

Andrew Hulin Illinois Department Natural Resources Office of Resource Conservation 1 Natural Resources Way Springfield, IL 62702

The Kishwaukee River Ecosystem Partnership (KREP) respectfully requests that the boundaries of the Crow's Foot Marsh – Coon Creek Kishwaukee River Conservation Opportunity Area (COA) as defined in the THE ILLINOIS COMPREHENSIVE WILDLIFE CONSERVATION PLAN & STRATEGY (THE PLAN) be amended to reflect the conservation priorities developed through the watershed planning work that KREP completed in 2006. KREP also requests the name be changed to the Kishwaukee River COA. KREP is confident that the proposed COA boundary encompasses those areas that are currently being managed in support of the plan, as well as areas that are IMPERATIVE for its implementation and that meet ecological objectives.

KREP was formed around the Kishwaukee River Resource Rich Area in 1997 as part of the Conservation 2000 and Critical Trends and Assessment Program established by the Illinois Department of Natural Resources (IDNR). A diverse set of watershed stakeholders serve on the board of KREP, representing resource agencies like County Conservation and Forest Preserve Districts, non profit land conservancies, NRCS/SWCD's and Park Districts, as well as municipalities, landowners and academia (NIU).

In 2006, KREP published the results of an extensive Natural Resource Inventory and Strategic Plan for Habitat Restoration and Conservation for the Kishwaukee River Watershed (See attached documents). KREPS Strategic plan and report (available online: http://krep.bios.niu.edu) includes all of the mapped natural resource information available within the watershed at the time it was developed. KREP collected, created or modified a 5 GB Geographic Information Systems (GIS) spatial database of this natural resource information. Similar to the list of Species in Greatest Need of Conservation for Illinois the plan identified specific species and habitat protection and restoration opportunity areas, known Target Species Habitat Restoration Areas Map. These areas provide the large contiguous habitat for imperiled wildlife and included protected as well as unprotected natural areas on private lands. Private land stewardship is critical to habitat protection and restoration efforts in the watershed and KREP will continue to engage and collaborate with private landowners on restoration projects. These areas directly address THE PLANS's Management Guidelines for the Northeastern Morainal Natural Area Division. At the time it was developed the KREP Target Species list included species from the U.S. Fish and Wildlife Species of Concern List, U.S. Fish and Wildlife Birds of Conservation Concern List, Partners in Flight Priority Bird Species, Illinois Natural Heritage Database, McHenry County Conservation District, Illinois Natural History Survey and the Illinois Threatened and Endangered species list for the Kishwaukee Watershed.

KREP's Strategic Plan uses the watershed framework for planning for resource conservation as well as stakeholder engagement, recognizing that when working with a high quality river system like the Kishwaukee, the success of downstream projects is directly linked to actions in the watershed's upper reaches. We favor retaining the watershed framework for the update to the COA. Attached you will find a hard copy map of the proposed Kishwaukee River COA as well as a CD with the spatial data of the proposed COA for your review. Thank you for your consideration of this information, we are available to discuss this material at your convenience.

Yours Sincerely

Terry Hannan, President Kishwaukee River Ecosystem Partnership DeKalb County Forest Preserve District, Executive Director

# RESOURCES WITHIN THE KISHWAUKEE RIVER WATERSHED COA BOUNDARY EXPANSION

# ....Locations with significant existing or potential wildlife habitat:

- FROM THE ILLINOIS COMPREHENSIVE WILDLIFE CONSERVATION PLAN & STRATEGY:
  - "The Northeastern Morainal Natural Division has many sizable, potentially good quality habitats protected by public and private landowners."
  - "With such diverse wetlands, prairie, forest, savanna, lakes, and streams, the Northeastern Morainal Natural Division hosts the greatest biodiversity in Illinois."

