Fox River Corridor Plan
Land Resource Management Plan
Kendall County, Illinois
June 2008

Prepared by Teska Associates, Inc.
24103 W. Lockport Street, Unit 109
Plainfield, Illinois 60544
phone: (815) 436-9485
fax: (815) 439-3304
# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Section I: Introduction</strong></td>
<td></td>
</tr>
<tr>
<td>- Study Area</td>
<td>1</td>
</tr>
<tr>
<td>- Value of a Corridor Plan</td>
<td>2</td>
</tr>
<tr>
<td><strong>Section II: Existing Conditions</strong></td>
<td>3</td>
</tr>
<tr>
<td>- Significant Features along the Fox River Corridor</td>
<td>3</td>
</tr>
<tr>
<td>- Opportunities</td>
<td>10</td>
</tr>
<tr>
<td>- Constraints</td>
<td>13</td>
</tr>
<tr>
<td>- Exhibit: Planning Issues Map</td>
<td>14</td>
</tr>
<tr>
<td><strong>Section III: Fox River Corridor Master Plan</strong></td>
<td>15</td>
</tr>
<tr>
<td>- Design Guidelines</td>
<td>15</td>
</tr>
<tr>
<td>- Corridor Users</td>
<td>25</td>
</tr>
<tr>
<td>- Corridor Design &amp; Amenities</td>
<td>26</td>
</tr>
<tr>
<td>- Maintenance</td>
<td>32</td>
</tr>
<tr>
<td>- Corridor Development Protection</td>
<td>32</td>
</tr>
<tr>
<td>- Exhibit: Corridor Master Plan Map</td>
<td>33</td>
</tr>
<tr>
<td><strong>Section IV: Implementation Plan</strong></td>
<td>34</td>
</tr>
<tr>
<td>- Implementation Plan Action Items</td>
<td>34</td>
</tr>
</tbody>
</table>

On the cover:
Photo of Fox River (Courtesy: Newark Sportsmen’s Club).
Section I
Introduction

The purpose of the Fox River Corridor Plan is to provide a focused study and set of guidelines for a segment of the Fox River Corridor west of Route 47. This area is experiencing less growth and development pressure than other segments further upstream in the northeast section of the County. Figure 1 lists the primary goals of the Fox River Corridor Plan.

Below is a description of the study area and discussion outlining the motivation for developing the Fox River Corridor Plan. The plan continues with a description of existing conditions (Section II), planning and design recommendations (Section III), and an implementation plan designed to prompt proactive achievement of the recommendations (Section IV).

Study Area
As illustrated in the map in Figure 2, the Fox River Corridor Study Area encompasses the river corridor extending from the Kendall County/La Salle County line northeast to Route 47. Although the study area generally focuses on the areas confined by the immediate road network paralleling the river, the recommendations outlined in Section III are applicable to adjacent areas that are not governed by municipal plans or plans managed by other non-County entities such as the State Department of Natural Resources (DNR) or private organizations.

Figure 1
Primary Goals of the Fox River Corridor Plan

- Create a unified greenway system that provides parks, recreational amenities, trails, and natural areas along the Fox River;
- Preserve, restore, and protect the beauty and character of the Fox River by establishing consistent planning concepts that can be applied along the river corridor;
- Establish a means for inter-connecting the communities along the river corridor by way of a County-wide common asset; and
- Accommodate appropriate development that capitalizes on the beautiful Fox River setting.

Figure 2
Map of the Fox River Corridor Study Area

The Fox River Corridor Study Area extends in a northeasterly direction from the Kendall County/La Salle County line to Route 47. The river bends around Fox River Drive near Silver Springs State Fish & Wildlife Area, creating a west bend and east bend.

Communities located along or in close proximity to the study area are Millington, Newark, Millbrook, Sandwich, Yorkville, and Plano.

A Planning Issues Map is provided in Section II indicating environmental features, the local transportation network, and other prominent elements within the study area.
**Value of a Corridor Plan**

The Fox River Corridor Plan provides community leaders, private organizations, and other entities with a blueprint to guide planning, design, and preservation along the Fox River. Elements such as existing conditions, opportunities and constraints, and available resources were all taken into consideration to draft equitable recommendations that would provide benefit to all users of the Fox River.

A unified plan also serves as an invaluable tool for all local stakeholders to encourage investment – whether measured in time or money – in the Fox River to ensure the goals of the plan are achieved. All communities face limitations on physical and financial resources; however, a unified plan such as the Fox River Corridor Plan demonstrates to those who can provide resources that their investments in the Fox River are contributing to an endeavor benefiting the common good.

Adoption of the Fox River Corridor Plan would support future capital improvement projects and grant funding applications impacting the Fox River. As a supplemental document to the Kendall County Land Resource Management Plan (LRMP), the Fox River Corridor Plan would also support the County’s long-range growth management plans, particularly as they relate to land use and land conservation, open space and recreation planning, and transportation planning. In addition, similar to the County LRMP, the Fox River Corridor Plan is a dynamic document that is subject to amendment as conditions change, resources become available, and opportunities arise.
Section II
Existing Conditions

In order to prepare effective planning and design recommendations for the Fox River Corridor, it is important to evaluate the existing conditions of the river corridor. Physical conditions such as the local transportation network, land composition, environmental features, and other significant features (e.g. parks, open space, and recreational facilities; municipal uses; and cultural facilities) were evaluated via site visits, interviews with local stakeholders, evaluation of aerial photography, and general research. While environmental features such as waterways, floodplains, and significant tree patches were identified, a thorough environmental assessment of the river corridor was not within the scope of services for this project; however, future environmental studies may be required to achieve some of the recommendations outlined in this plan.

Significant Features along the Fox River Corridor

While the Fox River itself is a prominent component of Kendall County’s landscape, the river is surrounded by other significant features that have a symbiotic relationship with the river. For example, while the Fox River adds to the beauty and recreational opportunities of the Silver Springs State Fish and Wildlife Area, the state park attracts visitors from all around the region to access and utilize the river. Figure 3 lists five categories of significant features along the Fox River Corridor. These features are identified on the Planning Issues Map on page 14.

Environmental Features

The Fox River Corridor has always been characterized by its prominent environmental features. Clearly, the Fox River is the most prominent environmental feature not only in size but also in the variety of ecological, recreational, and educational opportunities it provides. In addition to the river, the Fox River Corridor also offers other significant environmental features as listed in Figure 4 and described below:

- **Creeks.** Several creeks are tributary to the Fox River, including Blackberry Creek, Rob Roy Creek, Big Rock Creek, Little Rock Creek, Hollenback Creek, Clear Creek, and a few other smaller creeks. Creeks have an important role in the natural function of the river as they convey water to larger bodies of water, particularly...
rivers, ponds, and lakes, to replenish them and provide natural water filtration processes. While the creeks do not offer the same recreational opportunities as the river due to their smaller scale, they offer similar ecological and educational opportunities.

Watersheds & Floodplains. Watersheds and floodplains are extremely important elements of the environment as they provide creeks, streams, and rivers with natural areas for drainage or flooding, respectively. A watershed is the drainage basin for a creek or stream and is generally formed by topographical divides such as ridge lines or hills. A floodplain is land adjacent to a stream or river that experiences periodic flooding, particularly after a major storm event. It is imperative to understand the impact of a development proposal on the overall watershed and floodplain to ensure they maintain their natural functions.

Wetlands. Wetlands and fens are two other significant water-related environmental features in the Fox River Corridor. Wetlands are generally lowland areas that are saturated with moisture and often provide natural habitats for local flora and fauna. Wetlands are located in various spots throughout the Fox River Corridor, generally situated in areas with low land depressions. Fens are a particular type of wetland, generally defined as freshwater peat land with alkaline ground water. The Fox River Corridor is home to a few notably recognized fens, including Millbrook Fen (located south of Millbrook), Tucker-Millington Fen (located east of Millington), and a fen within the Woods of Silver Springs and Settlement of Silver Springs residential developments (located east of Silver Springs State Fish and Wildlife Area). Due to their importance to the natural ecosystem, wetlands should be preserved. The U.S. Army Corps of Engineers and Environmental Protection Agency provide specific wetland classifications and regulatory specifications.

