



**SITE-SPECIFIC MANAGEMENT SHEET  
TIER-3 RESOURCE MANAGEMENT PROPERTY**

**Property Name:** Lower Narrows

**Property Designation or Type:** State Natural Area

**SNA Designation Number:** 533

**Property Location:** Sauk County

**Real Estate:**

Project boundary acreage: 168

Fee acres owned: 146

Dedicated acres: None

DNR Easement acres: 5.9

Federal aid interest: DNR file #NA 20047 Grantor: Tye T Gribb. This parcel was used as state match (land bank) for the biennial USFWS State Wildlife Grant (SWG) #T-3-L-2.

Land use agreements: None

**Maps:**

- A. Project Boundary
  - B. Existing Roads and Infrastructure
- 

**Property Manager:** **Nate Fayram, Southwest Ecologist**  
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Prepared By (District Ecologist):

Name: Nate Fayram

Title: Conservation Biologist

Date: 4/10/2017

Reviewed/Approved By: (Bureau)

Name: Drew Feldkirchner

Title: Bureau Director, Natural Heritage Conservation Date: 4/10/2017

Approved by Natural Resources Board: Date: 6/28/2017

## A. Regional and Property Assessment

- 1. General Property Description (topography, soils, vegetation, water resources):** Lower Narrows SNA features a very scenic and unique geological feature of the Baraboo Range, and is an important educational tool that helps explain the glacial history of the area. About 900 feet wide and 230 feet high, the Narrows represents a historic break in the Baraboo Range through which the Baraboo River now flows. Historically, The Narrows was probably cut by a preglacial river before the last ice age some 12,000 years ago. Although most of the gorge is Precambrian Baraboo quartzite, part of the bluff is composed of rhyolite, and here one can see the vertical stratification in the Baraboo quartzite and also see the under laying volcanic rhyolite. The area is quite scenic and supports several rare and uncommon species including eastern prickly-pear cactus. Along the west flank of the Narrows is a southern dry-mesic forest dominated by red oak, white oak, and basswood. The ground flora contains numerous showy spring-blooming wildflowers including Dutchman's-breeches, rue anemone, wild geranium, bloodroot, shooting star, and large-flowered bellwort. Other species include common ninebark, red elder, wild columbine, maidenhair fern, white baneberry, and black snakeroot. Within the forest are several bedrock glade openings. Bedrock Glades are xeric, sparsely vegetated, non-vertical bedrock exposures, with thin, often discontinuous soils. The flora includes prairie and savanna components, as well as bare rock specialists including lichens and mosses. Glades have served as refugia for light-demanding species that are adapted to the more open savanna and prairie conditions that were formerly much more abundant and widespread in Southern Wisconsin. Many uncommon plant species associated with these habitats have been documented in the glades of the Baraboo Hills.
- 2. Ecological Landscape:** [Western Coulee and Ridges EL](#) is characterized by its highly eroded, unglaciated topography with steep sided valleys and ridges, high gradient headwaters streams, and large rivers with extensive, complex floodplains and terraces. It offers the best opportunities in the state to maintain many of southern Wisconsin's natural communities. Many rare species have been documented here due to the diversity, scale, types, condition and context of the natural communities present.

Forests can be managed and conserved here at virtually all scales, including areas up to hundreds, or even thousands, of acres. Oak forests are more abundant here than any other ecological landscape, mesic maple-basswood forests are also widespread, and some of the Upper Midwest's most extensive stands of Floodplain Forest occur here along

major rivers. All of these forest types can provide critical breeding and/or migratory habitat for significant populations of native plants and animals. Maintaining large blocks of these forest types, including areas with combinations of these types, is a major opportunity. Since much of the forested acreage is privately owned, there are opportunities to work with private landowners, looking for places to combine efforts and plan on a much larger scale than an individual property.

