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Service

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National
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Subject: PolyMet Land Exchange - Management Area Allocation of Proposed Nonfederal
Lands

To: The Files

This letter and its attachments document the Management Area (MA) allocation that would apply to the non-federal lands proposed for exchange in the PolyMet Land Exchange.

The proposed PolyMet land exchange, a connected action to the proposed NorthMet mining proposal, includes five tracts of land. These tracts and the overall proposed land exchange are described in detail in the November 2009 Feasibility Analysis.

Attachment 1: Proposed non-federal Lands Management Area Allocation contains descriptions and acreages of MA allocations. Maps for Tracts 1 – 5 that also accompany this letter show the MAs adjacent to the non-federal tracts, the MAs in the vicinity of parcels, and the acreages of the non-federal parcels as well.

Almost 90% of the non-federal lands would be allocated to the General Forest MA. Other MAs that would have lands allocated to them include General Forest – Longer Rotation, candidate Research natural Areas, and Riparian Emphasis Areas. See Table 1. Generally the proposed parcels are distinctly surrounded by one MA or another and are consistent with the theme and settings of the MAs described in the Forest Plan (pgs 3-6 – 3-37). The one exception is in Tract 1, Hay Lake Lands. Candidate Research Natural Area (cRNA) lands abut portions of the tract and provide an opportunity to extend the existing cRNAs.

Contact Michael Jiménez, Forest Planner, 218-626-4383 or Elizabeth Roat, Realty Specialist, 218-626-4373 for further information on the MA allocation of these proposed nonfederal lands

JAMES W. SANDERS
Forest Supervisor

cc: Steve Kuennen, Mary Shedd, Thomas A Hale, Daniel C Ryan, Jack T Greenlee, Elizabeth Roat, Sandra G Skrien



PolyMet Land Exchange

Attachment 1: Proposed Nonfederal Lands

Management Area Allocation

August 2011

Overview

The proposal for the PolyMet land exchange, a connected action to the proposed Northmet mining proposal, includes five tracts of land. These tracts and the overall proposed land exchange are described in detail in the November 2009 Feasibility Analysis. The following is a discussion on Management Area (MA) allocation for the nonfederal lands proposed in this land exchange.

Almost 90% of the nonfederal lands would be allocated to the General Forest MA. Other MAs that would have lands allocated to them include General Forest – Longer Rotation, candidate Research natural Areas, and Riparian Emphasis Areas. See Table 1. Most of the nonfederal parcels MA allocations would be straight forward. Generally the proposed parcels are distinctly surrounded by one MA or another and are consistent with the theme and settings of the MAs described in the Forest Plan (pgs 3-6 – 3-37). The one exception is in Tract 1, the Hay Lake Lands. Candidate Research Natural Area (cRNA) lands abut portions of the tract and provide an opportunity to extend the existing cRNAs.

Maps accompanying this document show the MAs adjacent to the nonfederal tracts and the MAs in the vicinity of parcels as well.

Table 1: Proposed PolyMet Land Exchange Management Area Allocation Overview

Management Area	Tract 1 Hay Lake Lands	Tract 2 Lake County Lands	Tract 3 Wolf Lands	Tract 4 Hunting Club Lands	Tract 5 McFarland Lake Lands	Total Acres Nonfederal Tracts	Percentage of Total Nonfederal Tracts
Riparian Emphasis Areas	0	158	0	0	0	158	2%
General Forest	4,353	0	1,415	0	32	5,800	87%
General Forest – Longer Rotation	0	161	144	160	0	465	7%
cRNA	299	0	0	0	0	299	4%
Totals	4,652	319	1,559	160	32	6,690	100%

Tract 1 – Hay Lake Lands**Table 2: Tract 1 - Hay Lake Lands MA Allocation**

Management Area	Hay Lake Tract Acres	Percentage of Tract
General Forest	4,353	94%
Candidate Research Natural Areas	299	6%
Total	4,652	100%

Superior National Forest lands that abut the Hay Lake tract, on the north and western boundaries, are primarily in the General Forest MA. Two candidate Research Natural Areas are also adjacent to the tract; the Pike Mountain cRNA on the southwest corner of the tract and the Loka Lake cRNA on the northeast corner. Allocating the lands shown on the accompanying Tract 1 NonFed Management Areas & Ownership map to the cRNAs takes advantage of incorporating lands that would likely have been included in the existing cRNAs if they had been in federal ownership when the cRNAs were included in the Forest Plan.