Ponds & Lakes. The Fox River Corridor has some ponds and small lakes within parks and natural areas. None of the lakes are of significant size to eclipse the Fox River as the most prominent environmental feature. Whether natural or man-made, ponds and lakes are important environmental features, providing ecological functions such as wildlife habitats and stormwater management. They offer recreational opportunities as well.

Topography. As evidenced by a leisurely drive through Kendall County, the Fox River Corridor is characterized by rolling topography, which produces scenic vistas and distinct natural areas such as overlooks onto the river and ridge lines forming watersheds. Even within land developments, topography may be incorporated into the site design of a residential or commercial development to enhance their physical attractiveness and appeal. Just like the water and woodland features within the Fox River Corridor, topography should also be maintained as much as possible to preserve the intrinsic layout of the natural landscape.
Woodlands. In addition to water features, the Fox River Corridor is characterized by a multitude of woodland areas. While many of these woodlands are located along the river, others are scattered throughout the corridor within parks, open spaces, agricultural areas, and private residential and commercial properties. Woodlands are vital to the natural ecosystem as they are comprised of native plant life, provide habitats for wildlife, and provide other important natural functions. As a result, preservation of healthy woodlands is imperative. Moreover, woodlands may be incorporated into the site design for parks, recreational areas, and private land development projects.

Municipalities

The Fox River Corridor runs through a few of Kendall County’s municipalities, including Millington, Millbrook, and Yorkville. The southern planning areas of Plano and Sandwich are also located within close proximity of the corridor. Some municipal parks, trails, and open spaces are currently in place providing residents of these communities with access to the river. For example, Yorkville has a canoe launch east of Route 47 and south of the dam and Riverfront Park. In Millbrook, an old bridge now limited to pedestrians located north of Whitfield Road crosses the river and provides access to Shuh Shuh Gah canoe launch along the west bank of the river.

Some communities are taking proactive measures to enhance their access to and design of the river corridor. For instance, Yorkville is currently updating its Park and Recreation Master Plan, evaluating the City’s park system and providing recreational provisions for bicyclists and pedestrians. Plano and Sandwich also provide limited recommendations for parks, open space, and recreation planning along the Fox River via their individual Comprehensive Plans. Smaller communities like Millbrook and Millington do not have specific planning documents for the Fox River Corridor or general parks, open space, and recreation planning. However, this plan will provide these communities with a valuable resource to help guide planning and design for the river corridor. For communities with established planning documents, the Fox River Corridor Plan carefully considered these established documents to prevent any conflicts and ensure compatibility between municipal and county planning recommendations.

Parks, Open Space & Recreational Facilities

Various parks, open spaces, and recreational facilities are located along the Fox River Corridor, which are listed in Figure 5 and described below:

<table>
<thead>
<tr>
<th>Parks, Open Space &amp; Recreational Facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>The recreational value of the Fox River Corridor is defined by a diverse mix of the following uses and places:</td>
</tr>
<tr>
<td>□ Municipal Parks &amp; Facilities</td>
</tr>
<tr>
<td>□ Silver Springs State Fish &amp; Wildlife Area</td>
</tr>
<tr>
<td>□ Forest Preserves</td>
</tr>
<tr>
<td>□ Camp &amp; Retreat Centers</td>
</tr>
</tbody>
</table>

The view of woodlands within the Fox River Corridor are accentuated by Kendall County’s rolling topography.
Municipal Parks & Facilities. Municipal parks and facilities within Yorkville, Millbrook, and Millington are located along or within close proximity of the Fox River Corridor. For example, parks such as Riverfront Park and West Hydraulic Park, which are adjacent to the river, and Town Square Park, which is north of the river along Route 47, are three municipal parks in Yorkville that benefit from their proximity to the river. Private recreational facilities such as Fox Paintball in Millington are also located along the river. In addition, private parks and open spaces located within residential developments also benefit from their locations near or within the Fox River Corridor.

Silver Springs State Fish & Wildlife Area. Silver Springs State Fish and Wildlife Area is the most prominent park along the Fox River. With the river cutting through the state park, Silver Springs provides various recreational opportunities, prairie restoration and environmental conservation areas, and scenic views along the local road network, particularly Fox River Drive, River Road, and Fox Road. The park offers pedestrian and equestrian trails, areas for nature study, picnicking areas, and opportunities for boating, camping, fishing, hunting, and winter sport. Silver Springs is also home to the Kendall County Outdoor Education Center, which provides nature study opportunities for school students in an outdoor experiential learning environment. In addition, the annual National Hunting and Fishing Days held each September is a major event drawing visitors from well beyond the region.

Forest Preserves. Figure 6 lists the 13 forest preserves managed by the Kendall County Forest Preserve District. Four of the 13 forest preserves are located along the Fox River Corridor, including the Subat, Maramech, and Hoover Forest Preserves and the Shuh Shuh Gah canoe launch near Millbrook. Eight of the County’s other 9 forest preserves are also located within a 5-mile radius of the Fox River Corridor, which accentuates the prominence of natural open space areas near the river. Two forest preserve areas were recently added near Millbrook, which highlights the fact that the Kendall County Forest Preserve District continually acquires properties to enhance the County’s system of forest preserves and natural areas. In addition to offering various woodlands, fens and wetlands, native plant life, animal habitats, varying topog-

---

**Figure 6**

**Kendall County Forest Preserve District**

Twelve of the 13 forest preserve and natural areas managed by the Kendall County Forest Preserve District are located within a 5-mile radius of the Fox River Corridor.

- Blackberry Creek Forest Preserve
- Harris Forest Preserve
- Hollenback Sugarbush Forest Preserve
- Hoover Forest Preserve
- Jay Woods Forest Preserve
- Lyon Forest Preserve
- Maramech Forest Preserve
- Newark Forest Preserve
- Richard Young Forest Preserve
- Shuh Shuh Gah Canoe Launch
- Subat Forest Preserve
- Forest Preserve near Millbrook

---
Subat Forest Preserve (left) and the Shuh Shuh Gah Canoe Launch (right) are two of Kendall County's twelve forest preserves/natural areas that are located within a 5-mile radius of the Fox River Corridor.

Subat, Maramech, and Hoover Forest Preserves provide trails, picnic shelters, and visitor parking areas. As the County's largest preserve at 400 acres and stretching about a mile along the Fox River, the Hoover Forest Preserve is an outdoor education center. The Shuh Shuh Gah canoe launch is the County's smallest preserve but offers an accessible canoe launch, picnic shelter, and access to the historic Millbrook pedestrian bridge located north of Whitfield Road.

Camp & Retreat Centers. Three private camp and retreat centers are located along the Fox River Corridor, including the Dickson Valley Camp and Retreat Center, Yogi Bear's Jellystone Park Camp and Resorts, and the Polish National Alliance (PNA) District 12 and 13 Youth Camp. Dickson Valley Camp and Retreat Center, which is located west of the river part way between Millbrook and Millington, provides a Christian-based outdoor learning and education program for youths and adults involved in local ministry. Yogi Bear's Jellystone Park Camp and Resorts, which is located east of the river and southeast of Millbrook, provides family-oriented camping and resort accommodations and recreational opportunities. The PNA Youth Camp, which is located north of the river and west of Yorkville High School, offers summer camp programming for Polish youth in arts, education, and sports.

Transportation Network
Although the Fox River Corridor is more commonly known for its environmental and recreational traits, it is also recognized for its accessible road network that allows residents and visitors to access the corridor's variety of recreational, educational, and cultural opportunities. The road network is part of an overall transportation system that also includes a railroad and trails.

Road Network. The Fox River Corridor is well served by a multi-tiered road network, including a future expressway, arterial roads, major and minor collector roads, and local roads (see Figure 7 on the next page for greater descriptions). The arterial and collector roads work together to carry vehicular traffic through the Fox River Corridor. Even though small local roads such as Finnie Road, Rogers Road, and Schaefer Road have less coverage than the arterial and collector roads, they still provide access and circulation within the corridor.
In addition to access and circulation, Kendall County’s distinctive rolling topography also creates scenic vistas along many of the area roadways within the Fox River Corridor. For instance, Finnie Road offers attractive views of rolling hills and dense woodlands while River Road and Fox Road travel through the natural landscape of the Silver Springs State Fish and Wildlife Area.

