

# Anoka Sand Plain

## Conservation Challenges:

- \*Urbanization
- \*Conversion to agricultural uses
- \*Changes in agricultural practices
- \*Increased draitiling 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
- \*Xeric landscapes are more susceptible to drought and fire
- \*Fire-dependent landscapes are difficult to burn in urban areas

## Conservation Opportunities:

- \* Metro Greenways corridors
- \* Partnering with Watershed Districts
- \* Friends of Minnesota River
- \* Great River Greening
- \* Municipal conservancy plans
- \* Park reserves and regional parks
- \* County Conservation Districts

## Existing Conservation Network:

### State Parks:

### State Forests:

### SNAs:

Blaine Airport Rich Fen  
Blaine Preserve  
Boot Lake  
Helen Allison  
Twin Lakes

### Wildlife Management Areas:

Carlos Avery  
Gordie Mikkelson

### USFWS National Wildlife Refuge:

### City: Blaine City Parks (Pioneer Park)

### Private: Cedar Creek Natural Area (Univ. of Minn.)

## Rare Species:

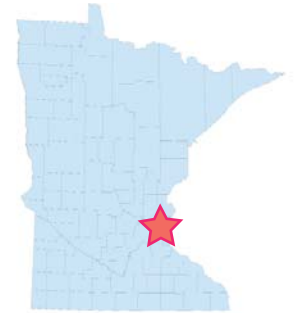
- |                                  |                                  |
|----------------------------------|----------------------------------|
| A Bramble                        | Northern Barrens Tiger Beetle    |
| A Jumping Spider (three species) | Old Field Toadflax               |
| A Species of Fungus              | One-flowered Broomrape           |
| Acadian Flycatcher               | Plains Hog-nosed Snake           |
| American Bittern                 | Plains Pocket Mouse              |
| Autumn Fimbristylis              | Purple Gerardia                  |
| Bald Eagle                       | Purple Sand-grass                |
| Beach-heather                    | Ram's-head Lady's-slipper        |
| Big Horseshoe Lake Dewberry      | Red-shouldered Hawk              |
| Blanding's Turtle                | Regal Fritillary                 |
| Blunt-lobed Grape fern           | Rhombic-petaled Evening Primrose |
| Bog Copper                       | Round Pigtoe                     |
| Buttonbush                       | Sandhill Crane                   |
| Cerulean Warbler                 | Sandy Laccaria                   |
| Clinton's Bulrush                | Sea-beach Needlegrass            |
| Colonial Waterbird Nesting Site  | Snailseed Pondweed               |
| Common Gallinule                 | Spiked Needlegrass               |
| Creek Heelsplitter               | St. Lawrence Grapefern           |
| Cross-leaved Milkwort            | Tall Nut-rush                    |
| Diverse-leaved Pondweed          | Tooth-cup                        |
| Eastern Hognose Snake            | Trumpeter Swan                   |
| Fernleaf False Foxglove          | Tuberclad Rein-orchid            |
| Fluted-shell                     | Twisted Yellow-eyed Grass        |
| Forster's Tern                   | Upland Sandpiper                 |
| Gopher snake                     | Virginia Bartonina               |
| Halberd-leaved Tearthumb         | Walter's Barnyard Grass          |
| Half Bristly Bramble             | Waterwillow                      |
| Hooded Warbler                   | Western Fox Snake                |
| Humped Bladderwort               | White Wild Indigo                |
| Lake Bed                         | Wilson's Phalarope               |
| Lance-leaved Violet              | Wood Turtle                      |
| Leafless Water Milfoil           | Woolgrass                        |
| Least Moonwort                   |                                  |
| Leonard's Skipper                |                                  |
| Loggerhead Shrike                |                                  |
| Long-bearded Hawkweed            |                                  |
| Louisiana Waterthrush            |                                  |
| Low Shrub Poor Fen               |                                  |
| Marginated Rush                  |                                  |
| Mucket                           |                                  |
| Northern Barrens Tiger Beetle    |                                  |

# Anoka Sand Plain

## Opportunity Area

## Ecological Significance:

In spite of its relative lack of topographic variation, the Anoka Sand Plain is of great biological interest. The shallow sands, perched atop a clay pan, provide great variation in hydrology with very subtle changes in elevation. With its location near the tension zone between the Hardwood Forest and the Laurentian Mixed Forest, it can provide a variety of biomes within very small distances. In addition, the sandy soils provide opportunities for heat-tolerant xeric communities, and also for boreal species that can tolerate extreme winter chill. Native plant communities range from Southern Dry Barrens Prairies to Northern Rich Fens and Tamarack-Black Spruce Swamps. Any particular site can harbor a great variety of communities, such as the Cedar Creek Natural Area. However, the sandy soils and frequent wetlands have made the lower cost lands of the Anoka Sand Plain a favorite location of very low-density development. Therefore, this area is a priority for conservation with its variety of biomes and its threats from urbanization, as it is located within the Twin Cities suburban and exurban fringe.