# • TERRESTRRIAL HABITAT AREAS WITHIN THE COA:

- Over 17,000 acres of Protected Natural Areas (Forest Preserves, Conservation Districts, NLI, Land Conservancy of McHenry County and IDNR lands).
- 252 acres of Nature Preserves (located within Protected Natural Areas) that provide critical habitat for the Species of Conservation Concern.
- 3140 acres of Illinois Natural Areas Inventory Sites (including the Kishwaukee River and Rush Creek)

 64,655 acres of habitat identified from the Target Species Habitat analysis (using 1999 land Cover) mostly on private lands.

- 122 Acres of Deep Marsh/Emergent Wetland
- 6608 Acres of Floodplain Forest
- 1472 Acres of Open Water
- 8347 Acres of Partial Forest / Savanna
- 42255 Acres of Rural Grassland
- 192 Acres of Seasonally Temporarily Flooded Emergent Wetland
- 1689 Acres of Shallow Marsh / Emergent Wetland
- 136 Acres of Shallow Water Wetland
- 3833 Acres of Upland Forest

## • SPECIES OF CONCERN WITHIN THE COA:

- 75 species of Birds that regularly occur in the Kishwaukee basin that are on the list of 95 Bird Species in Greatest Need of Conservation for Illinois.
- Whooping Cranes stopped along the Kishwaukee River near Lib Conservation Area in Boone County during migration.

Stilt Sandpiper	Savanna Sparrow	Foster's Tern	
Acadian Flycatcher	American Black Duck	Great Egret	
American Bittern	Lesser Scaup	Short-eared Owl	
Bald Eagle	Canvasback	Grasshopper Sparrow	
Barn Owl	Broad winged hawk	Henslow's Sparrow	
Bell's Vireo	Common Night Hawk	Kentucky Warbler	
Bewick's Wren	Marsh Wren	King Rail	
Black Crowned Nigh Heron	Northern Flicker	Least Bittern	
Black Rail	Prairie Warbler	Least Tern	
Black-billed Cuckoo	Willow Flycatcher	Le Conte's Sparrow	
Black Tern	Rusty Blackbird	Little Blue Heron	
Blue-winged Warbler	Hooded Merganser	Loggerhead Shrike	
Bobolink	Connecticut Warbler	Northern Bobwhite	
Brown Creeper	American Golden Plover	Northern Harrier	

Brown Thrasher	American Woodcock	Osprey	
Cerulean Warbler	Ovenbird	Peregrine Falcon	
Chimney Swift	Greater Yellow Legs	Piping Plover	
Common Moorhen	Buff Breasted Sandpiper	Pied-billed Grebe	
Common Tern	Whip-poor-will	Prothonotary Warbler	
Dickcissel	Wilson's Phalarope	Red-headed Woodpecker	
Field Sparrow	Wood Thrush	Red-shouldered Hawk	
Yellow Billed Cuckoo	Worm-eating Warbler	Sandhill Crane	
Yellow Crowned Night Heron	Swainson's Hawk	Sedge Wren	
Yellow Headed Blackbird	Upland Sandpiper	Short-billed Dowitcher	
Yellow Rail	Snowy Egret		

 8 species of Mussels that occur in the Kishwaukee basin that are on the list of 57 Mussel Species in Greatest Need of Conservation for Illinois.

Slippershell	Black Sandshell	
Spike	Creek Heelsplitter	
Butterfly	Flutedshell	
Rainbow	Ellipse	

 9 slippershell mussels (SE) were found by Roger Klocek of Openlands in 2008 in the Upper Kishwaukee River subwatershed (report and vouchers submitted to INHS)

 Results of 2009 Mussel Survey of Kishwaukee River North and South Branches and Piscasaw Creek with IDNR staff.

Species	Totals
Black sandshell	39
Creek heelsplitter	6
Creeper	23
Cylindrical papershell	0
Elktoe	91
Ellipse	2
Fatmucket	83
Fawnsfoot	1
Flutedshell	129
Fragile papershell	21
Giant floater	13
Mucket	539
Pimpleback	69
Pink papershell	2
Plain pocketbook	783
Paper pondshell	1
Round pigtoe	2
Slippershell	0
Spike	0
Threeridge	4
Wabash pigtoe	32
White heelsplitter	<u>36</u>
Number of individuals	1421
Total species	19

14 species of fish that occur in the Kishwaukee basin on the list of 80 Fish Species in Greatest Need of Conservation for Illinois.