Railroad. A railroad operated by Illinois Railway runs through the study area. The railroad is limited to freight carrier service. Although passenger rail service is not offered along the railroad, the road network provides sufficient access to the study area for local residents and out-of-town visitors.

Trails. Some of the parks, forest preserves, and camp and resort centers offer trails within their grounds. A contiguous multi-use trail system is recommended for the Fox River Corridor to provide connections to these existing trails and create a complete network of trails serving the entire corridor study area. The potential multi-use trail system is described in greater detail in the next sub-section outlining opportunities offered by the corridor.

Figure 7
Multi-Tiered Road Network serving the Fox River Corridor

- **Expressways.** The proposed Prairie Parkway would be the only expressway directly serving the Fox River Corridor. For interstate access, I-88 is located approximately 14 miles to the north, I-55 is located approximately 14 miles to the east, and I-80 is located approximately 15 miles to the south.

- **Arterial Roads.** Route 47 is the only arterial road within the immediate study area; however, Route 34 and Route 71 are also within close proximity as they run north and south, respectively, of the study area.

- **Major Collector Roads.** Major collector roads include Fox River Drive, Crimmins Road, Whitfield Road, Millbrook Road, and Eldamain Road (future arterial). Plans to connect Eldamain Road to Highpoint Road would create more efficient circulation along these roads and the need for a river crossing. Similarly, there are also plans to extend Beecher Road just west of Route 47, which would enhance circulation and create the need for a river crossing. In addition, the proposed extension of Fox Road would improve connectivity to Route 71 to the south.

- **Minor Collector Roads.** Minor collector roads include River Road, Highpoint Road, and Millhurst Road. Budd Road and Walker Road are two other minor collector roads located within close proximity of the study area.

- **Local Roads.** Local roads such as Griswold Springs Road and Schaefer Road carry the least amount of vehicular traffic but are still important components of the road network. In addition to providing access, many local roads like Rogers Road and Finnie Road offer scenic vistas of the Fox River Corridor and Kendall County’s natural landscape.
Cultural Resources

The Fox River Corridor is home to a variety of cultural resources that preserve local historical aspects and provide educational, recreational, and tourism opportunities. With the County’s rich history in architectural forms and long-standing identity as an area with rural character, it would be difficult to list every cultural resource; however, the following is a summary of the more prominent cultural resources within the Fox River Corridor:

Kendall County Historic Courthouse. The Kendall County Historic Courthouse is located in downtown Yorkville just south of the Fox River. Beautifully restored, the historic courthouse is home to the Kendall County Forest Preserve District office, the Olde Courthouse Gallery, and the Laws of Nature Center and offers a variety of educational and recreational programs for the entire community.

Farnsworth House. Located along the north bank of the Fox River just west of the Silver Springs State Fish and Wildlife Area, the Farnsworth House is an architectural gem designed in modern domestic style by renowned architect Ludwig Mies van der Rohe. Constructed for prominent Chicago physician Dr. Edith Farnsworth in 1951, the Farnsworth House is available for individual and group tours, rental for special events, and access to its resource center for research or general perusal. Its riverfront setting makes the Farnsworth House a prominent landmark within the Fox River Corridor.

Millhurst Inn. A short distance to the west of Farnsworth House is Millhurst Inn, a renovated residence along Millhurst Road straddles Little Rock Creek and is located just off the north bank of the Fox River. Originally constructed in 1870 to be a flour mill, Millhurst Inn was used as a resort and then a speakeasy before a fire burned much of the structure in 1979. Completely restored, Millhurst Inn has maintained its historic character as a place of residence surrounded by nature.

Old Mill. Another old mill is located further south along Millhurst Road. Like Millhurst Inn, this old mill was a used as a bed and breakfast; however, it is now vacant but presents an opportunity for re-use. Located right along the west bank of the Fox River, any potential re-use would benefit from the views and access to the river.

Located just south of the Fox River, the Kendall County Historic Courthouse is on the National Register of Historic Places.

Designed by renowned architect Ludwig Mies van der Rohe, the Farnsworth House is an architectural gem on the Fox River’s north bank.

Millhurst Inn, which sits along Little Rock Creek and west of the Fox River, is a former flour mill renovated for residential use.

Figure 8
A Note about the Hoover Outdoor Education Center

Located south of the Fox River outside of Yorkville, the Hoover Outdoor Education Center was acquired by a private agency, Corlands, and turned the land over to the Kendall County Forest Preserve District. Despite the turnover, the center still offers its diverse set of outdoor education programs.
Opportunities
In addition to the existing physical features, the Fox River Corridor provides opportunities for new or enhanced features relating to recreation, environmental/land conservation, and community and economic development. These opportunities will utilize the region’s most prominent natural asset as a stimulus to enhance not only the symbiotic relationship between the river and Fox River communities but also its overall quality of life.

As listed in Figure 9, the four primary opportunities are recreation, land conservation and environmental protection, economic development, and intergovernmental/interagency cooperation. Other constraints may arise as communities begin to plan for the Fox River Corridor.

Recreation
The parks, open spaces, and recreational facilities described above certainly provide a variety of recreational opportunities to the Fox River communities. Just like any other aspect of a community, though, there is room for growth and improvement, including the provision of the following opportunities:

- Contiguous Multi-Use Trail System. In addition to providing an alternative transportation option to vehicular road travel, a multi-use trail system offers recreational opportunities for walking, jogging, bicycling, in-line skating, and horse-riding (where appropriate) as well as connects various significant features and points of interest along the Fox River Corridor to each other. Creating a contiguous trail system allows trail users to access various points of interest along the Fox River Corridor while remaining on the same path.

- Since significant features and points of interest are located on both sides of the river, it is essential that a contiguous multi-use trail system traverse both sides of the river. While trail design will vary depending on the surrounding conditions (for example, trails along a roadway will likely have a different design than trails along the river), all trail segments should seamlessly feed into a multi-use trail system to ensure convenient access.

- A multi-use trail system could integrate the Fox River Water Trail, which is a coordinated system of access points and signage designed to promote water-based recreation. Managed by the Chicago-based independent, non-profit preservation and open space organization known as Openlands, the Fox River Water Trail is part of the Northeastern Illinois Water Trails Plan, which covers a corridor originating at the Illinois-Wisconsin border, continuing through Lake, McHenry, Kane, Kendall, and La Salle Counties, and terminating at the Illinois River in Ottawa.
River Crossings. Since there is an opportunity to establish a contiguous multi-use trail system on both sides of the river, it is imperative that safe and adequately constructed river crossings are provided. Millington Road/Bridge Street, Whitfield Road, Fox River Drive, and Route 47 currently cross the Fox River, providing vehicular access across the river. The only other river crossing is the historic Millbrook pedestrian bridge located north of Whitfield Road adjacent to the Shuh Shuh Gah canoe launch. While the four existing road river crossings provide opportunities for both vehicular and non-vehicular river crossing, there are opportunities to establish pedestrian-oriented river crossings similar to the historic Millbrook pedestrian bridge. If feasible, river crossings may also cross the river at points where islands present opportunities for recreation or general access.

River Access Points. While the Fox River Corridor’s collection of parks, open spaces, and recreational facilities offer various recreational opportunities, the river itself also provides recreational opportunities such as fishing, canoeing, and boating. To access and enjoy these water-based recreational opportunities, safe and adequately built access points must be provided to the river. A few publicly accessible canoe launches currently exist along the Fox River Corridor, including the Shuh Shuh Gah canoe launch near Millbrook, the Yorkville canoe launch east of Route 47 and south of the dam and Riverfront Park, and the canoe/boat launches in Silver Springs State Park. Additional formal river access points are needed to create a safe and inviting environment along the Fox River.

Land Conservation & Environmental Protection
As stated in the Kendall County LRMP Planning Goals and Objectives, the County is committed to “the protection of all surface and ground water resources” and “use of [its] land resources in a manner sensitive to inherent environmental limitations”. Relative to the Fox River Corridor, Kendall County is dedicated to maintaining the river as a safe and viable natural resource and managing the land within the river corridor with careful consideration of impacts on the natural environment. Land conservation and environmental protection present the following opportunities:

Land Conservation. While there is merit to utilizing land along the river corridor for parks, recreational facilities, and other limited land uses, there is also merit to conserve land as general open space or for agricultural purposes. Land conservation for the purpose of preserving open space is vital to protect sensitive environmental features, maintain natural stormwater management, and protect native plants and natural habitats for local wildlife.

