



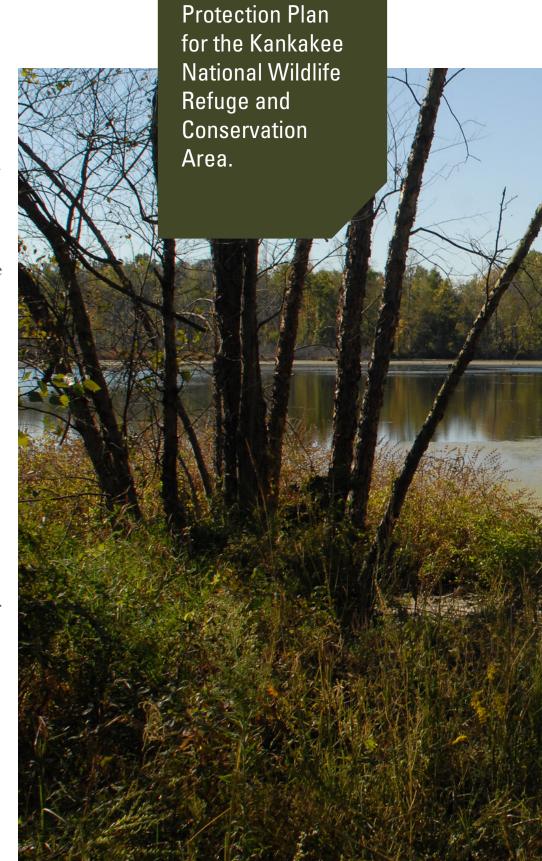


Preface

We committed to develop a Land Protection Plan (LPP) that outlines our wildlife conservation priorities and vision for working with the landowners and partners in the Illinois focal areas within the Kankakee River basin authorized as the Grand Kankakee Marsh National Wildlife Refuge in 2000. We recognize that conservation actions come in many forms and look forward to exploring new opportunities together.

This is a special area that people from all walks of life have connected with and been stewards of for generations. We are excited to share this document as the first step in our journey together to care for this land and the communities therein.

We hope you look forward to turning the page and fostering that working relationship with us.



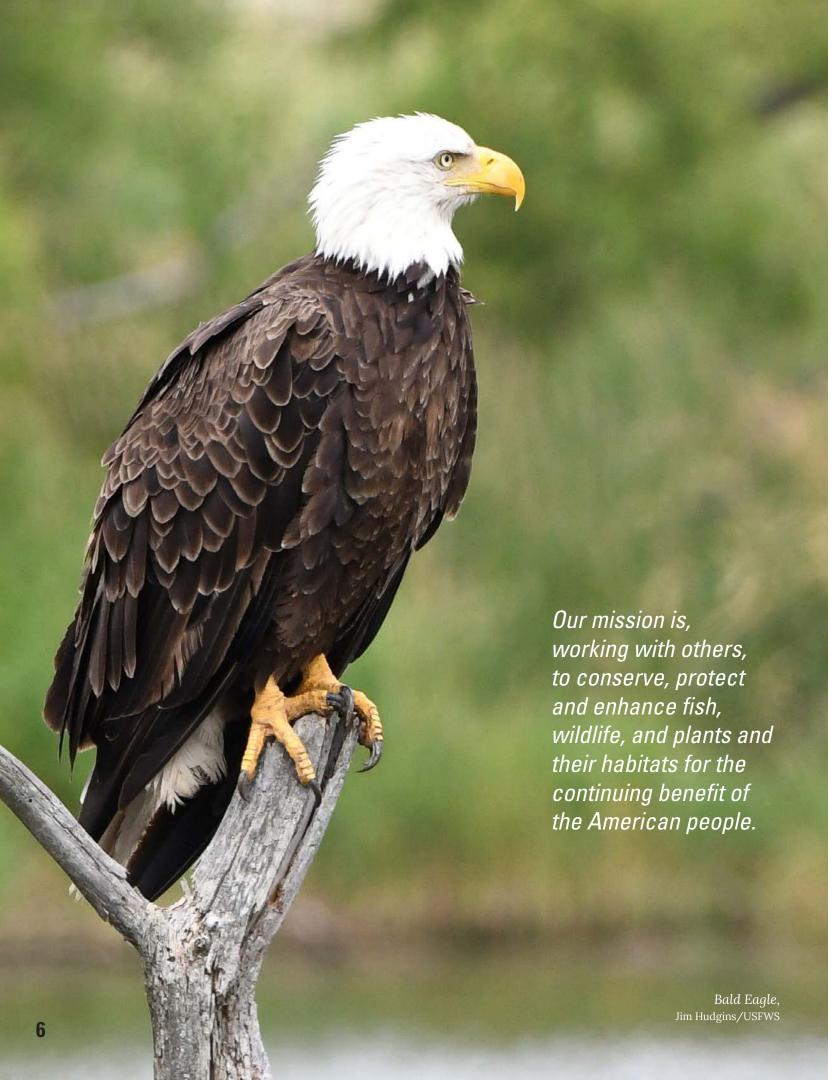
This document

serves as the Land

Purpose

The Kankakee National Wildlife Refuge and Conservation Area was established in 2016 after a long history of recognizing the important and unique natural resources of the area. This document provides background on those natural resources and outlines our priorities for land protection within the authorized refuge boundary in Illinois. It is our hope that you will gain a better understanding of how the refuge's conservation work can benefit local communities. We also explain how we can be a good neighbor and partner in growing conservation together with interested individuals in the area.





Who We Are: The U.S. Fish & Wildlife Service

The U.S. Fish and Wildlife Service is the oldest federal conservation agency, tracing its lineage back to 1871. We manage an unparalleled network of public lands and waters, dedicated to the conservation of fish and wildlife, for you, the American public. We strive to ensure a healthy environment for wildlife and people while providing opportunities for Americans to enjoy the outdoors and our natural heritage. We do this by:

- Conserving and restoring wildlife habitat such as wetlands, grasslands and woodlands
- Protecting endangered and threatened species
- Managing and conserving migratory birds
- Restoring nationally significant fisheries
- Enforcing federal wildlife laws
- International conservation efforts
- Distributing funding to state fish and wildlife agencies for projects that restore, conserve, manage and enhance wildlife habitat
- Helping people restore, conserve and manage wildlife habitat on their own land through our Partners for Fish and Wildlife Program







We Are...

- Land stewards, guided by the notion that land is a community of life and that love and respect for the land is an extension of ethics. We seek to reflect that land ethic in our stewardship and work to instill it in others. We ensure the future of natural resource conservation by connecting people with nature.
- A science-based organization that subscribes to the highest standards of scientific integrity and reflect this commitment in the design, delivery and evaluation of our work.
- A good neighbor, who respects the rights, beliefs and opinions of our neighbors.
- A partner in conservation.
- Your nearby nature that offers wildlife dependent recreation, which may include hunting, fishing, wildlife observation, photography, interpretation and education. Wild lands and the perpetuation of diverse and abundant wildlife are essential to the quality of American life.
- Public servants, and it is our privilege to serve the American people.





