

Office of Resource Conservation

State of Illinois

Grant Narrative

Project Number: T-81-D-1

Program Code: TBA

Project Title:

Statewide Public Lands Native Wetland Wildlife Habitat Restoration Project

Background:

Wetlands were once a dominant feature of the Illinois landscape, with an estimated 8.2 million acres in the state. Statewide, wetlands have been reduced by more than 90%. If one excludes floodplain forests (frequently classed as wetlands), the remaining natural wetlands now occupy about 1% of the Illinois landscape. Only 6,800 acres of wetlands (0.05%) are graded as high quality; however these sites too are at risk or declining in quality.

Of the wetlands remaining in Illinois, most have been highly degraded due to a variety of factors including siltation, altered hydrological conditions (both too little and too much water), and invasive plant species. Marsh and marsh-like wetlands, in particular, are scarce and often highly degraded, yet are critical for many wetland wildlife species (including many Species in Greatest Need of Conservation). Invasive exotic plants, including purple loosestrife, Eurasian milfoil, common reed, and reed canary grass, have reduced biodiversity and degraded the habitat structure of many wetlands. Remaining wetlands are increasingly isolated from other wetlands and adjacent habitats. Sedimentation has reduced wetland volume. Changes in hydrology and drainage have starved some wetlands of water and overwhelmed others.

Wetland bird and insect communities are especially sensitive to changes in hydrology, plant species composition and structure, fragmentation, and outright habitat loss. While area-sensitivity per se appears to be less pronounced in wetland birds (vs., say, grassland and forest birds), the loss of wetland complexes (several wetlands in within given landscape) has greatly affected wetland birds. Wetland complexes provided multiple wetland habitat types (e.g. open, closed and hemi- marsh) in a localized area as well as opportunities to track life history needs accompanied by changes in water levels, rainfall, and local drought. Isolated wetlands offer no such safety net to wetland wildlife that settles there.

Wetlands provide a number of valuable ecological services in addition to supporting diverse and occasionally phenomenally abundant wildlife populations and assemblages. By holding drainage waters, wetlands help to dampen changes in water levels in rivers and streams, reduce flooding, and recharge groundwater supplies. As natural locations where water and nutrients collect, wetlands are highly productive in plant and animal life. Similarly, by holding drainage waters and supporting rapid plant growth, wetlands improve water quality by trapping water-borne sediments and filtering pollutants and nutrients.

A number of federal, state, and local regulations have emerged to protect remaining wetlands and mitigate for losses. Illinois' Interagency Wetlands Act of 1989, for example, outlined a goal of no net loss of wetland acres or functional value caused by to state-supported activities. In addition to mitigation regulations, many agencies, organizations and programs encourage the voluntary restoration of wetlands. In general, restored wetlands have

lesser ecological function than natural wetlands, though restoration techniques are improving. A number of large-scale partnership wetland restoration projects are underway in Illinois, such as the Cache River project in southern Illinois.

Wetlands have been defined in many ways depending on the needs of the classification and expected user. From specific natural community types to ‘land with hydric soil’, the term wetland can cover a wide range of on-the-ground conditions.

For the purposes of this project, wetland refers to natural communities such as marshes, swamps, oxbow or backwater lakes and ponds, seeps, springs, bogs, pannes, and fens as well as their functional equivalents (e.g. restored backwater lakes). In addition, wetland in this project will also refer to floodplain forest. While floodplain forests are classified within the Forest habitat type in the Illinois Wildlife Action Plan (IWAP), these habitats are also water-driven, are impacted by similar factors (e.g. altered hydrology) and frequently encompass other more ‘classical’ wetland habitat types within their landscapes (e.g. shrub swamps, oxbow lakes). Therefore, it is more efficient to collectively address floodplain forest and floodplain forest wildlife as part of a larger wetland project.

