Conservation Challenges:

*Conversion to agricultural uses *Changes in agricultural practices *Conversion to mining *Deforestation/logging *Increased draintiling makes stream flow more flashy, reduces groundwater *Waterways are more incised, with more alluvium, and higher turbidity *Invasive spp.: Buckthorns, Eurasian honeysuckle, garlic mustard, leafy spurge, EAB *Habitat fragmentation *Valley bottoms prone to high-volume floods of increased frequency *The Mississippi Valley is a portal for new species to migrate into the state (native to N. America and non-native) *Fire-dependent communities are likely to decline due to difficulty in restoring natural fire regimes *Fire-dependent communities are likely to decline due to difficulty in restoring natural fire regimes

Existing Conservation Network:

State Forests:

Richard J. Dorer Memorial Hardwood SNAs:

Aquatic Management Areas: Wildcat Creek **Crooked Creek** Wildlife Management Areas: **Mound Prairie Root River** Winnebago Creek **Reinvest in Minnesota: Yes**

Rare Species:

American Brook Lamprey **Bald Eagle Beaked Snakeroot** Beard-tongue **Bell's Vireo** Black Buffalo Black Sandshell Blanchard's Cricket Frog Blue Sucker Bluntnose Darter Broad Beech-fern Bullfrog Butterfly Buttonbush **Catchfly Grass** Cattail Sedge **Cerulean Warbler Christmas Fern Clasping Milkweed Cliff Goldenrod Common Gallinule** Davis' Sedge **Ebony Spleenwort** Ebonyshell Elephant-ear Elktoe Fawnsfoot Flat Floater

Fluted-shell Ebonyshell Gopher snake Gray's Sedge **Green Dragon** Hickorynut Higgins' Eye Jewelled Shooting Star Kentucky Coffee-tree **King Rail** Lake Sturgeon Lilia-leaved Twayblade Marginal Shield-fern Mild Water Pepper Milk snake Monkeyface Mucket Muskingum Sedge North American Racer Northern Cricket Frog **Old Field Toadflax One-flowered Broomrape** Ovate-leaved Skullcap Paddle fish Pallid Shiner **Peregrine Falcon Pickerel Frog** Pirate Perch Pistolgrip **Plains Wild Indigo Pugnose Minnow**

Purple Cliff-brake Purple Sand-grass Red-shouldered Hawk Rock Pocketbook Rough Avens **Round Pigtoe** Sandhill Crane Sheepnose Shovelnose Sturgeon Silvery Spleenwort **Skipjack Herring** Smooth Softshell Spike Swamp White Oak Sweet-smelling Indian-plantain **Timber Rattlesnake** Upland Boneset Virginia Water Horehound Walter's Barnyard Grass Wartvback Washboard Western Fox snake Western Harvest Mouse Western Prairie Fringed Orchid Western Rat Snake White Baneberry Widgeon-grass Witch-hazel Yellow Bass Yellow Sandshell

Conservation Opportunities:

* Conservation partners along Mississippi

Flyway

Houston County Bluffs

Opportunity Area

Ecological Significance:

The Houston County Bluffs provide some of the greatest vertical relief in southern and central Minnesota. Steep north-facing and south-facing slopes and rock outcrops provide a setting for a variety of forest, savanna and prairie communities in very close juxtaposition. Southerly aspects frequently have goat prairies, mixed hardwoods occupy east-and west-facing slopes, and mesic hardwoods are found on north-facing slopes. Wetlands are primarily found in the Mississippi floodplain. Several species currently are endemic to the Houston County Bluffs area, such as chinkapin oak, and rat snake. Variations in terrain afford opportunities for a mosaic of community types within a small area. These species and others from adjacent states to the south may expand northward with climate change, The Blufflands also are within the Mississippi Flyway and provide essential habitat for migrating birds and waterfowl. Unlike other parts of Minnesota, watersheds define the landscape much more

strongly due to the dissected bluff terrain that separates the watersheds with bluffs

Dry Bedrock Bluff Prairie (Southern) exceeding 500 feet in height. **Evaluations:** Mesic Sandstone Cliff (Southern) Northern Bulrush-Spikerush Marsh Crooked Creek Bottoms **Oak - Shagbark Hickory Woodland** Red Oak - White Oak - (Sugar Maple) Forest Red Oak - White Oak Forest Sand Beach/Sandbar (River) Seepage Meadow/Carr Silver Maple - (Virginia Creeper) Floodplain Forest Silver Maple - Green Ash - Cottonwood Terrace Forest Southern Dry Cliff Swamp White Oak Terrace Forest White Pine - Oak - Sugar Maple Forest

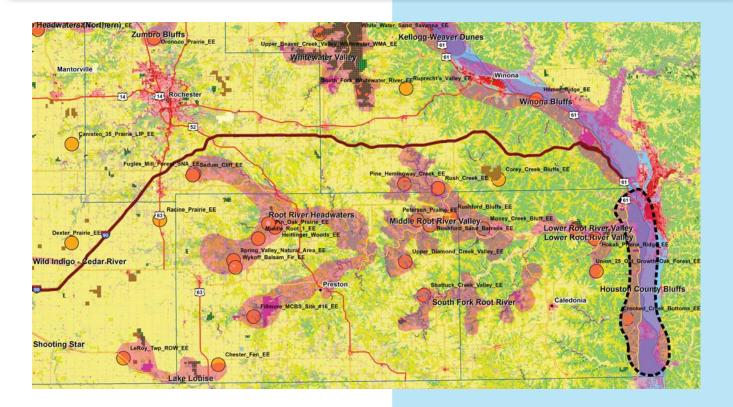


Rare Native Plant Communities:

Ecological

Houston County Bluffs

Element Occurrences, Land Cover, Public Ownership



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

Houston County Bluffs Marxan Prioritization, Ecological Evaluations