856

MILLION Acres of Land and Water

50 STATES

5

U.S. Territories

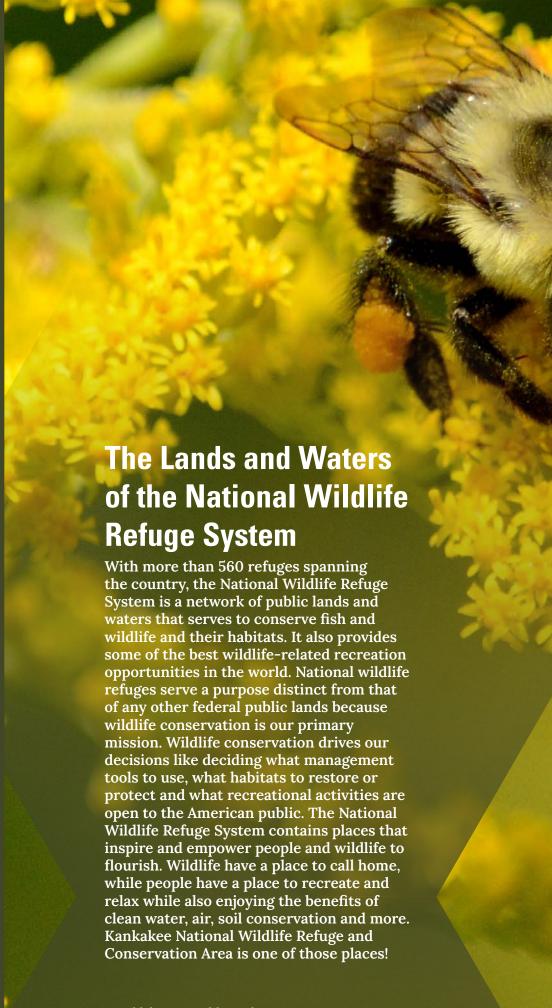
567NATIONAL Wildlife
Refuges

38
WETLAND
Management
Districts

5
MARINE National
Monuments

75

Wilderness Areas







Kankakee National Wildlife Refuge and Conservation Area

Why is the U.S. Fish & Wildlife Service Here?

The Kankakee River Basin has long been recognized as a premier area for wildlife. People settled here because of it, people engage in conservation practices because of it, people enjoy the outdoors because of it. What makes this area unique, and draws interest for conservation, are the remaining gems of black oak savannas, prairie and floodplain forests.

Once part of the Midwest's largest and most biologically productive ecosystems, we know from records dated back to European settlement times that less than one-tenth of one percent of northern tallgrass prairie¹, one tenth of Illinois' forests² and less than 1/100th of 1 percent of the 27 million acres of oak savannas that once stretched from Ohio to Missouri remains.³ We recognize the past and ongoing natural resource stewardship by local, private landowners. Indeed, thanks to that stewardship, the U.S. Fish and Wildlife Service was established by Congress and is dedicated to the conservation of important places for wildlife conservation. It is also why we would like to join the dedicated citizens in this area to continue and expand their conservation legacy as a regional and national resource.

Refuge Vision

Kankakee National Wildlife Refuge and Conservation Area was authorized in 2000 with the following vision: to restore and preserve an ecological system that supplies the needs of migratory waterfowl and songbirds, native fish, native plant communities, and threatened and endangered flora and fauna. The refuge and its staff will have mutually-beneficial relationships with the public and our partners which will lead to a greater understanding and appreciation of the natural world, and the role humankind plays in its stewardship.4



Black-eyed Susans, Scott Ralston/USFWS Oak seedling, Jeanne Holler/USFWS

The laws under which a refuge is authorized define a refuge's purposes. Kankakee National Wildlife Refuge and Conservation Area was authorized in 2000 with the following purposes:

- "for the development, advancement, management, conservation, and protection of fish and wildlife resources." (Fish and Wildlife Act of 1956)⁵
- "for the conservation of the wetlands of the Nation in order to maintain the public benefits they provide and to help fulfill international obligations contained in various migratory bird treaties and conventions." (Emergency Wetlands Conservation Act of 1986)⁶



Least Bittern, Steve Arena/USFWS

Refuge Goals

Pres naturanim or the enda

Preserve, restore and enhance in their natural ecosystems (when practical) all animals and plants that are endangered or threatened with becoming endangered;

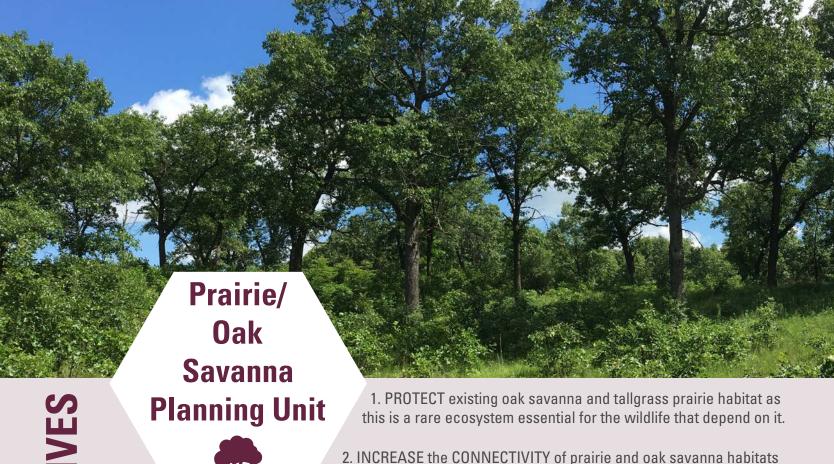
Support and sustain migratory bird resources;

Preserve a natural diversity and abundance of fauna and flora on refuge lands;

Provide an understanding and appreciation of fish and wildlife ecology and humankind's role in its environment;

Provide refuge visitors with high quality, safe, wholesome and enjoyable recreational experiences oriented toward wildlife to the extent these activities are compatible with the purposes for which the refuge was established.⁷

The refuge serves as an avenue to restore, preserve and enhance grassland and wetland-dependent populations of fish and wildlife in the Kankakee River Basin.



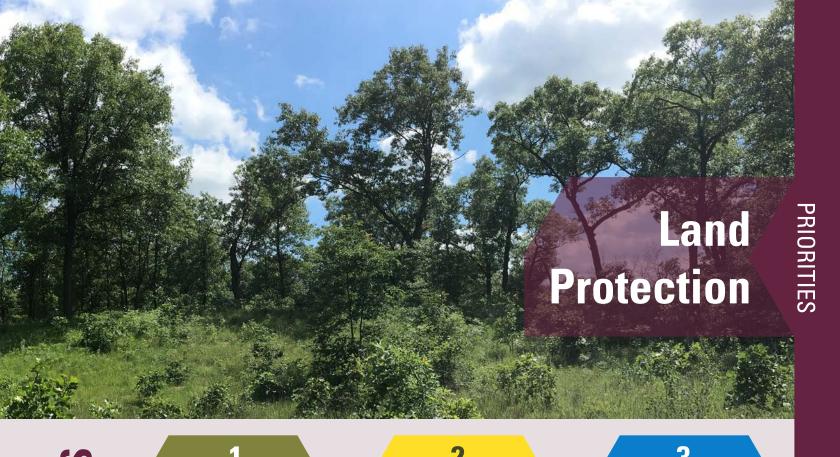
Wetland Planning Unit

1. PROTECT existing floodplain forests and wetland habitat to increase biodiversity and floodplain storage potential.

through restoration for the benefits of resident and migratory wildlife.

2. INCREASE the CONNECTIVITY through restoration of floodplain and wetland habitat for water quality and wildlife benefits.