Blacknose Shiner	Brown Bullhead	Northern Pike	Ozark Minnow
Weed Shiner	Largescale stoneroller	American Brook Lamprey	Rosyface Shiner
Iowa Darter	Brook Stickleback	Smallmouth Bass	
Blacknose dace	Central Mudminnow	So Redbelly dace	

 7 species of Mammal that occur in the Kishwaukee basin on the list of 20 Mammal Species in Greatest Need of Conservation for Illinois.

River Otter	Muskrat	Badger
Gray Wolf	Franklins Ground Squirrel	
Grey Fox	Least Weasel	

 24 species of butterflies that occur in the Kishwaukee basin that are on the list of 347 Insect Species in Greatest Need of Conservation for Illinois.

Aphrodite	Swamp Metalmark	Silvery Blue
Ottoe Skipper	Gorgone Checkerspot	Dakota Skipper
Regal Fritillary	Harris Checkerspot	Indian Skipper
Dakota Skipper	Silver Bordered Fritillary	Broad Winged Skipper
Olympia Marble	Leonard's Skipper	Byssus Skipper
Two Spotted Skipper	Cobweb Skipper	Edward's Hairstreak
Dreamy Dusky Wing	Purplish Copper	
Mottled Dusky Wing	Karner Blue	

 5 species of Amphibians/Reptiles that occur in the Kishwaukee basin are on the list of 37 Amphibian/Reptile Species in Greatest Need of Conservation for Illinois.

Blanding's Turtle	Pickerel Frog
Massasauga snake	Mudpuppy
Smooth Green Snake	

## PREVIOUSLY IDENTIFIED HIGH QUALITY RESOURCE REPORTS/PRIORITY AREAS

- The 1991 Biologically Significant Streams Report identified The Main stem of the Kishwaukee River upstream of the confluence with the South branch up to the Boone/McHenry Co Line as biologically significant.
- The most recent Evaluation of the Streams of Illinois Based on Aquatic Biodiversity Report Includes portions of Beaver Creek, North Branch of the Kishwaukee (tributary), and South Branch of the Kishwaukee as Biologically Significant.
- Critical Trends Assessment Report: Phase II, Inventory of Resource Rich Area in Illinois identified 64,386 acres of the Kishwaukee River Watershed as Resource Rich.
- o The Nature Conservancy Kishwaukee River Portfolio Area
- Chicago Wilderness An Atlas of Biodiversity
- Strategic Sub-Watershed Identification Process (SSIP)
- "The Coon Creek/Mosquito Creek Natural Communities Assessment of floral and faunal species and a Community assessment along two creek corridors." Steve Weller
- o <u>Crows foot Marsh Feasibility Study SmithGroup JJR Inc</u>
- Coon Creek Restoration Randy Stowe
- Piscasaw Creek USEPA

# ....Partners are willing to plan, implement and evaluate conservation Actions and where financial and human resources are available:

- FROM THE ILLINOIS COMPREHENSIVE WILDLIFE CONSERVATION PLAN & STRATEGY:
  - "Many partnerships with a multitude of public and private conservation organizations and institutions exist in the Northeastern Morainal Natural Division. Restoration and management goals for all major habitat types are being targeted by these partners".
- KREP has accomplished over 2.4 million dollars in projects from throughout the watershed, leveraging nearly half of those public and private funds.