## Counties:

- Anoka
- Chisago
- Isanti
- Ramsey
- Washington

## Rare Native Plant Communities:

- Alder - (Maple - Loosetrife) Swamp
- Black Ash - Yellow Birch - Red Maple - Alder Swamp (Eastcentral)
- Black Ash - Yellow Birch - Red Maple - Basswood Swamp (Eastcentral)
- Cattail - Sedge Marsh (Northern)
- Central Dry Oak-aspen (Pine) Woodland
- Dry Barrens Oak Savanna (Southern), Oak Subtype
- Dry Barrens Prairie (Southern)
- Elm - Basswood - Black Ash - (Hackberry) Forest
- Graminoid - Sphagnum Rich Fen (Basin)
- Graminoid Rich Fen (Basin)
- Native Plant Community, Undetermined Class
- Northern Bulrush-Spikerush Marsh
- Northern Mixed Cattail Marsh
- Northern Rich Fen (Basin)
- Northern Very Wet Ash Swamp
- Northern Wet Meadow/Carr Oak - (Red Maple) Woodland
- Oak - Aspen Woodland
- Pin Oak - Bur Oak Woodland
- Poor Tamarack - Black Spruce Swamp, Black Spruce Subtype
- Prairie Rich Fen
- Red Oak - Basswood Forest (Noncalcareous Till)
- Red Oak - Sugar Maple - Basswood - (Bitternut Hickory) Forest
- Red Oak - Sugar Maple - Basswood - (Large-Flowered Trillium) Forest
- Red Oak - White Oak Forest
- Sand Beach (Inland Lake)
- Sedge Meadow
- Sedge Meadow, Lake Sedge Subtype
- Southern Dry-Mesic Oak (Maple) Woodland
- Tamarack Swamp (Southern)
- Wet Prairie (Southern)
- Willow - Dogwood Shrub Swamp

