

## 5. NATURAL RESOURCES, OPEN SPACE, & RECREATION PLAN

When discussing the “assets” of Kankakee County, many citizens point to the abundance of the County’s natural resources and open spaces, and the Kankakee River. Many aspects which qualify the rural areas of the “town and country” land use preference for the County are based on the extensive natural areas and open spaces of the County.

The *Natural Resources, Open Space and Recreation Plan* provides a framework for continued preservation of existing resources, as well as the development of new recreational opportunities in the future. Today, farmland and the Kankakee River watershed serve as the County’s key natural resources and open space. Many other resources such as the savanna oak trees in Pembroke Township, the County’s historic structures, and State Parks all provide important contributions to the County’s “system” of cultural, open space and recreational uses. The Plan makes provision for their protection and expansion in the future.

### A. Existing Conditions Summary

Kankakee County’s history is rooted in agriculture. In the early 1900s, prairie was converted to productive farmland through the use of varying drainage techniques. Today, 87% of the County’s land is used for farming purposes. Contributing factors of farmland productivity are the creeks, wetlands, and floodplains of the Kankakee River watershed, which are an integral part of the agricultural drainage system. In addition, the Kankakee River watershed provides for the largest remaining natural ecosystem for fish, wildlife, and plant habitat in the County. Fortunately, the Kankakee River State Park protects over 4,000 waterfront acres in the northwestern Kankakee. It also provides major recreational options within the County. This public land network, however, could be expanded to include more riverfront areas throughout the County. Through prioritized actions, the County could not only preserve significant features of the Kankakee River watershed, but also support agricultural productivity, natural resources, and recreational systems.



*Kankakee River State Park is an invaluable asset*



## Water Resources

The Kankakee River Watershed comprises nearly all of Kankakee County, and provides for its water supply, drainage, and recreational resources. The origins of the river basin is near South Bend, Indiana and flows to Aroma Park, where it is joined by its largest tributary, the Iroquois River, and continues to Channahon where it joins with the Illinois River. In Illinois, the entire river system maintains its original meandering path, and is an invaluable asset providing unique recreational and economic benefits. The river's watershed also holds a high potential for archeological finds. The County's original inhabitants, the Pottawatomie Tribe, settled in temporary encampments along the river and its tributaries. As noted by many, the Kankakee River is the defining resource for the County.