The General Assembly defines Illinois Department of Natural Resources’ (IDNR) powers and duties in Article 805 of the Civil Administrative Code 20 ILCS 805/805-1 et seq. which provides the framework for IDNR operations. Article 805 states that “the Department has the power to take all measures necessary for the conservation, preservation, distribution, introduction, propagation, and restoration of fish, mussels, frogs, turtles, game, wild animals, wild fowls and birds” (20 ILCS 805-805-100). Section 805-225 authorizes the conservation of natural and scenic areas, and Section 805-225 authorizes the development of recreational areas and facilities.

The Illinois Wildlife Action Plan (IWAP) was approved by the U. S. Fish and Wildlife Service in 2005 (<http://dnr.state.il.us/orc/wildliferesources/theplan/home.htm>). The Plan is organized around Campaigns - sets of conservation actions, programs and strategies that seek to address the most widespread and the most urgent issues affecting wildlife and habitats, in an efficient, effective, and comprehensive manner. Four of these Campaigns are habitat-based to achieve both broad and specific conservation goals for Forests, Prairies, Wetlands, and Streams. The Plan identifies habitat areas that demonstrate the greatest conservation need and potential and establishes specific conservation goals for the enhancement and protection of these habitats and associated wildlife. Further, the Plan outlines 654 Species in Greatest Need of Conservation, including, 433 invertebrates, 79 fish, 14 amphibians, 23 reptiles, 85 birds, and 20 mammals.

Need:

The Statewide Public Lands Native Wetland Wildlife Habitat Restoration Project addresses conservation needs of the IWAP Wetland Campaign and the floodplain forest component of the Forest Campaign. The purpose of this project is to enhance and increase native wetland habitat on IDNR-owned public lands in Illinois in order to maintain and secure associated and characteristic native wildlife populations in these habitats. Secondly, the project will seek to enhance and expand functionally equivalent wetland habitats that support characteristic native wildlife species with emphasis on Species in Greatest Need of Conservation (Illinois Wildlife Action Plan, 2005).

In addition to these species- and habitat-specific benefits, the project addresses the following Goals and Actions of the Illinois Wildlife Action Plan (IWAP pages listed):

1. Habitats Goals (pp. 46 – 48)
  - a. Wetland Habitat Goals 1, 2, 3, 7, and 8

- b. Grassland Habitat Goals 1, 2, and 6
- c. Forest Habitat Goal 2
- 2. Campaigns Actions (pp. 67 – 87)
  - a. Wetland Campaign Actions 1a, 1b, 1c, 1d, 1e, 1f, 1g, 1i, 2b, and 2c (pp.78-79)
  - b. Forest Campaign Actions 1d, 1e, 2a (pp. 68-69)
  - c. Invasive Species Campaign Actions 3b (p. 83)
  - d. Land & Water Stewardship Campaign Actions 2a, 2b, 2c (p. 86)

This project will further address habitat-specific actions on most Natural Divisions in Illinois (IWAP, 2005; p. 119), especially those listed below:

- 1. Coastal Plain (p. 121)
- 2. Grand Prairie (p. 130)
- 3. Northeastern Morainal (p. 166)
- 4. Wabash Border (p. 221)

Finally, the project will enhance and increase habitat for Species in Greatest Need of Conservation listed in Appendix A.

#### Objectives:

By the end of this grant period, this project will maintain, enhance and develop 17,544 acres of wetland habitat and their adjacent buffers using ecosystem-based natural community and habitat management practices on 11 IDNR-owned and -managed lands statewide (Figure 1, Table 1 below). These lands will include State Parks (SP), State Natural Areas (SNA), Illinois Nature Preserves under IDNR ownership (NP) and Land and Water Reserves under IDNR ownership (LWR).

Funds approved through this grant will be used to expand the restoration and stewardship of high quality wildlife habitats on these publically-owned lands to meet the goals and objectives set forth in the Illinois Wildlife Action Plan (IWAP). The focus of this initiative is suitable IDNR-owned sites. This primarily includes sites that 1) are listed on the Illinois Natural Areas Inventory, 2) provide suitable habitat for threatened and endangered species, 3) provide suitable habitat for multiple species in greatest need of conservation, 3) are protected in perpetuity through an Illinois Nature Preserve program, or 4) are within a designated Conservation Opportunity Area.