## Ecological Evaluations:

Blaine Preserve  
Grow 23 Prairie  
Twin Lakes Site

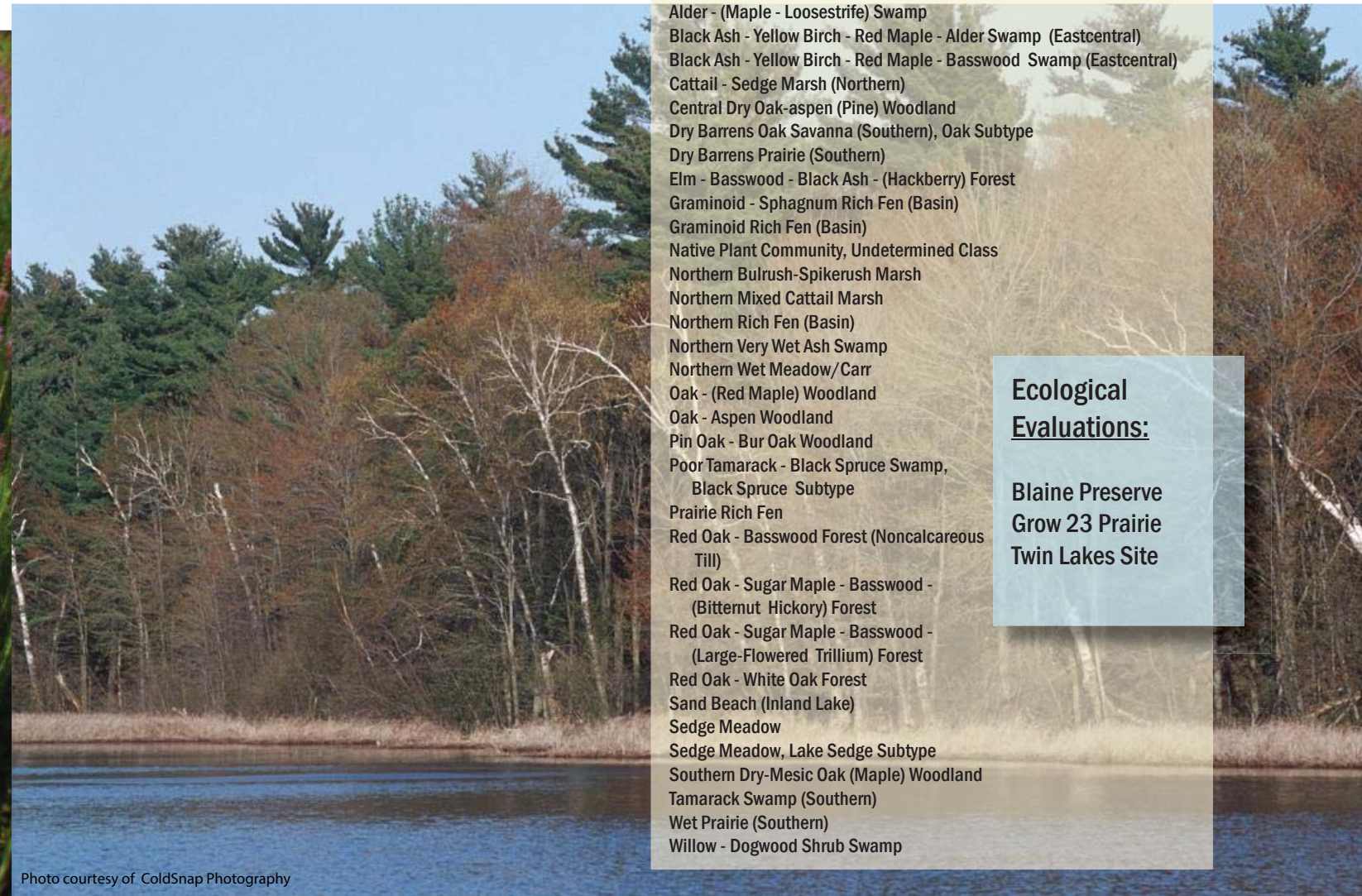
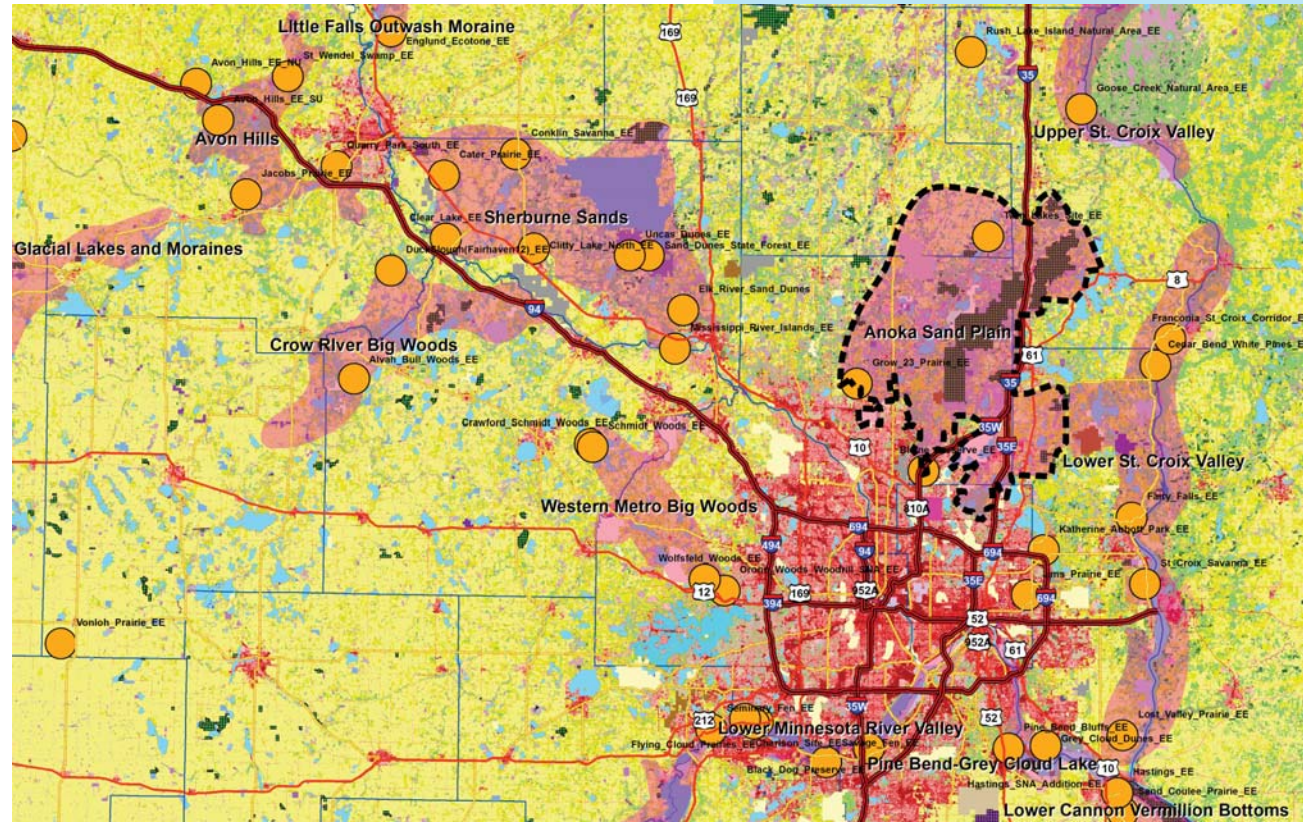