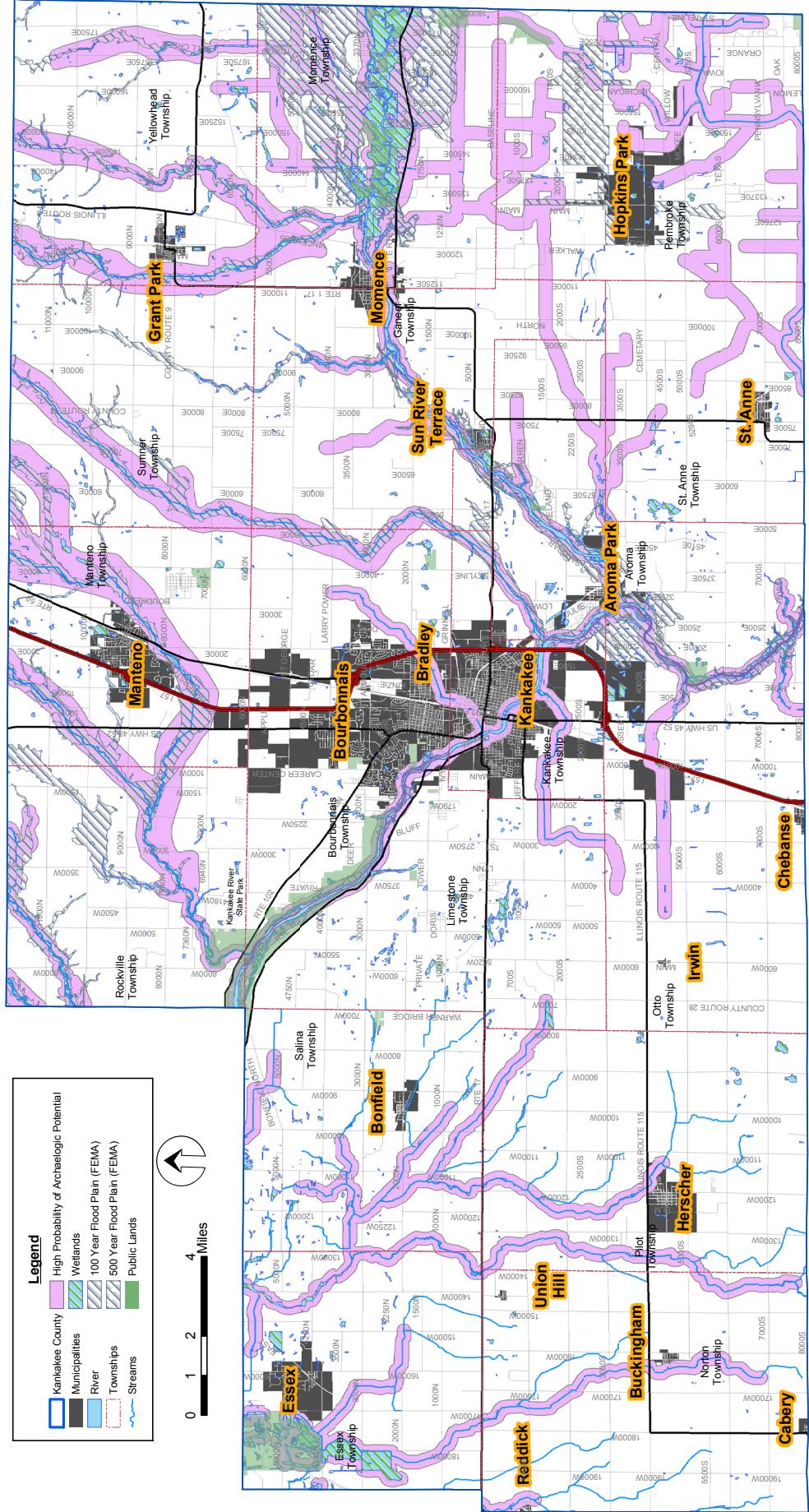
*The Pottawatomie settled along the Kankakee River*

Floodplains, wetlands, and other tributaries of the Kankakee River Watershed account for the majority of the County's drainage ways. Floodplains are areas near a river or stream that are periodically covered by flood water. Wetlands are areas that are regularly saturated by surface water or groundwater, and are characterized by vegetation adapted for those soil conditions. Both floodplains and wetlands serve vital functions for flood control, and wetlands serve as a natural filter of pollutants. The Kankakee River Watershed contains critical natural resources, and care should be taken to avoid and minimize impacts from future land development. The key features of the watershed have been identified on Figure 5-1 (see next page), and should be avoided or buffered when planning or constructing new development.

Notably, the Kankakee River State Park protects 4,000 acres along the river, and provides opportunities for hunting, fishing, boating, camping, hiking, and horseback riding. In addition, the portion of the river below Momence maintains some of the best sport fishing in the State. The most extensive remaining wetlands along the Kankakee River are the "Momence Wetlands," east of the City of Momence. Highly diverse populations of birds, fish, and mussels that are biologically significant can be found in this area. However, much of the Kankakee River, as well as the Momence Wetlands, remains unprotected and suffers from sedimentation, hydrological changes, and erosion.



Figure 5-1: Critical and Sensitive Areas



## Soil Resources

Kankakee County is agricultural in character, and is the basis of the County's historic and cultural heritage. Many areas of the County sustain prime agricultural soils that are suitable for most major crops, particularly the southwestern corner of the County near Buckingham, Herscher, and Irwin. However, other areas have serious limitations and require intensive management to maintain moisture, increase fertility, and minimize erosion. The key to preserving the County's most productive agriculture soils is to understand the soil's composition and properties.



*Farming is a way of life and the County's heritage*

The majority of the County's soils have developed from glacial origins, which left till, outwash, lake-bed sediments, and loess. The properties of the existing soils depend upon the type and thickness of the upper deposits, as well as the underlying materials. The underlying material, till, is a mix of clay, silt, sand, and gravel. This mix varies the soil's under drainage capability from slow to moderate permeability. Soils developed on outwash tend to have good under drainage, while those on lake sediments tend to have poor under drainage. Artificial drainage systems, such as ditches and field tiles, have been used on many lands in the County to convert poorly-drained soils into excellent agricultural land.