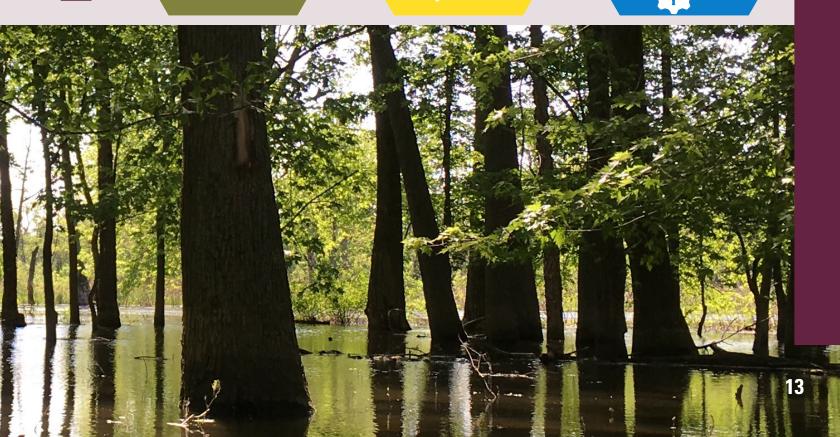
PRIORITIES

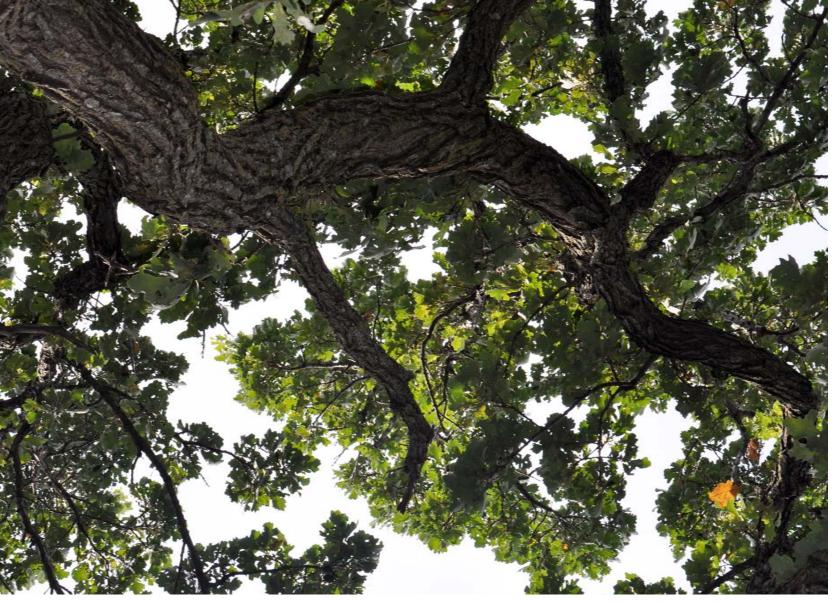
Protect
Existing Natural
Remnants



Add a
Protective
Buffer

Restore and Create Connectivity





Oak canopy, Jeanne Holler/USFWS

PRIORITY 1

PROTECT and MANAGE existing remnant native habitat.

Protect existing natural remnants

Our first priority is to work with people who want to help protect areas where natural habitat already exists. Specifically, the area within the refuge boundary contains rare remnant oak savanna, native prairie and floodplain forest. Natural intact wetlands are also present and rare. Protecting what natural areas remain on the landscape can guarantee future generations will continue to enjoy and appreciate what previous generations observed. It is easier to maintain the quality of what is present than it is to recreate a natural area after it is gone. These natural area remnants often remain because of the deep respect or appreciation a landowner or community has for a particular resource. We recognize that they are important not only for wildlife, but also for people.



Add a protective buffer

Our second priority is to work with interested individuals to provide a buffer of land to existing natural remnants. Providing a buffer to these areas helps protect their integrity, thereby maintaining the quality of that natural area.8 The goal for this priority is to minimize the decline often seen in natural areas due to "edge effects." Edge effects occur along the borders, or "edges", of a natural area and can vary in size and degree of disturbance depending on the neighboring land uses and vegetative cover. Examples of such effects are the spread of unwanted and damaging plants or animals into the natural area; possible transport of pathogens and disease; physical encroachments such as mowing or placement of garbage; and inadvertent overspray of herbicides. Appropriate buffer size is derived based upon several factors and can vary depending on location, habitat type and outside influences. A 100-meter buffer was determined to be most appropriate for grassland, oak savanna, wetland and forested habitat areas based on scientific recommendations. Establishment of a 100-meter buffer was found to be beneficial in reducing predation and nest parasitism in grassland birds,9 aid in the reduction of soil erosion and was linked to improved water quality of wetland and riparian habitats.¹⁰ In application on the ground, buffer sizes will be determined on a case-by-case basis.



MAINTAIN the integrity of remnant lands in Priority 1, by developing a buffer to existing floodplain, oak savanna, prairie, and wetland habitats.

