

Conservation Challenges:

- * Changes in agricultural practices
- * Conversion to mining
- * Deforestation/logging
- * Increased dewatering makes stream flow more flashy, reduces groundwater for algific habitats
- * Waterways are more incised, with more alluvium, and higher turbidity
- * Invasive spp.: Common buckthorn, Eurasian honeysuckle, garlic mustard, leafy spurge, Asian carp,
- * Valley bottoms prone to high-volume floods
- * Urbanization
- * Fire-dependent communities are likely to decline due to

Conservation Opportunities:

- * Frontenac State Park

Existing Conservation Network:

State Parks:

Frontenac

State Forests:

Richard J. Dorer Memorial Hardwood

SNAs:

Spring Creek Prairie

Aquatic Management Area:

Hay Creek

Bullard Creek

Gilbert Creek

Wildlife Management Area:

Perched Valley

Municipal Park:

Barn Bluff

Rare Features:

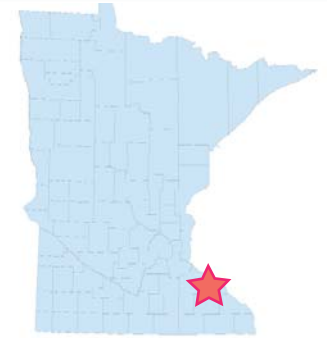
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|--------------------------------|--------------------------|
| Acadian Flycatcher | North American Racer |
| American Ginseng | Northern Myotis |
| Bald Eagle | Ovate-leaved Skullcap |
| Bat Concentration | Pallid Shiner |
| Black Sandshell | Peregrine Falcon |
| Bladder Pod | Pistolgrip |
| Blue Sucker | Pugnose Minnow |
| Butterfly | Purple Wartyback |
| Cerulean Warbler | Raven's Foot Sedge |
| Clustered Broomrape | Red-shouldered Hawk |
| Eastern Hognose Snake | Rock Pocketbook |
| Ebonysnail | Round Pigtoe |
| Elephant ear | Ordovician, Quaternary) |
| Elktoe | Sessile Flowered Cress |
| Fault (Paleozoic) | Sheepnose |
| Fossil Invertebrate (Cambrian) | Shovelnose Sturgeon |
| Goldie's Fern | Skipjack Herring |
| Gopher snake | Smooth Softshell |
| Hair-like Beak-rush | Spike |
| Henslow's Sparrow | Squirrel-corn |
| Hickorynut | Sterile Sedge |
| Higgins Eye | Timber Rattlesnake |
| Hill's Thistle | Tricolored Bat |
| Kitten-tails | Valerian |
| Lake Sturgeon | Virginia Water Horehound |
| Lilia-leaved Twayblade | Washboard |
| Long-bearded Hawkweed | Western Fox snake |
| Louisiana Waterthrush | Yellow Sandshell |
| Marsh Arrow-grass | |
| Milksnake | |
| Monkeyface | |
| Mucket | |
| Muskingum Sedge | |

Frontenac - Hay Creek Opportunity Area

Ecological Significance:

The Frontenac - Hay Creek Opportunity Area encompasses unique landforms of the Mississippi River: Lake Pepin, Frontenac Bluff and Wacouta Bluff. Lake Pepin has a unique etiology as it formed from the deposition of heavier sands at the confluence of the Chippewa River and the Mississippi, creating a delta which dams the largest natural lake on the navigable Upper Mississippi. Frontenac and Wacouta bluffs are remnant islands from the former glacial River Warren, but now are connected to the Minnesota shore by the abandoned river channel that is now mostly upland with some oxbow wetlands.

While the area harbors a number of rare species, it also provides outlying habitat for relict northern species such as mountain maple, and for more southerly species such as bladdernut and shagbark hickory. The opportunity area provides some key sites within the greater recreational landscape of Lake Pepin and within the Mississippi Flyway.