Less common natural communities also provide excellent management opportunities here. Conifer relicts, by definition, are almost entirely restricted to the Western Coulees and Ridges, with lesser management opportunities present in the Southwest Savanna. Fire-dependent oak ecosystems are well-represented here include Oak Openings, Oak Barrens, Oak Woodland and dry to mesic oak forests. Bluff prairies and sand prairies are better represented in this Ecological Landscape than anywhere else in Wisconsin and probably better than anywhere else in the Upper Midwest. These fire-dependent communities could be managed in a continuum with savanna and forest communities, wherever possible.

Bedrock features are important throughout the Western Coulees and Ridges and include cliffs, caves, talus slopes and Algific Talus Slopes. Some bats and reptiles are dependent on caves, tunnels and abandoned mines as roost sites and hibernacula.

- 3. Ownership and Adjacent Land Uses:** State highway, public road, agricultural and residential lands, and southern forest.

- 4. Property Management Issues, Trends and Needs:**

**Invasive Species:** Buckthorn, honeysuckle, and garlic mustard are known on this site, plus red cedar and other woody encroachment on the glades and savannas.

**Invasive Species Control History:** Since acquisition in 2006 red cedar clearing and buckthorn control has occurred.

**Forestry/Silviculture:** Opportunities may exist to use commercial timber harvests to help reach ecological restoration goals for accessible portions of the property.

**Prescribed Burning:** Prescribed fire will be used as a management practice to maintain this property.

5. **Facility/Amenity development:**
  - a. **Existing:** Parking lot, gates, and signage.
  - b. **Future:** Interpretive infrastructure and a segment of the Ice Age Trail may be developed on portions of this property in the future.
  
6. **Endangered, Threatened, Special Concern Species or Habitats, and wildlife Species of Greatest Conservation Need:** 1 state endangered species, 1 state threatened species, and 5 state special concern species are known to occur here and/or in the general area. For detailed EO data, see Appendix A.
  
7. **Conservation Opportunity Area:** Baraboo Hills and North Range (11.09) and Lower Baraboo River (A.21)
  
8. **Easements:**
  - a. 5.9 acres – DNR management access (DNR file #NA 20047)
  
9. **Land use Agreements: None**
  
10. **Significant Cultural and Archaeological Features:** State Natural Areas (SNAs) may contain historic Native American or Euro-American sites. Activities with potential to disturb archaeological sites will only be undertaken after consultation with the DNR Archaeologist. Any sites with cultural or historical value will be managed in accordance with guidance and statutory requirements (see ss. 44.40 and DNR Manual Code 1810.10). More details can be found in Appendix B.
  
11. **Refuges and other Closed Areas: None**
  
12. **Primary Public Use:** Recreational uses such as hiking, fishing, cross country skiing, hunting, trapping, scientific research, wild edibles collection, , and wildlife viewing are allowed. Reference the State Natural Areas [Visitation Guidelines](#) and the property's specific [webpage](#) for more information.
  
13. **Biotic Inventory needs:** Currently, no plant or vertebrate inventory needs have been identified beyond normal monitoring through established SNA Site Inspection protocol.

**B. Property Purpose and Goals/  
Management Objectives and Prescriptions**

**1. Property Purpose and Goals**

- a. Purpose:** The purpose of the SNA Program is to protect outstanding examples of Wisconsin's native landscape of natural communities, significant geological formations and archeological sites. Natural areas are valuable for research and educational use, the preservation of genetic and biological diversity, and for providing ecological benchmarks for determining the impact of use on managed lands. They also provide habitat for numerous rare plants and animals.
- b. Goal:** Manage the site as a reserve for bedrock glade, as a rare plant habitat site, as a significant geological site, and as an ecological reference area.