Soil is also an important issue for new development. Stable building foundations and septic systems rely on proper soil types. A number of locations in the County, such as Limestone Township, have had difficulty with supporting new development due to poorly drained soils. Further, since the County's economic production depends on agriculture, the County should promote redevelopment and infill within municipalities, and encourage new development within local municipalities.

The Land Evaluation and Site Assessment (LESA) Program is a widely accepted method to classify which soil is most appropriate for farming or most compatible for new development. LESA provides a framework for preserving farmland. Prime farmland is land that has the best combination of physical and chemical qualities for the production of crops, whereas farmland of statewide importance is land that has a good combination of these



qualities. Farmland of local importance is either currently producing crops, has the capability of production, or is used for confined livestock.

The most recent soil survey for Kankakee County was published in 1979 by the U.S. Department of Agriculture (USDA) Soil Conservation Service. The 1979 survey provides a detailed soil type description and limitations for farming and/or development. However, the USDA is currently updating the 1979 survey with new soil types and descriptions, and will not complete their work until late 2005. Nevertheless, the Kankakee office of Natural Resources Conservation Service has provided soil productivity data, which is illustrated in Figure 5-2.

### **Drainage Districts**

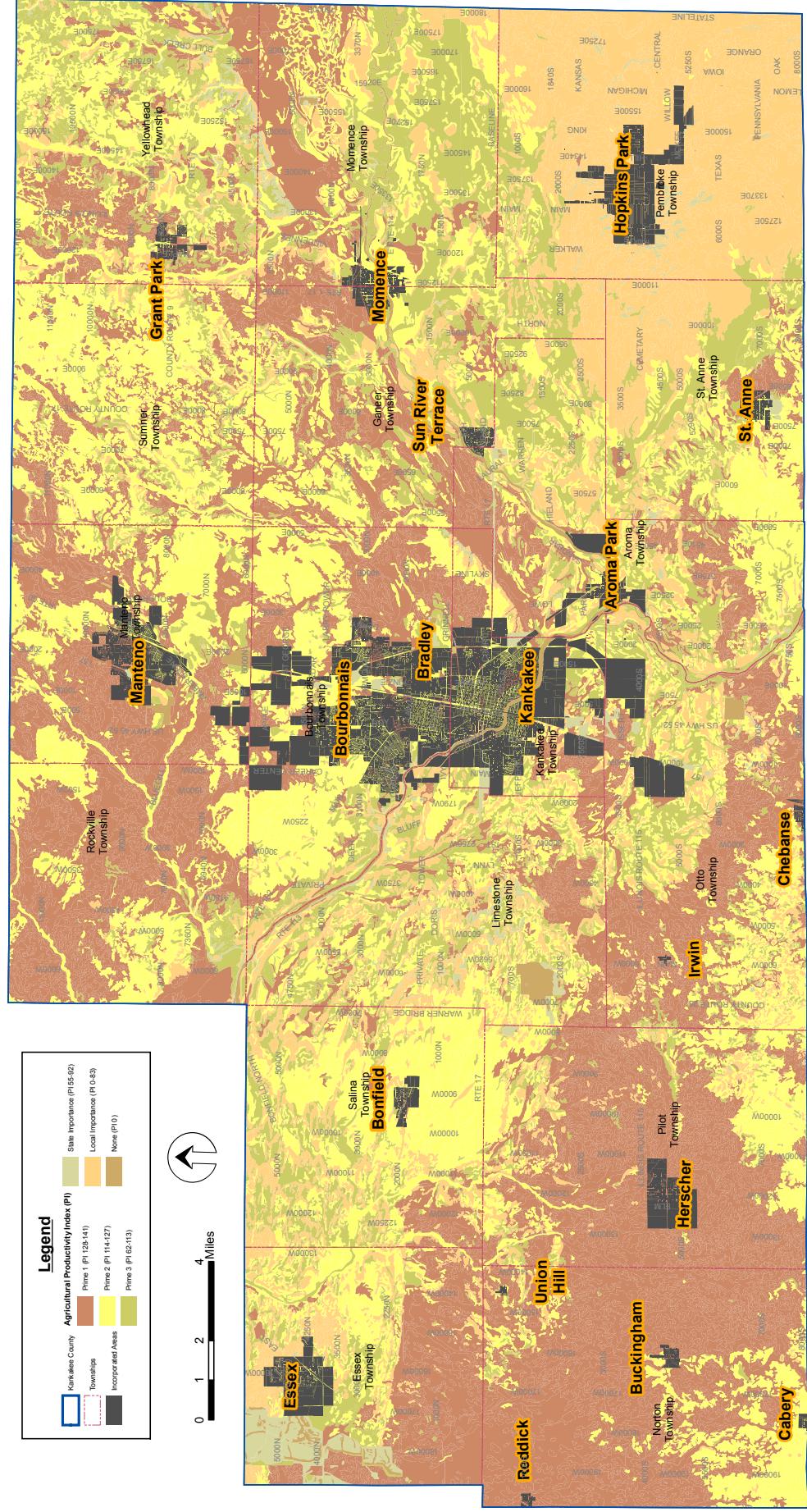
In order to increase farmland productivity, vast areas of the County have received improvements from local drainage districts. Drainage ditches, swales, and underground tiles have been improved to help control the moisture levels for crops. Although there are 53 drainage districts in the County, many districts are inactive and do not maintain or improve drainage.