There is also Recreation Use in a Scenic Landscape MA to the east of the Hay Lake tract but it is not directly adjacent, since there private lands that separate the Hay Lake tract from federal lands on this boundary. In addition, the tract does not conform to the theme and setting described in the Forest Plan for Recreation Use in a Scenic Landscape MA, p. 3-14. No concentrated recreation use and no developed recreation sites are in or adjacent to the Hay Lake tract.

The General Forest MA emphasizes land and resource conditions that provide a wide variety of goods, uses and services, and it is located throughout the Forest. The Hay Lake tract fits into this general theme. In addition to Hay Lake, rivers, and streams, the tract has various uses and resources, containing forest roads, a power line, and past timber harvesting

Candidate Research natural Areas - Hay Lake Tract

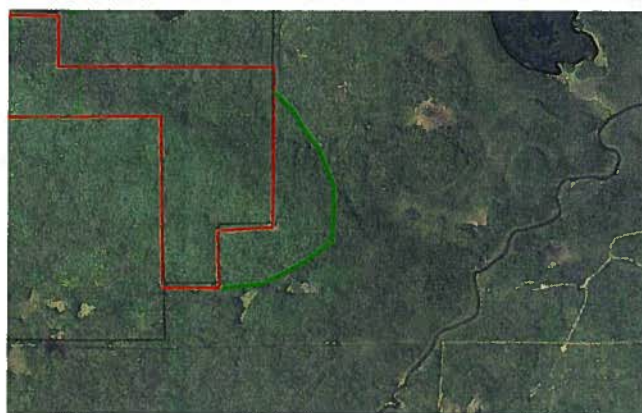
Michael Jiménez, Forest Planner, Dan Ryan, Laurentian District Biologist, and Jack Greenlee, Forest Botanist reviewed the potential for allocating cRNA to lands within the Hay Lake tract adjacent to the Pike Mountain and Loka Lake cRNAs. Figures 1 and 2 show where the potential areas of ecological interest are for each cRNA. The Tract 1 NonFed Management Areas & Ownership map shows the lands that would be allocated to cRNAs.

Candidate Research Natural Areas on the Superior National Forest were identified and analyzed during the Forest Plan Revision process resulting in the 2004 Record of Decision accompanying the Forest Plan. Effects analysis of candidate or “potential” RNAs is located in section 3.7.2 of the Final Environmental Impact Statement for the Forest Plan Revision, Vol. I., pages 3.7-14 – 3.7-34. Detailed evaluation and ranking for Loka Lake and Pike Mountain cRNAs are located in “Potential Research Natural Areas – Superior National Forest” (USDA Forest service 2000) pages 62 -67. This document is in the Project record for the Forest Plan Revision, Outline Number 3.7.2.1, Record Number 2060. The “Potential Natural Research Areas” document also describes the process used for identifying the pool of potential RNAs.

cRNA- Pike Mountain

The proposed Pike Mountain cRNA lands (about 129 acres) would be an extension of the plant communities on the hillside in the existing cRNA. The Forest has been concerned in the past ~~that~~ about the possibility of a large portion of the high ground being developed in the vicinity of the Pike Mountain cRNA. Pike Mountain cRNA was selected primarily because of the northern hardwoods plant community. The Pike Mountain cRNA would benefit from adding three "40's" in to T59N - R16W Section 31 (NE1/4 of SW1/4, NW 1/4 of the SE 1/4, and the SW 1/4 of the NE 1/4). Aerial photos show that the topography and the high sugar maple component of interest in the Pike Mountain cRNA is contiguous with the proposed area to extend the cRNA.