Types of activities to be accomplished under this project include habitat protection, habitat management, surveys to locate extant populations, monitoring effects of management practices and improving natural resource databases. The management and restoration of rare habitat types that contain unique assemblages of wildlife will also be targeted among different Natural Divisions and Section – Illinois’ equivalent of physiographic divisions (IWAP, 2005 p.119).

#### Expected Results or Benefits:

Focused natural resource management on publically-owned lands will insure that long-term IWAP and IDNR goals can be achieved, resulting in permanently-improved habitat conditions and enhanced wildlife populations for rare and declining wetland species. Such lands will be critical components of any effort to recover rare species as well as to prevent declining species from reaching perilously low numbers, necessitating more intensive and expensive conservation efforts.

Improving wetland habitat conditions on project sites will maintain and enhance targeted wildlife species populations, achieving the primary goal of the IWAP. Large land holdings in the public trust are the most important component of any long-term conservation action.

Benefits of this project will include:

- Maintained and enhanced Wetland habitat types and the associated Species in Greatest Need of Conservation to ensure their long-term survival in Illinois.
- Maintained and improved habitat structure, wetland complexes, and large habitat blocks that support area-sensitive wildlife species; benefits that, with rare exception, are best achieved on public lands.
- Enhanced habitat for various non-target species of wildlife that will benefit from implemented conservation actions. Many wildlife species that are not Species in Greatest Need of Conservation will also benefit from habitat conditions created and maintained under this project.
- Actions taken under this project will implement effective and efficient practices for improving habitat conditions on the ground and will serve as models for other public landowners, non-governmental organizations, and private landowners state-wide.

#### Approach:

Programmatically, the IDNR Public Lands - Wetland Wildlife Habitat Restoration Project will be modeled after its sibling "Public Lands Prairie and Savanna Wildlife Habitat Restoration Project" (T-76-D). Both these efforts are modeled on the highly successfully federal aid project "Statewide Public Lands Wildlife Habitat Development Project" (W-76-D). This is a departure from older IDNR Public Lands SWG projects (pre-2010) and is designed to more efficiently and comprehensively address wildlife management concerns and needs based on the IWAP Habitat Campaigns. This revised structure will also permit more focused efforts on wetland Conservation Opportunity Areas as well as facilitate necessary monitoring and follow-up management.

The Project will implement management actions on entire sites or major areas of sites that are focused specifically on wetland habitats and associated Species in Greatest Need of Conservation. Many of these sites are currently part of wetland COAs as defined in the Illinois Wildlife Action Plan. It is anticipated as this project is amended, more sites will be included in the project, including the remainder of the wetland COAs. This will create a single federal aid project that addresses the habitat needs of wetland wildlife, especially SGNC, on public lands statewide.

Sentinel and implementation monitoring (sensu IWAP, 2005; p.98-99) will be carried out on a regular basis as part of overall project management. Effectiveness monitoring will be more efficiently and effectively carried out under agency-wide protocols which are beyond the scope of this single project and are more appropriately addressed in conjunction with the larger IWAP implementation and coordinated with conservation partners.

Within this project, IDNR and its partners will use the following conservation practices to maintain existing and realize improved high-quality wetland habitats and associated wildlife benefits (Table 2). The IDNR's annual plan of work process, which includes site staff from the Office of Land Management and biologists from the Office of Resource Conservation, will be used for each of the sites listed in Table 1 to annually define the site

specifics (i.e. location, timing, design, construction schedule, funding, workforce, etc.) for the following conservation practices.

- Hydrology Restoration

Details – The restoration of natural or manageable hydrologic conditions can correct degradation in wetlands and the loss of wetland features (e.g. ephemeral pools) important to some Species in Greatest Need of Conservation, most notably amphibians, crayfish, and some invertebrates. Hydrology restoration may also include the hydrologic reconnection of previously separated sites, installation of water control structures, removal of sediment and manipulation of levees or drain tiles (all within applicable laws and with necessary permits; see section “Compliance”, paragraph 4). All planning, implementation, and monitoring/evaluation activities will be included in this practice including groundwater monitoring.