Sora, Mike Budd/USFWS 15



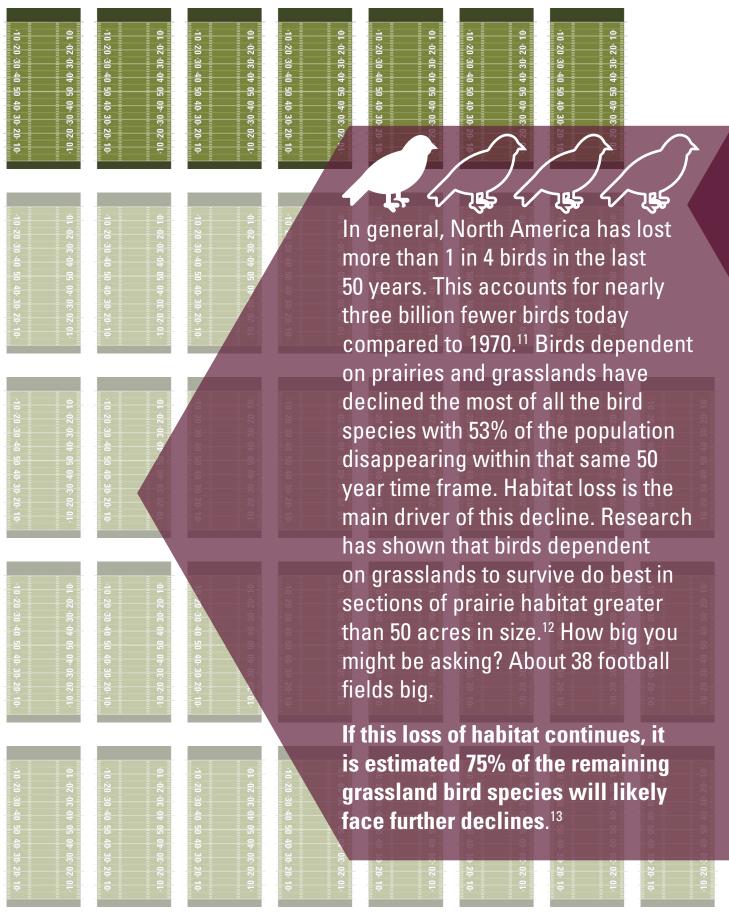
Restore and create connectivity



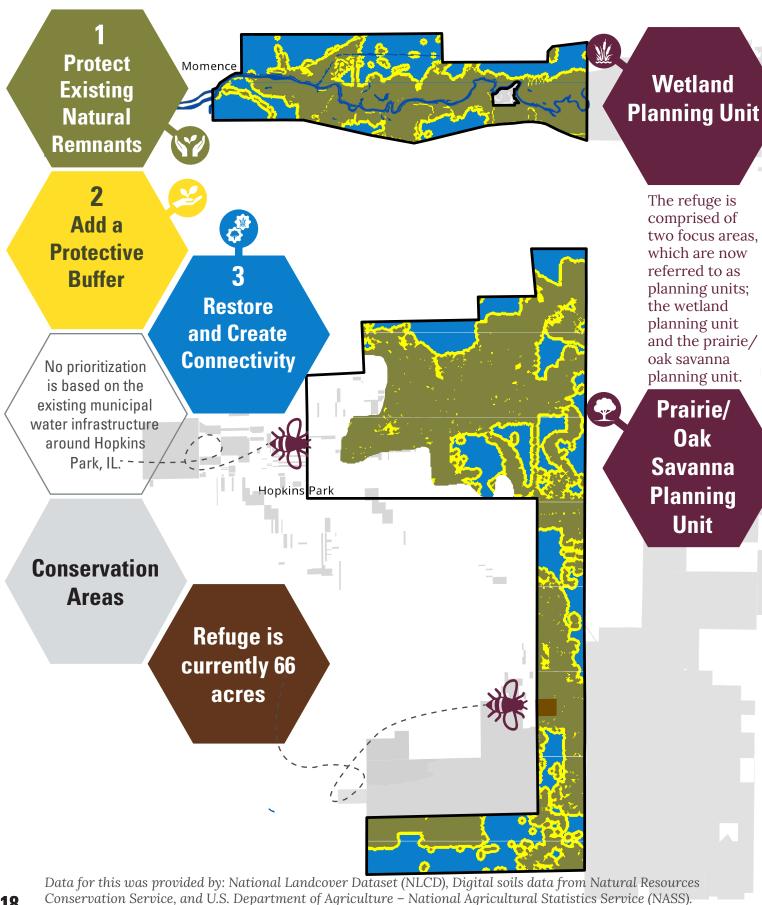
Bobolink, Jim Hudgins/USFWS

Our third priority is to work with others to restore habitats back to natural conditions and create connections between the natural areas of prairie, oak savanna, wetland and bottomland hardwood forest habitats. The majority of land found within this priority area has been converted to an alternative use in the past and would require some form of restoration. Restoration efforts will depend on the planning unit. In general the Wetland Planning Unit will focus on wetland and forested areas in the Kankakee River floodplain. The Oak Savanna and Prairie Planning Unit will focus on the connection of tallgrass prairie and oak savannas. These connections would provide corridors for wildlife movement, and increase the overall availability of habitat to sustain healthy wildlife populations. These connections will also increase flood protection, and reduce sedimentation and nutrient loading within the waterways.





Illustrated are our priorities. The final size and extent of the refuge is wholly dependent on the interest of local landowners. Refuge can only grow up to 59% of boundary - 12,716/21,552 acres





The Refuge and Conservation Area Boundary

Area shown in map

The Kankakee National Wildlife Refuge and Conservation Area boundary and maximum acreage was finalized in 2000. This is an administrative boundary that gives the U.S. Fish and Wildlife Service the ability to offer conservation options specific to landowners wishing to implement long-term natural resource stewardship on their property. For properties that fall within the authorized boundary, interested landowners can will occur sell all or part of their property to the Service to become part of the Refuge System. However, just because a property staff meets falls within the refuge's authorized boundary does not mean the Service with interested will be interested in acquiring it. It depends on many factors, because the Service must make sure each purchase meets the mission of the U.S. Fish and Wildlife Service and the intent of the Kankakee National Wildlife Refuge and Conservation Area. Please see the section titled "Acquisition Considerations" for more details.

The growth of any refuge is a long-term process that progresses as willing sellers and funding allow within the terms of its authorization. The authorization for this refuge capped the acreage at approximately three-fifths of its authorized boundary, or 12,716 acres.

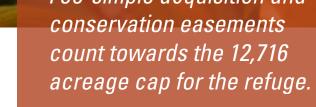






Conservation

Are you a landowner within the authorized refuge boundary who is interested in exploring options for putting your land in permanent conservation status? Contact us to learn more about the unique opportunities you may have given your location. Selling, donating or exchanging land, or placing a conservation easement on land, are just a few of the tools unique to interested landowners located within the authorized refuge boundary. Under these options, anyone who is interested can set aside all or a portion of their land for natural resource protection and become part of the Kankakee National Wildlife Refuge and Conservation Area. Participation is fully voluntary. The most common tools are described at the right. On rare occasion tools like transfers, cooperative agreements and no cost lease agreements are also available.





Fee-Simple Acquisition - Involves an interested landowner requesting the U.S. Fish and Wildlife Service acquire most or all of the rights to their property. There is a total transfer of property with the formal conveyance of a title to the federal government. In some instances certain rights such as water rights, mineral rights or use reservations can be negotiated at the time the property is transferred in ownership. We pay fair market value for property and any rights purchased.



Conservation Easements - Involves an interested landowner requesting the U.S. Fish and Wildlife Service to acquire a portion of their property rights. The landowner retains ownership of the land but sells certain rights identified and agreed upon by both parties. Because ownership of the land remains with the individual, the property remains on the state and local tax rolls. The value a landowner may expect to receive for an easement is dependent on the number of rights the landowner chooses to sell. The purpose for conservation easements is to provide permanent protection to the natural resources while retaining private landownership.



Donation - Landowners have the right to donate their land to the U.S. Fish and Wildlife Service. Lands considered for donation will be reviewed and evaluated prior to acceptance.



Land Exchanges - We have the authority to exchange agency land for other land deemed to be of greater conservation value. This concept requires the federal government to get dollar-for-dollar value. Exchanges usually do not increase federal land holdings or require purchase funds; however, they are typically very labor and time-intensive to complete and rarely considered.



Yellow Fringed-orchid, (CC BY-NC-ND 2.0) Adam Balzer





Conservation work involving permanent protection by the U.S. Fish and Wildlife Service must be consistent with federal laws and regulations, congressional guidelines and the executive orders that guide us. These transactions must benefit fish, wildlife and public use of these lands. Purchases are just like any other realty transaction between two individuals. We offer fair market value for your property based on a professionally prepared appraisal and no sale is complete until the landowner agrees to the price and terms. We respect your personal right to sell your property to whomever you wish and if you wish to work with us, your privacy will be maintained throughout that process. Like selling your home to any potential buyer, you have full right to refuse any purchase offer you do not like.

Ornate box turtle, Kim Roman

Oak Savanna with butterflyweed, Kim Roman

Acquisition Considerations

When we are approached by a landowner wishing to sell their land to the agency, a variety of considerations come into play for lands that may become part of Kankakee National Wildlife Refuge and Conservation Area. These range from federal laws that identify our responsibility to protect migratory birds, to local commitments, like avoiding the acquiring of land that is currently connected to municipal sewer and water. Refuge staff will work through these considerations with the landowner to assist in determining the best course of action to meet the needs of both the landowner and the refuge. In some situations, the refuge may not be the most appropriate avenue and we will connect them with other conservation agencies and organizations that could better meet their needs.

Just a few considerations when approaching us about land acquisition...

Protection of Federal Trust Species (Migratory Birds). Land that provides or has a potential to provide a significant value to migratory birds for prime nesting and foraging habitat will be highly valued.

Threatened or Endangered Species Present. A property that has documented federally threatened or endangered species present will have preference if not currently under permanent protection.

Existing and Potential Resource Concerns. Parcels of significant importance to the Kankakee River watershed or remnant properties that face immediate pressure or impacts to environmental conditions of an area will be valued.

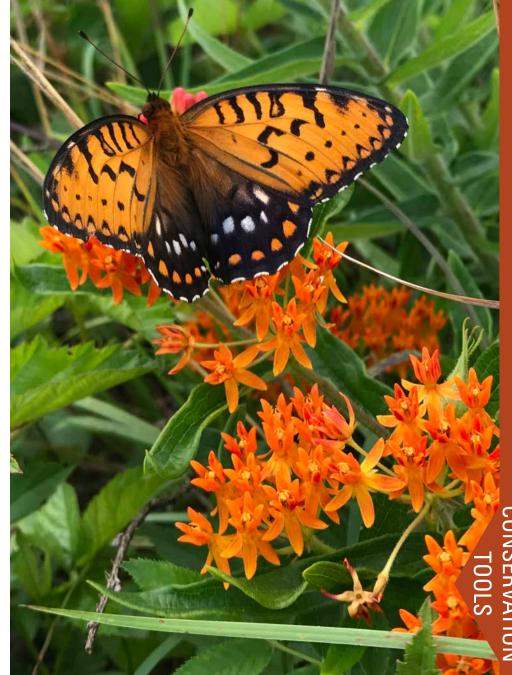
Location Relative to Other Conservation Properties. Parcels located next to existing conservation lands or that provide an opportunity to connect with existing neighboring conservation lands would be highly desirable. These properties often present an opportunity to more efficiently partner in management that could reduce duplication of effort. By combining forces, this saves time and money and yields a greater conservation outcome. Larger contiguous areas of habitat greatly benefit the ability of wildlife to succeed.

