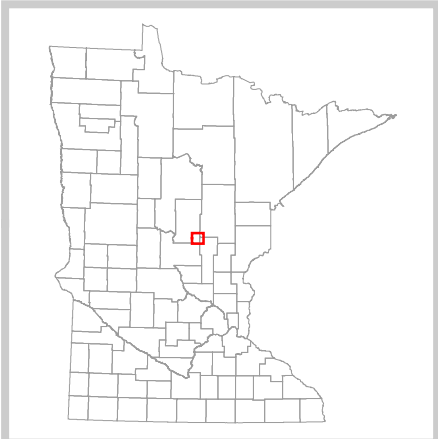
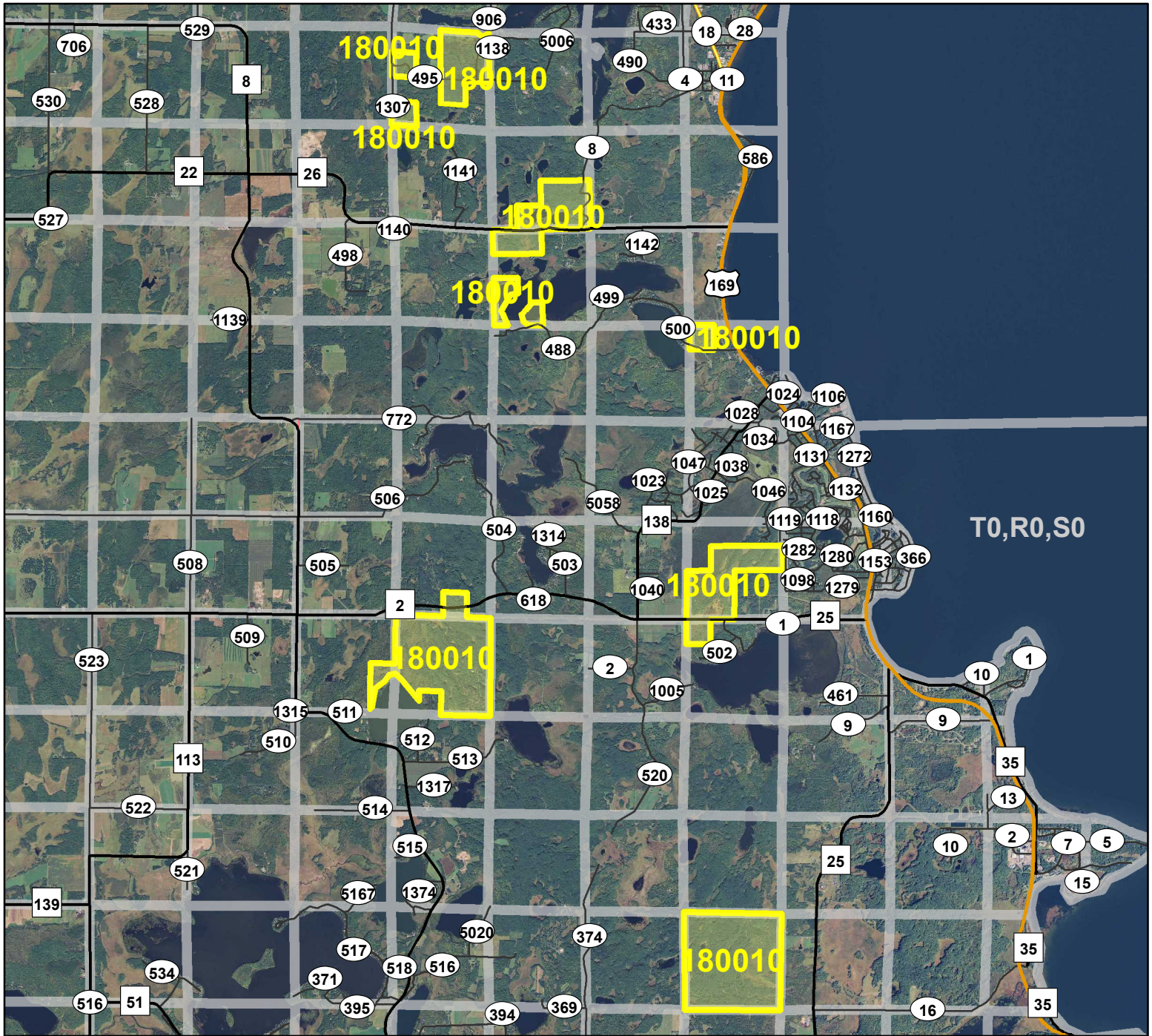