Even in instances of limited land uses such as residential development, land planning methods such as cluster development and conservation design are intended to conserve open space and integrate natural elements such as creeks, ponds, wood-
lands, and topography into residential site design. The Brighton Oaks residential development located along Highpoint Road southwest of Yorkville is an example of cluster development. While steps such as Kendall County’s April 2007 bond referendum for open space preservation are aimed at broader scale land conservation, methods such as cluster development and conservation design should be utilized in instances where land is planned for development rather than conservation.

Environmental Protection. In addition to the river, the Fox River Corridor is defined by a variety of other natural features such as creeks, floodplain, wetlands, ponds and lakes, fens, woodlands, and rolling topography. Whether land use comprises a private riverfront residential home or a public park, it is imperative to protect these natural features as much as possible by minimizing impacts from physical development or land alterations. The Kendall County Forest Preserve District is committed to the restoration of natural areas by utilizing methods such as controlled burns, brush removal, invasive plant control, and native plant seeding to protect biodiversity and maintain the overall health of native ecosystems. While private landowners are not expected to utilize the same methods of environmental protection and open space conservation, they are expected to be stewards of the natural environment, protecting it from excessive burdens or adverse impacts.

Kendall County Conservation Foundation. The Kendall County Conservation Foundation is actively working to protect key natural resources and promote environmental management best practices.

“Protect Kendall Now!” Project. Managed by The Conservation Foundation (different than foundation listed above), the “Protect Kendall Now!” project is dedicated to conserve land, protect the environment, and preserve natural areas – all in support of Kendall County’s own efforts for land conservation and environmental protection. In particular, the “Protect Kendall Now!” project is primarily based upon its Open Space and Natural Areas Plan, which outlines the foundation’s objectives, the anticipated extent of land preservation, and an implementation plan to meet the objectives. This Open Space and Natural Areas Plan and the efforts of The Conservation Foundation are a valuable resource for the planning and design of the Fox River Corridor.

Fox River Ecosystem Partnership. Comprised of landowners, businesses, non-profit organizations, agencies, and local governments, the Fox River Ecosystem Partnership oversees the study and conservation of the Fox River Watershed, which includes parts of Kendall County.

**Economic Development**

Safe, healthy residential neighborhoods and thriving businesses providing stable employment are the primary core elements of a successful economic development program. A functional recreation system and balanced system of built and natural environments can also play a key role in economic development. In particular, individual communities and the region as a whole may incorporate the regional recreation system and the natural characteristics and attraction of the Fox River Corridor into a local or regional tourism program. Scenic views, access to a variety of recreational opportunities, or the simple marvel of one of Illinois’ magnificent rivers are the types of major draws upon which to build a strong tourism program. In turn, tourism attracted by the Fox River Corridor is anticipated to have spillover effects on other local businesses and facilities as visitors explore nearby communities to find certain goods or services to supplement their trip (e.g. a restaurant to eat lunch, a bicycle store to fill a flat tire, etc) or explore out of mere curiosity.
Intergovernmental/Interagency Cooperation
As the Fox River flows through different communities and provides similar opportunities to them, communities and agencies are encouraged to share their concepts and ideas, pool their resources, and generate plans that minimize conflict and benefit all involved. For example, the creation of a contiguous multi-use trail system would entail connections to various state, county, and municipal parks and open space areas; in addition, municipal trails may also tie into a regional multi-use trail system. As such, intergovernmental/interagency cooperation is imperative to ensure the trail system is cohesive.

Constraints
While the Fox River Corridor provides a variety of existing significant features as well as opportunities for growth and enhancement, the river corridor also faces some constraints that may limit the extent to which opportunities are able to reach their full potential. The primary constraints are limited funding and property acquisition. In no way are these constraints insurmountable; however, they do present potential obstacles to overcome as communities plan and design for the Fox River Corridor.

Limited Funding
Funding sources relating to corridor planning and design come in various forms, including grant programs, public funds and bonds, private funds and investment, and donations. State and Federal agencies generally offer grant programs. For example, the Illinois Department of Natural Resources offers a variety of grant programs such as the Urban and Community Forestry Assistance Grant and the Open Space Lands Acquisition and Development Program (OSLAD). Some grant programs offer community matching requirements, requiring local governments to provide 20% to 50% matching funds (the State may occasionally assist local governments with these matching requirements). Local governments may also utilize their own public funding sources for land within their jurisdiction. Private funds generally come from private individuals, corporations, and trusts.

Property Acquisition
Establishing certain aspects of the Fox River Corridor Plan may require the acquisition of properties. More specifically, Figure 10 lists three methods to secure property or access. The extent of property acquisition is variable depending on the type of project. In cases such as the construction of a park or recreational facility, it may only be necessary to acquire one property or a small group of properties. However, in cases such as the creation of a contiguous multi-use trail system, it will be necessary to acquire several properties, which has the potential to be met with opposition from private property owners. Some property owners seek the highest value from their property, and a park or open space does not offer the same monetary value as a residential or commercial use. Even more, some property owners are just unwilling to sell their land for any number of reasons. However, there are some property owners who find value in establishing a park or open space, particularly if they believe the recreational or aesthetic values outweigh any monetary value. There are even instances where property owners place the overall community’s welfare over their own. Whichever the case, property acquisition or the establishment of public easements is inevitable and communities must be prepared for any opposition to ensure contingencies or alternative plans are in place. Kendall County has been proactive in this regard, which is demonstrated by one of the objectives of the County’s April 2007 bond referendum for open space preservation to acquire approximately 1,200 acres of land for open space and natural areas. The County views this objective will help protect the Fox River and other waterways from impending growth or development in the region.
Section III

Fox River Corridor Master Plan

The Fox River Corridor Master Plan provided in this section defines effective planning and design recommendations for the Fox River Corridor. More specifically, the Fox River Corridor Master Plan provides the following actions:

- Outlines the design guidelines for the river corridor;
- Identifies anticipated users of the corridor plan;
- Describes proposed amenities to be provided along the river corridor; and
- Identifies steps for proper maintenance of the plan.

A Fox River Corridor Master Plan Map is also provided at the end of this section, providing a spatial layout of the planning and design recommendations for the Fox River Corridor.

**Design Guidelines**

Design guidelines establish the goals and standards that are intended to guide the design and installation of river corridor elements, which generally conform to the categories listed in Figure 11. While some municipalities have their own set of design guidelines or standards for areas around the Fox River, the design guidelines established in this document are meant to provide County standards and support any existing municipal standards. The design guidelines for the Fox River Corridor Plan are outlined below and on the following pages.

### Parks, Open Space & Recreational Facilities

Goal: Create a complete greenway system that provides a diversity of recreational, environmental, and aesthetic amenities and connects parks, open spaces, recreational facilities, wildlife corridors, and natural areas along the Fox River Corridor.

Guidelines:

- Establish a contiguous multi-use trail system that provides access to the Fox River and connects parks, recreational facilities, and other significant community elements (e.g. schools, historic resources, etc.). The trail system shall be privately owned and maintained, unless the adjacent open space system is dedicated to a public land management agency.

- Maintain a standard trail design for continuity and identity purposes.

- Utilize railroad, utility, and natural corridors as greenway connections to the multi-use trail system.

- Provide active and passive recreational facilities and programming that are compatible with natural areas and open spaces.

- Explore the potential for recreational and open space opportunities on islands within the river.
Preserve greenways and open spaces through conservation techniques for both passive and active use.

Preserve scenic views along trails and within open spaces and natural areas.

Coordinate parks, open space, and recreation plans provided by the State of Illinois, Kendall County, local municipalities, and other public, private, or non-profit organizations.

Create a unified wayfinding signage system for the trail system to create an identity for the Fox River Corridor through Kendall County.

**Natural Features**

**Goal:** Protect the natural environment by using land resources in a manner sensitive to inherent environmental qualities and limitations.

