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I. CHAPTER FOCUS

Open space and recreational facilities are vital to the image of the community, the physical and mental health of its residents, and the protection of environmental resources. Historically, the City has benefited from “borrowed open space” in the form of farms and vacant land. As this land is developed, open space is lost. This, combined with increased demand for a variety of passive and active recreational activities, makes the need to acquire and maintain open space high priority.

Three major purposes of open space are:

1. To provide recreation to promote physical and mental health;
2. To preserve and restore the natural environment;
3. To establish community character.

St. Charles has a rich history of recreation and open space development, from the early days of Pottawatomie Park through current park and forest preserve acquisitions. This history includes close working relationships with the St. Charles Park District and the Kane County Forest Preserve District. Norris Nature Preserve and area bike trails are but two examples of facilities resulting from this cooperation.

Private and institutional open space plays a vital role in defining the form of St. Charles. Although this Chapter deals primarily with public open space, public actions must also be taken to encourage the preservation of private open space.

II. FINDINGS

A. Recreational Open Space

The St. Charles Park District is the principal agency charged with providing recreational open space, facilities and programs. The District's 1996 Master Plan states the following mission and goals:

Mission (St. Charles Park Board of Commissioners, 1995)

To enrich the quality of life of Park District Residents by:

- *Providing diverse programs, parks and facilities to promote the well being of residents.*
- *Preserving and protecting open space and high quality natural areas*
- *Improving the environmental health and enhancing the appearance of the community*
- *Utilizing resources creatively and innovatively.*

Goals (St. Charles Park District 1996 Comprehensive Master Plan)

- Land Acquisition: Acquire and preserve open space and high quality natural areas to meet existing and future recreation needs of Park District residents.
- Recreational Programming: Provide recreational opportunities and facilities to meet the physical, social, environmental and cultural programming needs of Park District residents.
- Use of Financial Resources: Utilize financial resources efficiently and equitably.
- Image/Service: Establish the St. Charles Park District as a recognized leader in the community, state and nation through responsive, dedicated service and excellence in management, programming, facility development and maintenance.
- Intergovernmental Cooperation: Establish cooperative relationships to expand recreational opportunities, to promote and enhance service delivery, and to preserve natural areas.
- Community Awareness/Participation: Integrate programs and facilities into the lifestyle of residents through public input and enhanced awareness of the Park District, its facilities, programs and services.
- Maintenance/Redevelopment of Facilities: Preserve and enhance the historical

landscape and architectural heritage of Park District facilities while anticipating needs and recognizing trends and innovations.

- Creativity/New Ideas and Technology: Anticipate needs and recognize trends and innovations in technology.

B. Preserving and Restoring the Natural Environment

Preserving the community's natural resources by protecting and restoring environmentally sensitive areas is key to maintaining the quality of life in St. Charles. Environmentally sensitive areas include wetlands, floodways and flood plains, stream banks or shorelands, hydric soils, woodlands and prairies. Chapters 5 and 6 define the areas that are environmentally sensitive due to geologic, soil, and hydrological characteristics. Areas that are sensitive due to their flora and fauna, such as woodlands and prairies, also need to be protected. The Existing Natural Features map completed by the St. Charles Park District for its 1996 Comprehensive Master Plan included wetlands, floodplains, open water, major tree masses, and natural areas. This map was used, along with other map data, to establish areas recommended for open space preservation on the Future Land Use Map.

Preserving natural areas helps to accomplish the following:

1. Preserving flora and fauna in sensitive environmental areas including wetlands, floodways and flood plains, stream banks (shorelands), hydric soils, woodlands and prairies, and wildlife migration corridors.
2. Protecting public health, safety and property by reserving floodways and flood plains, steep slopes and areas of high noise exposure (such as airport flight paths).
3. Satisfying community outdoor recreation needs with parks, trails, bike paths, nature study areas and other recreation areas.
4. Enhancing scenic beauty and providing buffer areas for separation between adjacent communities or incompatible land uses, and as a determinant of urban shape and form.

Both the St. Charles Park District and the Kane County Forest Preserve District are committed to preserving unique and sensitive natural areas for the enjoyment of all residents. The draft "Kane County Comprehensive Land Use Plan 2020" includes the following objectives:

1. To preserve Kane County's open space as the key to natural resource protection and community well-being.
2. To protect environmentally sensitive areas from deterioration or destruction by private or

public actions.

3. To develop a greenways network connecting water resources, forest preserves, cultural and historic sites, and communities as part of the Northeastern Illinois Greenways Plan.
4. To foster public awareness , education , and support of environmental and open space management.

