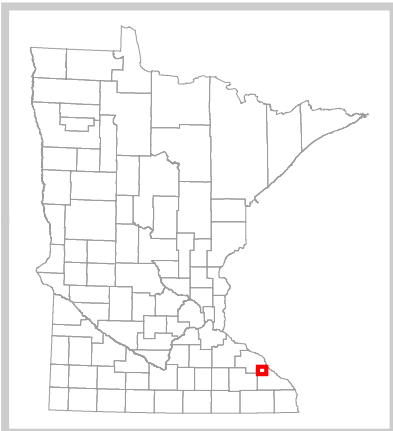
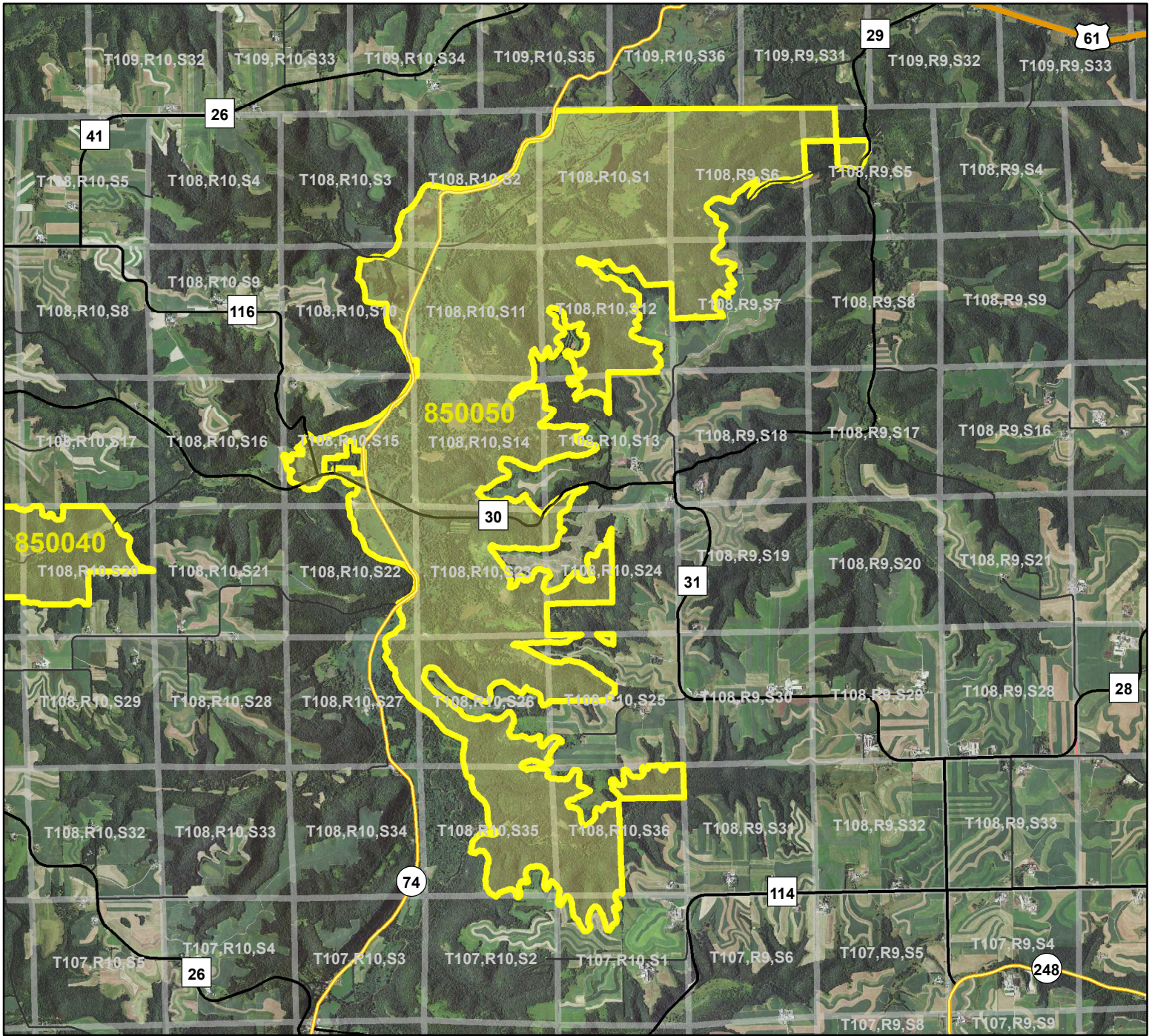