**Guidelines:**

Preserve natural areas through conservation and environmental management techniques (see corridor development protection recommendations in Section III) to protect environmental features and maintain the overall health of native ecosystems.

Prevent the disturbance of the natural environment by allowing only those land developments and other human activities that exhibit sensitivity to the qualities and limitations of the natural environment.

Protect streambanks and shoreline areas before, during, and after construction activity. Protection and restoration efforts should focus on measures that:

- Are self sustaining or reduce requirements for future human support;
- Use native, living materials;
- Enhance the physical and biological functions of streams and shorelines;
- Improve water quality through reduction of temperature and sedimentation problems;
- Retain and enhance the stream corridor or shoreline system.

Preserve scenic views of the natural environment along trails and within open spaces and natural areas.

Require all proposed developments to provide an environmental stewardship plan through community outreach and education efforts (see Figure 12 for more information).

---

**Figure 12**

**Environmental Stewardship Plan**

An environmental stewardship plan establishes guidelines that help identify the means to properly maintain and manage dedicated open space in perpetuity. The plan shall be approved as part of the subdivision review process and recorded in the covenants for the subdivision. The plan shall be in textual form and shall include appropriate maps and/or graphic renderings that identify the various management zones on the site. The plan shall provide specific details and methods regarding the preservation, re-establishment, maintenance, and management of open areas and natural resources in perpetuity on the subject site. It shall be in a format that is easily understood and shall identify the “who, what, when, and where” of specific tasks which must be completed in order to ensure the viability of current and future resources on the site.
Limit active use of forested land and sensitive natural features to minimize burden on the environment.

Setback development from streams and wetlands to allow for appropriate filtration and protection. A greenway along a stream or river with a designated floodplain shall include all of the 500-year floodplain per officially adopted FEMA maps and adjacent natural areas. If no floodplain is identified by FEMA, the greenway shall have a minimum width of 150 ft on each side of the stream and should include adjacent natural areas. Figure 13 lists restricted and permitted activities within a stream/wetland setback.

Conserve land, particularly those with highly sensitive environmental features or the potential to be restored to a natural condition, through property acquisition or easements for the shared use and enjoyment of wildlife and humans.

**Stormwater Management**

**Goal:** Protect the quality and health of all natural water resources and environmental areas within floodzones by encouraging traditional and innovative stormwater management practices.

**Guidelines:**
- Pursue watershed or County-wide “best practices” for stormwater management, wetland and waterway protection, groundwater protection, and erosion control.
- Prohibit land development within flood prone areas.
Encourage the use of natural vegetation and native plantings in floodzones to filter harmful discharges from stormwater runoff, create habitats for wildlife, and regulate water temperature to maintain a healthy ecosystem. Similar treatments should be used for areas containing bio-swales, detention basins, common areas, buffers of streams, lakes, wetlands, and other water bodies. Natural landscaping shall consist of grasses, wildflowers, shrubs and trees that are native to the greater Chicago region as identified in *Plants of the Chicago Region* (Swink and Wilhelm, 1994).

Ensure shade trees are provided along trails to offer shade relief.

Protect natural drainage areas, floodplains, & wetlands to maintain wildlife habitats & native ecosystems.

Integrate the elements of the natural drainage system into site plans for land development.

Encourage private property owners to utilize water conservation and stormwater management techniques designed for homes, businesses, and small-scale environments to help reduce extraneous stormwater runoff that may seep back into the environment without proper filtration. The website for the Great Lakes Information Network (www.great-lakes.net/envt/) provides a variety of information and resources about water conservation as well as other environmental topics, including air quality, biodiversity, and pollution.

**Cultural Resources**

**Goal:** Promote the cultural resources located along the Fox River Corridor to preserve historic connections and provide educational opportunities.

**Guidelines:**

Encourage adaptive reuse of historic structures and properties.

Incorporate information kiosks at wayside rest stops along the trail system as part of a unified wayfinding signage system to promote the history of and general facts about the Fox River and the region.

Establish meandering routes for trails to ensure they pass by or have safe access to significant cultural resources.

Continue to support and develop outdoor education programs focused on environmental awareness and stewardship offered by local schools and churches, the Kendall County Forest Preserve District, local municipalities, and other organizations.

Historic structures can be restored to their original use such as a historic barn at Hannaford Farm in Sugar Grove that was restored for inclusion as a centerpiece for a new residential development (left). In other cases, historic structures can be reused for other uses such as the reuse of an old flour mill for the Millhurst Inn bed and breakfast (right).
Road Corridors

Goal: Maintain road corridors as an infrastructure framework that provides access to and within the Fox River Corridor.

Guidelines:
- Support road improvements such as the construction of the Prairie Parkway and connection of Lisbon Road to Eldamain Road to enhance efficient road access and circulation to and within the Fox River Corridor. These improvements shall also consider incorporation of trails and crossings as part of road design.

  Integrate setbacks and buffer areas (see corridor design recommendations in Section III) along roadways serving the Fox River Corridor to enhance scenic views of the natural environment and mitigate negative visual impacts of land development.

  Provide safe buffer areas between roadways and trails that traverse along road right-of-ways.

  Integrate elements of the proposed trail system’s unified wayfinding signage system along roadways to create and promote an identity for the Fox River Corridor.

Land Development

Goal: Advocate for land development that recognizes the limitations of the natural environment and integrates natural features into site design as a means of preservation (in instances where land development is the preferred option over land conservation).

Guidelines:
- Encourage creative site design through methods such as cluster development and conservation design to conserve open space and integrate natural features into residential site design. Figure 14 below provides a greater description of conservation design.

| Figure 14 |
| Conservation Design |

Using the conservation design approach, a residential development shall be designed to fit the topography, physical features, and soil conditions of the subject site. More specifically, conservation design shall preserve natural drainage patterns, use and preserve native vegetation and stabilize soils during construction, and protect, enhance, and maintain natural resources.

All natural resources, conservation areas, open space areas, and physical features (floodplain, wetlands, lakes, ponds, channels and other water bodies, steep slopes, woodlands, savannas, significant native trees, meadows and prairies, hydric soils, significant vistas and scenic areas, and historic buildings and/or sites and archeological sites) shall be identified and, to a practical extent, preserved as open space and protected from any negative impacts generated as a result of the development or other land disturbing activities. In so doing, the design of an open space network also shall preserve or establish greenway and trail connections to adjacent natural areas, subdivisions, and local and regional trails and greenways.

Building sites shall take advantage of open space and scenic views. Lot areas and lot widths which facilitate the access of neighborhoods and lots to open space and conservation areas should be considered in order to provide more efficient use of the land, as well as to protect the development rights of the property owner and preserve the number of dwelling units permitted by the underlying zoning of the property.
a. Cluster home sites to minimize negative impacts on the natural, visual, and cultural resources of the site and between incompatible uses and activities. Such clusters shall be designed and sited to achieve the following objectives:

1. Minimize disturbance to woodlands, wetlands, prairies, mature trees, and steep slopes.
2. Minimize fragmentation of natural areas and open space while also providing for access and views from developable areas.
3. Avoid encroaching on rare plant communities, high quality habitats, or endangered species.
4. Minimize encroachment in natural depressions, drainageways, and sensitive recharge areas to facilitate their use for runoff infiltration and filtering.
5. Maintain and protect scenic views of open land from adjacent and proposed roads. Minimize visual impact through the use of natural landscaping.
6. Protect buildings and sites of historic significance or incorporate them through adaptive re-use.

b. Ensure conservation design adheres to the requirements of the Kendall County Stormwater Management Ordinance. In particular, the design shall incorporate a strategy to meet the ordinance release rate requirements, to minimize the increase in runoff volumes and rates, and to address the identified water quality treatment requirements of the ordinance. The four images below illustrate examples of developments utilizing conservation design. Figure 15 provided on pages 23 and 24 provides an illustrative example of a four-step conservation design approach for a sample site.

The four images above illustrate examples of conservation design: The Classics in Richmond IL (top left), Hillcrest Orchard in Ross Township MI (bottom left), Hawksnest in Waukesha County WI (bottom center), and Woodland Shores in Grafton WI (right).