Until any projects are designed, we will not know the extent of the permits required. Our budget and time frame puts significant limits on the magnitude of any such projects. We are not thinking about major projects; we are addressing local hydrological conditions to improve site-specific hydrology.

Restoration of vernal ephemeral pools will be limited to the removal of previously placed fill or drain tiles in existing wetland basins, placement of water control structures, and/or development of ephemeral or vernal pools (*A Guide to Creating Vernal Ponds* (Biebighauser 2002), *Habitat Management Guidelines for Amphibians and Reptiles of the Midwest* (Partners in Amphibian and Reptile Conservation 2002) and the *Illinois Landowner’s Guide to Amphibian Conservation* (Szafoni et al. 2002). The maximum surface area of disturbance for the restoration of ephemeral pools will be less than 5 acres with no more than 5 wetlands restored by the removal of fill at any project site.

- Prescribed Fire

Details - Prescribed fire involves the planned application of fire to meet specific management goals. Prescribed fire may be used to control the invasion or spread of exotic and/or invasive species, control succession, maintain wetland habitats, and promote the regeneration of associated plant species. The prescribed burning activities include planning, preparation, implementation and monitoring/evaluation of the prescribed burn and its impacts. All DNR-led prescribed fires will be conducted under the Department’s Prescribed Burn Policy (IDNR Policy and Procedure Manual Chapter 5D, Section 2) and all Burn Bosses will be State Certified under the Illinois Prescribed Burn Act (525 ILCS 37) and its Administrative Rules (Title 17 Chapter 1d part 1565).

- Invasive Woody Plant Control

Details - Invasive woody plant control is the planned mechanical removal, elimination or thinning of woody plant material that has invaded a project area. Such control frequently, but not exclusively, includes follow-up application of appropriate herbicides to control resprouting, preparation and monitoring/evaluation of efforts. Control methods will include removal or thinning of target invasive and/or exotic woody plants depending on the management goals. Techniques will include cut-stump, basal bark, and foliar applications using approved herbicides and state-licensed applicators. The control methods applied shall be those that are most effective in meeting the desired goal, have a minimal adverse impact on non-target species and are most cost efficient. Those methods may include mechanical cutting or removal of brush with tractor mounted mowers, bulldozer, hand operated brush cutters, and chainsaws. Application of appropriate herbicides using cut stem, injection, basal bark and foliar methods, or a combination of methods. All activities, supplies and equipment needed to plan, implement and evaluate a woody plant control effort at a project site will be included. All invasive woody plant control on state owned land will be approved through the annual site resource planning process and included on the site’s annual plan of work.

- Invasive Exotic Species Control

Details - Invasive exotic species control is the planned removal, elimination or reduction of invasive exotic species. Invasive exotic species include woody and herbaceous plants. Such control frequently, but not exclusively, includes follow-up application of appropriate herbicides to control resprouting, preparation and monitoring/evaluation of efforts. Control methods will include removal or thinning of target invasive and/or exotic woody plants depending on the management goals. Techniques will include cut-stump, basal bark, and foliar applications using approved herbicides and state-licensed applicators. The control methods applied in a specific project site shall be those that will be effective in meeting the desired goal, have a minimal adverse impact on non-target species, and are cost efficient. Application of appropriate herbicides using cut stem, injection, basal bark and foliar methods, or a combination of methods. All activities, supplies and equipment needed to plan, implement and monitor/evaluate an invasive exotic species control effort at a project site will be included. All invasive exotic species control will be approved through the annual site resource planning process and included on the site's annual plan of work.

