocked by private property.

Appearance of the area: There is mostly older aspen and birch paralleling the South Kawishiwi River.

Surroundings: South Kawishiwi River on south and east, and private land on north and west.

Key attractions: A quarter mile buffer to the South Kawishiwi River.

South Kawishiwi River - Wilderness Capability

Natural integrity and appearance: The area is basically natural appearing with no visible signs of humans. The scenic class for the area provides moderate public value.

Opportunities for wilderness experiences: Although the area is narrow, it could provide a buffer for those folks using the South Kawishiwi River as a travel route. It would enhance the natural appearance and decrease the sights and sounds of humans.

Special features: None.

Size/shape/external influences: The long thin shape of the area is ideally suited to serve as a buffer to the South Kawishiwi River.

Boundary management needs: The majority of lines would need to be run because of adjacent other ownership and not just if the area were recommended for wilderness.

South Kawishiwi River - Availability for Wilderness

Recreation/tourism: Wilderness designation would not likely increase nor decrease recreation or tourism for this very small narrow band of land.

Wildlife: There are no known special wildlife habitats. This area is in lynx analysis area 506.

Water availability and use: There is no water in the evaluated area.

Livestock operations: None.

Timber: 211 acres or 100 percent of the area is classified as suitable timberland. This area was last logged in the 1930's.

Minerals: There are no mineral reservations. There is no known mineral potential in the area.

Heritage Resources: This area has not yet been surveyed. There are no known sites.

Authorized and potential land uses: There are no special use permits now and none are anticipated.

Management considerations: There are no known plans or considerations that would prevent recommendation for wilderness.

South Kawishiwi River - Wilderness Evaluation

This area could provide extensive wilderness values as an addition to the BWCAW by providing a buffer for a major canoe travel route into the BWCAW, the South Kawishiwi River. There are no mineral reservations and no expected special use access requests so there is little likelihood of proposals that would change the existing character of the area.

South Kawishiwi River - Environmental Consequences

Wilderness study designation:

- About 211 acres of land would be removed from the Forest's suitable timber harvest base.
- Management activities would be limited that could contribute to meeting vegetation objectives.
- About 1.3 miles of additional boundary line would have to be established and maintained.
- BWCAW visitors would be assured that the view from the South Kawishiwi River would remain natural and the sights and sounds of humans would be unnoticed.

Non-wilderness study designation:

- Possible loss of wilderness associated values without wilderness study designation.
- Designation in one of the recreation related management areas could provide solitude and a backcountry experience and still allow some motorized use, but would allow timber harvest that could detract from future potential consideration as wilderness.
- Timber harvest and associated road construction would be an option in meeting vegetation objectives.
- Scenery management could provide a natural appearing environment to visitors on the South Kawishiwi River.

Urho Creek (0908)

Urho Creek - Description

Acreage: 3,613 acres (3,573 acres National Forest System, 40 water)

Location and access: The area is located approximately 2 to 3 miles southeast of Lake Jeanette in sections 10, 11, 15, 16, 21, 22, 27, 33, and 34 of T65N, R15W. The area can be accessed from FR 471C which is improved 0.2 miles into the area; there are also 1.5 miles of unimproved road in the area, mostly winter road. The area may be accessed via water by following Marvins, Urho, and Spike Horn Creeks from the Little Indian Sioux River. These creeks are generally not navigable year-round by watercraft.

Geography: The area is natural appearing with very little sign of human activity with the exception of 106 acres that were harvested less than 10 years ago.

Topography: A fair amount of topography exists, ranging from 1,400 to 1,550 feet with most of the area on high ground. Rock outcrops are common.

Vegetation: This area is within the Jack Pine-Black Spruce landscape ecosystem type.

Acres in each age class by forest cover type. Percentage of area over 70 years old by cover type.							
Age	J Pine	RW Pine	LC	UC	LH	UH	Total
0-19	277					64	341
20-69	15					61	76
70+%	64%	100%	100%	100%	100%	75%	
Other							*1247
Total	803	179	12	815	8	509	3573
% 70+	511	179	12	815	8	384	1909

Cover Type Key: J Pine=Jack Pine, RW Pine=Red/White Pine, LC=lowland conifers, UC=upland conifers (upland black spruce and white spruce), LH=lowland hardwood, UH= upland hardwood (Aspen, birch). *Water and wetlands

Current uses of the area: Hunting, berry picking, and hiking.

Appearance of the area: Many stands of mature Jack Pine are in the area.

Surroundings: There is a State-owned 40-acre parcel and a county-owned 80-acre parcel adjacent on the south side, but the great majority of adjacent land is the BWCAW and other National Forest System land. The original Norway Trail is also adjacent to the evaluated area.

Key attractions: The Norway hiking trail.

Urho Creek - Wilderness Capability

Natural integrity: The evaluated area has had about 106 acres harvested in the last ten years. Due to natural regeneration the harvests will not be significantly noticeable for very long.

Natural appearance: This large area has the look of a managed forest. The scenic class for the area provides a high public benefit.

Opportunities for wilderness experiences: The area provides opportunities for solitude and self-reliance, and to test outdoor skills.

Special features: It appears from the age of the vegetation that there is old growth that could be valuable to some wildlife species.

Size/shape/external influences: The area is a manageable sized and shaped block adjacent to the BWCAW. There are no known external influences that are expected to adversely affect the potential wilderness quality of the area.

Boundary management needs: Adding this area to the BWCAW would require maintenance of an additional three and one half miles of boundary line.

Urho Creek - Availability for Wilderness

Recreation/tourism: The evaluated area supplies the remoteness and solitude aspects of the recreation experience

that the Superior NF is noted for. Existing non-motorized opportunities would be available through wilderness designation.

Wildlife: There are no known special wildlife habitats other than potential lynx habitat.. The area is in lynx analysis unit 604.

Water availability and use: There are a few small lakes and ponds at the beginning of creeks that flow into the Indian Sioux River.

Livestock operations: None.

Timber: 2,326 acres or 64 percent of National Forest System acreage is on suitable timberland.

Minerals: There are no outstanding mineral reservations. There is no known mineral potential in the area.

Heritage Resources: The entire area has been surveyed. One historical site was located.

Authorized and potential land uses: There is one temporary special use permit to the Minnesota DNR (permit #1076-19) for winter road access to harvest timber. This permit is in the very southwest corner of the area. The road will be closed after use.

Management considerations: The area is within the Echo Trail mid-level assessment area.

Urho Creek - Wilderness Evaluation

The evaluated area could be incorporated into the BWCAW because it is adjacent and has small lakes that connect and could provide a little additional capacity; however, the routes to the lakes would not likely be navigable year round. There are no other known values that would contribute to wilderness designation. There are no other known key values that would contribute to potential wilderness study designation

Urho Creek - Environmental Consequences

Wilderness study designation:

- About 2,326 acres of land would be removed from the Forest's suitable timber harvest base.
- Management activities would be limited that could contribute to meeting vegetation objectives.
- There would be about 3.5 additional miles of boundary line to maintain.
- A few more hikers may use the Norway Trail if it were all in designated wilderness.

Non-wilderness study designation:

- Possible loss of wilderness associated values without wilderness study designation.
- Designation in one of the recreation related management areas could provide solitude and a backcountry experience and still possibly allow some motorized use.
- Timber harvest and associated road construction would be an option in meeting vegetation objectives.

Wolf Lake (0903)

Wolf Lake - Description

Acreeage: 2,840 acres (2,661 National Forest System, 179 acres)

Location and access: The area is located in T63N, R16W in St. Louis County. It is approximately two miles north of Moccasin Point just north of Lake Vermilion. The most southeasterly part of the area is accessed by water from Lake Vermilion. Unimproved roads used in logging and salvage from the north exist but are legally closed to motorized traffic. There is a nearly impassible old jeep trail that traverses from Lake Vermilion north to Wolf Lake.

Geography: The area is relatively natural with very few signs of human activity. There is a portage from Wolf Bay on Lake Vermilion to Wolf Lake. This portage is occasionally used by snowmobiles and ATVs.

Topography: The evaluated area is relatively flat; elevations vary from 1,400 to 1,500 feet. About 30 to 40 percent of the area is lowland swamp. There are high long ridges running east to west.

Vegetation: This area is within the Jack Pine-Black Spruce landscape ecosystem type.

Acres in each age class by forest cover type. Percentage of area over 70 years old by cover type.							
Age	J Pine	RW Pine	LC	UC	LH	UH	Total
0-19							
20-69						377	377
70+	37	69	61		374	901	1,442
Other							*842
Total	37	69	61		374	1,278	2,661
% 70+	100%	100%	100%		100%	71%	

Cover Type Key: J Pine=Jack Pine, RW Pine-Red/White Pine, LC=lowland conifers, UC=Upland Conifers, UC=Upland Conifers (upland black spruce and white spruce), LH=Lowland Hardwoods, UH=Upland Hardwoods (Aspen, birch) *Upland and lowland brush, open, wetlands, water, etc.

Current uses of the area: Hiking, fishing, hunting, berry picking, and access to Wolf Lake. A private cabin is on Wolf Lake (private land) adjacent to this area. There is also infrequent fly-in use to Wolf Lake.

Appearance of the area and surroundings: The only area adjacent to the evaluated area that is natural appearing and has very little activity is on the east side, which borders the BWCAW. To the north there was a major blow down of vegetation from the July 4, 1999 storm and a lot of salvage activity. To the west and south there is a mix of private, State, and county ownership that has and will continue to involve road access and forest management. The private land west and south is developed or is in the process of being developed for personal recreation use.

Key attractions: Wolf Lake.

Wolf Lake - Wilderness Capability

Natural integrity and appearance: Besides the portage to Wolf Lake, this area was heavily logged in the 1940's (black spruce in the lowland areas and red and white pine on the ridge tops). Photos from the 1950's show many miles of winter roads and harvest units. The scenic class for the area provides a moderate public value.

Opportunities for wilderness experiences: The area is suited to finding opportunities to test outdoor skills, although it is limited for solitude due to motorboats, float planes, and snowmobiles used on Lake Vermilion, which can be heard from this area.

Special features: The area is within a potential SMC #33.

Size/shape/external influences: There is 100 percent National Forest System ownership, and boundaries follow section lines and natural features. External influences may at times affect the area, but the area itself could provide an additional extension to the Trout Lake unit in the BWCAW.