Figure 1: Pike Mountain cRNA Aerial Photo



— - cRNA Boundary
— - Ecological area of interest boundary

cRNA - Loka Lake

The proposed Loka Lake cRNA lands (about 170 acres) are an extension of the wetland complex. Loka Lake cRNA was established primarily because of the high quality lowland black spruce and tamarack swamp, so adding the lands east of County Road 715 makes sense. It would basically put the entire swamp in the cRNA. The portion east of County Road 715 (T59N R16W SE 1/4 of SE 1/4 Sec. 16) would be excluded since there is a gravel pit in that area.

Figure 2: Loka Lake cRNA Aerial Photo



— - cRNA Boundary
— - Ecological area of interest boundary

Tract 2 – Lake County Lands

Table 3: Tract 2 – Lake County Lands MA Allocation

Management Area	Total Tract 2 Acres	Percentage of Tract
Riparian Emphasis Areas	158	50%
General Forest – Longer Rotation	161	50%
Totals	319	100%

In this tract two parcels totaling about 158 acres are entirely surrounded by the Riparian Emphasis Areas MA and two parcels totaling about 161 acres are entirely surrounded by the General Forest – Longer Rotation MA. All of these parcels are shown on the Tract 2 – NonFed Management Areas & Ownership map.

Since these lands are entirely surrounded by a single MA and there are no apparent outstanding features such as for a cRNA, it would be ineffective to allocate these relatively small areas to any other MA than the ones that surround them.

Tract 3 – Wolf Lands

Table 4: Tract 3 – Wolf Lands MA Allocation

Management Area	Total Tract 3 Acres	Percentage of Tract
General Forest	1,415	91%
General Forest – Longer Rotation	144	9%
Totals	1,559	100%

In this tract three parcels totaling about 1,415 acres are entirely surrounded by the General Forest MA and one parcel totaling about 144 acres is entirely surrounded by the General Forest – Longer Rotation MA. All of these parcels are shown on the Tract 3 – NonFed Management Areas & Ownership map.

Since these lands are entirely surrounded by a single MA and there are no apparent outstanding features such as for a cRNA, it would be ineffective to allocate these relatively small areas to any other MA than the ones that surround them.

Tract 4 – Hunting Club Lands

Table 5: Tract 4 – Hunting Club Lands MA Allocation

Management Area	Total Tract 4 Acres	Percentage of Tract
General Forest – Longer Rotation	160	100%

In this tract, one parcel totaling about 160 acres is entirely surrounded by the General Forest – Longer Rotation MA. All of these parcels are shown on the Tract 4 – NonFed Management Areas & Ownership map.

Since this area is entirely surrounded by a single MA and there are no apparent outstanding features such as for a cRNA, it would be ineffective to allocate these relatively small areas to any other MA than the one that surrounds it.