An issue for farmers close to a major stream or river is that their farms are on occasion inundated during periods of heavy rains. Sophisticated farming has sought to find ways to drain soils quickly to enhance productivity. Many drainage systems were developed generations ago when farmland was less intensely cultivated. Therefore, minor development can exacerbate storm water and flooding concerns.

The most notable issue for drainage districts is non-farm development. When residential subdivisions are constructed on farmland, developers are often unaware of farm/soil drainage systems. In many instances, excavation damages underground field tiles, and causes flooding. In addition, new residential infrastructure—such as driveways, access bridges, and storm water management—may disregard the area-wide drainage district system and cause an imbalance in the overall drainage system. In a County as topographically “flat” as Kankakee, minor changes in surface conditions can be very disruptive to storm and flood water management. Therefore, drainage districts should be contacted and consulted prior to development application approval in order to determine the most effective strategy to maintain appropriate drainage for existing farmers and for new developments.



**Figure 5-2: Agricultural Productivity Map**



SOURCE  
Kankakee County  
Illinois Natural Resources Conservation Service  
USDA Natural Resources Conservation Service



## Open Space and Recreation

The primary goal of the 1999 *Kankakee County Greenways and Trails Plan* is to provide environmental, aesthetic, and recreational enhancements to the County by creating a comprehensive system of natural corridors and trails. The Plan highlights the preservation of possible future corridors and improvement of park facilities through regional cooperation. Essentially, the Greenways and Trails Plan is a framework for action over the next 20 years to protect significant environmental resources and increase quality of life amenities, such as natural open space, trails, and parks. The 1999 *Greenways and Trails Plan* is accepted as part of this Comprehensive Plan, and copies are available at the Kankakee County Planning Department.

The Greenways and Trails Plan has established an ambitious goal of creating 10 natural greenways and 41 trails over a period of 20 years. The natural greenways were based on the following natural resources: Kankakee River, Iroquois River, Rock Creek, Soldier Creek, Baker Creek, Minnie Creek, Bourbonnais Creek, Wiley Creek, Davis Creek, Gar Creek, and Horse Creek. 41 trails are designated to connect existing municipalities to these natural greenways, and existing parks. A priority ranking system was created to highlight the greenways and trails that provide the most potential benefits. Figure 5-3: Kankakee County Greenways & Trails Plan on the next page highlights the greenway and trail opportunities available in Kankakee County.

