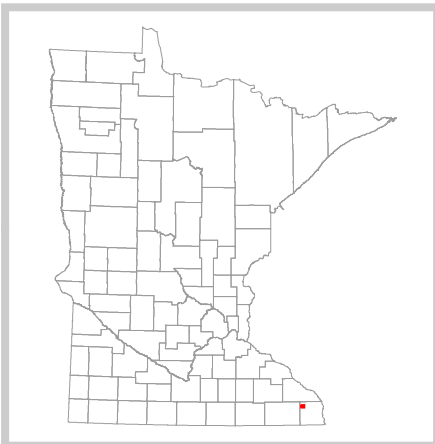
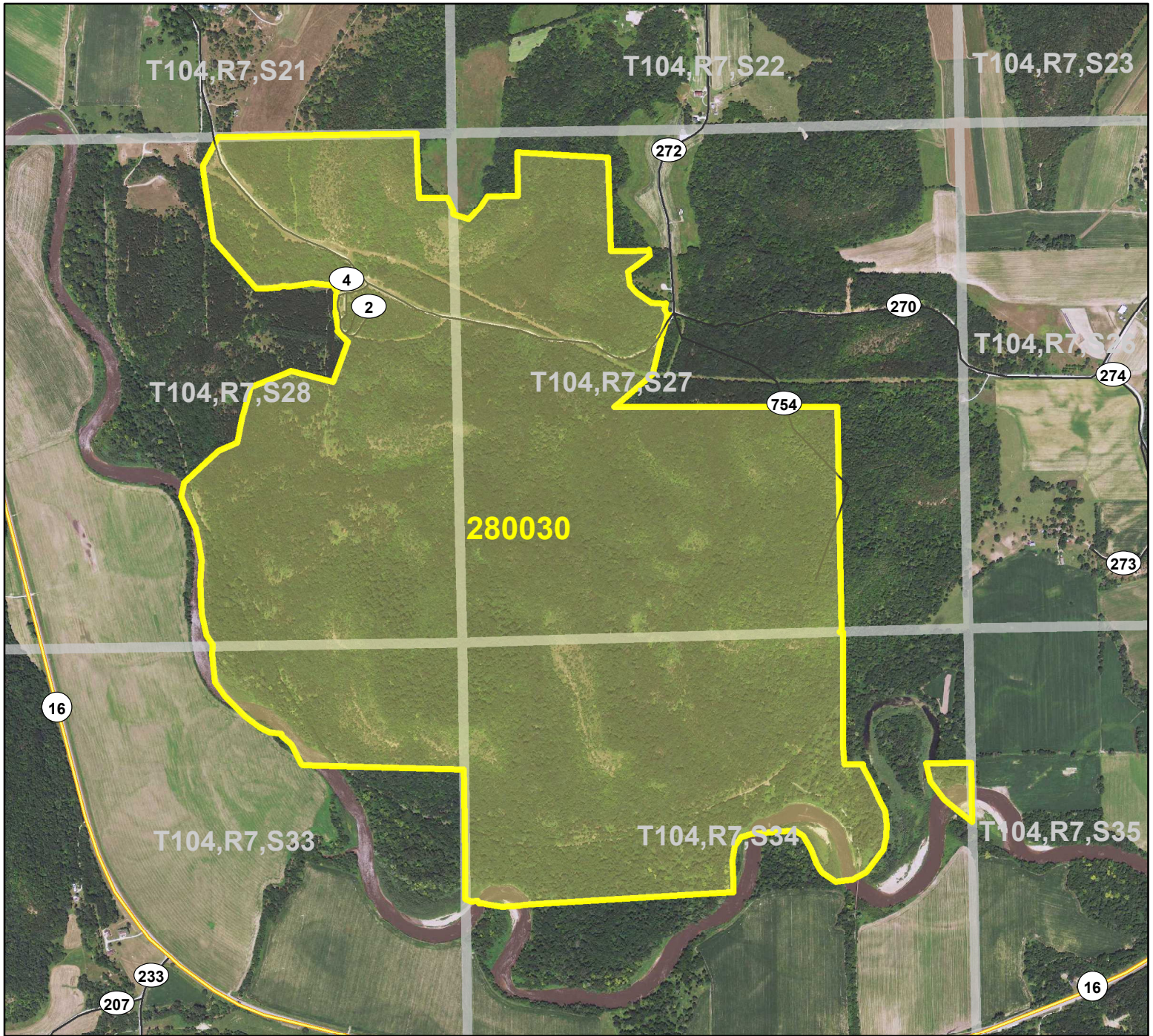


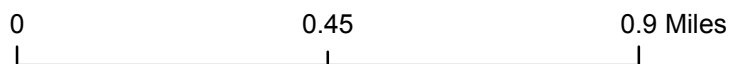
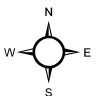
# HCVF Site 280030