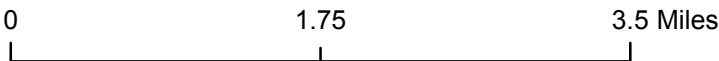
# HCVF Site 850050

## Whitewater Sand Savannas, Winona County



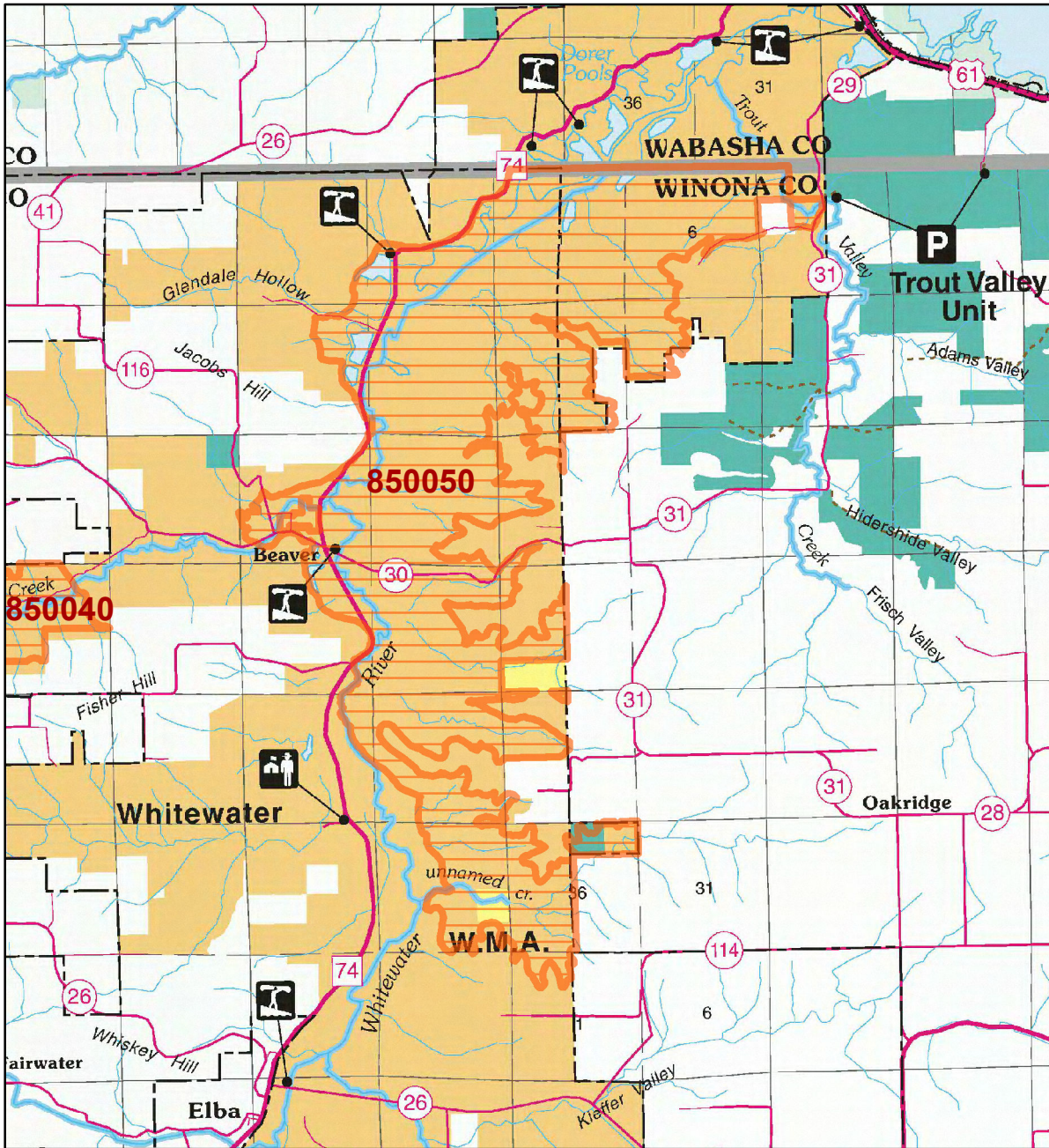
**Legend**

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



# HCVF Site 850050

## Whitewater Sand Savannas, Winona County



**LEGEND**

**HCVF Site**  
 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
- 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

