# RIVEL

#### **Conservation Challenges:**

- \*Urbanization
- \*Conversion to agricultural uses
- \*Changes in agricultural practices
- \*Increased draintiling makes stream flow more flashy, reduces
- . groundwater
- \*Fluctuating/declining groundwater levels
- \*Invasive spp.: Buckthorns, Eurasian honeysuckle, garlic.
- mustard, leafy spurge, EAB
- \*Habitat fragmentation
- \*Agricultural water pollutants/sedimentation
- \*Fire-dependent communities are likely to decline due to difficulty in restoring natural fire regimes

**Round Pigtoe** 

Sandhill Crane

Trumpeter Swan

**Upland Sandpiper** 

**Western Fox Snake** 

**Wood Turtle** 

**Southern Brook Lamprey** 

Stream Erosion (Quaternary)

#### **Existing Conservation Network:**

State Parks:

Banning

State Forests:

Chengwatana

**Kettle River** 

managment planning

**Conservation Opportunities:** 

\* Watershed is engaged in natural resource

SNAs:

Wildlife Management Areas:

Kettle River

National Wild and Scenic River:

St. Croix

# Kettle River Opportunity Area

#### **Ecological Significance:**

The Kettle River Opportunity Area is located within the tension zone between the Eastern Broadleaf Forest and the Laurentian Mixed Coniferous/Broadleaf forest. Fairly abrupt juxtapositions are present between southern communities (dry-mesic forest, dry barrens oak savanna) and northern boreal forest communities of spruce and fir. These community examples from both southern and northern Minnesota are located close to the limit of their ranges, and may possess critical genotypes of species that have fringe characteristics. The Kettle River OA is also a scenic resource, particularly in the vicinity of Banning State Park where the geology has created a series of waterfalls and rapids with names full of imagery such as Hell's Gate, Dragon's Tooth, Mother's Delight and Blueberry Slide.



**Counties:** 

Chisago Pine

#### **Rare Features:**

American Water-pennywort Appalachian Fir-clubmoss Bald Eagle Black Sandshell

Blanding's Turtle
Blunt-lobed Grape fern

Bog Bluegrass Cliff Goldenrod

Creek Heelsplitter Eastern Hemlock

Elktoe Fluted-shell

Gilt Darter Hickorynut

Intermediate Sedge

Lake Sturgeon Least Moonwort

Louisiana Waterthrush Matricary Grape fern

Mixed Unit or Sequence (Middle and

Upper Proterozoic) Mucket

Necklace Spike Sedge

Northern Brook Lamprey

Proglacial River Erosion (Quaternary)

Purple Wartyback
Sedimentary Structure (Upper Protero-

zoic)
Sedimentary Unit or Sequence (Upper

Proterozoic)



## Rare Native Plant Communities:

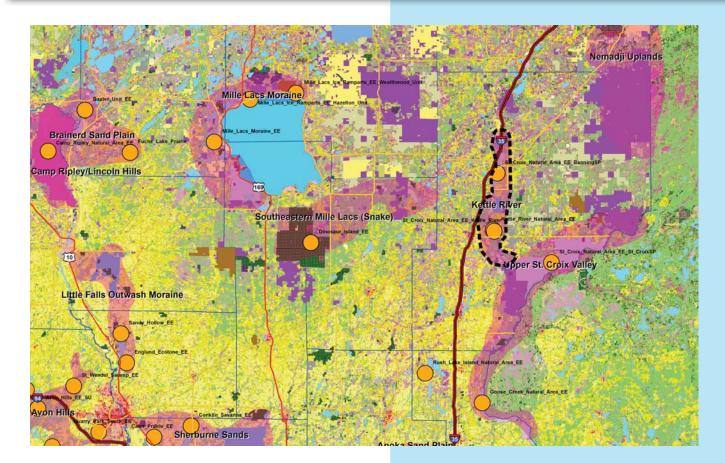
Silver Maple - (Sensitive Ferri) Floodplain Forest

Ecological
Evaluations:

Kettle River Natural Area
St. Croix Natural Area

# **Kettle River**

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



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

# **Kettle River**

#### **Marxan Prioritization, Element Occurrences**