C2000 Funding	C2000 Funding \$1,	
More Leveraged	lore Leveraged \$1,125,1	
TOTAL	\$2,	346,087.64
CONSERVATION 2000 Accomplishments in Kishwaukee River Ecosystem Partnership		
Acres Restored		710.2
Land Acquired (acres)		441.2
Feet of Stream Restored		14,060
Sites Monitored		18
Students Educated		5,800
Teachers Trained		42
Volunteers Enlisted		2,141
Other Citizens Contacted		17,257

## • PROJECTS OF NOTE WITHIN THE COA BOUNDARY:

- Clear Water Legacy 384 Acres of Conservation Easements on bottomland forest along the South Branch of the Kishwaukee River held by the Natural Land Institute funded by Conservation 2000.
- CMAP and KREP developed Subwatershed Plans to meet the IEPA 319 Planning Criteria Upper Kishwaukee River, Lawrence Creek and Beaver Creek.
- o Belvidere Dam Fish Passage Study
- Winnebago-Boone County Greenways Map Updates 2005+2010
- DeKalb County Greenways and Trails Plan Creation
- Route 47 Kishwaukee River Corridor Project
- Village of Union, Soil Water Action Team Planning Project
- o Environmental Defenders of McHenry County Sustainable Development Guide
- McHenry County Local Legacy Planning Project
- Preserving the Kishwaukee Watershed: Guiding development in the Marengo Union area Planning Project
- o U.S. Army Corps of Engineers-Kishwaukee Assessment & Coon Creek Project
- Biological surveys related to waste water treatment plant expansions Lakewood, City of Belvidere, Poplar Grove and Woodstock
- Anti-Degradation Studies Huntley, Lakewood

- Presentations on KREPs Strategic Plan given to Local Units of Government and Organizations many of the following units of government and organizations have adopted or at least referenced our strategic plan in their planning documents.
- Gilberts Planning
  Commission
- Village of Union Board
- Village of Cherry Valley
- Village of Maple Park -Board
- City of Sycamore Board
- Village of Virgil Board
- Village of Capron Board
- Village of Kirkland -Board
- Village of Lakewood Board
- City of Marengo- Board and staff
- Belvidere Boone County Planning Committee
- Village of Davis Junction
  Board
- Village of Burlington Board
- Village of Poplar Grove Board and residents
- Candlewick Lake Board
- Village of Hampshire Board

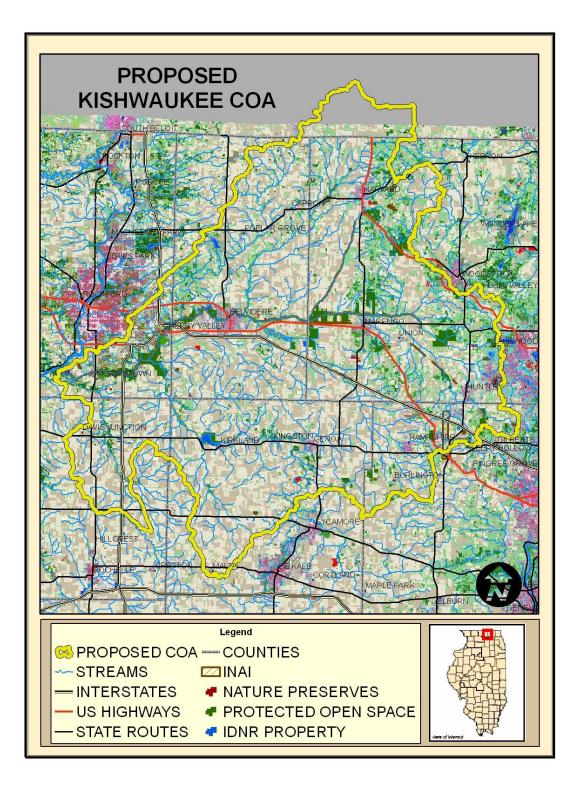
- McHenry Co. Marengo Township- Trustees
- McHenry Co. Riley Township
- McHenry Co. Seneca Township – Trustees
- McHenry Co. Coral Township
- Town of Genoa Board
- Village of Kingston Board
- City of Woodstock Board
- o Belvidere Rotary
- IDNR Region 1 Staff
- o IDNR Region 2 Staff
- DeKalb County SWCD Board
- Illinois Environmental Protection Agency – Bureau of Water staff, Northeastern Illinois Planning Commission,
- Metropolitan Planning Council
- Campaign for Sensible Growth