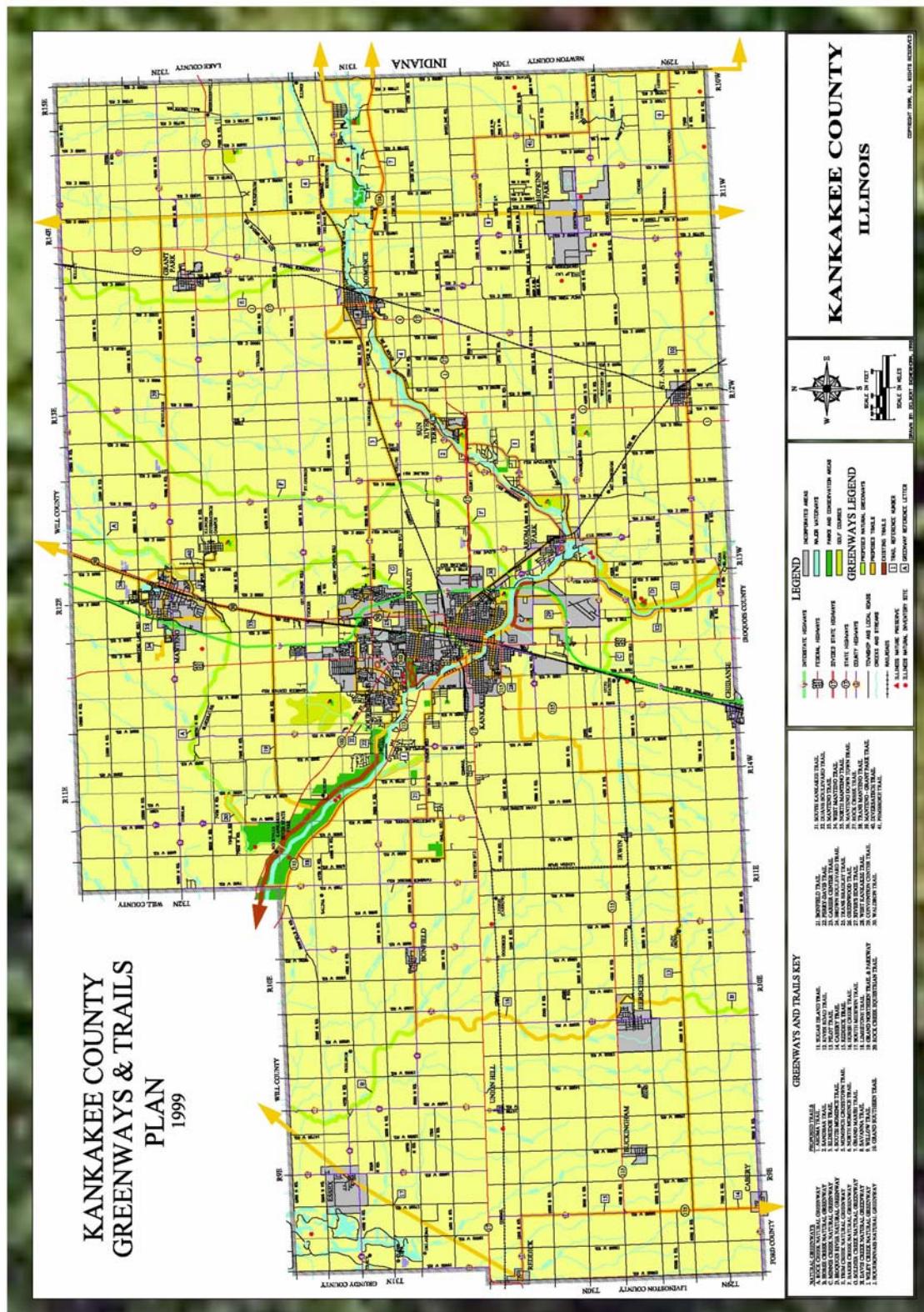


*Potential trail site along the Kankakee on CH 42*

An important benefit of a comprehensive greenway system is its ability to help manage unwanted development. If properly implemented through zoning and subdivision regulations, the greenway system would provide a buffer between developed areas and help preserve natural and scenic areas for public enjoyment. Various implementation tools are outlined in the Greenways Plan. The County should offer planning assistance to those municipalities with jurisdiction over the high-priority greenways or trails to realize plan implementation.



Figure 5-3: Kankakee County Greenways and Trails Plan



## B. Goals and Objectives

Kankakee County is a rural county that wishes to preserve agricultural productivity as a long-term planning goal. The County has a unique opportunity to plan and maintain a comprehensive greenway system, because most areas are accessible and undisturbed by non-agricultural activity. Therefore, an overall goal of the County is to proactively implement the 1999 *Greenways and Trails Plan*, which provides comprehensive guidance on a county-wide greenway system.