**2. Management Objectives by Natural Community Type:**

- a.** Natural processes and prescribed fire will determine the structure of the natural communities of this site, plus prescribed understory manipulation as described below.
- b.** Provide opportunities for research and education on high quality native bedrock glades and geological features.
- c.** Restore and maintain a continuum of fire-dependent native communities from bedrock glade and oak opening to oak woodland, dry forest, and dry-mesic forest.
- d.** Create overstory conditions that allow enough light to penetrate the canopy and reach the forest floor to stimulate light dependent understory oak opening and oak woodland species that are currently suppressed from inadequate light.
- e.** Expand the size of bedrock glade openings towards historic boundaries and maintain conditions favorable to native glade/prairie vegetation.
- f.** Increase the diversity and abundance of native glade, dry prairie, oak opening, and open woodland vegetation and associated animal species with emphasis on rare species.
- g.** Restore and maintain open areas around appropriate rock structures and glades as an important habitat component for reptiles.
- h.** Restore and maintain oak opening and oak woodland to provide long term hard mast food sources and habitat for wildlife and game species such as turkeys.
- i.** Prevent introduction of new invasive species, and ensure long-term limitation of the spread, reproduction and impact of existing invasive species.

**1. Management Prescriptions by Natural Community Type:**

- a. The native species on the bedrock glade (primarily oaks and red cedar) are managed in a mostly passive manner.
- b. However, some thinning of the canopy, understory manipulation and shrub control via brushing or fire may be needed to mimic natural disturbance patterns. Red cedar will be actively managed except in ecologically and historically appropriate locations where they will be passively managed, and fire will be allowed to determine their distribution.
- c. Outside the glades in the oak openings, oak woodlands, and forests the native dominant tree species (primarily oaks) are managed passively. However, some thinning of the canopy, understory manipulation, and shrub control may be needed to mimic natural disturbance patterns. The mostly passive canopy management, understory manipulation, and prescribed fire will determine the ecological characteristics of the savannas and forests.
- d. Non-commercial canopy and understory manipulation, and potential limited timber harvests, will improve conditions for existing oaks, and focus on removal of shade tolerant central hardwood, northern hardwood, and bottomland hardwood species (such as maple, walnut, ironwood).
- e. Contain or eradicate invasive species through the use of department approved manual, chemical, biological, and mechanical practices, as well as prescribed fire.
- f. Other allowable activities across the entire site include control of invasive plants and animals and access to suppress wildfires.
- g. Follow Incidental Take Protocols for listed species  
<http://dnr.wi.gov/topic/erreview/itgrasslands.html>