- McHenry County College Biology and Earth Science Departments, Defenders of Wildlife Water Resources Committee
- Chicago Wilderness
- NIGPC Northern Illinois Groundwater Protection Committee, Black Hawk Sierra Club
- Chicago Wilderness Watersheds Conference
- Defenders of Wildlife Membership
- Izaac Walton League
- McHenry County Defenders
- Kishwaukee Solduc
  Group of the Sierra Club,
- McHenry County Regional Planning Commission

# ....Where conservation is motivated by an agreed-upon conservation philosophy and set of objectives:

The Strategic Plan for Habitat Conservation and Restoration in the Kishwaukee River Watershed, completed in 2006, is the agreed upon document with clear goals and objectives to guide habitat restoration in the watershed. As listed above the Strategic Plan has been noted in local planning documents like: McHenry County 2030 Comprehensive Plan, Boone County Conservation Districts Long Range Plan and the Marengo – Union Area Planning Project just to name a few. KREP's Strategic Plan addresses nearly all of the Actions outlined in the Streams, Forest, Farmland/Prairie, Wetlands, Invasive Species, Land/Water Stewardship, and Green Cities Campaigns in THE PLAN.

- Major Habitats & Challenges from THE ILLINOIS COMPREHENSIVE WILDLIFE CONSERVATION PLAN & STRATEGY Addressed in KREPs STRATEGIC Plan
  - Forest
    - Fragmentation/edge effects
    - Woody exotics, exotic insect pests
    - Excessive deer browse,
    - Drainage diversion and flood water
  - Open Woodland/Savanna
    - Fragmentation
    - Lack of fire
    - Woody exotic invasion
  - Grassland
    - Fragmentation
    - o Dominance by invasive species, woody species or natural succession to forest
  - Wetland
    - o Drainage issues including de-watering, impounding water too long, urban run-off,
    - Filling, sedimentation
    - o Exotic species including reed canary grass, phragmites, purple loosestrife
  - Streams
    - o Urbanization: increased point and non point sources pollution
    - o Exacerbated nutrient levels
    - o Increased stream flow from higher imperious surface coverage,
    - o Dams



# **KREP COUNCIL MEMBERS 2010**

PRESIDENT DeKalb County Forest Preserve District # Terry Hannan, Executive Director

VICE PRESIDENT Private Landowner, 2010 – 2012 Rick Hoffman

TREASURER Natural Land Institute # Jerry Paulson, Executive Director

Boone County Soil & Water Conservation District # OPEN

Boone County Conservation District # Dan Kane, Executive Director

McHenry County Conservation District #, John Kremer, Director of Operations

Northern Illinois University, 2010-2012 Donna Prain, Biology Department-

McHenry Co. Farm Bureau #

Open Winnebago Co. Forest Preserve # Tom Hartley, Deputy Director of Development

Environmental Defenders of McHenry County # Neil Sachs

Land Conservancy of McHenry County # Lisa Haderlein, Executive Director

McHenry County Soil & Water Conservation District # Ed Weskerna, District Manager

Openlands # Ders Anderson, Greenways Director

Rockford Park District 2010-2012 Nathan Hill, Natural Areas Maintenance Coordinator

Sierra Club – 2010 -2012 Dr. Cindy Skrukrud

# - Permanent Council Member 20##-20## Term of non Permanent members

# KREPS TARGET SPECIES LIST DESCRIPTION AND METHODOLOGY: EXCERPT FROM PAGE 32 OF THE REPORT ON NATURAL RESOUCES AND HABITAT IN THE KISHWUAKEE RIVER WATERSHED

## SPATIAL ANALYSIS OF WATERSHED LANDCOVER FOR RESTORATION OF CRITICAL HABITAT AREAS

In addition to the general watershed recommendations in this document and the subwatershed-specific recommendations in the attached reports, analysis was also performed to identify habitat restoration areas suitable for those species in the watershed at greatest risk of extirpation (becoming extinct in the watershed). A Target Species List and set of maps was derived from existing analyses and reports detailing spatial habitat requirements for unique native species inhabiting the watershed. This list and accompanying maps are intended to serve as tools for the partnership, resource agencies and public to identify areas that could provide habitat for these species. See Figure 28.