Photo courtesy of ColdSnap Photography

Photo courtesy of Kelly Randall

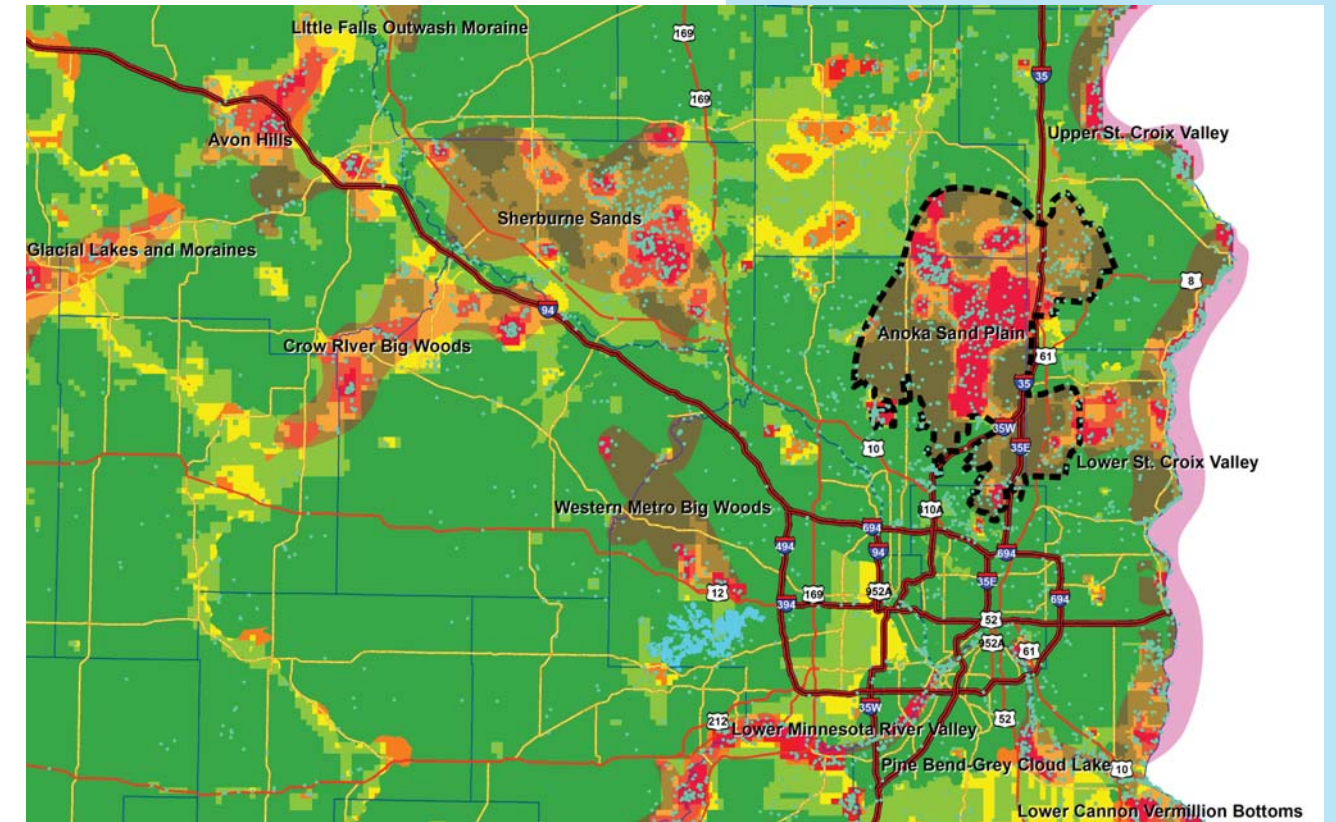
# Anoka Sand Plain

Element Occurrences, Land Cover, Public Ownership
















# Anoka Sand Plain

Marxan Prioritization, Element Occurrences



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

## 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