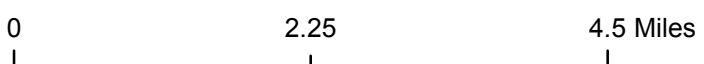
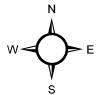
HCVF Site 180010

Mille Lacs Moraine Hardwoods, Crow Wing County



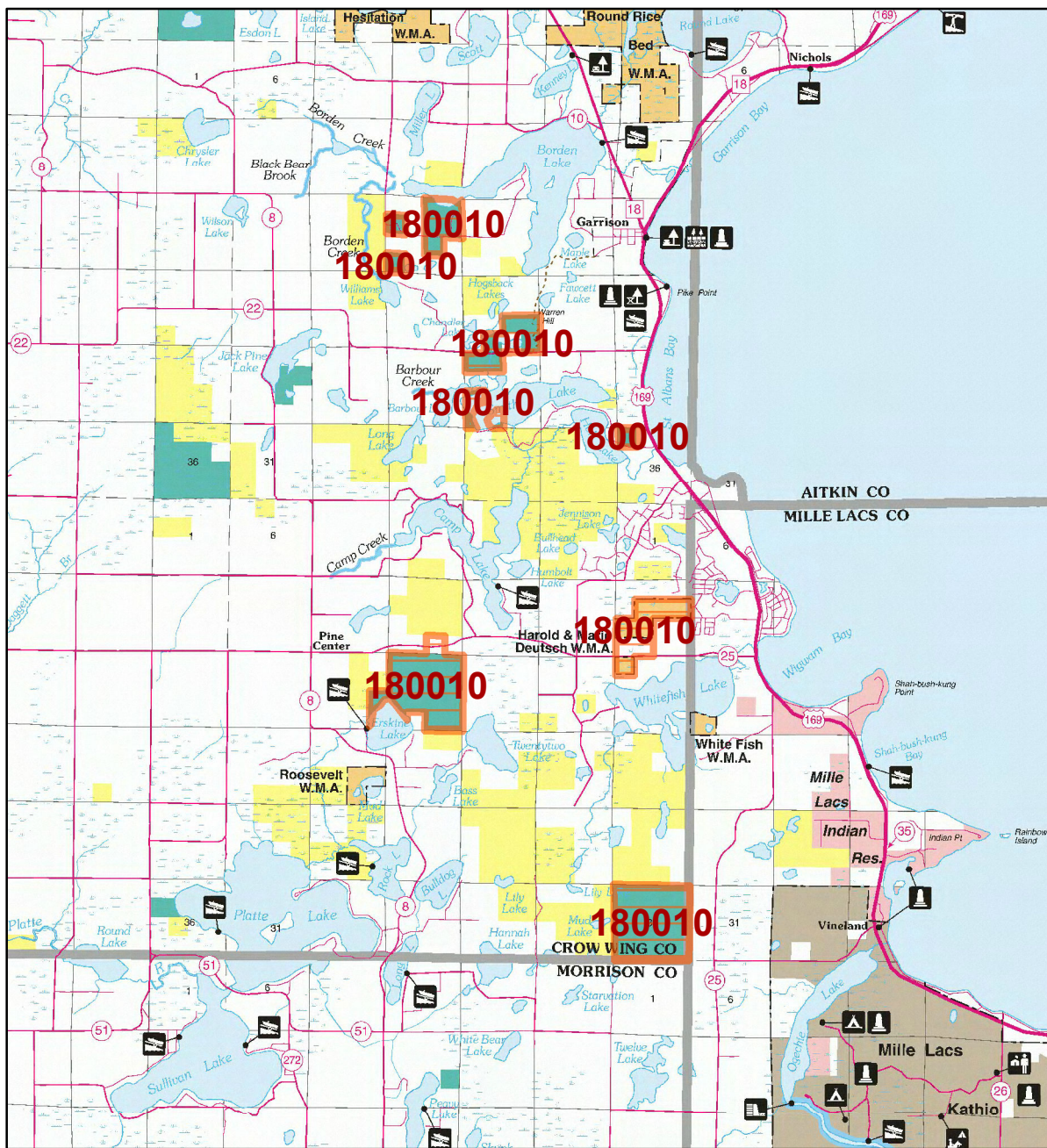
Legend

Federal Trunk Highways	Ramps
State Trunk Highways	HCVF Site
County Highways	PLS Sections
Municipal, Township or Other Roads	



HCVF Site 180010

Mille Lacs Moraine Hardwoods, Crow Wing County



LEGEND

HCVF Site

MAP EXPLANATION

LAND OWNERSHIP

- County Land
- Recreation Area under 40 acres
- State Forest Land
- State Park and Recreation Land
- State Wildlife Management Area Land
- W.M.A.'s under 40 acres
- State Scientific & Natural Area Land
- S.N.A.'s under 40 acres
- National Waterfowl Production Area
- N.W.P.A.'s under 40 acres
- National Forest, Park, Wildlife Refuge & Recreation Land
- Bureau of Indian Affairs Land

BOUNDARIES

- County Unit Boundary
- State Unit Boundary
- National Unit Boundary

TRAILS AND FOREST ROADS

- State Trail
- State Forest Road

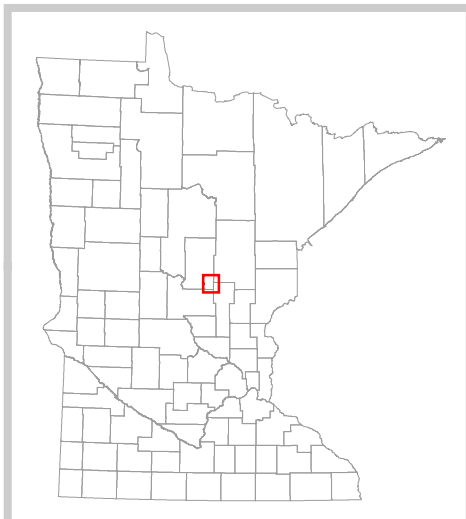
DESIGNATED WATERWAYS

- State Trout Stream
- State Canoe and Boating Route
- State Wild, Scenic & Recreational River (also designated Canoe & Boating Route)
- National Wild, Scenic & Recreational River (also designated Canoe & Boating Route)

FACILITIES

- D.N.R. Office
- Travel Information Center
- Rest Area (with facilities)
- Rest Area (limited facilities)
- Campground
- Watercraft Camping
- Equestrian Camping
- Water Access
- Carry-in Access
- Dam (on designated canoe route)
- Fishing Pier
- Overlook
- Parking
- Historic Site
- Geologic Feature
- Fish Hatchery
- Forestry Nursery
- National Great River Road
- State Great River Road

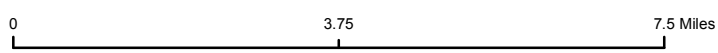
NOTE: Some of the features defined in this map explanation may not occur on the map.



The PRIM series was developed using funds provided through the Legislative Commission on Minnesota Resources (LCMR).

Base information was compiled from 1:100,000 series U.S. Geologic Survey planimetric maps.

Facility and ownership information was compiled from the following sources: Minnesota Department of Natural Resources, Minnesota Department of Transportation, State Planning Agency, Minnesota Historical Society and the respective counties.



Land ownership categories on this map are in some cases outdated. HCVF sites are on DNR-managed land only; DNR HCVF sites have not been identified on other ownerships.