Counties:
Goodhue
Wabasha

Rare Native Plant Communities:

- Calcareous Fen (Southeastern)
- Dry Bedrock Bluff Prairie (Southern)
- Dry Limestone - Dolomite Cliff (Southern)
- Dry Sand - Gravel Prairie (Southern)
- Dry Sandstone Cliff (Southern)
- Lake and Wetland Process (Holocene)
- Mesic Sandstone Cliff (Southern)
- Oak - Shagbark Hickory Woodland
- Red Oak - Sugar Maple - Basswood - (Bitternut Hickory) Forest
- Red Oak - White Oak - (Sugar Maple)
- Red Oak - White Oak Forest
- Seepage Meadow/Carr, Tussock Sedge Subtype
- Silver Maple - (Virginia Creeper) Floodplain Forest
- Silver Maple - Green Ash - Cottonwood Terrace Forest
- Southern Dry-Mesic Oak Forest
- Sugar Maple - Basswood - (Bitternut Hickory) Forest
- Sugar Maple - Basswood - Red Oak - (Blue Beech) Forest
- White Pine - Oak - Sugar Maple Forest

Ecological Evaluations:

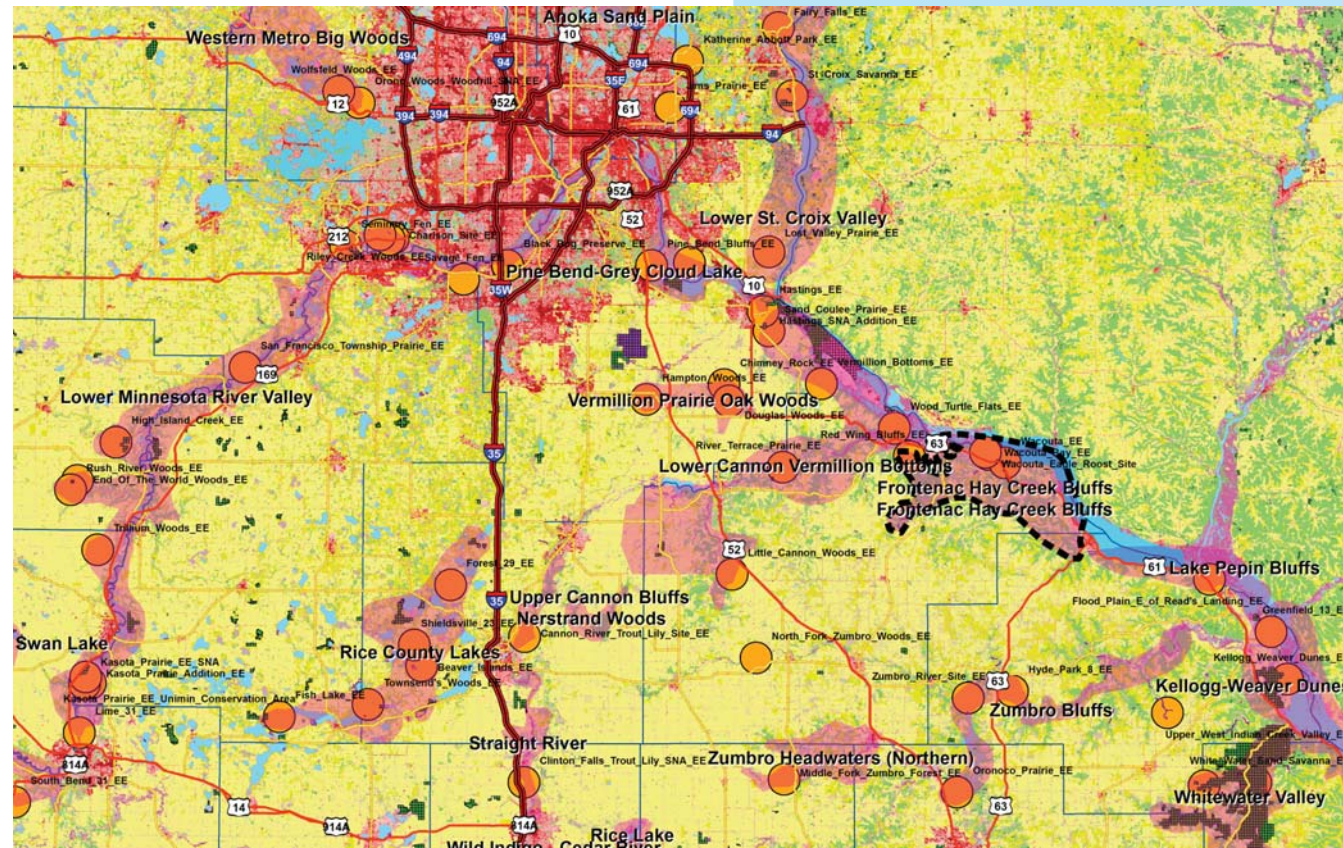
- Red Wing Bluffs
- Wacouta Eagle Roost
- Wacouta Bay
- Wacouta

Other Candidate Sites:



Frontenac - Hay Creek

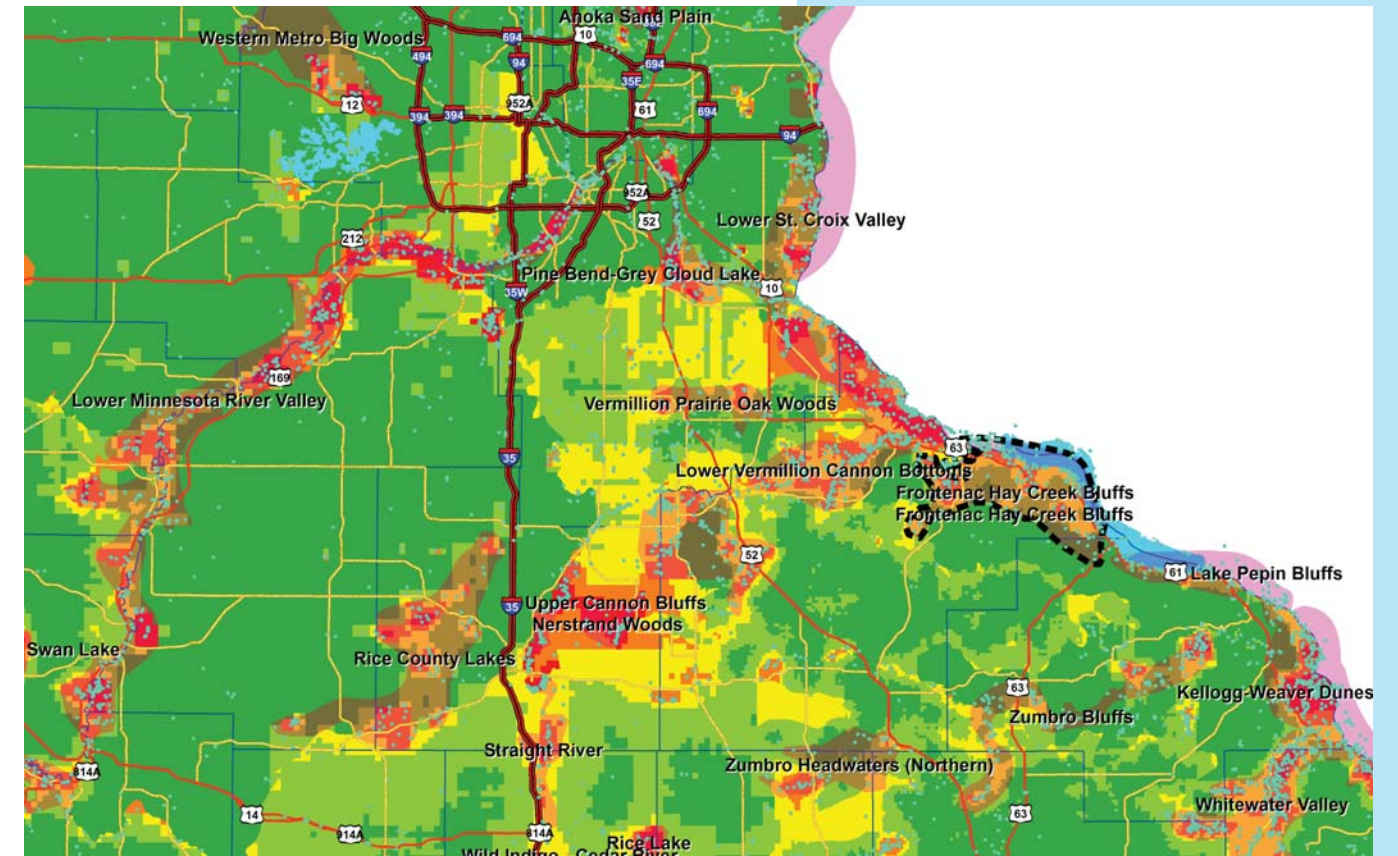
Ecological Evaluations, Land Cover, Public Ownership



Please see Legend at the front of the Opportunity Area Descriptions for a key to this map

Frontenac - Hay Creek

Marxan Prioritization, Element Occurrences



Legend

- Profiled COA
- Conservation Opportunity Area
- Rare Feature
- County Boundary
- Large Lake
- Marxan Conservation Prioritization**
- Lowest Priority
- Low Priority
- Medium Priority
- High Priority
- Highest Priority
- Interstate Highway
- U.S. Trunk Highway
- MN Trunk Highway