Tract 5 – McFarland Lake Lands

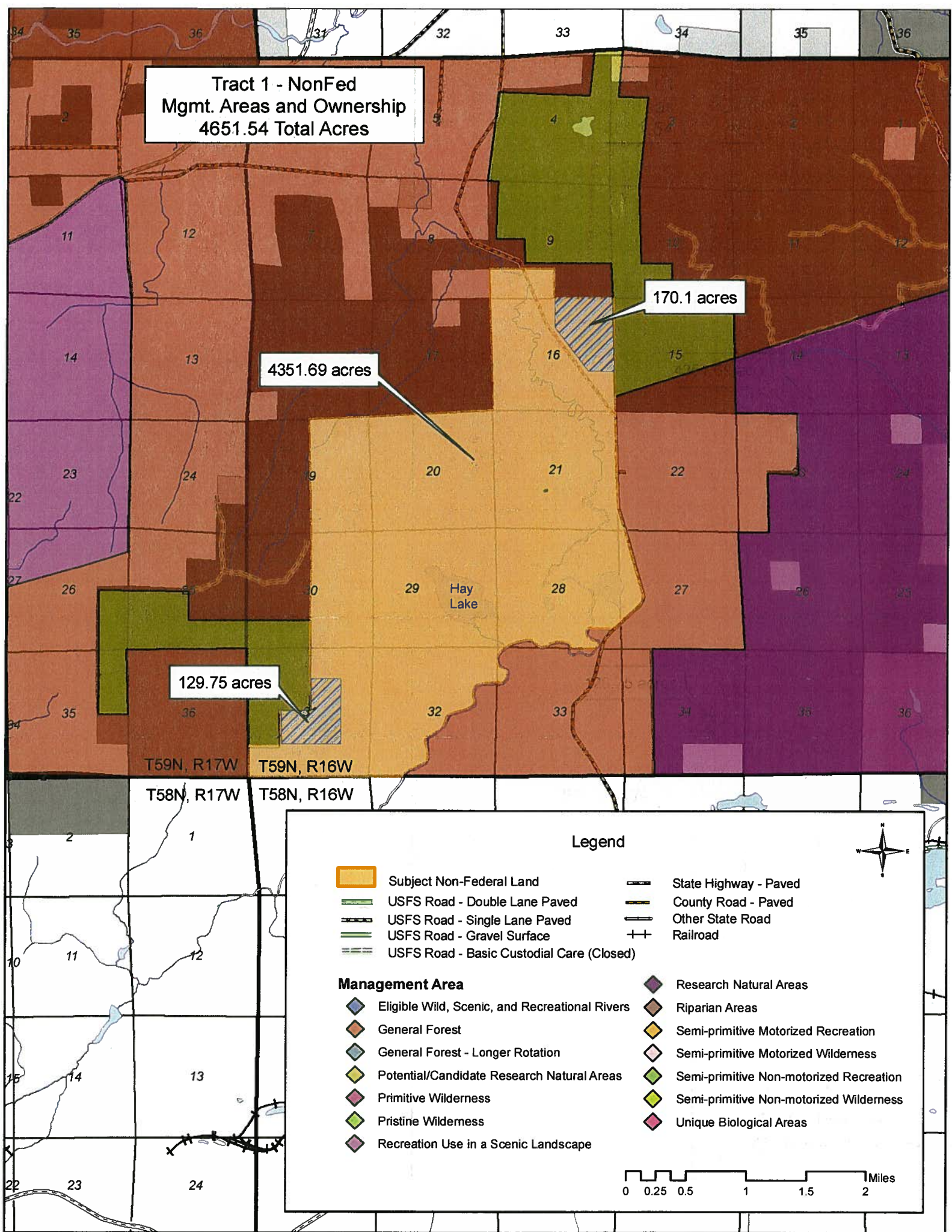
Table 6: Tract 5 – McFarland Lake Lands MA Allocation

Management Area	Total Tract 5 Acres	Percentage of Tract
General Forest – Longer Rotation	32	100%

In this tract, one parcel totaling about 32 acres is entirely surrounded by the General Forest – Longer Rotation MA. All of these parcels are shown on the Tract 5 – NonFed Management Areas & Ownership map.

Since this area is entirely surrounded by a single MA and there are no apparent outstanding features such as for a cRNA, it would be ineffective to allocate these relatively small areas to any other MA than the one that surrounds it.