Watershed protection and preservation requires a commitment from all stakeholders in the watershed, from the agency/organization level all the way down to the individual landowners. The maps presented in this section are not to be interpreted as parcels targeted for acquisition or condemnation, rather they are intended to help both public and private stakeholders identify which sections of the watershed are in the ideal locations to provide the habitat features essential to re-establishing or maintaining the critical wildlife species of the watershed. These areas should receive some degree of special consideration for grant funding of private and public habitat restoration projects due to the likelihood they will provide the greatest benefit to these target species. KREP hopes these maps can help raise awareness of the habitat areas so that private land stewardship and existing land protection organizations can work in cooperation to increase the amount, quality and connectedness of habitat in the Kishwaukee River Watershed. Doing so will only help to preserve the richness and appealing features that have brought us to this unique part of the state.

#### **Target Species List Development**

The KREP Target Species list on Page 34 is a compilation of existing species lists from many sources and databases. Care was taken to exclude non-endemic (non-native to the watershed) or rare migrant species (like some bird species). The KREP Target Species list included species from the U.S. Fish and Wildlife Species of Concern List for Region 3, U.S. Fish and Wildlife Birds of Conservation Concern List, Partners in Flight Priority Bird Species for the Dissected Till Plain, Prairie Peninsula, and Upper Great Lakes Regions. The list also includes collection databases information from the Illinois Natural Heritage Database, McHenry County Conservation District, Illinois Natural History Survey and the 1999 Illinois Threatened and Endangered species list for the Kishwaukee Watershed. (State T&E Species in Bold).

The species are on these lists because their populations are in decline or unstable and, without protection they will continue to disappear. It was not feasible in the scope of this analysis to cover each species individually; therefore we have tailored the general habitat recommendations for species guilds listed below.

#### **KREPs Target Species List**

BIRDS Acadian Flycatcher American Bittern (SE) Bald Eagle (SE,FT) Baltimore Oriole Barn Owl (SE) Bell's Vireo Bewick's Wren (SE) Black Crowned Nigh Heron (SE) Black Rail Black-billed Cuckoo Black Tern (SE) Blue-winged Warbler Bobolink Brown Creeper (Removed from ST in 2004) Brown Thrasher Cerulean Warbler (Added as ST in 2004) Chimney Swift Common Moorhen (ST) Common Tern (SE) Dickcissel Double Crested Cormorant (ST) Eastern Kingbird

Eastern Phoebe Eastern Wood Pewee Field Sparrow Foster's Tern (SE) Golden Winged Warbler Great Egret (ST) Greater Prairie Chicken Grasshopper Sparrow Great Crested Flycatcher Henslow's Sparrow (SE) **Kentucky Warbler** King Rail (ST) Least Bittern (SE) Least Tern Le Conte's Sparrow Little Blue Heron (SE) Long Eared Owl (SE) Loggerhead Shrike (ST) Louisiana Waterthrush Northern Bobwhite Northern Harrier (SE) Northern goshawk **Orchard Oriole** Osprey (SE) Peregrine Falcon (SE,FE) **Piping Plover** Pied-billed Grebe (ST) **Prothonotary Warbler** Red-headed Woodpecker Red-shouldered Hawk (SE) Sandhill Crane (SE) Sedge Wren Sharp-shinned Hawk (SE)