Boundary management needs: Boundaries of the area follow land lines, except for the northwest portion that is an existing unimproved road and is easy to find on the ground, and short areas where it follows Wolf and Vermilion Lake shore lines.

Wolf Lake - Availability for Wilderness

Recreation/tourism: The majority of recreation use is for hunting and fishing on Wolf Lake. Snowmobile use is common in the area.

Wildlife: There are no known special wildlife habitat needs in the evaluated area.

Water availability and use: Wolf Lake is accessible by portage, and wilderness designation would displace the current motorized users who access the lake by snowmobile or ATV.

Livestock operations: None.

Timber: 1,819 acres or 68 percent of acreage is on suitable timberland. There is one inventoried old-growth stand, which is 68 acres of Red Pine forest type.

Minerals: The federal government owns 80 percent of the minerals. The University of Minnesota reserves 10 percent. There is potential for small, high-grade copper-lead-zinc silver deposits.

Heritage Resources: The entire area has been surveyed, and there are no known sites.

Authorized and potential land uses: There are two boat storage permits on Wolf Lake. One is to the Lake Vermilion Resort Association for storage of a boat for resort guests to use. The other permit is issued to an individual for access to private property on Wolf Lake.

Management considerations: These include current motorized use and access to private property.

Wolf Lake - Wilderness Evaluation

This area could offer some wilderness values such as the ability to find solitude and test outdoor skills. It is adjacent to the BWCAW and has the attraction of Wolf Lake. However, it would not effectively add to the capacity of wilderness canoe routes, as it is two miles by land from Trout Lake to Wolf Lake. The current private land on Wolf Lake and associated motor boat storage and use could detract from potential wilderness experiences. The additional recreation boat storage permit would have to be terminated and that use displaced. Current snowmobile use would also be displaced.

Wolf Lake - Environmental Consequences

Wilderness study designation:

- About 1,819 acres of land would be removed from the Forest's suitable timber harvest base.
- Management activities would be limited that could contribute to meeting vegetation objectives. There may be a loss of the jack pine component for species diversity over time as natural succession occurs.
- There would be a very large increase in boundary line establishment and maintenance.
- Current snowmobile use would be displaced.

Non-wilderness study designation:

- Possible loss of wilderness associated values without wilderness study designation.
- Designation in one of the recreation related management areas could provide solitude and a backcountry experience and still possibly allow some motorized use.
- Designation in one of the special or research related management areas would maintain the area's special features.
- Timber harvest and associated road construction would be an option in meeting vegetation objectives.

Wood Lake (09I)

Wood Lake - Description

Acreage: 622 acres (544 National Forest System, 38 non-federal, 40 water)

This area is within a RARE II area of the same name (#9136).

Location and access: The evaluated area is nestled in the corner of the BWCAW just north of Tofte Lake and southwest of Wood Lake in Section 35 T64N, R10W. The area can be accessed from Tofte Lake. There are no roads within the evaluated area.

Geography and Topography: This area has very little change in elevation from 1,400 to 1,420. A good portion of the area is in wetland.

Vegetation: The area is within the dry-mesic White Pine-Red Pine landscape ecosystem type.

Acres in each age class by forest cover type. Percentage of area over 70 years old by cover type.							
Age	J Pine	RW Pine	LC	UC	LH	UH	Total
0-19							
20-69						176	176
70+			26	25		214	265
Other							*103
Total			26	25		390	544
%70+			100%	100%		55%	

Cover Type Key: J Pine=Jack Pine, RW Pine=Red/White Pine, LC=lowland conifers, UC=upland conifers (upland black spruce and white spruce), LH=lowland hardwood, UH=upland hardwood (Aspen, birch). *Water and wetlands

Current uses of the area: The private land is being used for outfitting and guiding of dogsled trips and has a yurt for shelter. There are two dispersed campsites on the north end of Tofte Lake in the evaluated area. There is a resort on Tofte Lake outside of this area and motor use on Tofte Lake.

Appearance of the area: The area appears mostly natural. The campsites on Tofte Lake and the yurt on private land are basically the only signs of humans.

Surroundings: The area is bordered by the BWCAW on the west and north, a section of State land on the east, and Tofte Lake on the south.

Key attractions: Fishing year-round on Tofte Lake is very good, including trout fishing. Dogsledding is also a very popular recreation activity.

Wood Lake - Wilderness Capability

Natural integrity and appearance: The majority of the area is natural appearing with only the edges showing signs of human activity. The scenic class for the area provides for moderate public value.

Opportunities for wilderness experiences: The area provides opportunities for solitude, self-reliance, and to test outdoor skills away from Tofte Lake. This could change if the private landowner in the northwest corner of the evaluated area decides to develop his property.

Special features: None.

Size/shape/external influences: The size and shape of the area would fit well as an addition to the existing BWCAW. There are two campsites on the north end of Tofte Lake. However, drawing the wilderness boundary through a lake and having it be non-motorized on the very north tip would be difficult to manage.

Boundary management needs: There would be no additional wilderness boundary to maintain.

Wood Lake - Availability for Wilderness

Recreation/tourism: This area supplies remoteness and solitude aspects of the recreation experience that the Superior NF is noted for. Existing opportunities would be available through wilderness designation.

Wildlife: There are no known special wildlife habitats. This is in lynx analysis unit 501.

Water availability and use: Tofte Lake is a very popular fishing lake and is used most of the year.

Livestock operations: None.

Timber: 441 acres or 81 percent of the National Forest System land is classified as suitable timberland.

Minerals: All mineral rights are reserved. There is potential for small, high-grade copper-lead-zinc silver deposits.

Heritage Resources: The area was surveyed and no sites were located.

Authorized and potential land uses: The owners of the private land in the northwest corner may apply for trail access to their property.

Management considerations: The current private landowners want to maintain their ownership. It would be difficult to manage this area as wilderness with private land included. Also, designation of this area as wilderness would limit access to State land on the east boundary.

Wood Lake - Wilderness Evaluation

This area could make a logical addition to the BWCAW because it is adjacent. However, sights and sounds from the private land could detract from a wilderness experience.

Wood Lake - Environmental Consequences

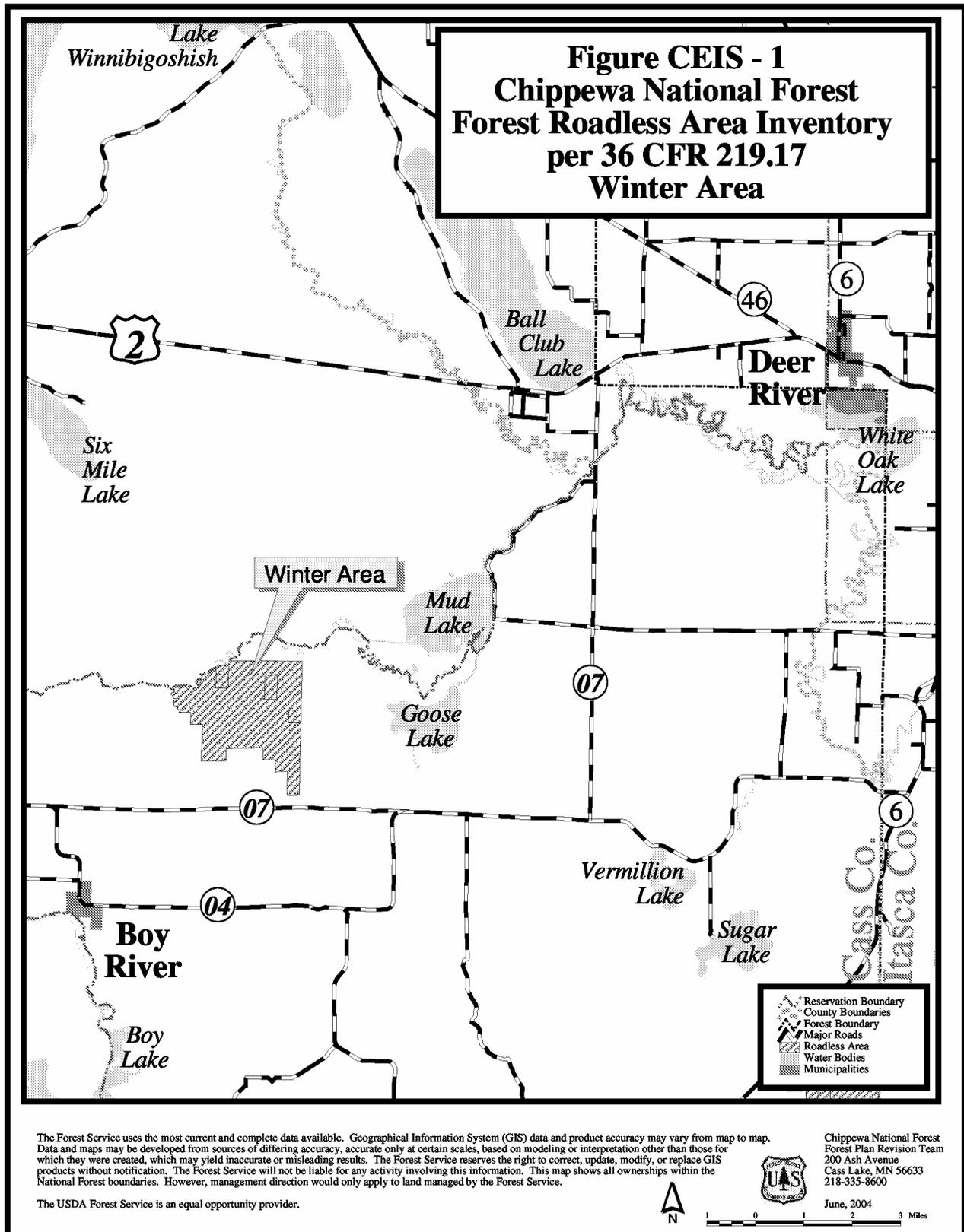
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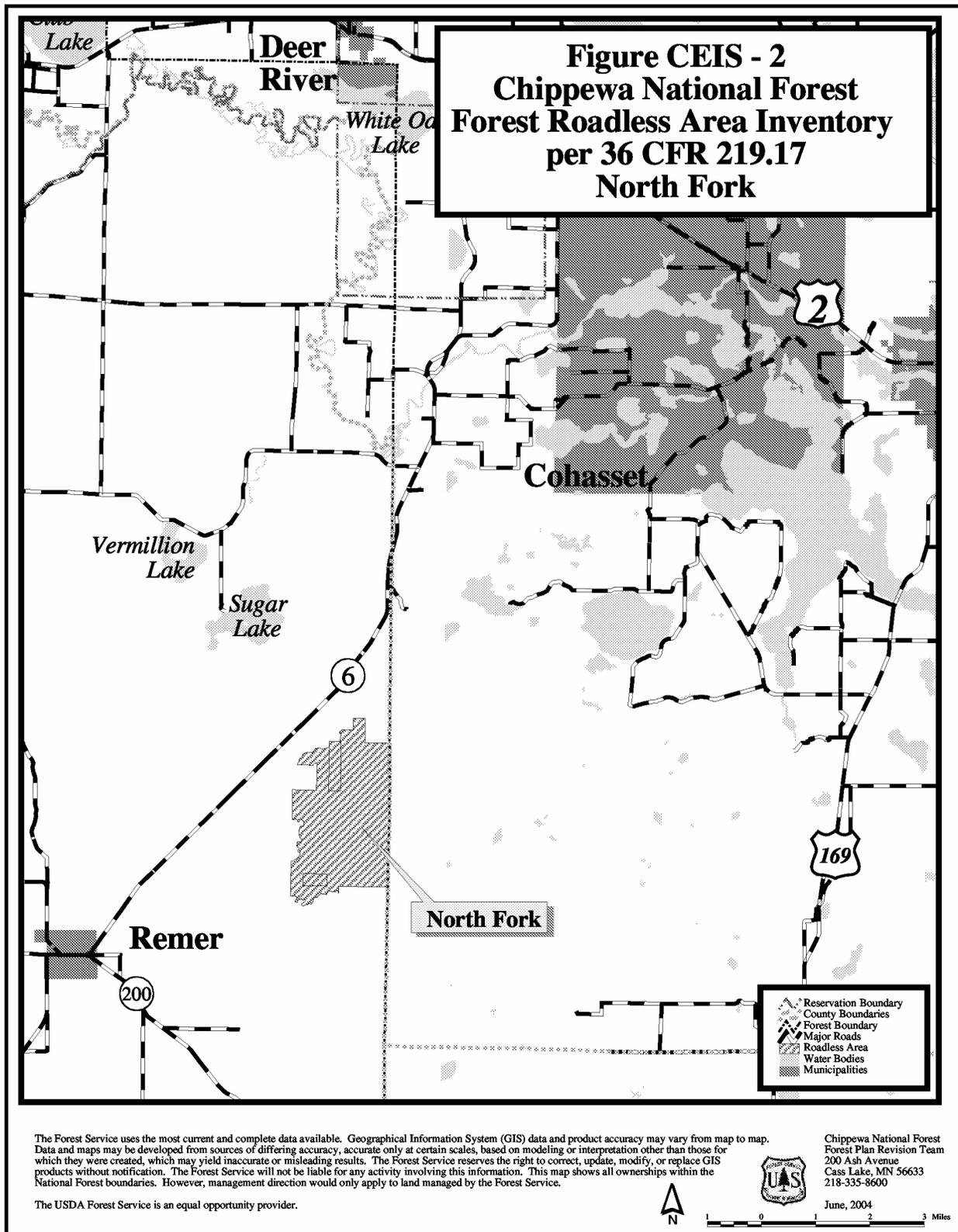
- About 441 acres of land would be removed from the Forest's suitable timber harvest base.
- Management activities would be limited that could contribute to meeting vegetation objectives.
- There would be no additional wilderness boundary line to maintain.
- The activities on the private inholding could detract from a wilderness experience.