Note: All site designs prepared by Teska Associates, Inc.
Develop trail and open space opportunities within developments and connections to adjacent parks, open spaces, or recreational facilities. Trail stubs should also be reserved for future connections.

Encourage land development that provides amenities for pedestrians and bicyclists.

Encourage land development that reduces environmental pollution.

Encourage flexible building setback/yard requirements in instances where conflicts with sensitive environmental features may arise.

Incorporate open spaces and landscaping, particularly native plantings, into site designs to help transition developments into the natural environment.

Ensure neighborhood streets take the form of a two-way street or a one-way loop street around a landscaped median.

Develop streets according to standards that promote road safety, provide adequate access for emergency vehicles, provide access to trails and, where appropriate, to accommodate bikeways on roads, and allow for adequate vehicular circulation and movement within the subdivision and connecting to adjacent subdivisions.

Design the street network in a manner that optimizes connectivity both within the subdivision and to adjacent roads. Cul-de-sacs are discouraged unless there are no practical alternatives to serve the buildable portions of the property.

Maintain a minimum 30 foot vegetative buffer as a separate outlot around the exterior of the development on all sides. The buffer shall be measured from the road right-of-way or adjacent property line, as appropriate. This buffer shall be designed, as appropriate, to screen new housing or incompatible development, to preserve scenic views, or otherwise enhance the landscape as seen from existing perimeter roads. A trail or sidewalk may be constructed within the perimeter buffer area and should, where feasible, connect to any neighboring trails or sidewalks.

Maintain a minimum 150 foot setback from an active agricultural use, an adjacent natural area, or a public or private deed-restricted open space (buffer separate from 50 foot rear yard setback).

Ensure parking lots are designed with the intent of minimizing impervious surfaces and maximizing the opportunity to infiltrate and filter runoff from the lot. Parking lot designs shall meet the following standards:

a. Provide the minimum number of parking spaces necessary to meet expected needs. Where feasible, shared parking shall be utilized to minimize space requirements.

b. Route parking lot runoff to internal and/or peripheral swales and bio-swales. Where curbing is determined to be necessary, frequent curb cuts shall be utilized to allow runoff to enter swale and bio-swale structures.

c. Evaluate the use of permeable paving in lieu of conventional asphalt or concrete paving.
Ensure land development effectively relates to the river without turning its back to it. While the view of the Fox River is imperative, view from the river are just as important because they facilitate the visual relationship between the natural and built environments.

While the Fox River Corridor Master Plan Map indicates limited instances of riverfront residential development at very low densities, houses and accessory structures should have attractive facades and adjacent yards/open areas facing the river. Similarly, park and recreational facilities along the river should maintain quality architecture/structural design that not only has attractive form (e.g. architecture) but practical function (e.g. river access) as well.

Orienting land development towards the river is a good opportunity to introduce river access points such as docks, canoe launches, and esplanades. Natural elements such as woodlands, creek outlets, and significant topographic changes like overlooks should also be preserved as much as possible to maintain attractive natural vistas.

Overall, a person enjoying a recreational canoe or boat ride in the Fox River should be able to look back to the river banks and view attractive scenery, regardless of if they are natural or man-made.
Example of a 4-Step Conservation Design Process

The four images below and on the next page illustrate a 4-step conservation design process for a sample area along a river. To maintain sensitivity to the local environment, natural features such as streams and tree clusters are incorporated into the residential site design.

[Note: this example is a sample design only and does not represent an actual plan for development]

Step 1:
Developing a “yield plan” to determine the maximum allowable density for the site.

The site is 120 acres, which includes 10 acres devoted to wetlands. At 90,000 square feet per lot, the 110 buildable acres yield 47 total lots. In addition, the 120 acre site provides for about 15% open space.

Step 2:
Identifying and analyzing key environmental features such as woodlands, topography, wetlands, and natural drainage.

This site has extensive environmental features, including large woodlands (shown as the green area) with natural drainage ways (shown as the blue dotted line). One of the natural drainage ways leads to a river on the west side of the graphic. Wetlands are shown as light blue shapes.
Example of a 4-Step Conservation Design Process

The four images below and on the previous page illustrate a 4-step conservation design process for a sample area along a river. To maintain sensitivity to the local environment, natural features such as streams and tree clusters are incorporated into the residential site design.

[Note: this example is a sample design only and does not represent an actual plan for development]

**Step 3:**
Identifying “development opportunities” and “conservation opportunities”.

Illustrated in green, conservation opportunities are formed by the environmental features identified in Step 2. The yellow shapes represent development opportunities, offering sites for residential lots.

**Step 4:**
Preparing a site design with residential lots, a road network, and conservation areas.

At 40,000 square feet per lot, the 110 buildable acres yield 59 total lots in this conservation design plan. The 120 acre site provides about 60% open space, which is much greater than the yield plan from Step 1. The existing farm structure along the eastern edge was also preserved as its own lot (light orange area). The higher lot count and greater open space coverage emphasize the benefits of using the conservation design approach.
**Corridor Users**

With the variety of recreational, educational, and cultural opportunities located within and in close proximity to the Fox River Corridor, the river corridor appeals to a diverse set of users. Users of the Fox River Corridor can be categorized by mode of transportation and user group type. Each category also has a sub-set of corridor users.

**Modes of Transportation**

As the Fox River Corridor is served by a conveniently accessible road network and the potential for a contiguous multi-use trail system, the river corridor is accessible by a variety of modes of transportation, including:

- **Non-Motorized Vehicles.** While some of the forest preserves and recreational areas currently offer trails, the Fox River Corridor Plan intends to create a more comprehensive multi-use trail system that is fully connected and accessible to the region's diverse collection of recreational, educational, and cultural opportunities. Trails are specifically designed to accommodate non-motorized modes of transportation for the safety of trail users and maintenance of the physical conditions of the trails. Acceptable non-motorized trail activities include walking, jogging, bicycling, in-line skating, dog walking, cross country skiing, and horse-back riding (on trails designed specifically designated for equestrian activity).

- **Motorized Vehicles.** The Fox River Corridor is served by a conveniently accessible road network that allows residents and visitors to access a variety of recreational, educational, and cultural opportunities by car. While the road network helps motorists access and traverse segments of the Fox River Corridor, vehicular access within parks, forest preserves, and recreational areas is generally limited to site access, parking, or specifically designated areas (e.g. boat launches). Motorized vehicles such as snow mobiles and all-terrain vehicles (ATV's) are restricted unless explicitly permitted otherwise.

- **Water Crafts.** The Fox River and ponds/lakes located within parks and forest preserves may be used by water crafts for recreation or travel. Water crafts include canoes and boats, whether propelled by a motor or paddles. While motorized boats are permitted, gas motors are restricted. Also, small motors are recommended due to shallow spots within the river and ponds/lakes. The authorization of water crafts within the Fox River reinforces the importance of safe and accessible river access points.

**User Group Type**

In addition to different modes of transportation, the Fox River Corridor is available for use and enjoyment by different groups of people and wildlife, including:

- **Residents & Visitors.** As the Fox River Corridor traverses through and within close proximity to the communities of Millington, Newark, Millbrook, Yorkville, Plano, and Sandwich, residents are anticipated to be the most common users of the river corridor. As the Fox River Corridor extends further east and further south, the amount of resident users increases as the river traverses through and within close proximity to other communities like Montgomery, Oswego, and Sheridan in La Salle County. As one of the most prominent rivers in Illinois and the Midwest, the Fox River Corridor is also accessed by a multitude of out-of-town visitors from all around the Chicago metropolitan area, the state, and region. Visitors from well beyond the Midwest may also be
counted among the out-of-town visitors accessing the Fox River Corridor. While prominent events such as the annual National Hunting and Fishing Days at Silver Springs State Fish and Wildlife Area are major attractions for the Fox River Corridor, the multitude of recreational opportunities and sheer splendor offered by the river corridor are significant draws as well.

**Students & Educators.** Students and educators comprise a specific sub-set of resident/visitor corridor users. A few of the forest preserves and recreational facilities along the Fox River Corridor offer educational opportunities geared towards local students and educators. In particular, Silver Springs State Fish and Wildlife Area is home to the Kendall County Outdoor Education Center and Hoover Forest Preserve is an outdoor education center. The camp and retreat centers within the area also offer educational and personal growth opportunities for people of all ages. Although not all parks, forest preserves, and recreational facilities within the Fox River Corridor offer specific educational programming, they are available to students and educators to utilize as an outdoor classroom or laboratory for field trips and special curriculum studies.