Planning goals and objectives are intended to provide general policy direction. Goals describe a desired end state toward which planning efforts should be directed, while objectives describe actions that should be undertaken in order to advance toward the overall goals. The goals and objectives for natural resources, open space, and recreation are listed below, and were considered in the subsequent implementation and recommendations section.

### Natural Resources, Open Space, and Recreation

**Goal 1:** *Preserve the integrity of the Kankakee River as a sustainable source of water and as an environmental, recreational and economic resource.*

Objective 1.1: Educate residents about the role that natural resources and wildlife play in maintaining a high quality of life in the County, and residents' roles in protection and restoration efforts.

Objective 1.2: Promote recreation and ecotourism opportunities within the County, including areas such as the Kankakee River and the State Park near Essex.

**Goal 2:** *Safeguard Kankakee County's environmental features and natural resources as distinguishing features of the community.*

Objective 2.1: Prepare a county-wide inventory and program to preserve and manage existing and potential natural resources and habitats that emphasizes larger, connected areas rather than small, isolated pockets.

Objective 2.2: Make available to the public the state of Illinois Dept. of Natural Resources inventory that identifies natural resources and habitats that are unique to Kankakee County.

Objective 2.3: Identify opportunities to network multi-use trails and pathways to provide connections between subdivisions, schools, parks, and commercial areas.



Objective 2.4: Support creative funding mechanisms in order to achieve and implement park, open space, and recreation objectives at every level of Kankakee County government.

Objective 2.5: Coordinate land use designations with soil and topographic characteristics, the protection of historical and natural resources, existing land uses, and the availability of public facilities.

***Goal 3: Manage storm water, floodplains and wetlands.***

Objective 3.1: Implement a county-wide Storm Water Management and Erosion Control Model Ordinance.

Objective 3.2: Require that the management of storm water discharge meets standards that will ensure there will not be adverse impacts on agriculture, or on the quality of potable public surface water supplies.

Objective 3.3: Study the possibility of providing regional storm water management.

***Goal 4: Support a public and private parks and recreation system that promotes healthy lifestyles by offering active and passive recreational opportunities.***

Objective 4.1: Implement the Kankakee County Greenways and Trails Plan and provide support for any interrelated municipal open space plans.

Objective 4.2: Continue to support the State Park system in Kankakee County.

Objective 4.3: Encourage Kankakee County's cities and villages to adopt open space and recreation plans consistent with the County Greenways & Trails Plan.

Objective 4.4: Continue to enhance access and utilization of the Kankakee River for recreational purposes.



## **C. Recommendations and Implementation**

Kankakee County is committed to preserving its agricultural productivity, especially prime farmland outside municipal extraterritorial jurisdictions. Since 1996, the County has taken a strong position in supporting agriculture by requiring a minimum 20-acre lot for residential uses, and supporting urban areas by encouraging annexations of major residential subdivisions. Nevertheless, as described in the Land Use Plan, growth pressures have consumed rural agricultural lands. Given the expected rate of growth in the County over the next twenty to thirty years, absent any further intervention by the County, the rate of consumption could increase.

Kankakee County, with the support of its municipalities, is pursuing a stronger policy of requiring annexations of subdivisions, and increasing the minimum farm size in agricultural areas. In addition, the County and its municipalities are committed to implementing the 1999 *Kankakee County Greenways and Trails Plan* to provide a comprehensive open space and recreation network. This effort will require county-wide leadership, zoning and subdivision revisions, and a focus on priority greenway corridors. In preparing for its future open space vision, the County should use the subsequent policies and implementation actions.

### **Natural Resources, Open Space, and Recreation**

Based on plan goals and objectives, and County preferences for future natural resource and open space protection and development, several recommendations and implementation strategies are provided below.

***Recommendation 1: Protect and enhance the Kankakee River for its natural beauty, recreational opportunities, and potential for nearby economic development.***

#### ***Implementation Actions:***

##### ***A. Promote a county-wide open space management entity.***

In order to manage preserved open space over the long-term, the County should promote the development of a county-wide "management entity." Forest preserves or park districts are typical management entities used by



other counties. One option is to expand the jurisdiction of the Kankakee Valley Park District, which was established in 1925 and now manages 31 properties covering 600 acres. Even though the Park District formally serves the residents of Kankakee and Aroma Park Townships, its parks are enjoyed county-wide.

