#### **Conservation Challenges:**

- \*Conversion to agricultural uses
- \*Changes in agricultural practices
- \*Conversion to mining
- \*Deforestation/logging
- \*Increased draintiling 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
- \*Habitat fragmentation
- \*Valley bottoms prone to high-volume floods
- \*Fire-dependent communities are likely to decline due to difficulty in restoring natural fire regimes
- \*Bluff terrain more prone to flash floods

### **Existing Conservation Network:**

State Parks:

**State Forests:** 

Richard J. Dorer Memorial Hardwood

SNAs: **Rushford Sand Barrens Aquatic Management Areas: Peterson Trout Hatchery Cool Ridge Creek** Wildlife Management Areas: **Chisholm Valley WMA** 

#### **Conservation Opportunities:**

- \*Land Trusts
- \*Root River Planning

## Rare Species:

Acadian Flycatcher American Beakgrain American Brook Lamprey **American Ginseng Bald Eagle Bat Concentration** Beaked Snakeroot Big Tick-trefoil **Black Redhorse** Blanchard's Cricket Frog Blunt-lobed Grape Fern **Broad Beech-fern** Butternut Canadian Frostweed Canadian Forked Chickweed

Carey's Sedge Cerulean Warbler Clasping Milkweed Cliff Goldenrod Clinton's Bulrush **Clustered Broomrape** Common Five-lined Skink Creek Heelsplitter **Crystal Darter Dune Grape** Eastern Hognose Snake **Ebony Spleenwort** Elktoe Ellipse **False Mermaid** luted-shell Glade Mallow Goat's-rue Goldie's Fern Gopher snake

**Gravel Chub** Great Indian-plantain **Green Dragon Green Violet** Hickorynut Hill's Thistle Hubricht's Vertigo Iowa Golden Saxifrage Iowa Pleistocene Ambersnail ames' Sedge lumping Spider lewelled Shooting Star Laurentian Bladder Fern Leedy's Roseroot Leonard's Skipper Lilia-leaved Twayblade Limestone Oak Fern Loggerhead Shrike Louisiana Waterthrush

Long-berded Hawkweed

Minnesota Pleistocene

Milk snake

Moschatel Mucket Narrow-leaved Pinweed Narrow-leaved Spleenwort Nodding Wild Onion North American Racer Northern Myotis

**Old Field Toadflax** One-flowered Broomrape Ovate-leaved Skullcap Ozark Minnow Pickerel Frog Plains Wild Indigo Prairie-parsley Purple Cliff-brake Purple Rocket Rattlesnake-master Red-shouldered Hawk Reniform Sullivantia Rhombic-petaled **Evening Primrose** 

**Rock Sandwort Rock Whitlow-grass** Rough-seeded Fameflower Rough avens **Round Pigtoe** Sandy stream Tiger Beetle Sea-beach Needlegrass Sedge Meadow **Shovelnose Sturgeon** Short's Aster Silverleaf grape Silvery Spleenwort Slender-leafed Scurf Pea Smooth-sheathed Sedge Smooth Rock Cress Smooth-sheathed Sedge Snow Trillium

**Snowy Campion** Splendid tiger beetle **Spreading Sedge** Squirrel-corn Stemless Tick-trefoil Sweet-smelling

Indian-plantain Three-flowered melic grass Three-leaved coneflower **Ticklegrass Tricolored Bat Timber Rattlesnake Tricolored Bat Tuberous Indian-plantain Twinleaf Upland Boneset** Valerian

Variable Pleistocene Vertigo Western Fox snake Western Harvest Mouse White Heath Aster White baneberry Midwest Pleistocene Vertigo Witch hazel Wolf's Bluegrass Wood's Sedge **Yellow Pimpernel** 

# **Middle Root River Opportunity Area**

### **Ecological Significance:**

The Root River has broadened into wide valley in its lower reaches. Narrow gorges a less common than in the headwaters limiting the occurrence of special habitats such as algific talus slopes. Instead, north-facing slopes may harbor mesic hardwood forests instead of relict communities. Southerly aspects can be too steep and xeric to support woodland, and are frequently covered with goat prairies. Wetlands are limited in this landscape, and are found only within valleys adjacent to streams. Many NPCs and species are endemic to the Blufflands subsection, such as twinleaf and shagbark hickory. The landscape contains other unique features such as numerous trout streams, and karst topography containing sinkholes, fractures, and cave systems. Variations in terrain afford opportunities for a mosaic of community types within a small area. In addition, a number of eastern hardwood forest species reach their northwesternmost aspects of their native ranges in the Blufflands. Some of the tree species include black oak, honey locust,

chinkapin oak, swamp white oak, and shagbark hickory. The Blufflands also are within the Mississippi Flyway and provide essential habitat for migrating birds and waterfowl.



#### Counties:

Houston **Fillmore** Winona

#### **Rare Native Plant Communities:**

Algific Talus, Limestone Subtype

Black Ash - Sugar Maple - Basswood - (Blue Beech) Seepage

Black Oak - White Oak Woodland (Sand)

Dry Barrens Oak Savanna (Southern), Jack Pine Subtype

Dry Barrens Oak Savanna (Southern), Oak Subtype Dry Barrens Prairie (Southern)

Dry Bedrock Bluff Prairie (Southern)

Elm - Ash - Basswood Terrace Forest Elm - Basswood - Black Ash - (Blue Beech) Forest

Jack Pine - Oak Woodland (Sand) Maderate Cliff, Dolomite Subtype

Mesic Limestone - Dolomite Cliff (Southern)

Oak - Shagbark Hickory Woodland Red Oak - Sugar Maple - Basswood (Bitternut Hickory) Forest Red Oak - White Oak - (Sugar Maple)

Forest Red Oak - White Oak Forest

Southern Dry Cliff

Southern Dry Savanna Southern Dry-Mesic Oak Forest

Southern Mesic Cliff

Southern Wet-Mesic Hardwood Fores Sugar Maple - Basswood - Red Oak -

(Blue Beech) Forest

White Pine - Oak - Sugar Maple Forest White Pine - Oak Woodland (Sand) White Pine - Sugar Maple - Basswood

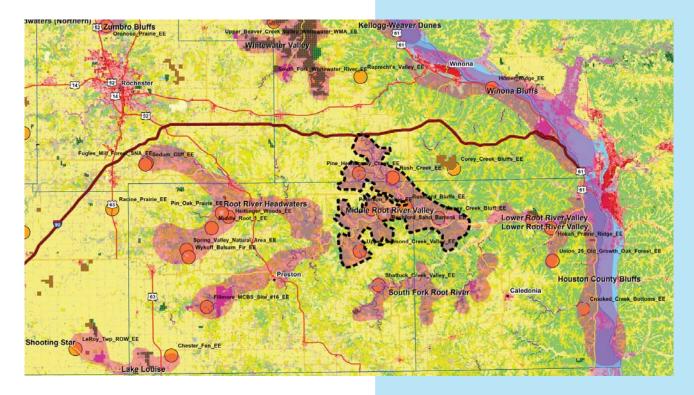
Forest (Cold Slope)

### **Ecological Evaluations:**

**Peterson Prairie Rushford Bluffs Rushford Sand Barrens Money Creek Bluff Rush Creek Pine Hemingway Creek Upper Diamond Creek Bluff** 

# **Middle Root River Valley**

# **Ecological Evaluations, Land Cover, Public Ownership**



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

# **Middle Root River Valley**

# **Marxan Prioritization, Element Occurrences**