Potential to Contribute Towards Outdoor Recreation. Properties that can provide opportunities for environmental education and interpretation, nature photography and observation, as well as hunting and fishing, will directly meet the purpose of the refuge and be valued highly.

Presence of Infrastructure. Current land use of a property is always evaluated. It is not our intent to acquire land currently associated with municipal water and sewer infrastructure. If buildings or support infrastructure other than current municipal sewer and water are located on a property, additional factors like type, condition and location will be highly scrutinized before we consider that property.

Acquisition Funding

Funding to buy land and easements within Kankakee National Wildlife Refuge and Conservation Area will primarily come from the Land and Water and Conservation Fund.14 The Land Water Conservation Fund is appropriated by Congress annually to the U.S. Fish and Wildlife Service to acquire refuge lands or conservation easements from interested landowners. The main source of revenue for the fund is proceeds from Outer Continental Shelf federal oil and gas leases. It also receives revenue from certain user fees, the proceeds from the disposal of surplus federal property and the federal tax on motor boat fuels. The Migratory Bird Conservation Fund could be another source of funding and is derived from Federal Duck Stamp revenues. Additional funding for conservation actions may become available as grant opportunities present themselves.



Regal fritillary on butterflyweed, Kim Roman





Technical Guidance

Landowners who have questions about how to implement wildlife conservation on their own land while continuing their primary land management goals can reach out to us for technical help. We provide this technical assistance through our Partners for Fish and Wildlife Program and design custom habitat management projects to meet landowner needs.

As of 2020, we have worked with more than 50,000 landowners across the nation to complete 60,000 habitat restoration projects through this program. That totals 6 million acres since the program began in 1987!

Any privately-owned land is potentially eligible for restoration through this program, including working farms, ranches and recreation lands. Participating in these projects is voluntary and controlled by the landowner. Landowners retain all property rights and are not required to allow public access.

These agreements are not permanent. Landowners can change their participation in this program over time. While these private lands do not become part of the refuge, they are just as important in creating habitat for wildlife and conserving our nation's natural resources. We work with you to custom-design a conservation project that meets your needs.

The Partners for Fish and Wildlife Program in Illinois has worked extensively with U.S. Department of Agriculture agencies, the Illinois Department of Natural Resources, county and local governments and private conservation organizations to enhance, restore and protect a variety of fish and wildlife habitats.

Financial Assistance

Our Partners for Fish and Wildlife program can also provide financial assistance on projects where the private landowner and the U.S. Fish and Wildlife Service mutually benefit from the project and when funds are available. Our biologists often prioritize projects based on relative location to a national wildlife refuge. Projects selected for the program could expect up to 50% of the cost covered by us for the restoration project. The landowner would be responsible for the remaining portion and inkind services can be part of their contribution.

All projects require a minimum 10 year agreement with the landowner. Our employees are actively involved with the projects, helping landowners by being part of things like construction management, seeding, planting and surveying. Our team usually fields more requests than we have available funding, so not all projects may receive financial assistance.



Habitat construction, Mike Budd/USFWS

"The USFWS Partners
program provides simple,
no strings attached
cost share to create,
restore, or enhance
habitats while working
alongside you to achieve
your objectives" - John
Dassow (Livingston County,
IL Landowner/Producer)



John Dassow with Partners Project Mike Budd/USFWS



Before (above) and after (below) photos of prairie habitat restoration, $$_{\rm Mike\ Budd/USFWS}$$





Partners

The Partners for Fish and Wildlife program works with private landowners to improve fish and wildlife habitat on their own lands.

Partners projects are voluntary. Participating landowners continue to own and manage their land to serve their needs while they improve conditions for wildlife. If you are interested in working with Partners program visit the https://www.fws.gov/partners/ website for additional information and contact information.

Being a Good Neighbor

As Kankakee National Wildlife Refuge and Conservation Area grows, we will become a neighbor to many landowners. We strive to be a part of the community and provide the benefits of natural areas. Some areas will need little management and some will need intensive restoration.

As a good neighbor, we will actively manage properties utilizing a variety of habitat management techniques such as prescribed fire, mowing and herbicide applications. We are responsible for controlling plants listed as noxious weeds by the state of Illinois.

Drainage

It will be our responsibility as a landowner, within the State of Illinois, to follow drainage laws. We can reduce flooding impacts through restoration of wetlands, but not at the expense of our neighbors.

It is our policy not to restrict the flow of waters from other lands, even if that flow only passes through our lands. If we inadvertently create a waterrelated problem (flooding, soil saturation, increase in water table height, etc.) from our management actions, we will correct the problem at our expense.

To prevent problems from happening in the first place, professional biologists perform site-level studies and detailed planning before we undertake any management activity affecting drainage.

Taxes

We recognize that as the federal government purchases lands, a reduction in tax base may occur. The Refuge Revenue Sharing Act of June 15, 1935, as amended, provides annual payments to counties based on the value of land appraised at its highest and best use to aid in the possible reduction of tax base. The amount appropriated to the Refuge Revenue Sharing Program is decided annually by Congress.

Revenue Sharing payments to Illinois counties are typically three-fourths of one percent of the appraised (not assessed) value. Lands are re-appraised approximately every five years to reflect current market values. Counties are required to pass payments along to other units of local government within the county that may have suffered losses in revenue.

Landowners who sell a conservation easement remain on the tax roll as private owners and continue to pay property taxes and assessments even after the easement is in place.

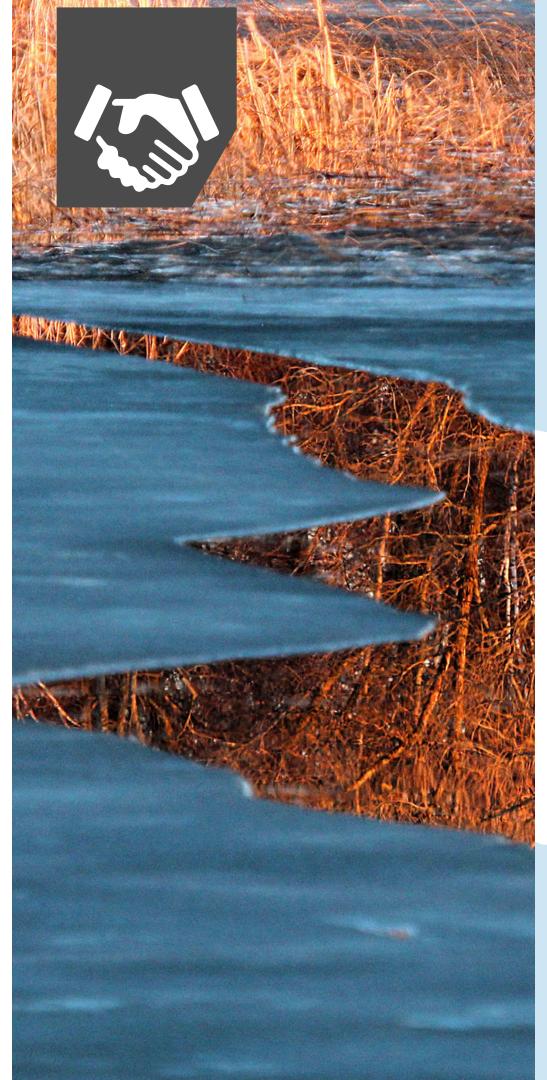
Wildlife Concerns

Wildlife do not always recognize boundary signs and we cannot prevent wildlife from eating your flower gardens or crops. However, we can contribute to controlling certain wildlife populations by allowing hunting on refuge lands where deemed safe and appropriate. We work closely with the Illinois Department of Natural Resources on establishment of refuge hunting regulations. Illinois Department of Natural Resources is the regulatory agency that manages nuisance wildlife control permits on private lands.