B. Update development regulations to protect 100-year floodplains.

The County should update its subdivision regulations to protect 100-year floodplain areas from significant disturbance. Residential construction is permissible in floodplains under federal regulations (provided the dwelling area is located above federally-designated flood levels). However, homes in a floodplain are always particularly subject to damage in major storm events. Therefore, the County should consider the preservation of floodplains as part of a development's open space requirements. In the unfortunate situation of a large flood, the County should work with FEMA to purchase damaged properties, relocate residents, and preserve the properties as open space.

C. Adopt a county-wide storm water management program.

The Kankakee County Regional Planning Commission's Land Use Subcommittee has drafted a county-wide storm water ordinance and submitted it for state review. It is planned the ordinance will be submitted for County Board adoption in late 2005. The Comprehensive Plan encourages its endorsement, along with unified storm water management regulations by municipalities in Kankakee County.

D. Provide planning grants for public access studies.

The County currently provides small grants for community improvement projects, such as comprehensive plans, technical studies, or environmental projects, under the *Kankakee County Quality Improvement Grant Initiative*. The County should update the program to ensure that grants demonstrate concurrence with the 1999 Greenways and Trails Plan.



*Recommendation 2: Utilize the 1999 Kankakee County Greenways and Trails Plan to create a comprehensive trail network and protect critical natural resources.*

***Implementation Actions:***

A. Update County's development regulations to require waterfront "buffers."

The County should update its regulations to specify that any developments must preserve a 50- to 100-foot natural buffer from the top of all river and stream banks. The County's subdivision regulations already require open space as part of a new development; however, the regulations do not specify the protection of river and stream banks. The Village of Herscher already has such provisions in its subdivision ordinance. Other County cities and villages along rivers and streams should adopt similar regulations.

B. Update regulations to allow conservation development.

The County should update its subdivision regulations to allow for conservation development, which could be mandatory within the "greenway and trail district" zoning overlay (see Greenways and Trails Plan). This type of residential subdivision allows for flexible site planning, lot size development, and clustering so that natural features and larger open space areas are preserved. If this development technique is used with the "greenway and trail district," larger open space areas could be unified into a county-wide open space network. Shared open space areas adjacent to residential areas typically increase the value of homes for resale.

C. Promote designation of county-wide land trust to manage greenways.

In order to manage a comprehensive greenways and trails system, the County should promote the designation of a non-profit land trust, park district, or other management entity. In the short-term, the preservation of open space greenways and creation of trails within new developments may be managed by "local" entities such as a homeowners' association. In the long-term, the creation of a unified greenways and trails system will require a skilled management staff and maintenance crews.



D. Conduct a detailed natural resources inventory for the entire County.

To help preserve critical natural resources as part of the greenway system, the County should prepare a detailed natural resources inventory. The Illinois Department of Natural Resources (IDNR) has a partial inventory of woodlands, savannas, and prairies, which may be used as a starting point for the county-wide inventory. The County also should work with municipalities to inventory natural resources, and then disseminate the inventory to municipalities and other local agencies for awareness and preservation purposes.

E. Provide planning assistance to create greenways and trails system.

The County should offer planning assistance to its municipalities for updating their regulations to preserve waterway "buffers." In addition, the County could provide municipal planning assistance in determining appropriate trail locations and connections. Lastly, the County could facilitate the development of grant applications to state and federal agencies for trail construction funds, and sponsor municipal applications to these agencies.

*Recommendation3: Preserve the Momence Wetlands for its hydrologic value, natural beauty, recreational opportunities, and economic development potential.*

*Implementation Actions:*

A. Provide planning assistance to Momence and Momence Township.

The County should provide planning assistance to facilitate the preservation of the Momence Wetlands as a state park, which is a concept supported by the City of Momence. Once the County has updated its development regulations for open space requirements, it should offer planning assistance in securing protection of the area. In particular, the County and the City should work together to explore alternative uses for residentially zoned parcels proximate to the area (see Land Use Plan). The Momence Wetlands are biologically significant, and have the potential to provide an eco-tourism niche for visitors including fishing and hunting, canoe and kayak, bed and breakfasts, and specialty retail.