- Erosion/sedimentation control

Details - The control of erosion or sedimentation resulting from unnatural disturbances may be undertaken at some project sites. Erosion and sedimentation can lead to the direct elimination of habitat for at-risk species. The erosion control methods applied in a project site shall be those that will be effective in meeting the desired goal, have a minimal adverse impact on native species, and are cost efficient. Methods to be employed may include a combination of planting of native covers and installation of appropriate structures (e.g. check dams, Dozier valves, etc). Such control measures will be developed to site-specific needs based on an assessment of the biotic and abiotic conditions by geomorphologists and/or erosion specialists and NRCS Technical Guidelines when appropriate. All necessary local, state, and federal permits will be obtained as required by each projects specifications (see Section "Compliance", paragraph 4). All activities and materials needed to plan, implement and monitor/evaluate erosion/sedimentation control projects may be included in this practice.

- Habitat Creation/Reconstruction/Enhancement: Planting

Details – Planting of seed, started plants, rootstock, and seedlings/whips is used to establish new habitat and restore or enhance existing habitats. Existing high quality habitats shall not be adversely impacted by such projects (e.g. over collection of seed). Restoration and enhancement for wetland habitats may include herbaceous and woody plant material. Restoration and enhancement of floodplain habitats may include appropriate native trees, shrubs, grasses and herbs. All activities included in planning, obtaining plant material, planting and monitoring/evaluating the success of habitat creation/restoration/planting will be included in this practice. All planting projects will be approved through the annual site resource planning process and included on the site's annual plan of work.

- Boundary Protection/Fence Repair

Details - Project sites may be impacted from external intrusions from livestock, off road vehicles, and people at or near the site. These intrusions can cause direct harm to resources within a preserve or may result in degraded habitat conditions (e.g. increased erosion, spread of exotic or invasive species). Boundary protection includes the finding, delineating and marking of boundaries and the construction or repair of a fence or barrier if necessary. All activities and supplies needed to implement boundary protection may be included in this project. Land surveys will be conducted by licensed land surveyors.

Project Duration: September 1, 2013 – June 30, 2016

Location:

Table 1.

Public Lands Native Wetland Wildlife Habitat Restoration Project Sites and Acres. Project areas in parentheses have their acreage included within the site listed above them.

SITE NAME	ACRES	SITE NAME	ACRES
Chain O'Lakes SP		Dixon Springs SP	
Turner Lake Fen NP	88	Flag Pond SNA	254
Grass Lake Wetlands NA	2000		
Cedar Lake Bog SNA	39	Red Hills SP	
Redwing Slough SNA	1007	Chauncey Marsh SNA	621
Moraine Hills SP		Cache River SNA	11,154
Kettle Moraine NP and NA	622	(Heron Pond-Wildcat Bluff NP)	
(Pike Marsh Unit)		(Little Black Slough NP)	
(Leatherleaf Bog Unit)		(Section 8 Woods NP)	
Black-crown Marsh SNA	336		
Lake-in-the-Hills Fen SNA	188		
Volo Bog SNA	1235		
(Pistakee Bog NP)			
(Volo Bog NP)			
		Total Acres	17,544

Figure 1. Statewide Public Lands Native Wetland Wildlife Habitat Restoration Project Sites



Figure 2. Statewide Public Lands Native Wetland Wildlife Habitat Restoration Project Sites – NE Illinois



Figure 3. Statewide Public Lands Native Wetland Wildlife Habitat Restoration Project Sites –Southern Illinois.



Table 2.

Planned Activities by Site - Statewide Public Lands Native Wetland Wildlife Habitat Restoration Project Sites

SITE	COLSP	MHSP	FPSNA	CMSNA	CRSNA		
FY14							
Rx Fire	X	X	X	X	X		
Invasive Woody Control	X	X	X	X	X		
Invasive Exotic Control	X	X	X	X	X		
Erosion Control			X	X	X		
Boundary Protection	X	X	X	X	X		
Planting			X	X			
Hydrologic Restoration	X	X	X	X	X		
FY15							
Rx Fire	X	X	X	X	X		
Invasive Woody Control	X	X	X	X	X		
Invasive Exotic Control	X	X	X	X	X		
Erosion Control			X	X	X		
Boundary Protection	X	X	X	X	X		
Planting			X	X			
Hydrologic Restoration	X	X	X	X	X		
FY16							
Rx Fire	X	X	X	X	X		
Invasive Woody Control	X	X	X	X	X		
Invasive Exotic Control	X	X	X	X	X		
Erosion Control			X	X	X		
Boundary Protection	X	X	X	X	X		
Planting			X	X			
Hydrologic Restoration	X	X	X	X	X		