Some environmentally sensitive areas such as flood plains are protected because they are subject to local, state or federal regulations that limit or prohibit development. Other kinds of sensitive areas, however, are not regulated. The most common example of this is woodlands. This Plan calls for unique, high quality woodland areas to be preserved as part of the open space system, either by public acquisition or by easements or other restrictions.

C. Open Space Qualities of the Fox River

Approximately 7.5 miles of the Fox River exist within the St. Charles Park District. The Park District owns or maintains approximately 2.9 miles or 19% of the shoreline. Another 3.8 miles or 25% are owned by the Kane County Forest Preserve. This includes the 1990 acquisition of Tekakwitha Woods. A total of 7.3 miles or 48% of the shoreline is available for public recreational purposes.

The Fox River is the most obvious of all water-based recreational opportunities in the area. The river bisects the community from north to south, lending itself to recreational development on both sides. Most recreation on or along the river can be categorized as boating and water skiing, picnicking, walking and bicycling, scenic viewing or fishing.

In the past, use of the river waned due to the increased amount of pollution. With more stringent environmental protection laws, increased monitoring, and a higher awareness on the part of the public, the quality of the Fox River has improved perceptibly. River-associated recreation has increased and this trend is expected to continue as long as water quality is maintained or further improved.

Recreation along the river has also improved with the development of the Fox River Bike Trail. The Trail extends from the southern boundaries of St. Charles north along the river, through the downtown, along streets parallel to Pottawatomie Park to Norris Woods, then north to Tekakwitha Woods and Blackhawk Forest Preserve. From that point the trail continues through South Elgin, Elgin and Algonquin. Ultimate plans show the Fox River Trail linking directly to the Illinois Prairie Path. Plans are being prepared for the connection of the Fox River Trail with the Great Western Trail with the construction of a trail along Randall Road.

It is possible that future bridge crossings may be located within open space land along the River. Care should be taken to locate crossings in less sensitive or lower quality natural areas and to design such crossings so that the continuity of trails and the natural shoreline environments are maintained as much as possible.

The river presents opportunities for enhancing the vitality of the downtown area. Historical and cultural amenities such as the Ekwabet Indian statue and the Freedom Shrine, improved bicycle and pedestrian access, viewing areas for scenic vistas, landscaping features and other aesthetic improvements, and river-related recreational activities and promotional events will attract people to the center of the community.

D. Continuity of Open Space

The Northeastern Illinois Regional Greenways Plan adopted by NIPC in 1992 broadly defines greenways as corridors of open space which "...vary greatly in scale, from narrow ribbons of green that run through urban and suburban development, to wide corridors that incorporate diverse natural and cultural features....Some greenways are primarily recreational corridors, while others function almost exclusively for environmental protection..."

Greenways help achieve the optimum utilization of existing park and open space facilities and preserve and restore the natural environment. These continuous systems of open space should include natural areas requiring protection from disturbance and development, and may also link open space, recreational facilities and other public uses. Open space connections or greenways may include environmental corridors, river and stream corridors or buffer strips, parkways, linear parks, median green strips, and trails available for walking, jogging, bicycling, or horseback riding. Greenways do not necessarily consist entirely of public land, but may include private open space or easements across other private land.

The draft Kane County Land Use Plan explains the importance of open space linkages:

"...the open space system is regional in scope because natural areas, wildlife habitats, and watersheds traverse municipal and county boundaries. Greenways assist flood control and improve water quality in sensitive watersheds. They also protect plant and animal habitats increasingly compressed by development, resulting in islands of habitat and a loss of species diversity."

Within the St. Charles Planning Area there are six regional greenway corridors designated in the Northeastern Illinois Regional Greenways Plan:

- Ferson Creek
- Fox River
- Great Western Trail
- Illinois Prairie Path

- Mill Creek
- Otter Creek

The St. Charles Park District has also designated a greenway system in its 1996 Master Plan, which includes the following corridors:

- Peck Road
- Ferson Creek
- Fox River West/Fox River East
- Wayne/Fox Chase
- Brewster Creek
- Great Western Trail

In addition to these greenways, access corridors are needed to provide pedestrian and bicycle connections for neighborhoods and open space facilities. These include:

- From the bike trail along the east side of the Fox River to the Prairie Path.
- From the Cambridge neighborhood to a major bike path.
- From LeRoy Oakes Forest Preserve northerly along Randall Road and Silver Glen Road to Blackhawk Forest Preserve.
- From LeRoy Oakes south to the Kane County Judicial Complex at Peck Road and Route 38, connecting to Geneva Park District's Peck Farm Park.
- From the Great Western Trail to the East Fox River Trail.
- From Red Gate and Timbers neighborhoods to downtown St. Charles.