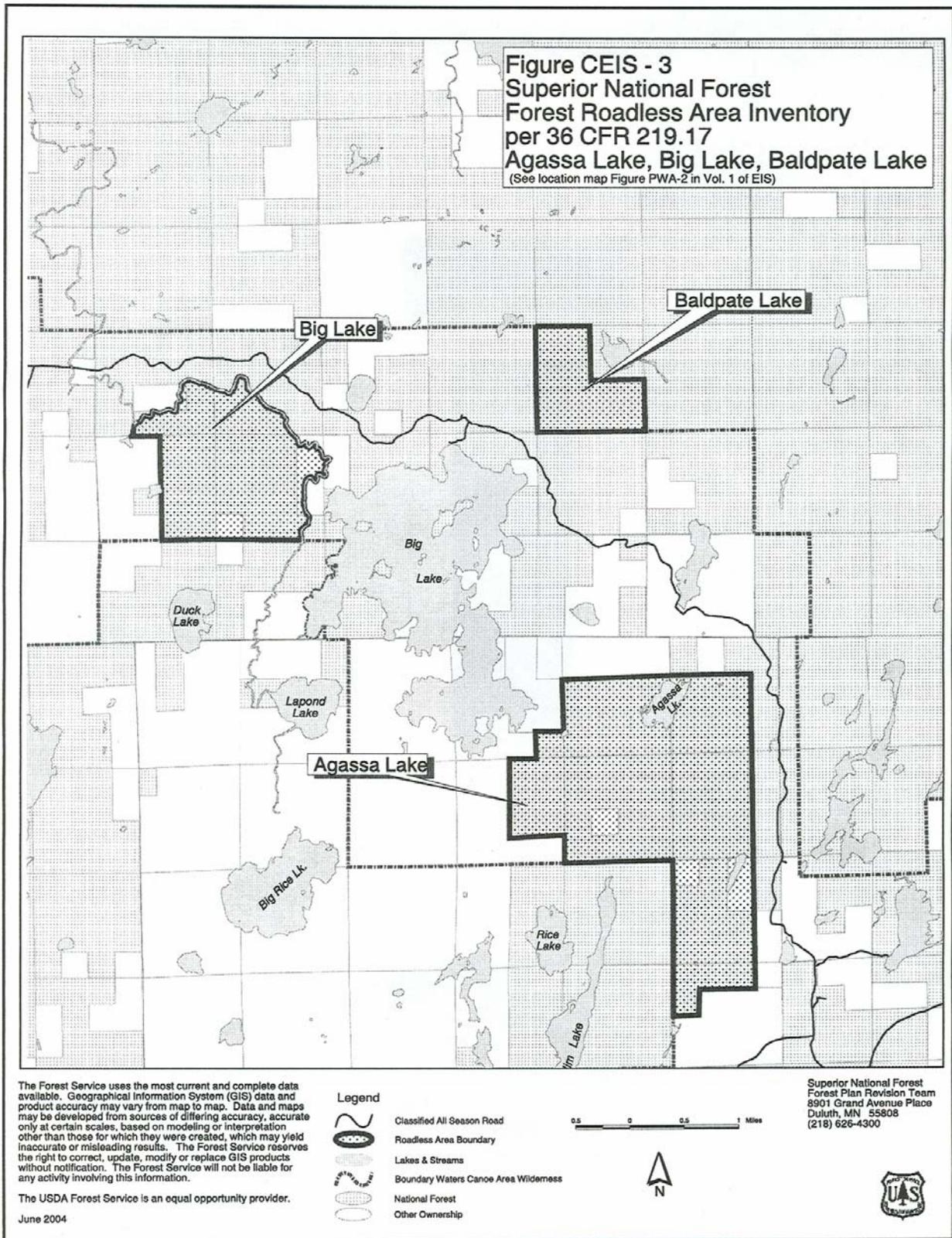
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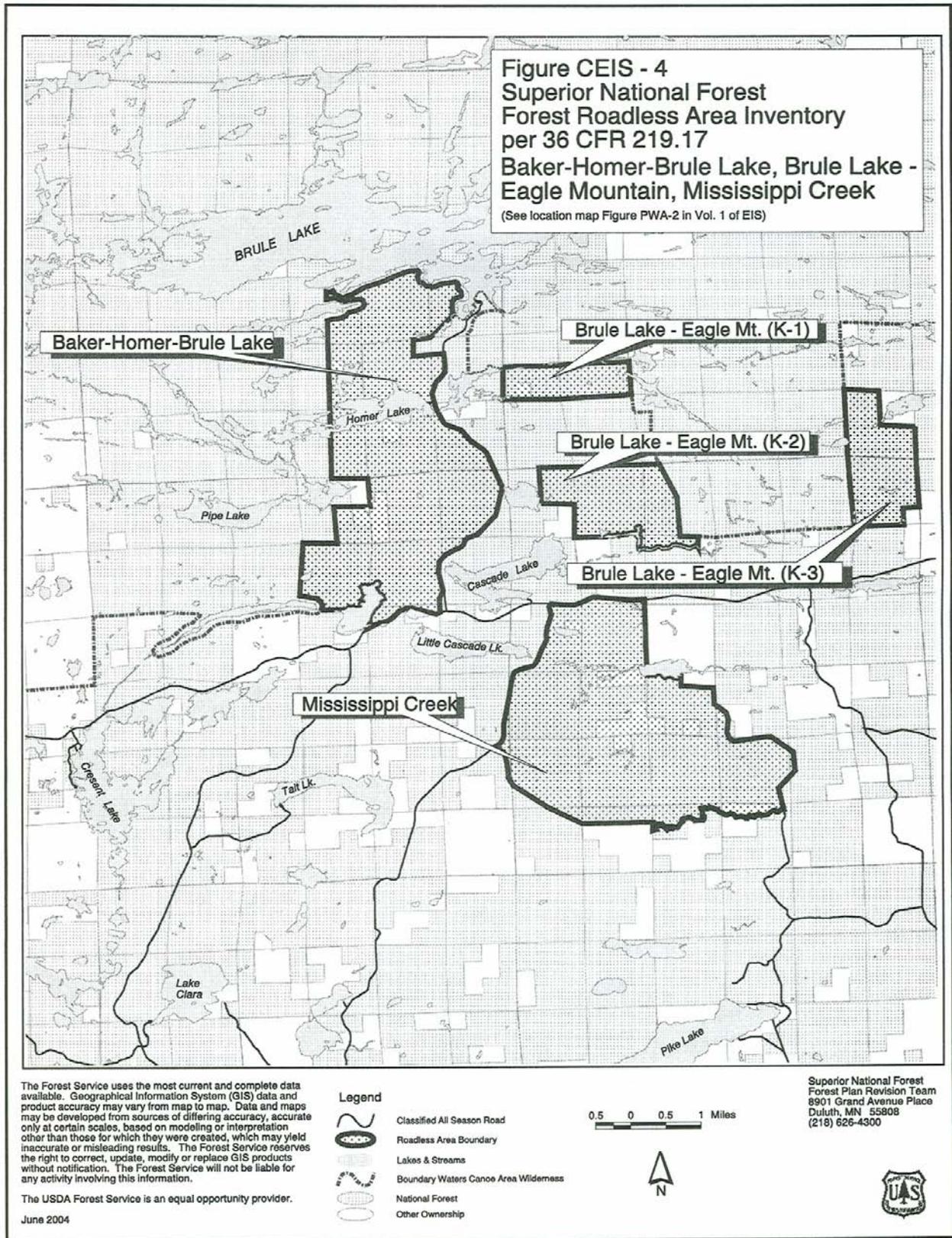
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- Timber harvest and associated road construction would be an option in meeting vegetation objectives.