## APPENDICES:

### A. Benefitted 'Species in Greatest Need of Conservation' in Statewide Public Lands Native Wetland Wildlife Habitat Restoration Project

#### Related Grants:

Chain O'Lakes, Moraine Hills, and Volo Bog had projects funded through T-28-M-1; these projects are completed. Cache River State Natural Area had projects funded through T-5-M-1 and T-28-M-1; those are completed or will be before the effective date of this grant. Chauncey Marsh had projects funded through T-28-M-1; that project is completed. Redwing Slough has projects funded through W-76-D-1 but projects within T-81-D-1 will be focused on wetland Species in Greatest Need of Conservation, not waterfowl and hunter access.

#### Compliance

The IDNR will use its CERP (Comprehensive Environmental Review Process) as a tool to aid the Department in meeting NEPA compliance for the project outlined under this grant proposal. It is the Department's policy to require CERP applications for all land disturbing activities unless those activities are covered by CERP exemptions.

All planned activities will also be in compliance with the Endangered Species Act. All determinations and documentation will be in accordance with the current established U.S. Fish and Wildlife Service protocols for section 7.

All planned activities will be in compliance with the National Historic Preservation Act and the Council on Historic Preservation Act. All determinations and documentation will be in accordance with the terms of the Programmatic Agreement, as amended, effective September 23, 2002.

When applicable, those planned activities which involve a floodplain and/or jurisdiction wetlands will be done in accordance with Presidential Executive Orders 11988 and 11990.

When applicable, those planned activities which involve programs and/or site improvements will be done in accordance with Section 504 of the Rehabilitation Act and the Americans with Disabilities Act.

When applicable, those planned activities which involve the use of pesticides, herbicides or other comparable chemicals will be done in accordance with current state and federal regulations to assure the safe and legal application of those chemicals. All chemicals will be applied in accordance with the manufacturers label instructions. All persons applying chemicals will be licensed by the Illinois Department of Agriculture as a chemical operator along with a licensed applicator, in accordance with Illinois state law.

#### Grant Proposal Support Documentation:

The following documents are attached in support of this grant proposal:

1. Application for Federal Assistance (Standard Form 424)

2. Federal Aid Section 7 Evaluation Form
3. Illinois Clearinghouse Response per Federal Executive Order 12372
4. NEPA Compliance Checklist and Environmental Assessment
5. Location Map (See Figure 1).

Project Budget: **(corrected 10/23/12 – PEV)**

	Federal Share	State Share	Total
Contractual	\$400,000	\$110,000	\$510,000
Commodities	\$50,000	\$9,231	\$59,231
Personnel	\$0	<b>\$179,247</b>	<b>\$179,247</b>
Equipment	\$50,000	\$	\$50,000
<b>Total</b>	<b>\$500,000</b>	<b>\$298,478</b>	<b>\$798,478</b>

**Contractual Services:**

Contractual services are agreements entered into with qualified contractors to complete specific habitat management practices. These practices can include but are not limited to Prescribed Fire, Invasive Woody Plant Control, Invasive Exotic Species Control, Erosion/sedimentation control, Boundary Protection/Fence Repair, Habitat Creation/Restoration/Planting, and Hydrology Restoration.

**Commodities:**

Commodity funds are used to purchase materials for projects that are generally less than \$100 each unit (herbicide is an exception) that are used to carry out habitat management practices. Examples include but are not limited to herbicide, seed and other planting stock, small hand tools, signs and sign posts, and fencing material.

**Personnel:**

Personnel services will be in-kind match provided by IDNR personnel via prescribed burning, woody invasive vegetation control, exotic invasive species control, habitat creation/restoration: planting, plant and animal surveys, grant administration and project management. Personnel costs include salary, fringe benefits and indirect costs.