B. Enlist the assistance of the Illinois Department of Natural Resources.

The Illinois Department of Natural Resources (IDNR) already owns a number of parcels within the Momence Wetlands. The County should continue to support this agency's interest in planning and financial assistance to preserve the Momence Wetlands. In particular, the IDNR could provide leadership and knowledge on preserving wetlands and floodplains through regulatory means, conservation easements, and funding sources.

C. Study potential for state park designation.

The County in collaboration with other agencies should study the potential for state park designation of the Momence Wetlands. The more partners that the County can enlist to support conservation of the Momence Wetlands, the more likely it can become a reality. Local environmental organizations, such as the Chicago Openlands Project, can provide the County with valuable experience in this area.

*Recommendation 4: Protect and preserve the ecologically significant savanna prairies in Pembroke Township as an open space amenity.*

*Implementation Actions:*

A. Provide planning assistance to Hopkins Park and Pembroke Township.

Pembroke Township contains some of the last remaining savanna oaks in the entire Midwest, as well as other threatened and endangered plants in its woodlands and savanna prairies. Because these features are relatively undisturbed, the Nature Conservancy has already purchased land within the township. In addition, the U.S. Fish and Wildlife Service had investigated the potential to purchase lands in the area. Kankakee County should provide planning assistance to the township and Village of Hopkins Park to inventory these areas and facilitate preservation efforts, while at the same time accommodating future growth.



B. Promote environmental sustainability principles within Pembroke Township.

Due to the significant natural resources within the Township, the County should promote environmental sustainability principles as a component of an economic development strategy. Specifically, the County could utilize the many resources of the U.S. Department of Agriculture's rural sustainability program, which provides planning and funding opportunities for renewable energy sources.

*Recommendation 5: Promote an open space development strategy for the former strip mines in Essex Township.*

A. Provide planning assistance and support for Essex and Essex Township.

The former strip mines west of Essex are used locally for fishing and boating activities. The County should offer planning assistance to Essex and Essex Township to develop an open space plan that focuses on an eco-tourism development strategies. In particular, the County could provide general planning services, GIS mapping, and meeting facilitation.

B. Enlist the assistance of the Illinois Department of Natural Resources (IDNR).

The Mazonia Fish and Wildlife Area in Will County is located just north of the former strip mines, and already includes portions of the strip mine area. The County should contact IDNR to determine if they have plans to incorporate additional strip mine areas into the Fish and Wildlife Area.

*Recommendation 6: Protect the Prime 1 agricultural soils in Kankakee County due to their high productivity levels for farming.*

A. Utilize the LESA Program to preserve Prime 1 agricultural soil.

The U.S. Department of Agriculture developed the Land Evaluation and Site Assessment (LESA) Program to help governing bodies determine the most appropriate areas for farming and non-farming development. Since the majority of the County's land cover is prime agricultural soils, the County should focus its preservation efforts in those areas with large amounts of Prime 1 soils, outside municipal extraterritorial jurisdictions. In particular, "county west" and the northern tier township of Rockville contain Prime 1



soils. The County should work with the local Farm Bureau to specifically determine the most appropriate areas for preservation efforts.

B. Consider increasing the minimum lot area for farm dwellings.

In 1996, the County increased the minimum size of a farm residence parcel from 2 to 20 acres. As indicated before, rural growth pressures will continue in the future. In order to reduce the potential for a "fractured" rural landscape, the County should investigate an increase in the size of a farm residence parcel. Many of the rural Illinois counties have utilized varying minimum residential lot sizes in agricultural areas. Kankakee County should consult with the Farmland Trust and other agencies to determine the precedents for increased lot sizes and to address farmers' development issues.

C. Investigate potential for a farmland conservation easement program.

The County should investigate the potential for a conservation easement program through the assistance of regional open space organizations, such as the Open Lands Project, or the U.S. Department of Agriculture. For farmers wishing to preserve their land for future generations, they may voluntarily develop a conservation easement over a portion of their land. A conservation easement could be used for charitable tax deductions and lower property and estate taxes. The conservation easement would need to be "held" by a government entity or non-profit organization, such as a land trust.