Why Federal Ownership?

Refuge properties are your lands and belong to all Americans. We plan to provide opportunities for wildlife-dependent recreation and other outdoor recreation as deemed appropriate and compatible with refuge purposes.

Amenities like parking lots and interpretive information may be found on some of the areas. Hunting, fishing, nature observation and photography, as well as environmental education and interpretation, are allowed on most lands within the National Wildlife Refuge System. As a part of that system, the refuge also plans to offer these activities as long as they can be carried out safely and without negative impacts to wildlife and neighboring properties. We view refuges as extensions of your nearby nature. These public lands provide everyone a place to be in the great outdoors.



Your Property Rights

Landowners located in the authorized boundary of the refuge, or who own property directly next to refuge lands, retain all the rights, privileges and responsibilities of private land ownership. Inclusion within an authorized refuge boundary confers no additional federal authority or regulatory requirements on the landowners.

We recognize that every landowner has the following rights:

- The right to retain all privileges and responsibilities of private ownership.
- 2. The right to sell their land to anyone of their choice.
- 3. The right to control access on their land.

Becoming a part of the Community

We strive to be a part of the fabric of your community. We intend to do this by tailoring how we work with you on conservation in your area. The areas that community members wish to become a part of the refuge will continue to provide a sense of place for the community and be open for their enjoyment as well as all Americans. Over time, we hope that the refuge becomes a place of pride and identity for you. The refuge provides an opportunity for the community to set aside one of the rarest remaining ecosystems in the world and be cherished for generations to come while creating opportunities for every day experiences in nature.

The National Wildlife Refuge System encourages conservation efforts by all landowners in both the public and private sectors, to reach greater conservation benefits. In reality, conservation cannot be done by one individual or organization, rather it's done through the collective effort of a community. Every conservation act – from installing a bird feeder in an urban backyard, to landowners enrolling in farm programs or signing their property into a conservation easement, are meaningful actions. We hope to be value-added to the conservation activities already occurring in the area and to provide an avenue for those interested in learning more about natural habitats.



Hiking, Megan Wandag/USFWS





Employed summer YCC since

2017



830,284

Hours Served

Employment Opportunities

As the refuge begins to grow, additional staff will be needed to aid in the management of natural resources, which means the potential for some new job opportunities. Beyond creating jobs, we strive to provide opportunities for the next generation of conservation leaders through internships and youth employment. Since 2017, we have partnered with local conservation entities to provide summer youth employment through the Youth Conservation Corps. This is a crew of local high school students hired to care for the natural resources within the area communities as they learn about conservation. As the refuge becomes more established, we will continue exploring ways to provide jobs and volunteer opportunities in these communities.



YCC crew members weeding, Stephanie Martinez/USFWS



A Vibrant Volunteer Corps

We are fortunate to have a group of devoted volunteers, made up of people from all walks of life. Volunteers include parents who want to model stewardship, retirees who wish to pass on knowledge, outdoor enthusiasts sharing their passion for wildlife refuges and young people interested in serving a worthy cause while learning job skills. Volunteers share their passions while contributing to the good of their communities and wildlife. Are you interested in becoming a volunteer? Give us a call!



Friends Groups

Support to Community Liaisons

Local nonprofit Refuge Friends groups have long been established to support area refuges in a variety of ways, including hosting public events, coordinating volunteers, even leading environmental education and interpretation experiences. Refuge staff work with 184 local Friends organizations and facilitate the formation of new ones. Refuge Friends groups are often the lead partners alongside community groups like Chambers of Commerce or community event planners in organizing regional bird festivals and similar events that promote nature-based tourism. Kankakee National Wildlife Refuge and Conservation Area is fortunate to have a partnership with the Friends of the Kankakee.



Programs Where People Are

Nature is not a far off place where only few people get to experience its wonder. It can be found in your backyard, in your local parks and in your nearby refuge. We pride ourselves on providing safe and accessible outdoor places for nearby communities. There is at least one refuge in every state and territory and within an hour's drive of most major cities. Currently, we own 66 acres near the community of Hopkins Park, Illinois in Beaverville Township, Iroquois County. This area is open to anyone local and distant who wishes to enjoy nature. This accessibility makes it easy for communities to enjoy their wildlife heritage. We work to ensure that the roads, trails and parking areas are welcoming and safe for all visitors.



Cultural Resource Protection

15,798 Recorded Historical Sites

Through our stewardship of cultural resources and historic properties, we not only comply with federal law, we also engage refuge visitors, to deepen our understanding of the nation's past and build relationships with local communities. We commit to being aware of sites of cultural and historical importance and assure that land conservation does not adversely affect them. The areas within the refuge have been home to many people over the years and their stories are intertwined with the land. We hope to bring light to the relationships people have with the land - both from the past and into the future.

All Data for FWS in 2020





61.45

MILLION Annual
Visits

37.13

MILLION Birders and Wildlife Observers

2

MILLION Nature Program Attendees

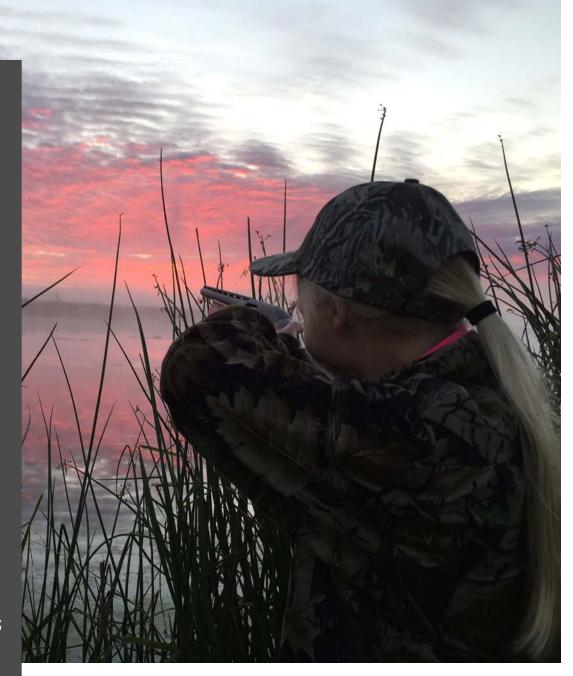
2.5

MILLION Annual Hunting Visits

8.3

MILLION Annual Fishing Visits

Data is from 2020 for all refuges



Adventure and Escapes for All

Opportunities for outdoor recreation draw millions of people each year to national wildlife refuges, boosting local economies. Many community members and visitors take part in heritage sports such as hunting and fishing. Others enjoy hiking, paddling, wildlife viewing or nature photography. All these activities offer a chance to unplug from the stresses of modern life and reconnect with their natural surroundings during any season.

The National Wildlife Refuge System Improvement Act of 1997 identifies six priority recreational uses (hunting, fishing, wildlife observation, photography, environmental education and interpretation). This system of public lands strives to offer these activities on every refuge, if found compatible with the refuge's statutory purposes and can be done in a manner that is safe and respectful of our neighbors. All six of these recreational opportunities can be found compatible and will occur on Kankakee National Wildlife Refuge and Conservation Area as the refuge grows.









Photo credits from the left to right, top down:

Preparing for a shot, USFWS Birding, (CC BY 2.0) Joanna Gilkeson/ USFWS

Fishing, (CC BY 2.0) Katie Steiger-Meister/USFWS

Early fall colors, Courtney Celley/USFWS Catch of the day Ice Fishing Day, Mary Stefanski/USFWS

In 2017 national refuge visits generated

\$3.2 BILLION of sales in LOCAL ECONOMIES



Being in NATURE reduces Stress



Habitat restoration provides a SAFETY NET to flooding threats



WETLANDS are nature's natural filters and storage tanks

Conservation Benefits

Besides the obvious benefit of protecting and preserving wild spaces for wild things and people, wildlife conservation can come in many forms and has proven to be beneficial in many ways.