## Vinegar Ridge, Houston County



**Legend**

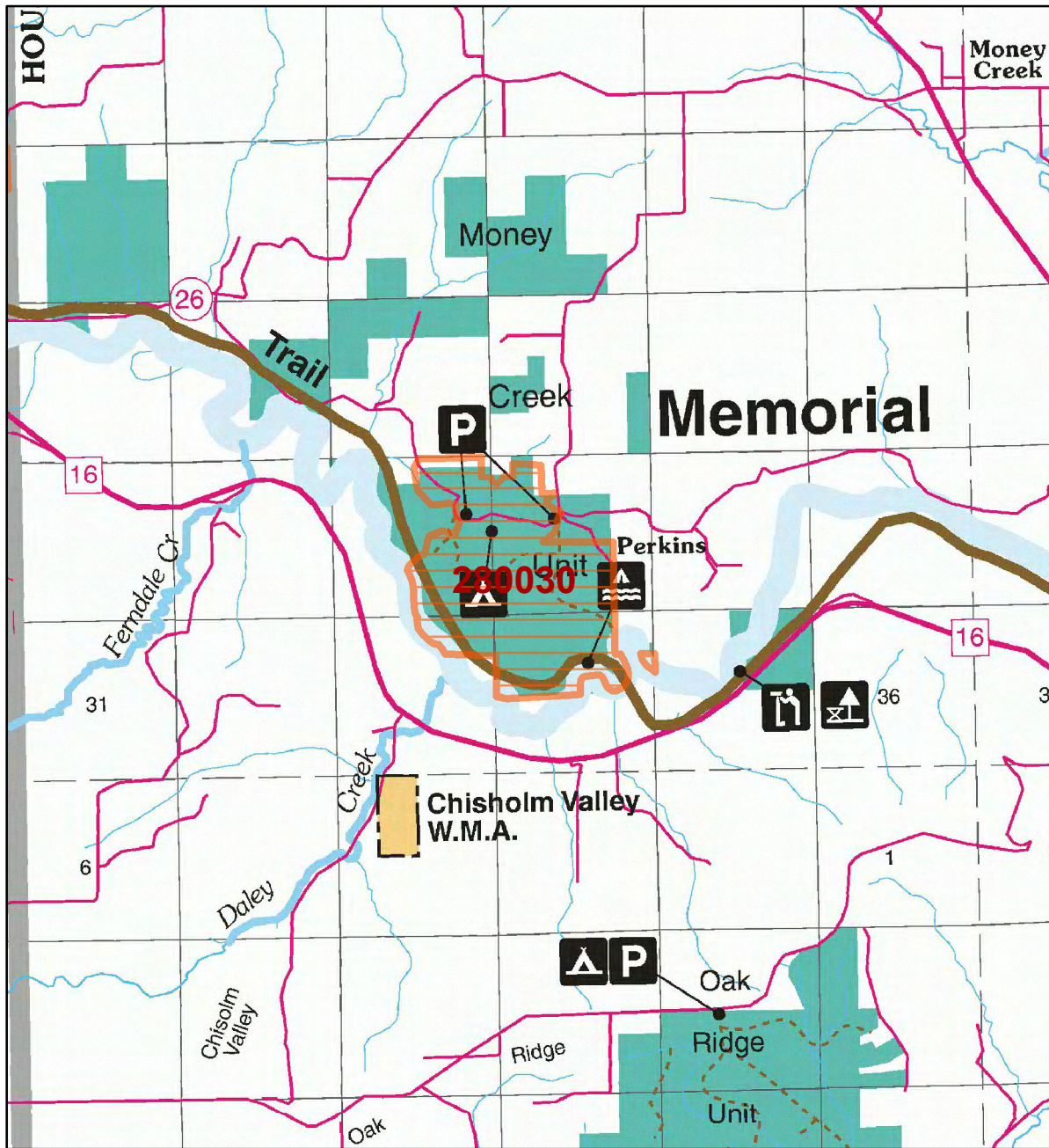
- State Trunk Highways
- Municipal, Township or Other Roads
- HCVF Site
- PLS Sections



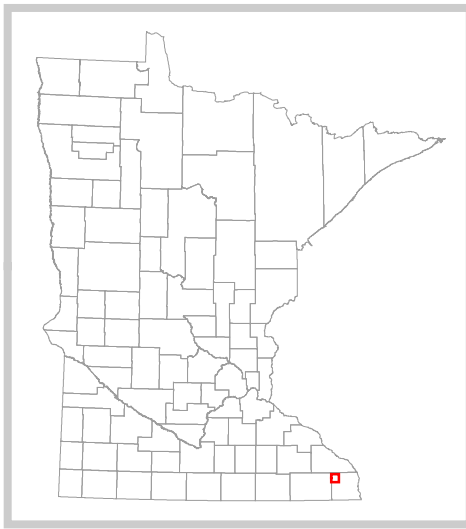


# HCVF Site 280030

## Vinegar Ridge, Houston County



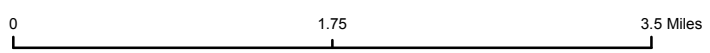
- LEGEND**
- MAP EXPLANATION**
- LAND OWNERSHIP**
- County Land
  - Recreation Area under 40 acres
  - State Forest Land
  - State Park and Recreation Land
  - State Wildlife Management Area Land
    - W.M.A.'s under 40 acres
    - S.N.A.'s under 40 acres
  - State Scientific & Natural Area Land
    - 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 #: 280030**