Clearly, these linkages will complement each other. This Plan supports the greenway plans of the St. Charles Park District, Kane County, the Northeastern Illinois Planning Commission and the Open Lands Project. The greenways and access corridors are shown on Map 8, Open Space.

E. The Impact of Development

In addition to obtaining public open space through the City's land/cash ordinance requirements and public acquisitions, setting aside private open space within developments should be encouraged. Private open space contributes to the quality of the individual project as well as to the community. Private open space may be reserved by means of private easements, deed restrictions, set-aside areas or conservation areas.

An opportunity to implement a number of this Chapter's goals and objectives comes when a specific project is under review. The City must be prepared to evaluate the site where the project is located, to develop strategies to preserve its natural features, and to incorporate recreational facilities and access to them into the site design. The following five topics should be pursued to assist in such evaluations and aid in the analysis of the project:

1. If a woodland site designated as open space cannot be preserved in its undeveloped state because of lack of acquisition funds or other limitations, then some development may have to be permitted. Low density residential development is usually the best alternative, with large lot areas, or cluster development located on less sensitive parts of the site. The goal would be to preserve as much of the natural quality and character of the site as possible, while allowing a reasonable use of the land. This could be accomplished through development regulations which would include:
 - Strict erosion and sedimentation controls
 - Total protection of the root zone of trees to be saved
 - Construction envelope
 - Mitigation measures to accommodate required changes in design
 - Minimum/maximum lot size and shape standards
 - Construction damage penalties
2. Stormwater management control requirements offer opportunities for attractive and usable open space. Regional and subregional stormwater detention facilities are encouraged. Such facilities should be designed and landscaped to give them a more natural and less functional appearance.
3. Adopt a rating system for natural areas. An example of such a system is found in the Kane County Natural Area Survey developed by Gerould Wilhelm, later refined by Wilhelm and Swink in Plants of the Chicago Region.
4. Expand City requirements for tree surveys and tree preservation plans for proposed development sites.
5. Expand the City's current tree planting ordinance. Include in the ordinance a compensation schedule for tree loss due to development. This tree compensation would be in addition to required parkway tree plantings and would take the form of additional tree plantings throughout the project. Encourage the planting of oak trees which are native to this area, particularly the White Oak which is one of the City's symbols.

F. Open Space Standards

As the St. Charles community grows and matures, additional open space is needed to serve the needs of the new residents and to preserve the natural environment. To evaluate how much open space is needed, specific standards should be adopted. There are two different kinds of standards to be applied in evaluating the need for additional open space: Specific standards that focus on recreational needs and a general standard that takes into account all open space in the community.

The first set of standards, for local developed open space, are established by the National Recreation and Park Association and have been adopted by the St. Charles Park District. Table 7-1 presents the park classification system adopted by the St. Charles Park District, and includes the National Recreation and Park Association standards for local developed park facilities.

**TABLE 7-1
CLASSIFICATION OF PARKS AND OPEN SPACE**

Type	Service Area Radius	Minimum Desirable Size	Acres/1000 Population	Use
Mini-Park (“Vest Pocket”)	< 1/4 mi.	1 ac.	0.25 to 0.50	Specialized facilities to serve a concentrated or limited population (e.g. tots or seniors)
Neighborhood	1/4 to 1/2 mile	5 to 10 ac. (9 to 10 preferred)	1.0 to 2.0	Serve a neighborhood w/space for intense recreation activities (e.g. field games, court games, skating, picnicking)
Community	1 to 2 miles	25 ac.+	5.0 to 8.0	Diverse: may include intense, active recreational facilities or passive uses based on need & site suitability
Regional	No standard	Variable	5.0 to 10.0	Flexible depending on size, natural conditions and need
Linear	No standard	As appropriate	No standard	Areas for recreational travel (e.g. hiking, walking, biking, jogging, horseback riding...)
Special Use	No standard	Variable	No standard	Single-purpose uses (e.g. golf courses, arboreta, gun ranges, ski-hills...); also retention/ detention ponds, boulevards...)
Conservancy	No standard	Sufficient to protect resource	Variable	Protection & management of natural areas, unique or threatened environmental or ecological systems

Source: St. Charles Park District and National Recreation and Park Association (NRPA)

The St. Charles Park District presently owns 48 park sites totaling 687 acres, and maintains another facilities comprising an additional 414 acres. The District also uses 12 school sites, totaling approximately 105 acres, for playground and programming purposes. In 1989 the Park District acquired the Westside Sports Center tennis facility on Dean Street which was recently remodeled to provide three gymnasiums and a gymnastic practice area. In 1990 the Park District constructed a Community Center in Pottawatomie Park. More recently Timber Trails Park was opened for public use and plans have been prepared for the development of the Otter Creek Bend Wetlands Park. Table 7-2 summarizes existing Park District facilities and the public open space available in the St. Charles Park District in 1996.