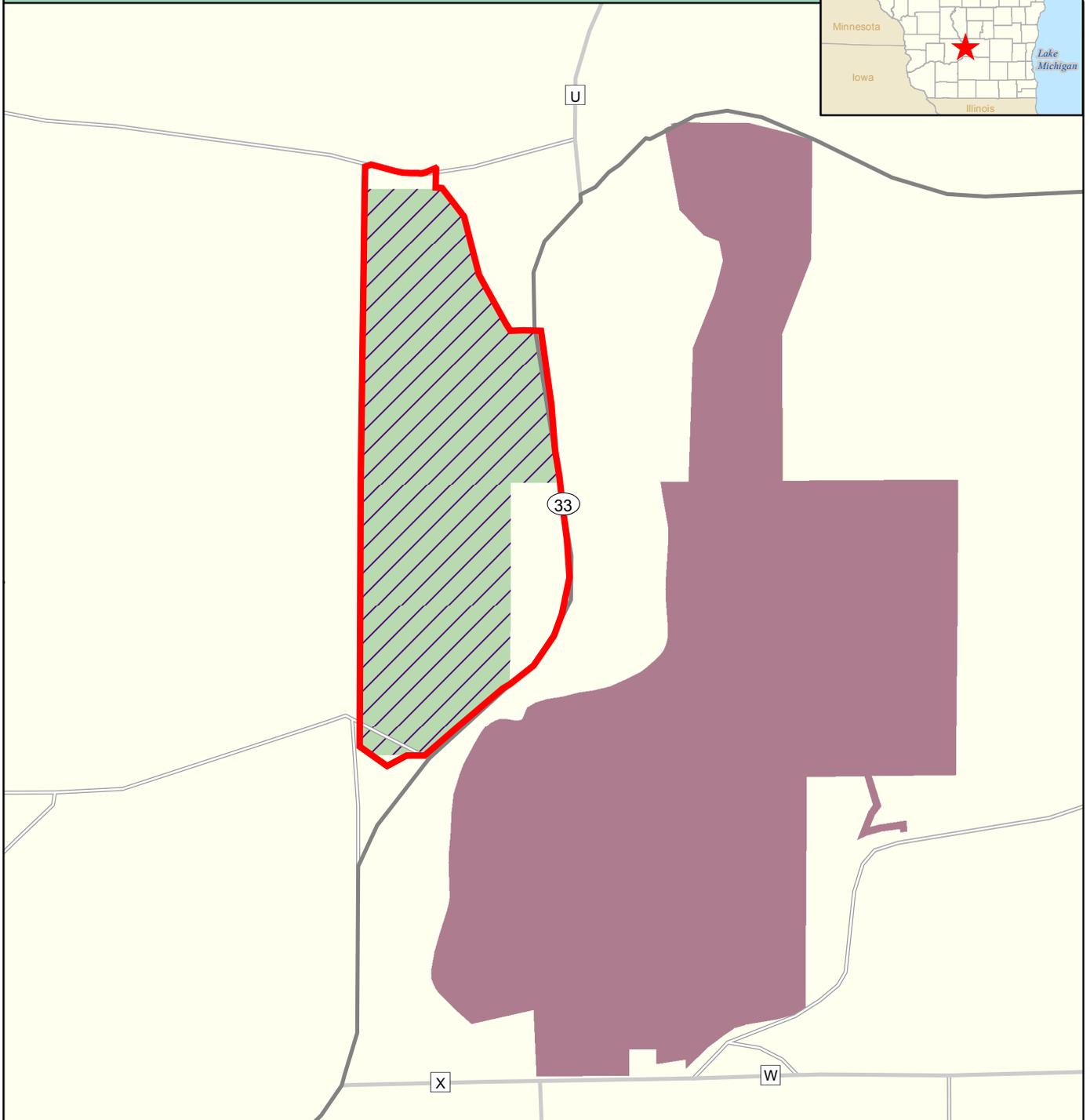
**2. Special Management Issues and/or constraints:**

- a. Although removal of hazardous trees from over and near trails is an allowed activity, manipulation/removal of vegetation and soil disturbance should be minimized to the extent possible.
- b. The bedrock glade is fragile (particularly the lichens that are found there). Since trampling of lichens presents a threat to this community, public use is preferably limited to researchers and small education groups. Other visitors are encouraged to observe the bedrock glade from trails only.
- c. All rock climbing is prohibited.
- d. A segment of the Ice Age Trail may be developed on this property in the future.

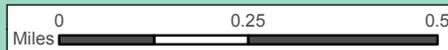
**Table 1: Current Facilities or Infrastructure**

<b>Type of Facility</b>	<b>Total (number/length)</b>	<b>Management Activities</b>	<b>Management Issues and Constraints</b>
Roads – public	None		
Roads – maintenance/service	0.7 miles		Shared maintenance with landowners.
Roads – access easement	None		
Parking lots	1		
Boat landings	None		
Designated trails	None		
Dikes, ditches	None		
Dams	None		
Other			

# Lower Narrows State Natural Area PROJECT BOUNDARY



-  Project Boundary
-  DNR Owned
-  State Natural Area
-  Stewardship Grant Land



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Bureau of Natural  
Heritage Conservation