Supports Local Economies

In 2017, 53.6 million people visited national wildlife refuges across the United States and generated \$3.2 billion of sales in local economies. As this spending flowed through the economy, more than 41,000 people were employed and \$1.1 billion in employment income was generated across the nation. There are five national wildlife refuges in Illinois, two of which are in multiple states. For example, these five Illinois refuges welcomed more than 1.6 million recreational visitors resulting in modest economic input to retail stores, gas stations and restaurants in local communities.¹⁶ Specific to Kankakee National Wildlife Refuge and Conservation Area, the refuge provides a way to support local ecotourism and meet planning goals of Kankakee County.¹⁷ Beyond economic impacts from recreational visits, refuges provide benefits to the local agricultural industry by serving as a home to pollinators. More than 150 food crops in the U.S. depend on pollinators, including almost all fruit and grain crops. The U.S. Department of Agriculture estimated that crops dependent on pollination are worth more than \$10 billion per year. 18

Nature Heals by helping Mental and Physical Wellbeing

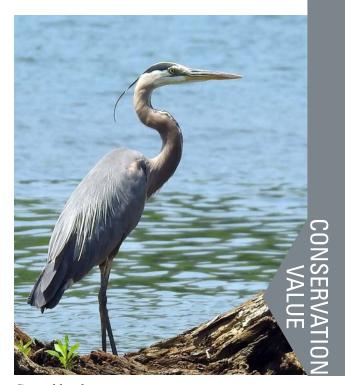
Being in nature helps rejuvenate the mind and body. The simple viewing or experiencing of nature first hand has been shown to reduce anger, fear and stress and provide overall pleasant feelings. Nature not only makes you feel better emotionally, it contributes to your physical wellbeing by reducing blood pressure, heart rate, muscle tension and the release of stress hormones. A survey conducted in 2019, indicated that a majority of adult Americans view nature as important for their physical health and emotional outlook. Most noted it was certain smells and sounds of nature that often sparked some of their happiest memories. Being in nature provides a sense of peace, and helps to give meaning and purpose to their lives. Youth had the same experiences. Every 8 to 12-year-old surveyed indicated that some form of contact with nature promoted their physical, psychological and social well-being. Besides a nature prescription for health, nature also offers alternative medicine through the array of native plants that can be harvested on refuges by permit for medicinal uses.

Improves Water Quality

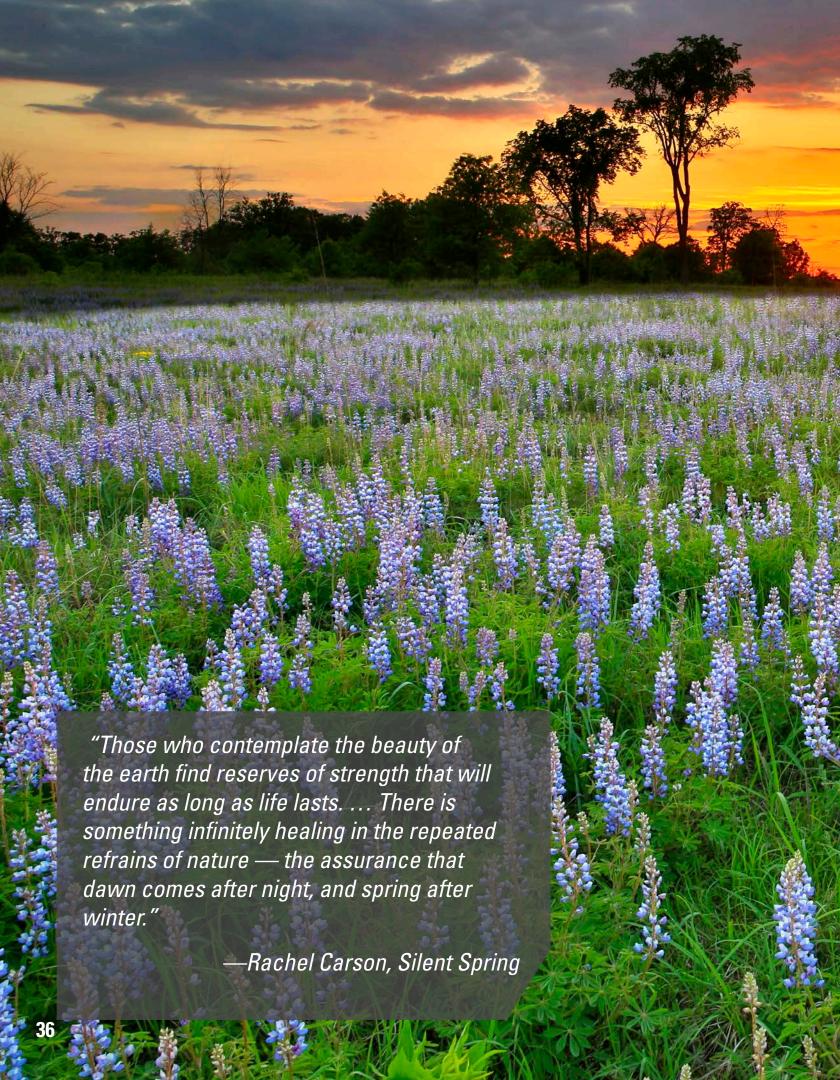
Wetlands often act as filters by removing pollutants from surface water, thereby improving water quality. These pollutants are washed in by rainfall or snow melt from urban and agricultural settings and may include soil particles, fertilizers, pesticides, residual oil and grease from road surfaces and road salts. Wetlands aid in sediment trapping, nutrient removal and chemical detoxification. As much as 90 percent of the sediments that are present in runoff or in streamflow may be removed if the water passes through wetlands.²⁰ In addition, because pollutants, such as heavy metals, are attached to soil particles, the settling of sediments in wetlands further improves water quality. Small changes on the landscape can lead to big impacts for sediment reduction within waterways and cleaner water.