**Tract 1 - NonFed
Mgmt. Areas and Ownership
4651.54 Total Acres**


























170.1 acres

4351.69 acres

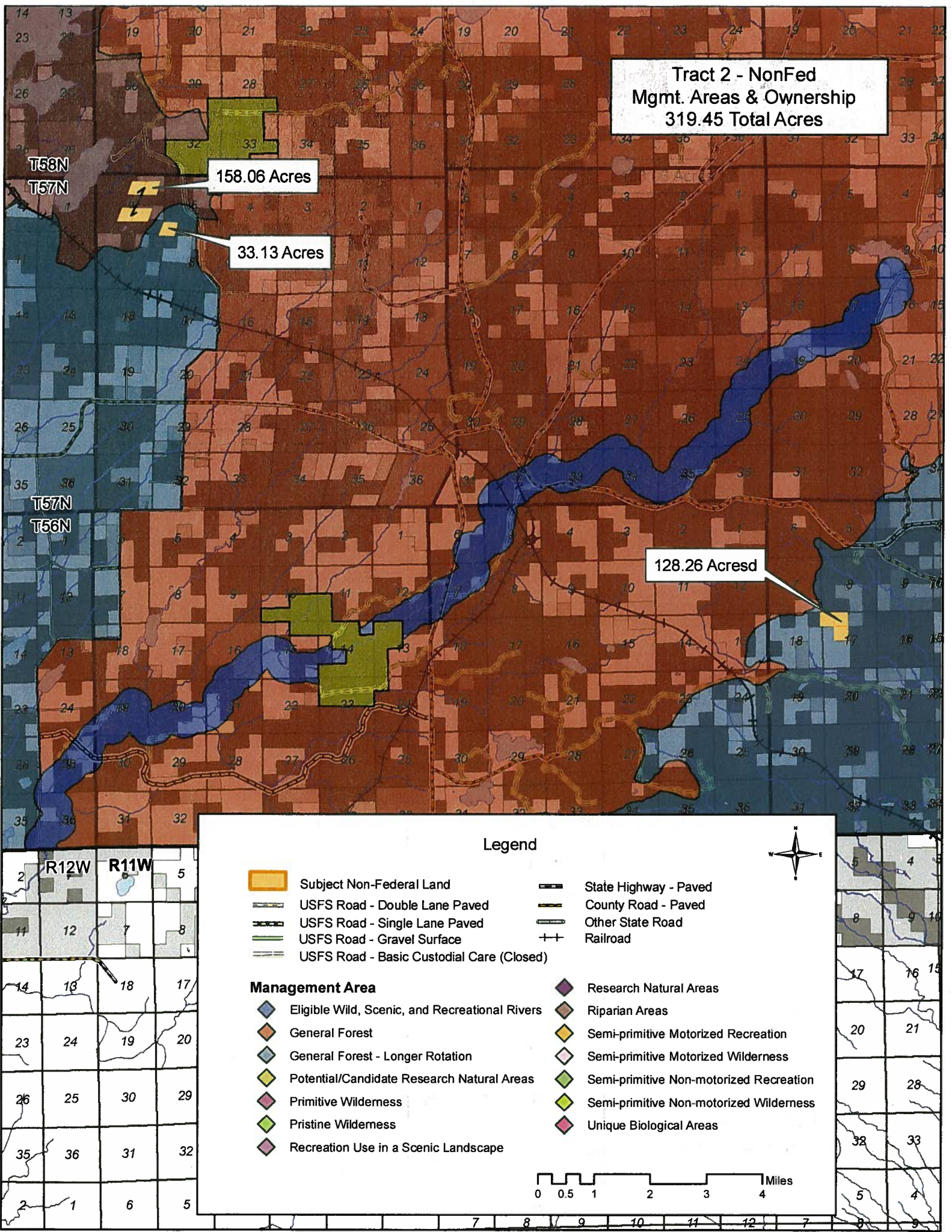
129.75 acres

T59N, R17W T59N, R16W
T58N, R17W T58N, R16W

Legend

- | | |
|--|---|
|  Subject Non-Federal Land |  State Highway - Paved |
|  USFS Road - Double Lane Paved |  County Road - Paved |
|  USFS Road - Single Lane Paved |  Other State Road |
|  USFS Road - Gravel Surface |  Railroad |
|  USFS Road - Basic Custodial Care (Closed) | |
| Management Area | |
|  Eligible Wild, Scenic, and Recreational Rivers |  Research Natural Areas |
|  General Forest |  Riparian Areas |
|  General Forest - Longer Rotation |  Semi-primitive Motorized Recreation |
|  Potential/Candidate Research Natural Areas |  Semi-primitive Motorized Wilderness |
|  Primitive Wilderness |  Semi-primitive Non-motorized Recreation |
|  Pristine Wilderness |  Semi-primitive Non-motorized Wilderness |
|  Recreation Use in a Scenic Landscape |  Unique Biological Areas |

0 0.25 0.5 1 1.5 2 Miles



Tract 3 - NonFed
Mgmt. Areas & Ownership
1559.39 Total Acres

417.98 acres

306.9 acres

690.02 acres

144.49 acres






T59N





T58N

T58N








T57N

Legend

-  Subject Non-Federal Land
-  USFS Road - Double Lane Paved
-  USFS Road - Single Lane Paved
-  USFS Road - Gravel Surface
-  USFS Road - Basic Custodial Care (Closed)

-  State Highway - Paved
-  County Road - Paved
-  Other State Road
-  Railroad

Management Area

-  Eligible Wild, Scenic, and Recreational Rivers
-  General Forest
-  General Forest - Longer Rotation
-  Potential/Candidate Research Natural Areas
-  Primitive Wilderness
-  Pristine Wilderness
-  Recreation Use in a Scenic Landscape

-  Research Natural Areas
-  Riparian Areas
-  Semi-primitive Motorized Recreation
-  Semi-primitive Motorized Wilderness
-  Semi-primitive Non-motorized Recreation