**Equipment:**

Equipment funds are used to purchase items and materials for projects which cost \$100 per item or more (herbicide is an exception) that are used to carry out habitat management practices. Examples include water control structures, piezometers, and data loggers.

**Federal Share & State Share:**

**The \$500,000 federal share of this project is coming from three State Wildlife Grant funding sources. \$21,928 is revert FFY'09 SWG fed aid funds with a 50% match rate; \$41,441 is revert SWG fed aid funds**

**from prior to FFY'09 with a 50% match rate; and the third source of SWG funding is \$436,631 from FFY'11 with a 35% match rate. Based on the above stated SWG funding source match requirements, the state share match breaks down as follows: \$21,928 (50% match), \$41,441 (50% match), and \$235,109 (35% match) for a total match of \$298,478.**

Project Personnel:

The following IDNR personnel will be the primary staff implementing the Statewide Public Lands Native Prairie/Savanna Wildlife Habitat Restoration Project. They will perform grant administration, project implementation and management, and direct contact with landowners and contractors. Other Office of Resource Conservation and Land Management staff may be involved in limited site specific project implementation.

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## References:

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Appendix A.

Benefitted Species in Greatest Need of Conservation Statewide Public Lands Native  
Prairie/Savanna Wildlife Habitat Restoration Project

(Status - FE/SE - Fed or State Endangered; FT/ST - Fed or State Threatened, CP – Conservation Priority / Species  
in Greatest Need of Conservation)

	Species Name	Scientific Name	Status
<b>Amphibians</b>			
	Pickerel frog	<i>Rana palustris</i>	CP
	Crayfish Frog	<i>Rana areolata</i>	CP
<b>Birds</b>			
	Willow Flycatcher	<i>Empidonax trailii</i>	CP
	Black tern	<i>Chlidonias niger</i>	SE, CP
	Rusty blackbird	<i>Euphagus carolinus</i>	CP
	Swainson's warbler	<i>Limnothlypis swainsonii</i>	SE, CP
	Yellow-crowned night-heron	<i>Nyctanassa violacea</i>	SE, CP
	Black-crowned night-heron	<i>Nycticorax nycticorax</i>	SE, CP
	Forster's tern	<i>Sterna forsteri</i>	SE, CP
	Common tern	<i>Sterna hirundo</i>	SE, CP
	Yellow-headed blackbird	<i>Xanthocephalus xanthocephalus</i>	SE, CP
	King rail	<i>Rallus elegans</i>	SE, CP
	Pied billed grebe	<i>Podilymbus podiceps</i>	CP
	Common moorhen	<i>Gallinula chloropus</i>	ST, CP
	Least bittern	<i>Ixobrychus exilis</i>	SE, CP
	American bittern	<i>Botaurus lentiginosus</i>	SE, CP
	Sandhill crane	<i>Grus Canadensis</i>	ST, CP
	Marsh wren	<i>Cistothorus palustris</i>	CP
	Great Egret	<i>Ardea alba</i>	CP
	Canvasback	<i>Aythya valisineria</i>	CP
	Sedge Wren	<i>Cistothorus platensis</i>	CP
	Yellow Rail	<i>Coturnicops noveboracensis</i>	CP
	Little Blue Heron	<i>Egretta caerulea</i>	SE, CP
	Wilson's Snipe	<i>Gallinago delicatata</i>	CP
	Greater Yellowlegs	<i>Tringa melanoleuca</i>	CP
<b>Fishes</b>			
	Bantam sunfish	<i>Lepomis symmetricus</i>	ST, CP
	Cypress minnow	<i>Hybognathus hayi</i>	SE, CP
	Bluntnose darter	<i>Etheostoma chlorosomum</i>	CP
	Banded pygmy sunfish	<i>Elassoma zonatum</i>	CP
	Flier	<i>Centrarchus macropterus</i>	CP
<b>Mammals</b>			
	Bobcat	<i>Lynx rufus</i>	CP
	Least weasel	<i>Mustela nivalis</i>	CP
	Muskrat	<i>Odontra zibethicus</i>	CP