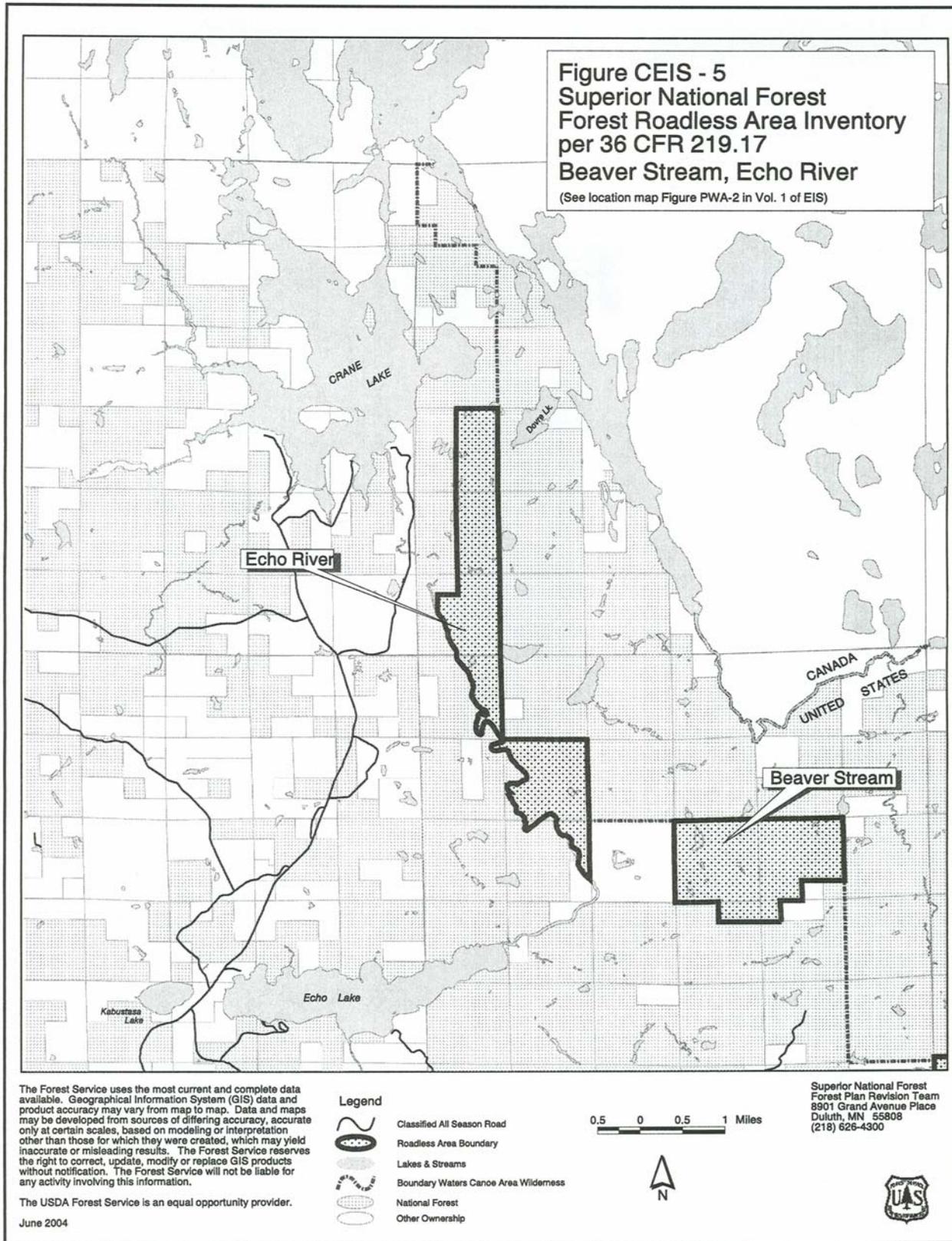
C. VI. Maps

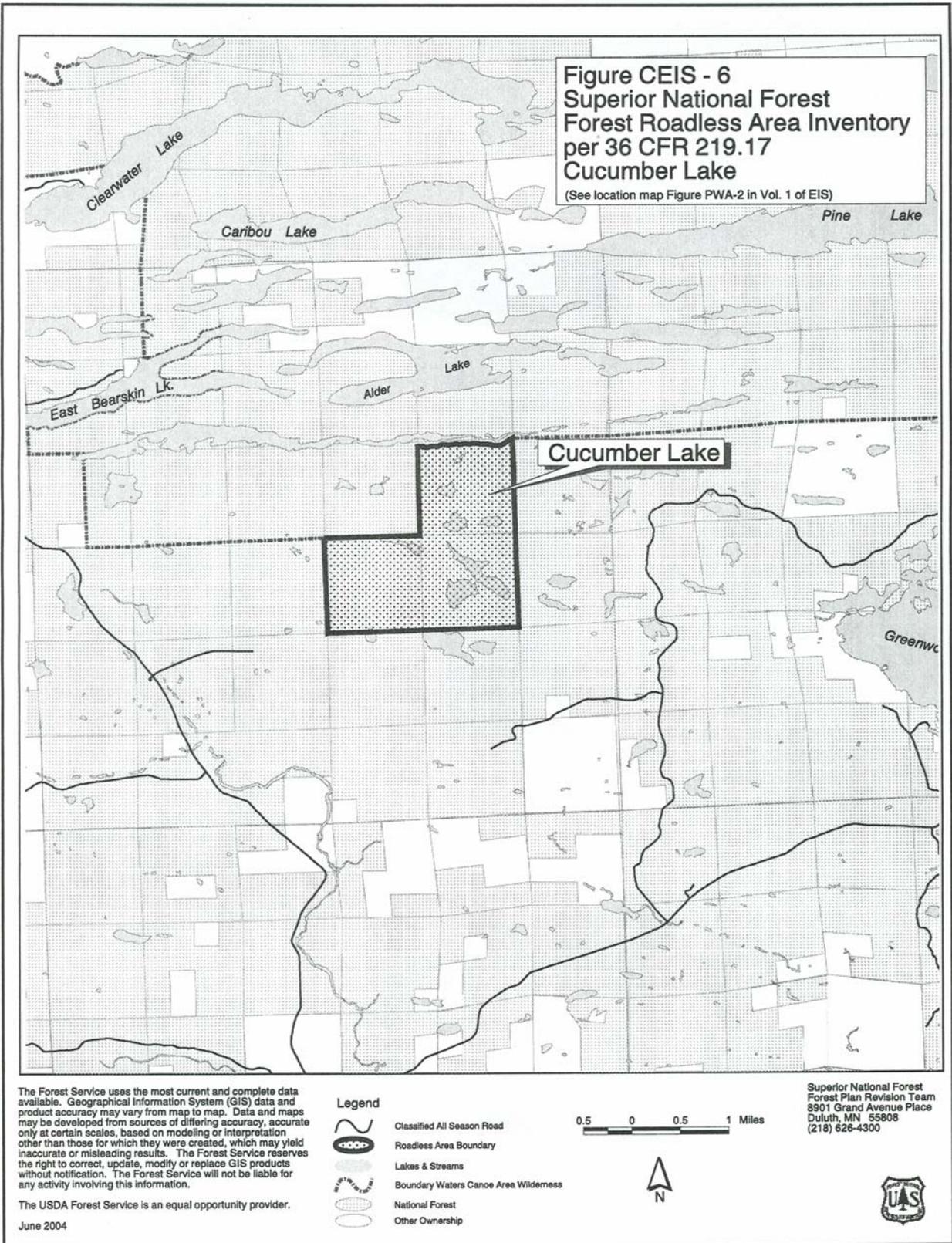


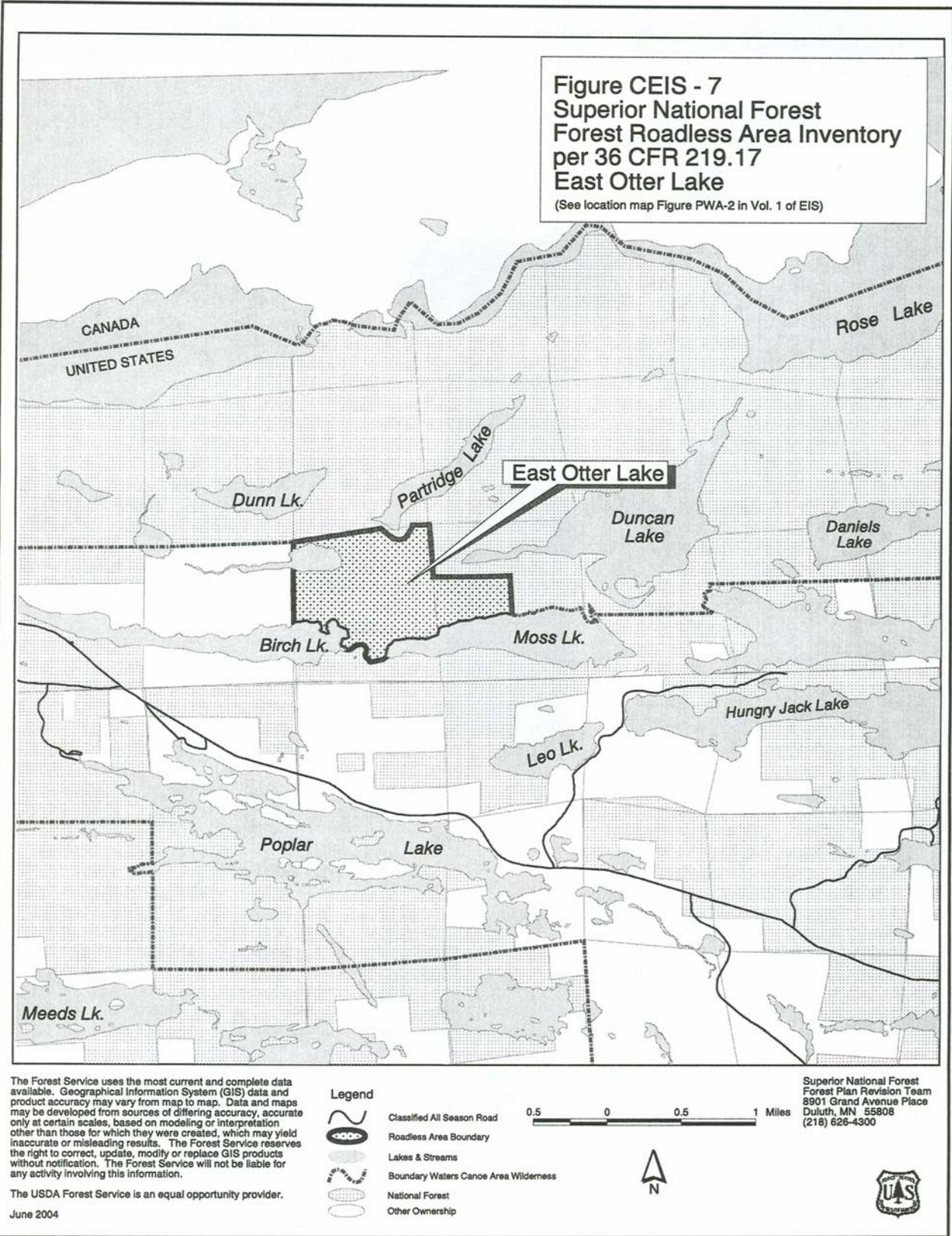












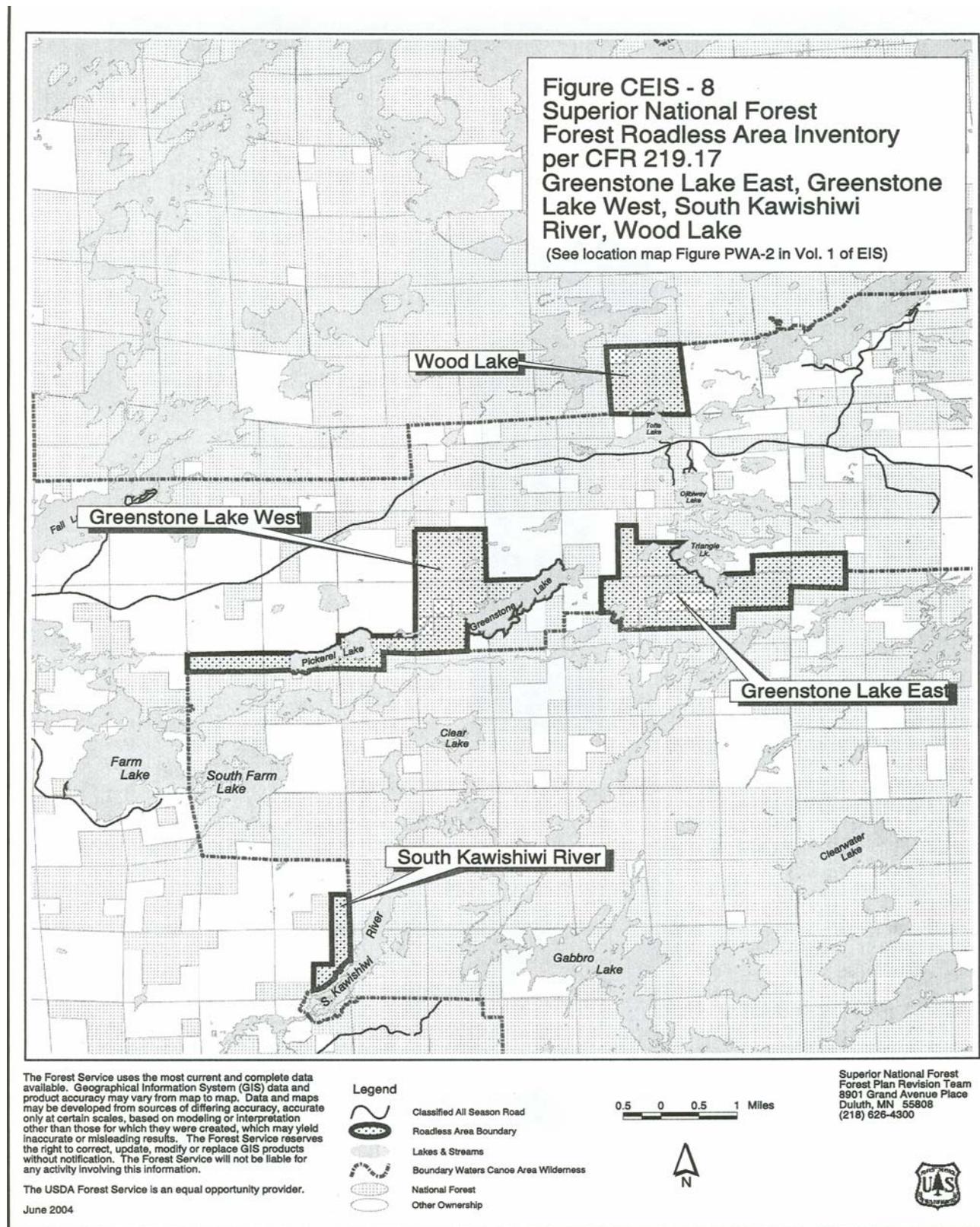
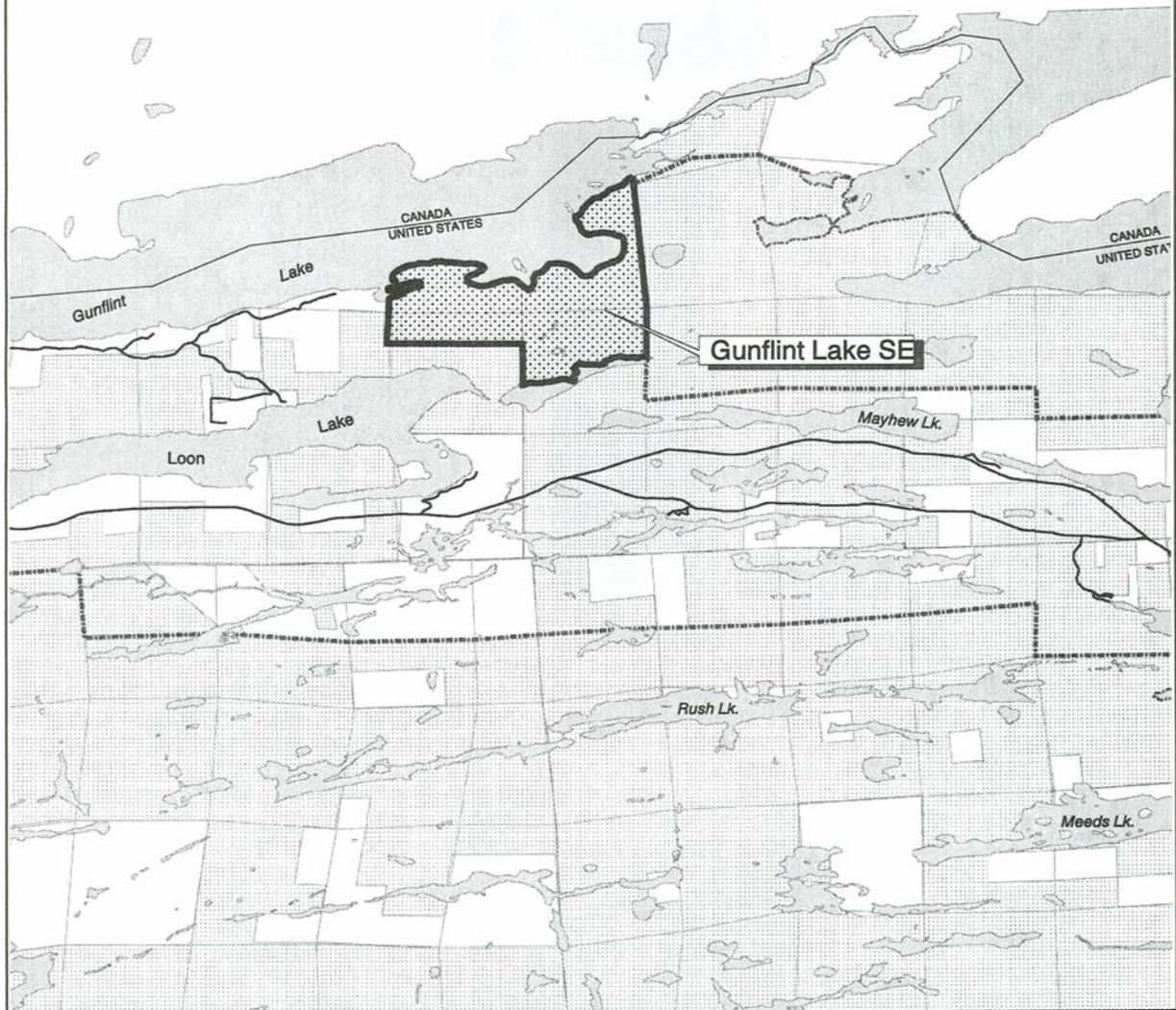


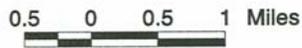
Figure CEIS - 9
Superior National Forest
Forest Roadless Area Inventory
per 36 CFR 219.17
Gunflint Lake SE
 (See location map Figure PWA-2 in Vol. 1 of EIS)



The Forest Service uses the most current and complete data available. Geographical Information System (GIS) data and product accuracy may vary from map to map. Data and maps may be developed from sources of differing accuracy, accurate only at certain scales, based on modeling or interpretation other than those for which they were created, which may yield inaccurate or misleading results. The Forest Service reserves the right to correct, update, modify or replace GIS products without notification. The Forest Service will not be liable for any activity involving this information.