HCVF Informational Report

Report Run: September 3, 2013

General Information

HCVF #: 180010

HCVF Name: Mille Lacs Moraine Hardwoods

Acres of HCVF site: 2234.71

County: Crow Wing

Data edited by: NE HCVF Workgroup

Role: NE HCVF Workgroup

Date edited on: 2013-07-26

Corresponding Land Administrator(s): DNR Forestry

Management Unit Name(s) (if applicable): Scattered lands

HCVF Summary

HCVF site within a much larger MBS Site of Outstanding Biodiversity Significance. State HCVF acres occur as isolated parcels. State HCVF lands and the MBS site represent a portion of the Mille Lacs Moraine LTA with classic rolling and pitted end-moraine topography with many lakes and isolated digressional wetlands. The biodiversity significance of this site is based on documented rare species (especially the high concentration of red-shouldered hawks), good quality native plant communities, size, landscape context, and significant amounts of undeveloped lakeshore. Good potential for four-toed salamander. Relatively minimal fragmentation for this part of MN. Floristic transition zone with plant species typical of both N & C Minnesota. Upland forests are typically 60-80 years old with various degrees of active forest management but generally lacking large patches of young forest and generally with good canopy continuity. Some of the larger roadless areas in Crow Wing County occur in this site. White and red pine are scattered throughout this site but are rarely a significant or abundant canopy component. Ownership within the larger MBS site: state, county, tribal and private. Maintaining or enhancing most documented HCVs here will require cooperation of other owners; some adjacent Crow Wing County lands within the same MBS site also HCVF. Recent SNA acquisition within the site acquired from private and TNC. 2nd most important area for red-shouldered hawks in the state. NW most cerulean warbler population.

HCVs known to be present that factored into HCVF designation.

FSC expects DNR to maintain HCVs within designated HCVFs. Because HCVF boundaries are not the same as the larger, multi-ownership MBS Sites, this list will differ from the values identified during the MBS Survey.

HCV1b (S1 or S2 species): 1 Botrychium. HCV1e (Rare species concentration): 1 rare raptor, SGCN birds. HCV1f (Taxonomic group concentration): 1 rare raptor, SGCN birds. HCV1g (Outstanding Key Habitats Examples): Shoreline, Forest Upland Deciduous mixed hardwood-pine, Forest upland conifer (limited). HCV2-LMFa (Large habitat block): yes. HCV2-LMFbi (late-successional forest block): potential exists. HCV2-LMFbii (blocks with rare species): yes. HCV3c (Special S3 plant community): APn91b, FPn72a, MHn47a, WFn55b, WFn53. HCV3d (Natural origin pine stand): 16 acres red pine.

Management Considerations

Overall management objectives for the entire HCVF:

Collaborate with Crow Wing County and private land owners to effectively address most of the HCVs here; emphasize collaboration in areas that connect HCVF parcels and where Crow Wing County HCVF is contiguous with State HCVF. Field verify condition of rare plant occurrences. Apply red-shouldered hawk forest management guidelines. Collaborate with adjacent landowners to maintain/enhance >500 acre blocks of later successional forest with old growth features or rare species. Maintain/enhance conifer component within mesic hardwood matrix forest, enhance natural conifer regeneration within these native plant communities. Silvicultural prescriptions in S3 native plant communities maintains or enhances the floristic, structural, and spatial components that define the native plant community; see SRM Objective code CON1. Apply DNR HCV General Landscape Guidance.

Management direction from the following sources was considered in developing the above recommendations:

MLU SFRMP; Crow Wing County Forest Plan & HCVF site management; MFRC North Central Landscape Plan

Are the HCVs within this HCVF likely to benefit from coordination with adjacent landowner(s)?

Yes

This HCVF was flagged by the Regional HCVF Team as warranting cross-ownership coordination efforts. The specific HCVs likely to benefit from such coordination with adjacent landowners are identified below.

Crow Wing County; Mille Lacs Band of Ojibwe

General Comments

Develop plan to address HCVF aspen management that contributes to HCV objectives.

Reference to rare plants and animals, Minnesota Biological Survey Sites of Biological Significance and mapped native plant communities are records maintained in the Minnesota DNR's Natural Heritage Information System (NHIS). A date of information is associated with each record. The NHIS is continually updated as new information becomes available. The lack of data listed for any geographic area should not be construed to mean that no significant features are present.

... Report End ...