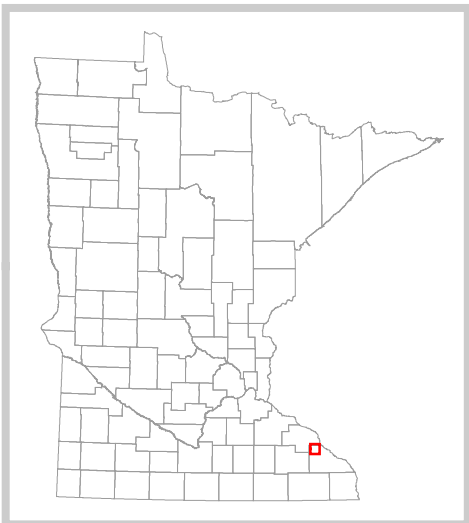
**DESIGNATED WATERWAYS**

- 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

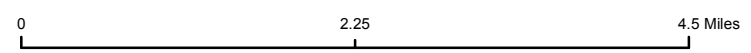
NOTE: Some of the features defined in this map explanation may not occur on the map.



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 #:** 850050

**HCVF Name:** Whitewater Sand Savannas

**Acres of HCVF site:** 5856.31

**County:** Winona

**Data edited by:** Region 3 HCVF Team

**Role:** Region 3 HCVF Team

**Date edited on:** 2013-08-01

**Corresponding Land Administrator(s):** FAW

**Management Unit Name(s) (if applicable):** Whitewater Sand Savannas Area (Whitewater WMA)

## HCVF Summary

Bluffs and valleys east of the Whitewater River and floodplain along the river. Large, very significant site. Valleys with Plainfield Sand support dry oak savanna, dry jack pine savanna, Karner blue butterflies, rare reptiles/amphibians, many rare plants. Large high quality bedrock bluff prairies with rare plants, as well as mesic prairies and dry barrens prairies. Portions of n-facing steep slopes with high-quality mature oak forest. Thirteen rare plant species and 18 rare animal species. This site together with other savanna in Whitewater WMA have only population of Karner blue butterflies in the state.

### **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 (S or-S2 species): two reptile/amphian species , Karner blue, Persius dusky wing , ottoe skipper, Rough-seeded fameflower (Phemeranthus rugospermus), valerian (Valeriana edulis var. ciliata), one-flowered broomrape (Orobanch uniflora), beach heather (Hudsonia tomentosa), sea-beach needle grass (Aristida tuberculosa), clasping milkweed (Asclepias ampexicaulis). HCV1c (Federal T or E species): Karner blue. HCV1e ( rare species concentration): Plants, lepidoptera, birds, herps, jumping spiders, prairie voles, 16 SGCN species. HCV1g (Exemplifies of Outstanding Key Habitats): Oak savanna. HCV2a -EBF (intact forest block): yes. HCV2b - EBF (old forest): yes. HCV2c - EBF (forest block in ag. landscape): yes. HCV3a (G1 or G2 plant community): FDs27c, UPs14a1, UPs14a2, UPs13a, UPs23a. HCV3b (S1 or S2 plant community): FDs27b, FDs27c, UPs14a1, UPs14a2, UPs13a, UPs23a. HCV3c (Special S3 plant community): FDs38a, MHs37a, UPs13c, FDs38a, UPs13c. HCV3d (Natural origin pine stand): jack pine.

## Management Considerations

**Overall management objectives for the entire HCVF:**

All upland plant communities are fire-dependent, so use of prescribed fire is important component. Fire intensity, seasonality, & frequency need to incorporate rare animal concerns, especially invertebrates and reptiles/amphibians. Timber harvest should be done with care to avoid invasive species increases & to maintain native plant community types. Floodplain habitat is degraded, often dominated by reed canary grass and could use restoration to native plant communities, including floodplain forest, sedge meadows, and possibly others such as seepage meadows. Some floodplain rare species (red-shouldered hawk, cerulean warbler) are forest species & would benefit from more floodplain forest cover. Others (gallinule, pickerel frogs, and reptiles/amphibians utilize sedge meadows and pools. Pickerel frogs and other reptiles and also use forests occasionally, & one species nests in sand prairie and savanna.

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

High Biodiversity Site Plan

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

## General Comments

This is a "High Biodiversity Site" identified by the Blufflands SFRMP. Site includes 3 Representative Sample Areas: Lupine Valley, Fabel Ravine, and Whitewater Sand Savannas.

*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 ...