**Flora & Fauna.** The local flora and fauna may also be characterized as “users” of the Fox River Corridor, particularly since they are the most native and intrinsic inhabitants of a natural area like the river corridor. The Fox River Corridor has long provided an indigenous ecosystem for native plants and habitats for diverse wildlife. Even as the Fox River Corridor continues to evolve as the communities around it change, it is imperative that the greatest of care is given to protecting the original users of the river corridor to ensure a healthy ecosystem that is in balance with evolving human settlements.

**Corridor Design & Amenities**

Although the Fox River is a major attraction in itself, building the Fox River Corridor into a functional and physically attractive natural corridor requires the provision of amenities that facilitate access, circulation, connectivity, wayfinding, safety, vistas, and aesthetic quality. The overarching amenity for the Fox River Corridor is a contiguous multi-use trail system, which would provide a network of recreation trails for walking, jogging, bicycling, in-line skating, and horse-riding (where appropriate) as well as connect various significant features and points of interest along the Fox River Corridor to each other. In addition to the benefits afforded by the corridor amenities, the design of the trail system is just as integral to how corridor users utilize and experience all the Fox River Corridor has to offer. Below, trail design is described first and then followed by the corridor amenities.

**Trail Design**

The Kendall County Trails & Greenways Plan (2004, Kendall County) provides a general trail design guide outlining design criteria, including construction materials, location requirements, trail dimensions, and trail maintenance.

**Construction Materials.** The Kendall County Trails & Greenways Plan follows the 1999 American Association of State Highway and Transportation Officials (AASHTO) Guide for the Development of Bicycle Facilities for the design and construction of trails. Trails anticipated to carry a high intensity of usage should generally be constructed of bituminous asphalt or concrete (Hot-mix Asphalt). Trails anticipated to carry a low intensity of usage should generally be constructed of compacted limestone screening, although bituminous asphalt or concrete would also be acceptable. Crushed limestone or cinders would also be acceptable due to their affordability, ease of installation and maintenance, durability, and porous quality.

Trails constructed along natural corridors should take on a more naturalized form using more natural and porous materials such as gravel, dirt, or wood chips. Due to their ability to be elevated by supports,
boardwalks may also be used for trails traveling over sensitive environmental features such as floodplain, wetlands, and fens. While most trail surface materials are suitable for most recreational activities, in-line skating is a particular activity that requires a solid surface such as asphalt or concrete. Less intensive surface materials such as gravel and crushed limestone or cinders also act as a base material for future asphalt resurfacing if needed to accommodate higher intensity uses.

As surface materials are set into place, care must be taken to avoid or minimize any bumps, potholes, or other obstructions that may pose a safety hazard. Care should also be taken to ensure minimal disturbance of natural drainage patterns. Proper soil and topographical analyses will help determine the placement and suitability of certain construction materials for trails.

Location Requirements. The Kendall County Trails & Greenways Plan indicates that trails located within or adjacent to road rights-of-way should be designed on the west side of north-south roads and on the south side of east-west roads. In addition to the location requirements outlined, other recommendations for trail locations include utilizing existing utility, railroad, and natural corridors where feasible. In most cases, utility and railroad corridors generally have space within their rights-of-way to potentially accommodate trails (provided easements are granted). Similarly, a natural corridor, which is generally identified as a path or corridor formed by natural elements such as woodlands and creeks, also has the potential to accommodate trails, perhaps designed in a more naturalized form (e.g. line the trail path with dirt or wood chips instead of pavement).

Just as permission is needed to utilize utility and railroad corridors to locate trails, permission is also needed to run trails through private properties. Short of property acquisition, establishing access easements is the most logical step towards obtaining permission to run a trail through private property. In cases where property acquisition and access easements are infeasible, trails will need to be routed in such a way to steer clear of obstinate private properties. For trails that wind close to private properties, native landscaping and attractive and appropriate fencing may be used to help maintain views from private properties.

Setbacks & Buffer Areas. Setbacks and buffer areas along roadways serve the Fox River Corridor to enhance scenic views of the natural environment and mitigate negative visual impacts of land development. The Kendall County Scenic Route Guidelines specify that all County zoning districts should follow the
setback requirement for the agricultural zoning district, which requires the provision of a 100 ft setback from a dedicated road right-of-way or 150 ft from the centerline of all adjacent roads, whichever is greater. Greenways along a stream should also maintain a 150 ft setback from the centerline.

### Trail Dimensions

The Kendall County Trails & Greenways Plan provides recommended dimensions for different trail types, including trails for pedestrian, bicycle, and in-line skating uses. Trail widths may be modified to adapt to varying intensities of use, environmental restrictions, or physical conditions. Trail shoulders help prevent trail edges from damage and provide lateral clearance for trail users. Other trail dimensions are described in Figure 19.

### Dimension for Other Trail Elements

- **Equestrian Trails.** Dimensions for equestrian trails include an 8 ft width for total right-of-way, which includes 4 ft width for pavement and 2 ft width for a shoulder on each side. The 4 ft pavement width is generally wide enough to accommodate one horse and rider traveling in one direction. A minimum height clearance of 12 ft is also required for horse-back riders.

- **Bridges & Overpasses.** Any trail passing across a bridge or through an overpass should maintain minimum dimensions of 10 ft width and 10 ft height.

- **Design Speed.** Trails should be designed for a maximum user speed of 20 miles per hour (equestrian trails should be designed for a maximum user speed of 15 miles per hour). As long as user safety is not comprised, design speed may be modified to adapt to varying intensities of use, environmental restrictions, or physical conditions.

- **Curve Radius.** In accordance with a design speed of 20 miles per hour, a minimum curve radius of 90 ft (or maximum 100 ft) should be maintained. Curve radius may be modified in accordance with any modification to design speed or to adapt to varying intensities of use, environmental restrictions, or physical conditions.

- **Grade.** The grade of trails should be minimized as much as possible to meet all AASHTO and American with Disabilities Act (ADA) requirements. Vertical grades should not exceed 5%. Switchbacks or scissor ramps may be used on steeper terrain to maintain the maximum 5% grade. However, steeper grades may be necessary to adapt to the local terrain or other factors if switchbacks or scissor ramps are infeasible. Horizontal grades (cross slopes) should not exceed 3% in order to facilitate adequate drainage.

- **Sightlines.** Trail alignments should capture scenic views while providing trail users with a safe and convenient experience. While clear sightlines help facilitate scenic views of the natural surroundings, they also provide unobstructed visibility of fellow trail users, road and trail intersections, signage, and other items or areas that users may encounter. Maintaining clear sightlines is critical to allow sufficient stopping distances as trails approach road crossings and other items or areas that may present hazards. Minimum stopping distances should be maintained as follows: 50 linear feet for pedestrians, 150 linear feet for bicyclists, and 100 linear feet for equestrians. Stopping distances may be modified to adapt to the specific characteristics of each location.

Source: Kendall County Trails & Greenways Plan.
Corridor Amenities

The following corridor amenities facilitate access, circulation, connectivity, wayfinding, safety, vistas, and aesthetic quality of the Fox River Corridor:

Safety Amenities. One of the most important qualities of a recreation corridor is safety. Corridor users need to feel safe as they use and access the Fox River Corridor to ensure they have an enjoyable experience and plan to visit again. Safety amenities such as lighting, caution signs, and safety railings on steep inclines all enhance the safety along trails and within recreational areas. Lighting should be constructed at an appropriate scale to fit the scale and design of the corridor, particularly as the corridor transitions through different area/trail types such as rural area to urban area and naturalized trail to paved trail. In addition, adequate access for emergency and maintenance vehicles should be provided where feasible to ensure emergencies and repairs can be tended to in a prompt and safe manner. In cases where vehicles access is restricted, access for emergency and maintenance crews by foot is needed.