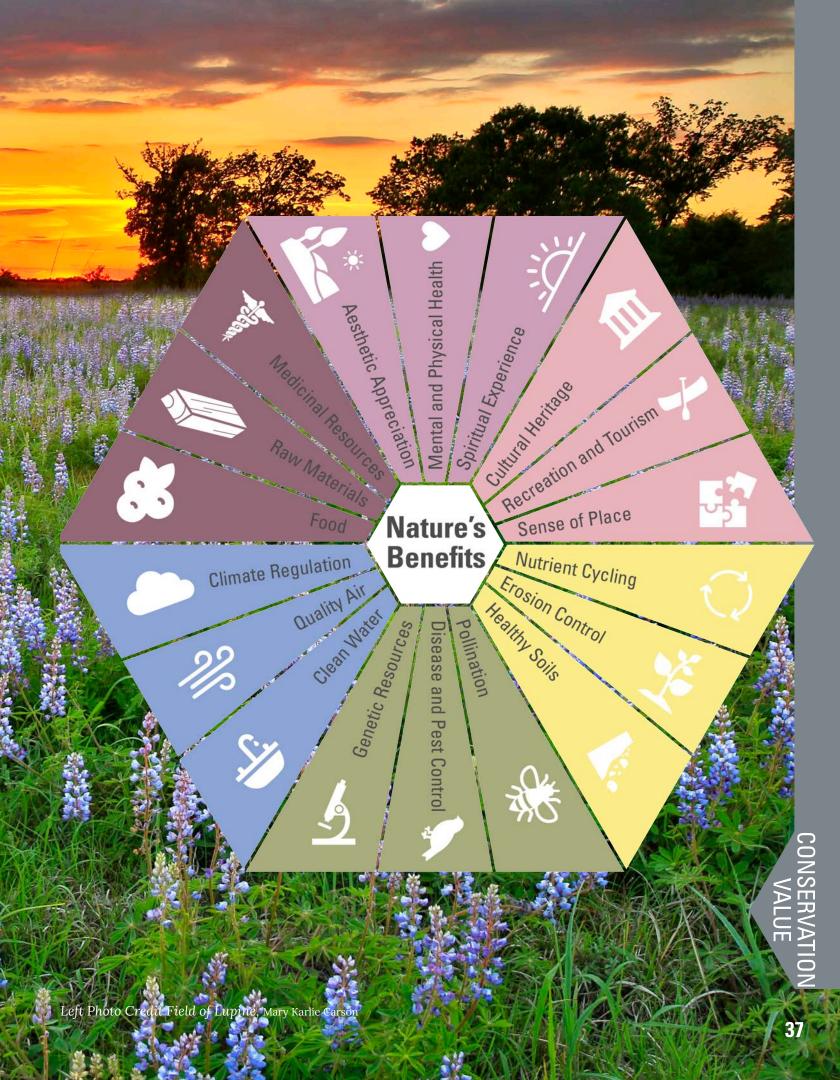
Provides Flood Protection

Peak flood events are increasing over time for the Kankakee River. Wetland and floodplain restoration is one solution to providing a safety net against flooding issues and sedimentation threats. Wetlands are nature's filters and storage tanks. Acting like a sponge, wetlands aid in slowing down the initial force of flood and storm water entering a waterway. For the Kankakee River, the current 10-year-mean peak-flow average is 1,516 cubic feet per second, which is more than the previous 70 years of 1,182 cubic feet per second. 19 The increase in volume is equivalent to a 6-inch rise during flood peaks, which is a significant rise for those in flood prone areas. Many factors likely contribute to this trend, but with increase in flow rate comes higher levels of sedimentation, nutrient loading and river bank erosion. Restoring floodplains, wetland and grassland areas are just some of the many ways the refuge could assist with reduction in flood events for the local area.



Great blue heron, Michael Schramm/USFWS





Growing Conservation Together

The U.S. Fish and Wildlife Service is committed to making conservation grow and flourish in the Kankakee National Wildlife Refuge and Conservation Area. We intend to work with the surrounding communities to meet conservation goals that are shared. Having this established refuge located in the Kankakee River Basin in Illinois provides the Service the opportunity to offer additional tools to landowners and stakeholders interested in conservation. We strive to protect the lifestyle of the area and conserve not only the natural resources but the character of the community as well. There are many paths to fish and wildlife conservation. We want to work with all who are willing to craft a solution that jointly meets the needs of landowners, the community, and the Service. At the end of the day, we hope to create a space where both wildlife and communities continue to thrive by focusing on collaborative opportunities for conserving and restoring natural areas.





- ¹ Samson, F.B. and F.L. Knopf. 1994. Prairie Conservation in North America. BioScience 44: 418–421
- ² Illinois State Museum. 2006. Museum Link Illinois: Forest Conservation. Available from: .http://www.museum.state.il.us/muslink/forest/htmls/conserv.html. Accessed March 2021.
- ³ Nuzzo, V.A. 1986. Extent and status of Midwest oak savanna: presettlement and 1985. Natural Areas Journal 6: 6-36.
- ⁴The Fish and Wildlife Act of 1956 (16 U.S.C. 742a-742j, not including 742 d-l; 70 Stat. 1119), as amended
- ⁵ Emergency Wetlands Resources Act of 1986 Public Law 99-645 (100 Stat. 3582)
- ⁶ U.S. Fish and Wildlife Service (Service). 1999. Grand Kankakee Marsh National Wildlife Refuge: Environmental Assessment. U.S. Dept. of Interior, Fish and Wildlife Service, Region 3, FortSnelling, MN.
- ⁷ Service, 1999
- ⁸ Bennett, G. and K. J. Mulongoy. 2006. Review of Experience with Ecological Networks, Corridors and Buffer Zones. Secretariat of the Convention on Biological Diversity, Montreal, Technical Series No. 23, 100 pages.
- ⁹ Beacon Environmental Ltd. 2012. Ecological Buffer Guideline Review. Available from: https://cvc.ca/wp-content/uploads/2013/08/ Ecological-Buffer-Guideline-Review.pdf. Accessed March 2021
- ¹⁰ The Environmental Law Institute. 2003. Conservation Thresholds For Land Use Planners. Washington D.C. Available from: https://www.eli.org/sites/default/files/eli-pubs/d13-04.pdf. Accessed March 2021.
- ¹¹ Rosenberg, K.V., Dokter, A.M, Blancher, P.J., Sauer, J.R., Smith, A.C, Smith, P.A., Stanton, J.C., Panjabi, A. Helft, L., Parr, M., and Marra, P.P. 2019. Staggering decline of bird populations. Science. Vol. 366, Issue 6461, pp. 120-124. Available from: https://science.sciencemag.org/content/366/6461/120.
- ¹² Herkert, James R., Robert E. Szafoni, Vernon M. Kleen, and John E. Schwegman. 1993. Habitat Establishment, Enhancement and Management for Forest and Grassland Birds in Illinois. Division of Natural Heritage, Illinois Department of Conservation, Natural Heritage Technical Publication #1, Springfield, Illinois.
- ¹³ Rosenberg, et al. 2019.
- ¹⁴ More information about the Land and Water Conservation Fund available from: https://www.doi.gov/lwcf
- ¹⁵ More information about the Refuge Revenue Sharing program: https://www.fws.gov/refuges/realty/rrs.html
- ¹⁶ Caudill, James and Erin Carver. 2019. Banking on Nature 2017: The Economic Contributions of National Wildlife Refuge Recreational Visitation to Local Communities. U.S. Fish and Wildlife Service, Falls Church, Virginia. Available from: https://www.fws.gov/economics/divisionpublications/bankingOnNature/BoN2017/Banking-on-Nature-2017v4.pdf
- ¹⁷ Kankakee County Board, Regional Planning Commission, Planning Commission Land Use Subcommittee, Planning Department, HNTB Corporation, and Real Estate Planning Group. 2005. 2030 Kankakee County Conservation Plan. Available from: http://planning.k3county.net/pdf/LUP/Overall.pdf. Accessed March 2021.
- ¹⁸ U.S. Forest Service. 2021. Why is Pollination Important? U.S. Department of Agriculture. Web. Available from: https://www.fs.fed.us/wildflowers/pollinators/importance.shtml. Accessed March 2021.
- ¹⁹ Thomas L and Stack JK. 2020. Kankakee National Wildlife Refuge and Conservation Area- Water Resource Inventory and Assessment. U.S. Fish and Wildlife Service. Bloomington, MN Available from: https://ecos.fws.gov/ServCat/DownloadFile/169863. Accessed March 2021.
- ²⁰ Vermont Department of Environmental Conservation. 2021. Wetland Functions And Values: Surface And Ground Water Protection. Web. Available from: https://dec.vermont.gov/watershed/wetlands/functions/water-quality. Accessed March 2021.
- ²¹ University of Minnesota. 2016. How Does Nature Impact Our Wellbeing? Web. Available from: https://www.takingcharge.csh.umn. edu/how-does-nature-impact-our-wellbeing. Accessed March 2021.
- ²² Kellert, S.R., Case, D.J, Escher, D. Witter, D.J, Midels-Carrasco, J.M. and Seng, P.T. April 2017. The Nature of Americans Disconnection and Recommendations for Reconnection: National Report. Available from: https://natureofamericans.org/findings/benefits-of-nature