Jul 07, 2017

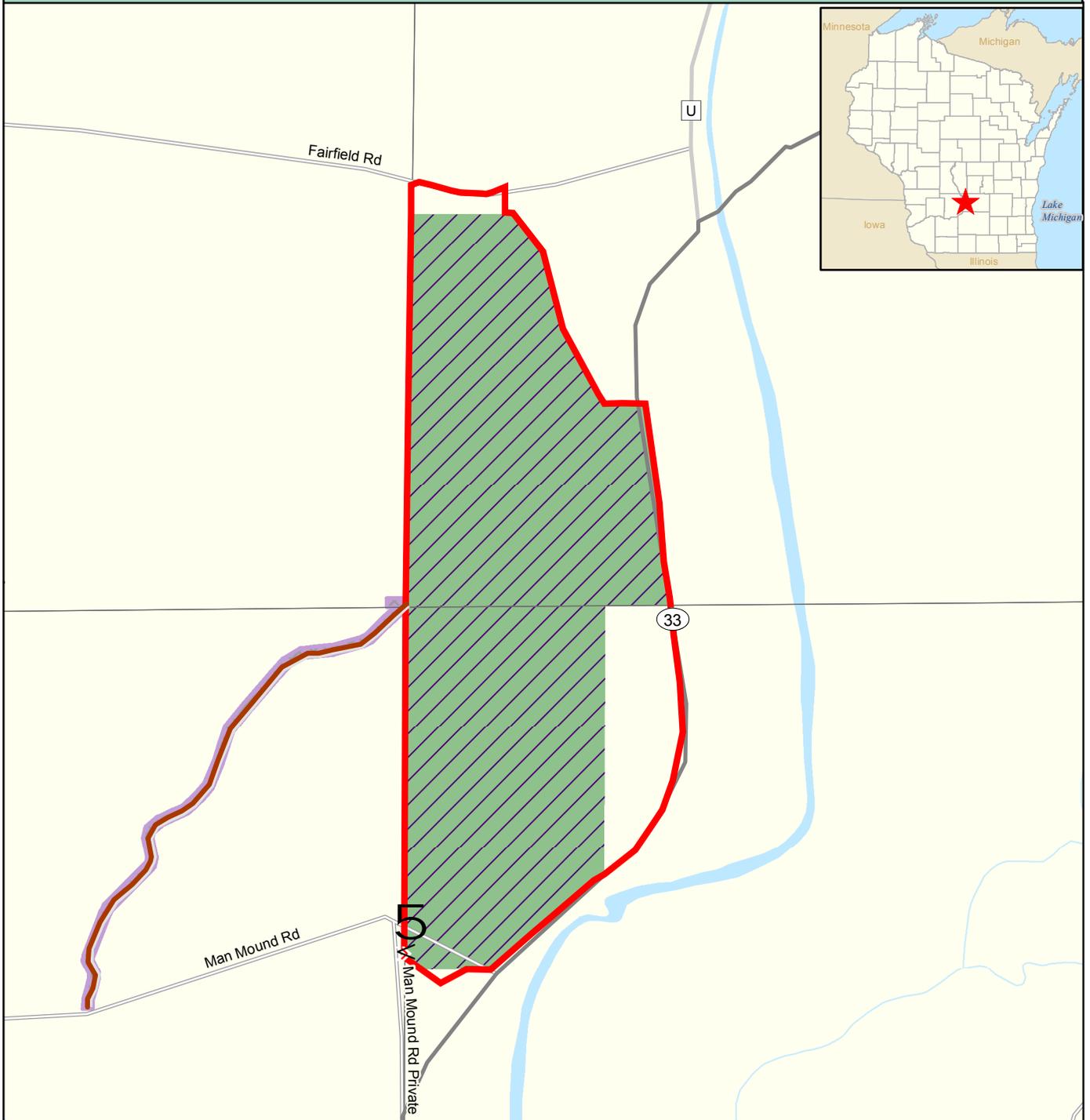
SNA Tier 3 dmh

## MAP A

The data shown on this map have been obtained from various sources, and are of varying age, reliability and resolution. This map is not intended to be used for navigation, nor is this map an authoritative source of information about legal land ownership or public access. Users of this map should confirm the ownership of land through other means in order to avoid trespassing. No warranty, expressed or implied, is made regarding accuracy, applicability for a particular use, completeness, or legality of the information depicted on this map.

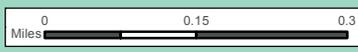
# Lower Narrows State Natural Area

## EXISTING ROADS AND INFRASTRUCTURE



-  Project Boundary
-  State Natural Area
-  DNR Owned
-  DNR Easement (Closed)

-  Gate
-  Parking Lot
-  Fully-developed Road: Private



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### MAP B

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