-  Semi-primitive Non-motorized Wilderness
-  Unique Biological Areas



0 0.45 0.9 1.8 2.7 3.6 Miles

**Tract 4 - NonFed
Mgmt. Areas & Ownership
160.0 Total Acres**

160.0 acres

Legend



Subject Non-Federal Land



USFS Road - Double Lane Paved



USFS Road - Single Lane Paved



USFS Road - Gravel Surface



USFS Road - Basic Custodial Care (Closed)



State Highway - Paved



County Road - Paved



Other State Road



Railroad

Management Area



Eligible Wild, Scenic, and Recreational Rivers



General Forest



General Forest - Longer Rotation



Potential/Candidate Research Natural Areas



Primitive Wilderness



Pristine Wilderness



Recreation/Use in a Scenic Landscape



Research Natural Areas



Riparian Areas



Semi-primitive Motorized Recreation



Semi-primitive Motorized Wilderness



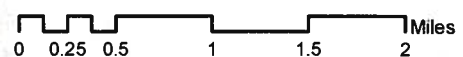
Semi-primitive Non-motorized Recreation



Semi-primitive Non-motorized Wilderness



Unique Biological Areas



Tract 5 - NonFed
Mgmt. Areas & Ownership
32.10 Total Acres

Tract 5 - NonFed
Mgmt. Areas & Ownership
32.10 Total Acres

T65N, R3E
T64N, R3E

32.10 acres

McFarland Lake

Legend



Subject Non-Federal Land



USFS Road - Double Lane Paved



USFS Road - Single Lane Paved



USFS Road - Gravel Surface



USFS Road - Basic Custodial Care (Closed)



State Highway - Paved



County Road - Paved



Other State Road



Railroad

Management Area



Eligible Wild, Scenic, and Recreational Rivers



General Forest



General Forest - Longer Rotation



Potential/Candidate Research Natural Areas



Primitive Wilderness



Pristine Wilderness



Recreation Use in a Scenic Landscape



Research Natural Areas



Riparian Areas



Semi-primitive Motorized Recreation



Semi-primitive Motorized Wilderness



Semi-primitive Non-motorized Recreation



Semi-primitive Non-motorized Wilderness



Unique Biological Areas