**HCVF Name:** Vinegar Ridge

**Acres of HCVF site:** 892.04

**County:** Houston

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

**Role:** Region 3 HCVF Team

**Date edited on:** 2013-07-24

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

**Management Unit Name(s) (if applicable):** Vinegar Ridge/Money Creek Unit (Money Creek Bluff)

## HCVF Summary

This site is a large ridge spur forming a steep bluff in a large, ancient meander of the Root River. The site is highly dissected by small, steep-sided valleys and ravines with many narrow ridges that create a unique landscape with unusual soil patterns. There are several high-quality native plant communities present including bluff prairies and oak forests especially on the broad crests. This site contains the only large intact floodplain forest in the interior Root River, which is a moderate quality forest on channeled alluvium with sand river beaches. State Trail meanders adjacent to the river in the southern portion of the site. This site includes two Representative Sample Areas for UPs14a and FFs59c.

### **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): rough-seeded fameflower (*Talinum rugospermum*), Canadian forked chickweed (*Paronychia canadensis*), ovate-leaved skullcap (*Scutellaria ovata*), three-flowered melicgrass (*Melica nitens*), upland boneset (*Eupatorium sessilifolium*), blunt-lobed grapefern (*Botrychium oneidense*), timber rattlesnake (*Crotalus horridus*) clasping milkweed (*Asclepias amplexicaulis*), witch-hazel (*Hamamelis virginiana*), sea-beach needlegrass (*Aristida tuberculosa*), three-leaved coneflower (*Rudbeckia triloba*); HCV1e (Rare species concentration): rough-seeded fameflower (*Talinum rugospermum*), Canadian forked chickweed (*Paronychia canadensis*), ovate-leaved skullcap (*Scutellaria ovata*), three-flowered melicgrass (*Melica nitens*), upland boneset (*Eupatorium sessilifolium*), blunt-lobed grapefern (*Botrychium oneidense* (?)), timber rattlesnake (*Crotalus horridus*), cliff goldenrod (*Solidago sciaphila*), plains wild indigo (*Baptisia bracteata* var. *leucophaea*), three-leaved coneflower (*Rudbeckia triloba*), goat's-rue (*Tephrosia virginiana*), rhombic-petaled evening primrose (*Oenothera rhombipetala*), purple cliff-brake (*Pellaea atropurpurea*), clasping milkweed (*Asclepias amplexicaulis*), witch-hazel (*Hamamelis virginiana*), sea-beach needlegrass (*Aristida tuberculosa*), ebony spleenwort (*Asplenium platyneuron*), Acadian flycatcher, North American racer (*Coluber constrictor*), gopher snake (*Pituophis catenifer*), bald eagle ; HCV1g (Outstanding Key Habitats Examples): oak savanna; HCV2-EBFa (intact forest block): yes; HCV3a (G1 or G2 plant community): UPs13a [not ranked], UPs14a2 [1 record ranked BC in 1992, 1 record ranked C in 1992]; HCV3b (S1 or S2 plant community): UPs14a2 [1 record ranked BC in 1992, 1 record ranked C in 1992], FFs59c [C rank, 1992], UPs13a [not ranked]; HCV3c (Special S3 plant community): UPs13c [1 record ranked C in 1992, 2 records ranked B in 1992, 1 record BC in 1992], FDs38a [C rank, 1992].

## Management Considerations

### Overall management objectives for the entire HCVF:

Clear and use prescribe burning in the oak savannah and prairie areas. Coordinate with EWR non-game and plant ecology specialists on burn season/timing and size of burn area to provide refugia for rare species. Oak woodlands would also benefit from this management. Managing the understory to produce oak advanced regen prior to harvests would help maintaining dry-mesic oak forests. Control invasive species throughout the site. The High Bio Plan for this area should be consulted for previously agreed-upon goals, objectives, and management strategies for this unit. [NOTE: much of this management is already in progress]

### 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)?

\_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.*

There are about 11 private landowners that are adjacent to the HCVF site. Much of the adjacent land is managed agriculturally, but coordinating management of the flood plain forest (especially for invasive species) and prairies would be beneficial (this has already been happening with the prairie site; the DNR was given permission to burn the private ownership). The adjacent upland forest would be better maintained/enhanced with landowner coordination and management participation as well.

## General Comments

There is a High Bio Plan written for this site. It is also part of the DNR's Adaptive Forest Management Project portfolio. The HCVF boundary is smaller than the MBS boundary. The HCVF site follows the High Bio Plan boundary (but excludes all private land).

*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 ...*