Recreational Amenities. Recreational amenities such as benches, pavilions/shelters, drinking fountains, trash and recycling receptacles, bicycle racks, mile markers, information kiosks, and physical fitness path each offer distinct functions but collectively enhance the experience of using the river corridor:

- Bicycle racks, drinking fountains, benches, and pavilions/shelters offer respite along the corridor as users rest or enjoy the natural surroundings.
- Trash and recycling receptacles provide appropriate containers to help keep the corridor clean.
- Mile markers help users identify where they are located and how far they have traveled.
- A physical fitness path provides an informal recreation program that users may follow as they utilize the trail system.
- Information kiosks, which may be incorporated into an overall signage/wayfinding system, provide information such as a location map, descriptions of nearby points of interest, descriptions of native plantings and wildlife, safety tips, trail or facility regulations, and historical and fun facts. An emergency call box and first aid kit may also be integrated into an information kiosk for convenient access.
River Crossings. Since the Fox River Corridor provides a variety of recreational opportunities, points of interest, and other local features, it is important that the potential multi-use trail system connect them as much as possible to ensure adequate access and efficient circulation. At certain points, though, the trail system will need to cross the river to maintain access and connectivity. River crossings currently exist at Millington Road/Bridge Street, Whitfield Road, Fox River Drive, and Route 47, providing access across the river. The only other river crossing is the historic Millbrook pedestrian bridge located north of Whitfield Road adjacent to the Shuh Shuh Gah canoe launch. While the four existing road river crossings provide opportunities for both vehicular and non-vehicular river crossing, there are opportunities to establish pedestrian-oriented river crossings similar to the historic Millbrook pedestrian bridge. By providing a dedicated river crossing closed to motorized vehicles, pedestrian bridges provide a safe traveling environment for pedestrians, bicyclists, and other alternative modes of transportation.

Silver Springs State Park is exploring the potential to re-use abandoned bridge piers to create a new pedestrian bridge along the west side of Fox River Drive. Other river crossing opportunities are presented by proposed additions/improvements to the transportation network, including the construction of the Prairie Parkway, connection of Lisbon Road to Eldamain Road, and extension of Beecher Road, which will all cross the river. Islands also present opportunities for river crossings and potential recreational options.

River Access Points. Among all the recreational opportunities offered throughout the Fox River Corridor, activities such as fishing, canoeing, and boating in the river are some of the most popular options. Safe and adequately built river access points must be provided to ensure corridor users are able to access and enjoy these water-based recreational opportunities. River access points should be adequately built, including the provision of sturdy piers or docks, boat slips, launch ramps, and clearing of obstructions such as low tree branches and jagged rocks. These types of measures help enhance overall safety, which is critical for access to any body of water. River access points should also be provided at regular intervals along the Fox River Corridor to provide river users with convenient access into and out of the water. A few publicly accessible canoe launches currently exist along the Fox River Corridor, including the Shuh Shuh Gah canoe launch near Millbrook, the Yorkville canoe launch east of Route 47 and south of the dam and Riverfront Park, and the canoe/boat launches in Silver Springs State Park. Additional formal river access points are needed to create a safe and inviting environment along the Fox River.
**Signage/Wayfinding System.** Wayfinding is generally defined as how people find their way through a particular area. For example, a theme park typically has a wayfinding system that consists of signs and information kiosks -- often with a unified color scheme and materials palette -- that instruct visitors how to navigate through the park, inform them of current and upcoming events, and perhaps educate them on historical or fun facts. The Fox River Corridor is a unique place that should attract local residents and visitors who are not quite familiar with the area. A wayfinding system for the Fox River Corridor can be a very effective tool to help people navigate through the corridor. Signs can provide direction to specific destinations while information kiosks can recount stories of the history of the Fox River Corridor. Even beyond the corridor study area, signs can provide direction to visitors as they find their way through Kendall County to access the river corridor. Using signs and information kiosks, a wayfinding system for the Fox River Corridor should include elements described in Figure 21.

A wayfinding system that establishes a strong identity for the Fox River Corridor can also help boost local tourism and economic development as the corridor identity may be integrated in marketing materials. A wayfinding system can also incorporate the signage elements of the Fox River Water Trail.
**Maintenance**

In addition to general design requirements and provision of amenities, trails and the general river corridor also require maintenance to ensure they remain safe, attractive, and convenient to access and use. Both routine and remedial maintenance are needed. Routine maintenance includes general day-to-day care and minor repairs. Remedial maintenance entails major repairs or work that may require temporary closure of a trail segment. While remedial maintenance is intermittent and not needed as frequently as routine maintenance, remedial maintenance is critical to long-term upkeep, particularly as trails wear over time through frequent usage or become damaged by severe weather or accidents. Remedial maintenance project are typically included in capital improvement plans since they tend to require long-term planning to identify and garner funding and physical resources. General trail maintenance recommendations, some of which are suggested by the Kendall County Trails & Greenways Plan, are summarized below:

Adhere to applicable standards set by the AASHTO Guide for the Development of Bicycle Facilities.

Develop cooperative multi-jurisdictional agreements to streamline maintenance processes and ensure all trail segments and corridor areas are maintained adequately and consistently.

Keep trails and waterways clear of all debris, litter, snow and ice, and other obstructions (as applicable).

Provide a regular maintenance schedule to clean all recreational amenities such as benches, shelters, water fountains, bicycle racks, and trash and recycling receptacles.

Provide a regular maintenance schedule to inspect, maintain, and repair all safety amenities.

Provide periodic trail inspections to identify and make any necessary repairs.

Provide adequate access for maintenance and emergency vehicles where feasible (in cases where vehicles access is restricted, access for maintenance and emergency crews by foot is needed).

Utilize caution signs/markings as necessary to warn trail users of any impending trail repairs or closures.

Give prompt attention to hazards and maintenance problems reported by corridor users.

Remove vegetation/obstructions on each side of the trail to maintain clear visibility.

Clear vegetation and any other obstructions to maintain adequate sightlines along the trail, particularly at curves, intersections, and other areas that may present hazards.

**Corridor Development Protection**

To maintain the natural qualities of the Fox River Corridor, corridor development protection is needed to protect natural resources, environmental features, and attractive vistas from undesirable development or land uses that may generate negative impacts. Kendall County’s April 2007 bond referendum for open space preservation was a major step towards corridor development protection. Stricter project review requirements and design guidelines specifically for the Fox River Corridor are two additional steps towards promoting corridor development protection. Continued promotion of land conservation and environmental protection through innovative land development methods such as cluster development and conservation design also enhance the viability of corridor development protection for the Fox River Corridor.
The planning process does not end with the production and adoption of this document. Rather, the planning process begins its second stage: implementation of the plan. The Implementation Plan for the Fox River Corridor is intended to translate the recommendations outlined in this plan into action to meet the plan’s objectives. The Implementation Plan is comprised of a series of action items designed to meet the goals and recommendations established in this plan.

**Implementation Plan Action Items**

The Implementation Plan consists of a set of action items that will collectively ensure that the Fox River Corridor capitalizes on its opportunities to achieve the goals and objectives established in this plan. Each action item is designed to meet a particular objective, some directly reflecting one of the objectives from Section III while others focusing on multiple related objectives.

- Develop a capital improvements plan specifically for the Fox River Corridor to target short-term and long-term construction and improvement projects.
- Integrate design guidelines outlined in this plan in County and municipal zoning and site plan review requirements to ensure they adequately reflect the anticipated design of the Fox River Corridor.
- Explore funding options to support projects listed in the capital improvements plan.
- Determine opportunities to integrate the river corridor into tourism and economic development efforts.
- Work with the Kendall County Forest Preserve District, municipal park districts, schools, and other recreational organizations to evaluate current recreational facilities and programming and identify ways to fill any voids.
- Work with ComEd and Illinois Railway to consider integrating their rights-of-way into a trail system.
- Identify properties for land conservation via property acquisition or easements as outlined in Kendall County’s April 2007 bond referendum for open space preservation.
- Identify properties and structures that could be protected for historic preservation or rehabilitated for adaptive re-use.
- Develop a marketing program to promote and educate the public about the Fox River Corridor.
- Continue to incorporate the Fox River Corridor into school curricula.
- Identify potential properties that may need to be acquired (or granted an easement) to enable establishment of trails and open spaces along the Fox River Corridor.
- Develop a signage/wayfinding system to help build an identity for the Fox River Corridor.