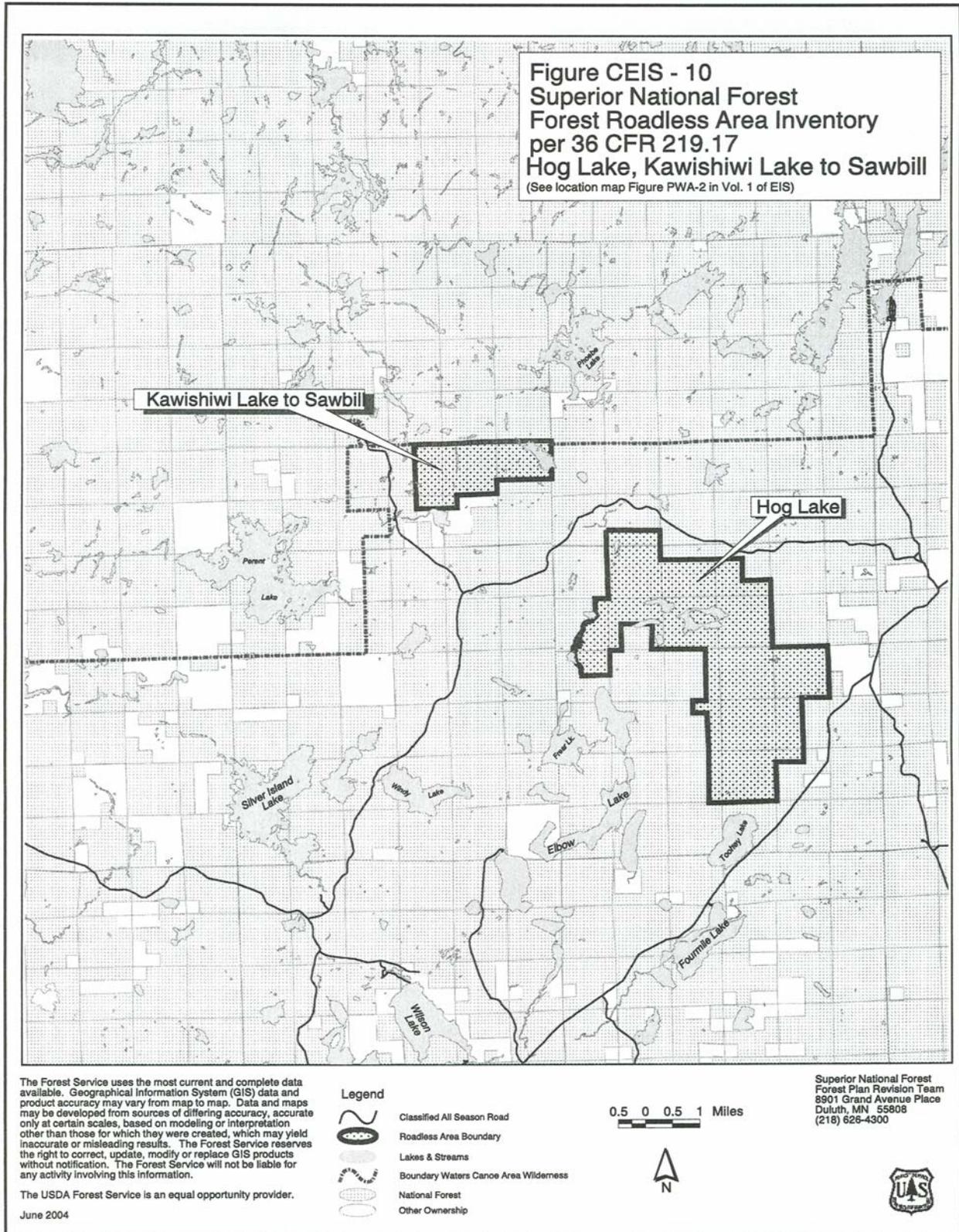
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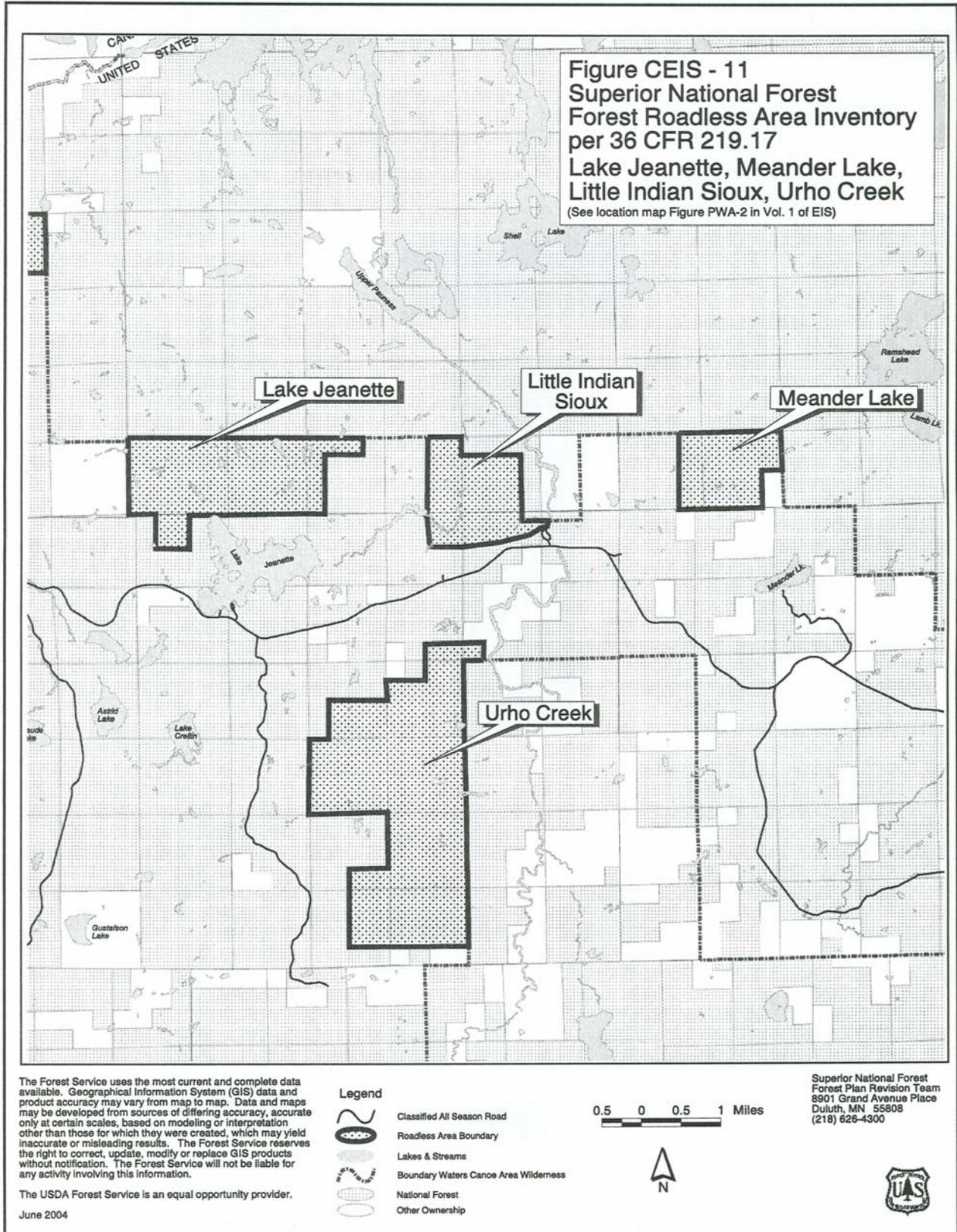
- Legend**
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 - Roadless Area Boundary
 - Lakes & Streams
 - Boundary Waters Canoe Area Wilderness
 - National Forest
 - Other Ownership