Short-billed Dowitcher Short-eared Owl (SE) Snowy Egret (SE) Stilt Sandpiper Swainson's Hawk (SE) Upland Sandpiper (SE) Veery (ST) Whip-poor-will Wilson's Phalarope (SE) Wood Thrush Worm-eating Warbler Yellow Billed Cuckoo Yellow Crowned Night Heron (ST) Yellow Headed Blackbird (SE) Yellow Rail (SE) REPTILES **Blanding's Turtle** Massasauga snake MUSSELS Slippershell Mussel Spike Butterfly Rainbow FISH **Blacknose Shiner** Weed Shiner Iowa Darter MAMMALS **River Otter** Gray Wolf INSECTS

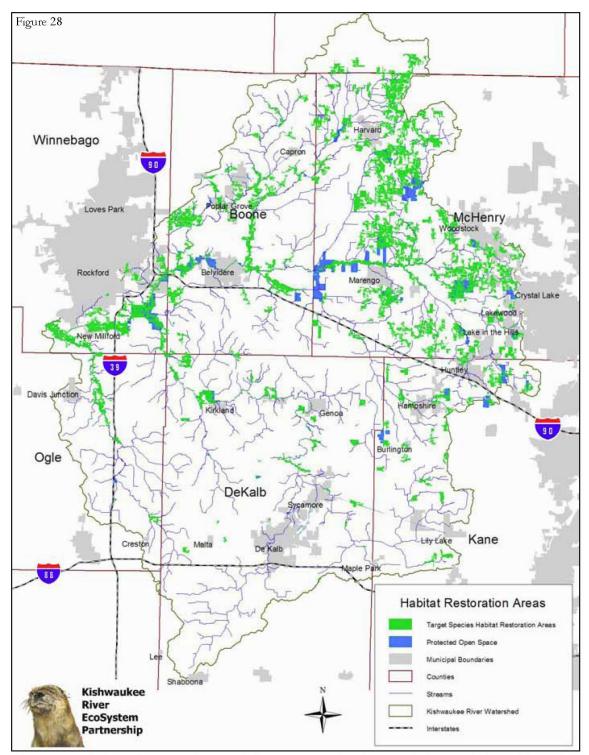
Melissa Blue Ottoe Skipper **Cobweb Skipper** Dakota Skipper PLANTS American Dog Violet Balsam poplar Beaked sedge Black-sided rice grass Bog bedstraw Common bog arrow grass Crawe's sedge Dragon wormwood Few-seeded sedge Forked aster Ground juniper Hairy marsh yellow cress Hills thistle Narrow-leaved sundew Northern gooseberry Pale vetchling Plains buttercup Prairie bush clover Queen of the prairie **Red-berried elder Richardson's Rush** Slender bog arrow grass Small yellow lady's slipper Speckled alder White lady's slipper Woolly milkweed

## **GENERAL HABITAT REQUIREMENTS**

Each species on KREPs Target Species List was grouped into several general habitat types Forest (Riparian, Upland and, Savanna), Grassland (Open and With Shrubs) Wetland and Aquatic. Since bird habitat can serve as an umbrella for other terrestrial species data, they were the primary focus of these recommendations.

## **Analytical Procedure**

The maps were created in Arc View GIS by using the KREP GIS database layers, specifically the 1999 Land Cover file from IDNR. Forest areas, rural grassland areas and wetland areas were saved as separate land cover layers. For each land cover layer the polygons were manually unioned together (or merged together) to create larger contiguous tracts that accurately reflect the size of the polygons. Then the layers were queried: (Forest areas >100 ac, Rural Grassland areas >100ac and Wetlands >10ac) and saved as separate layers. The GIS files derived from the analysis can be found in the habitat restoration file folder on the CD/DVD of GIS information available from KREP. The areas designated on the maps are not the subject of acquisition or control. They are a graphic representation of the areas KREP feels are critical to supporting the variety of plant and animal life needed to maintain biodiversity in the watershed. Through both public and private land stewardship, KREP hopes to enhance and restore these areas to ensure the long-term preservation of the Target Species.



Above: Watershed map illustrating the sum of all priority areas (significant wetlands, grasslands, and forests)