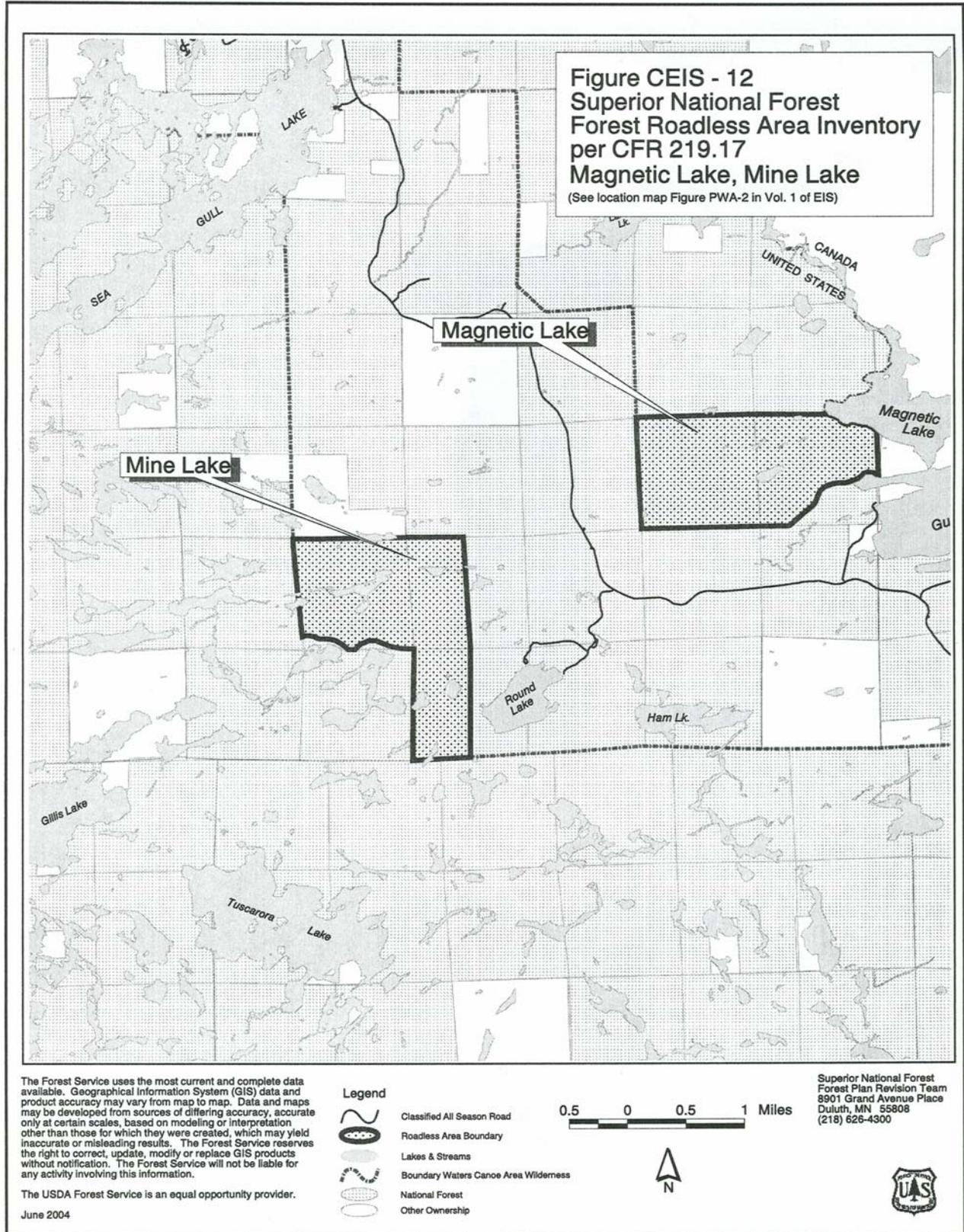


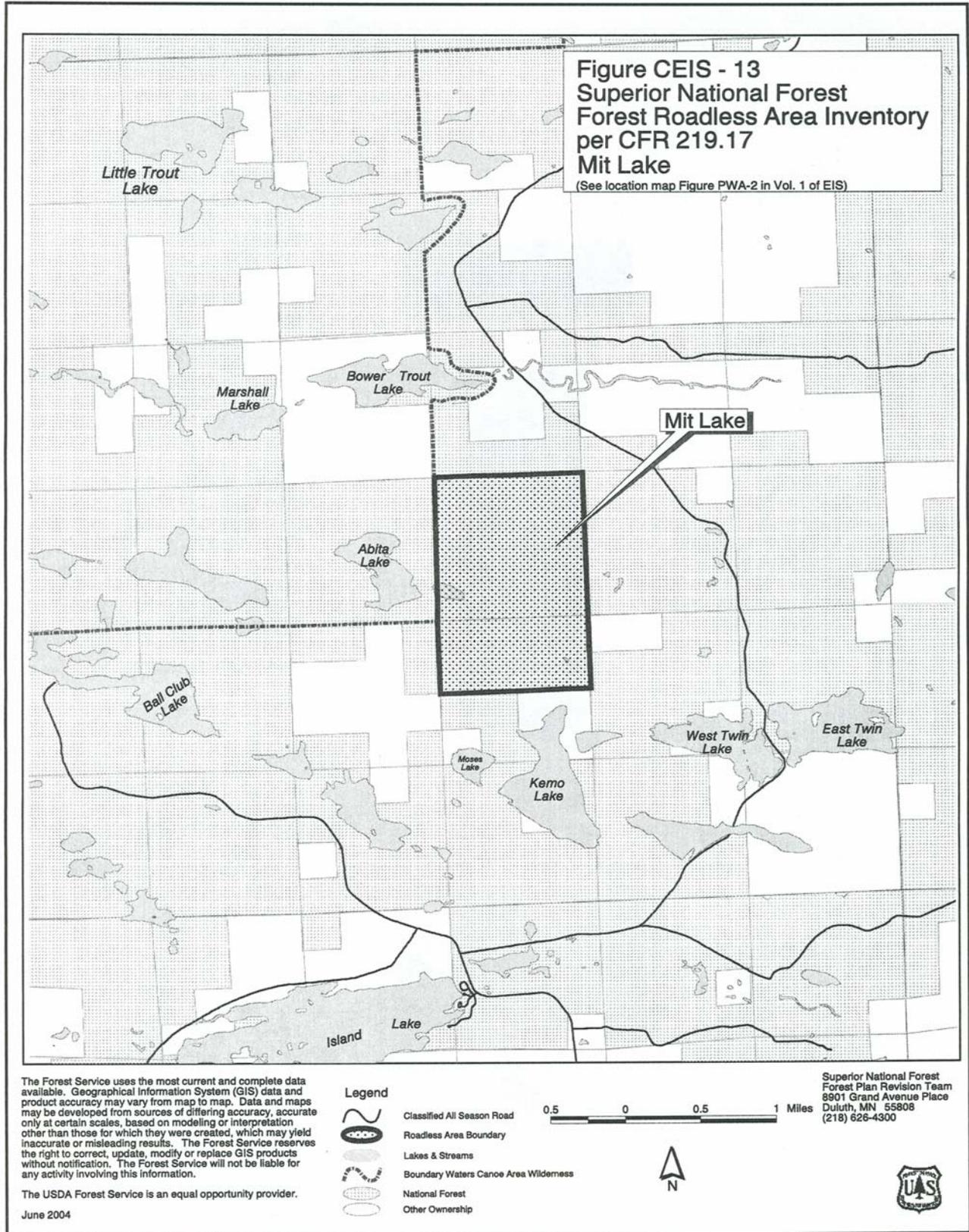
Superior National Forest
 Forest Plan Revision Team
 8901 Grand Avenue Place
 Duluth, MN 55808
 (218) 626-4300

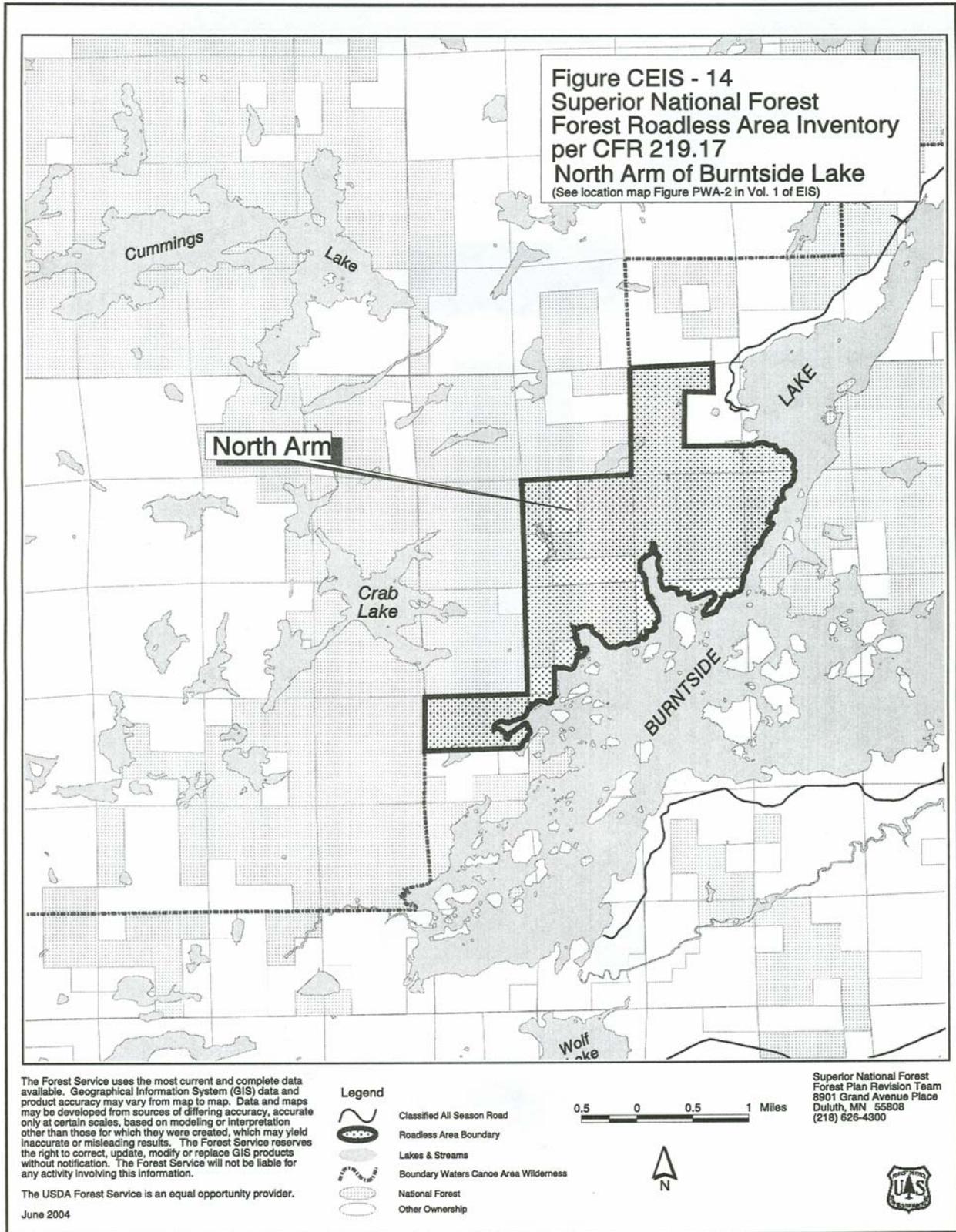


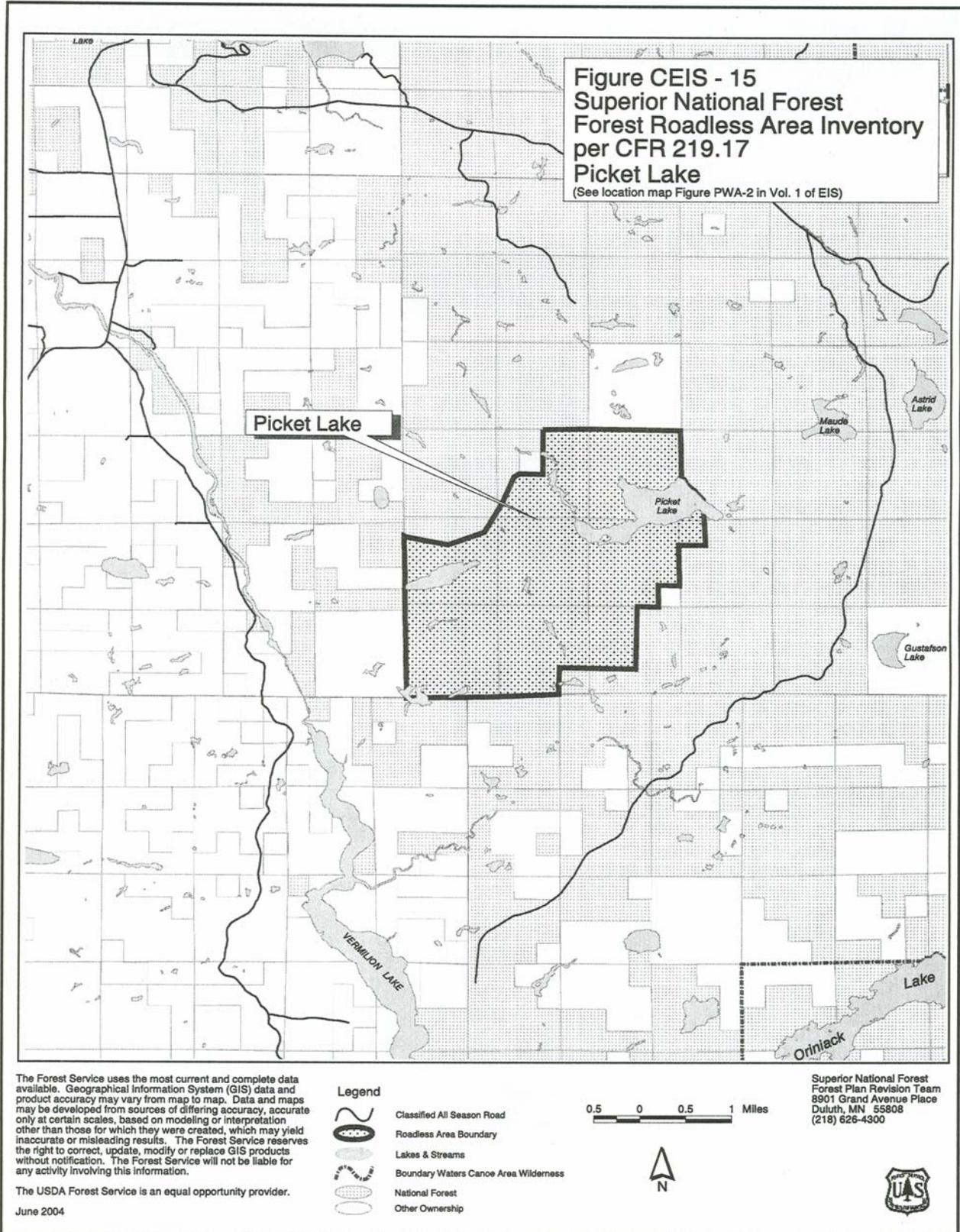


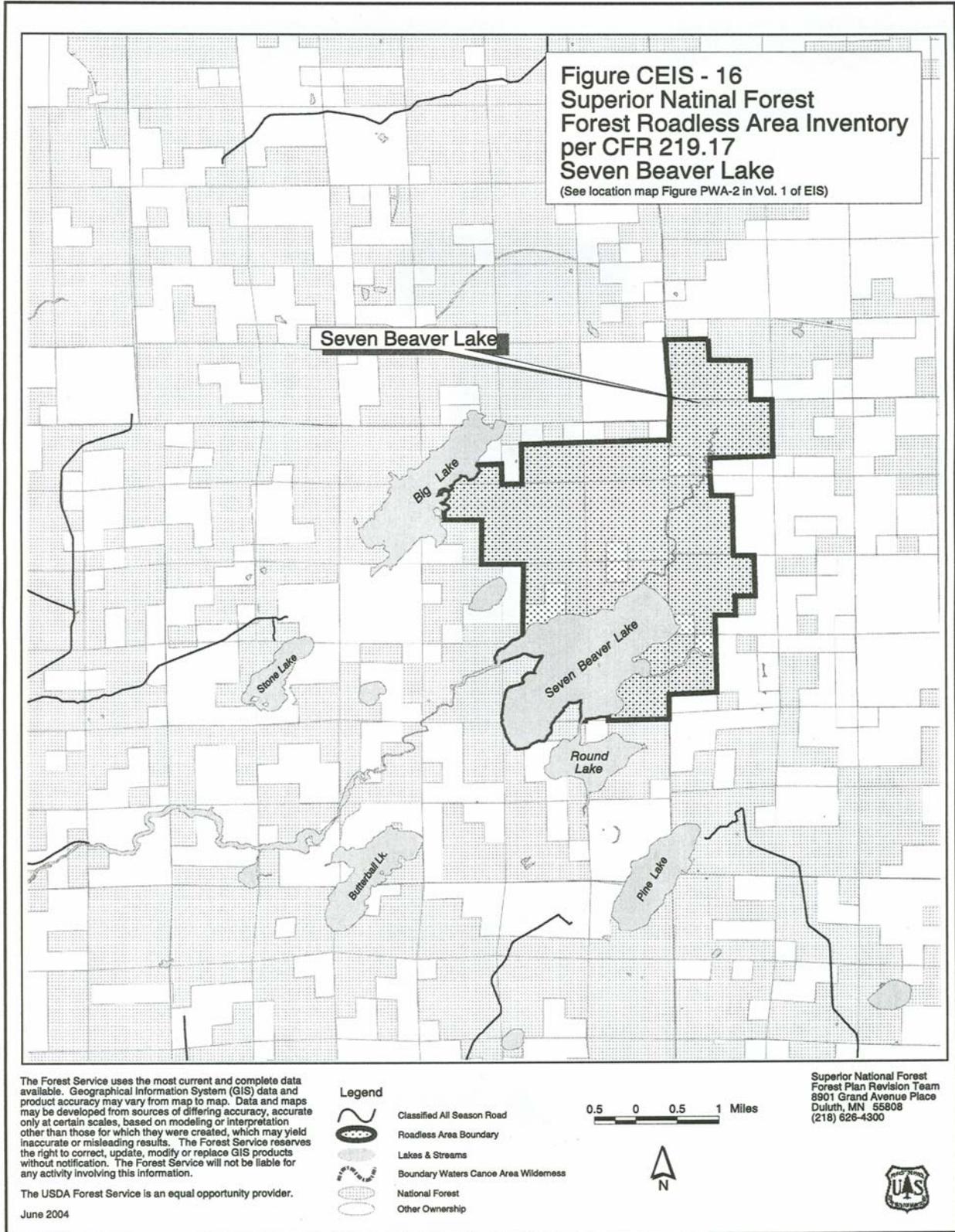


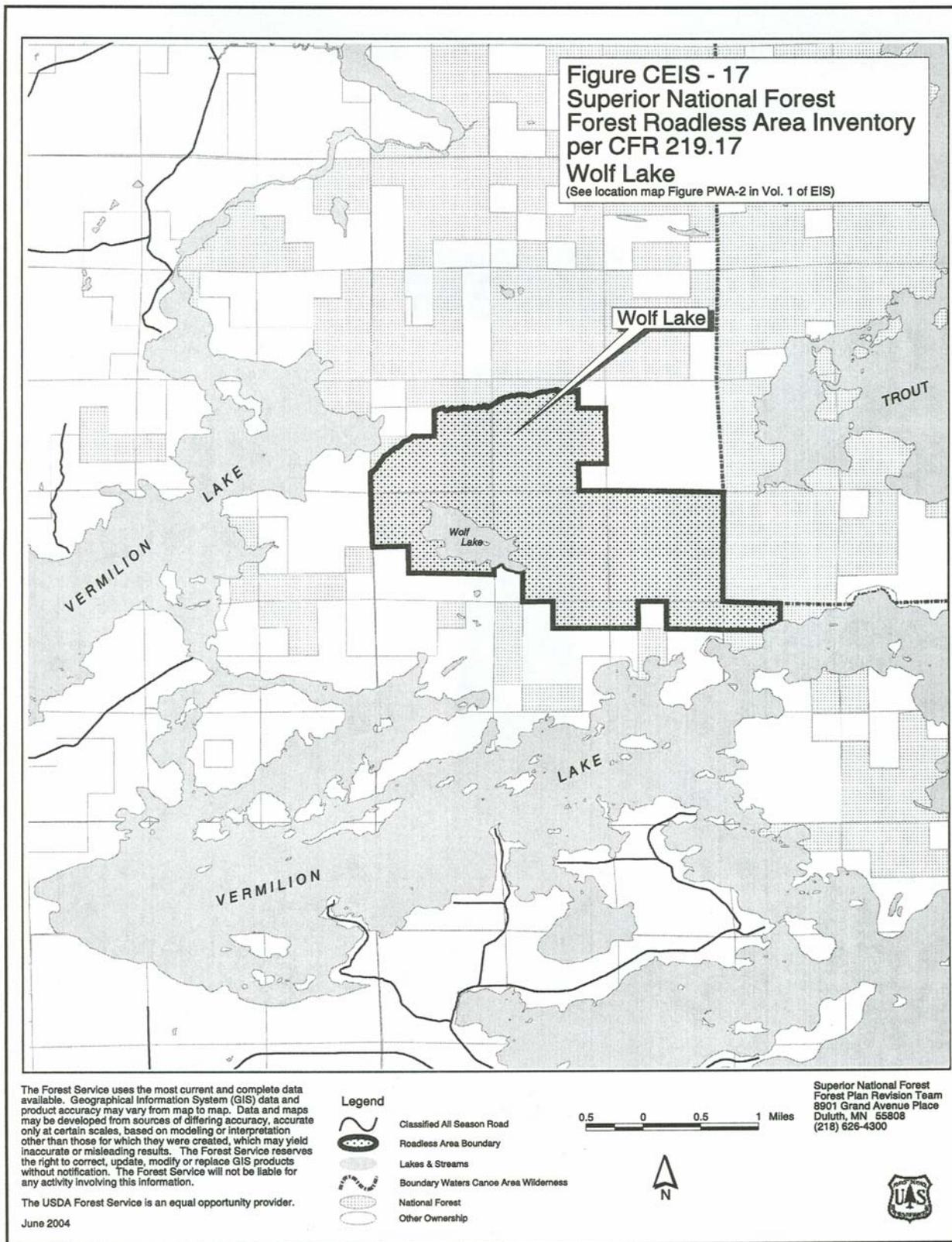












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