**TABLE 7-2
PUBLIC OPEN SPACE**

ST. CHARLES PARK DISTRICT FACILITIES (All facilities owned and maintained by Park District)	
Park Classification:	Area in Acres:
Mini-parks	10.24
Neighborhood Parks	96.58
Community Parks	96.20
Regional Parks	412.00
Conservancy Parks	196.00
Special Use Parks	93.10
Linear Parks	25.00
Undeveloped	173.20
TOTAL	1,102.32
PUBLIC OPEN SPACE IN ST. CHARLES TOWNSHIP:	
Government Unit:	Area in Acres:
St. Charles Park District (owned/maintained):	1,102.32
Park-School Sites:	104.80
Kane County Forest Preserve District:	1,187.10
Community Unit School District 303:	61.74
TOTAL	2,455.96

A comparison of the St. Charles Park District’s mini-parks, neighborhood parks, and community parks with NRPA standards shows that more local developed open space is needed to serve current and future residents. Table 7-3 shows the details.

**TABLE 7-3
ST. CHARLES PARK DISTRICT OPEN SPACE
COMPARED TO NRPA STANDARDS**

	St. Charles Park District Owned facilities	St. Charles Park District Owned and/or Maintained Facilities
Mini-parks:		
Total Area	8.44 acres	10.24 acres
Acres per 1,000 Population	0.24 acres	0.29 acres
NRPA standard per 1,000 population	0.25 to 0.50 acres	
Neighborhood Parks:		
Total Area	96.58 acres	96.58 acres
Acres per 1,000 Population	2.78 acres	2.78 acres
NRPA standard per 1,000 population	1.00 to 2.00 acres	
Community Parks:		
Total Area	65.0 acres	96.20 acres
Acres per 1,000 Population	1.87 acres	2.77 acres
NRPA standard per 1,000 population	5.00 to 8.00 acres	
Total Local Developed Open Space:		
Total Area	170.02 acres	203.02 acres
Acres per 1,000 Population	4.89 acres	5.84 acres
NRPA standard per 1,000 population	6.25 to 10.5 acres	

An important tool in the acquisition of land for local developed open space is the City's park and school land/cash ordinance. Since it was established in 1974, the ordinance has required new development to provide 5.5 acres per 1,000 residents for local developed open space. According to the 1983 NRPA standards, however, the minimum local developed open space acreage available to neighborhoods in the community should be from 6.25 to 10.5 acres per 1,000 population. St. Charles should be toward the top of this range, for a number of reasons:

- a. In a survey conducted by the St. Charles Park District for its 1996 Master Plan, residents identified a need for more usable, accessible open space for active recreational activities.
- b. St. Charles has historically been developed at a relatively low residential density. To reduce reliance on the automobile and enhance the safety of children and others using park facilities, local developed open space should be accessible to neighborhood residents by walking or bicycling.
- c. Open space and recreational facilities are one means to enhance community attractiveness and to maintain the identity of St. Charles. The community Charles has a high proportion of open space, but much of it is located in natural areas which are not suitable for active recreational uses. More active recreational areas are needed to complement the natural areas.
- d. Per capita income of the St. Charles area is higher than average. This correlates with a higher demand for active recreational areas.

Therefore, the land/cash ordinance should be amended to require 10.5 acres per 1,000 population. Map 8, Open Space, indicates undeveloped parcels that will probably develop for residential use and will therefore be subject to the land/cash ordinance. Amending the ordinance will ensure that these new residents will have adequate local developed open space. To address the needs of the current population, the St. Charles Park District has established an acquisition strategy and has identified improvements to existing facilities in its 1996 Comprehensive Master Plan.

In addition to meeting standards for local developed recreational facilities, open space should be provided in sufficient quantity to meet the demand for regional and conservation parks. The Future Land Use Map identifies 16.5% of the planning area as being Open Space. Meeting this goal is key to preserving and enhancing the quality of life in the community.

G. Community Image and Character

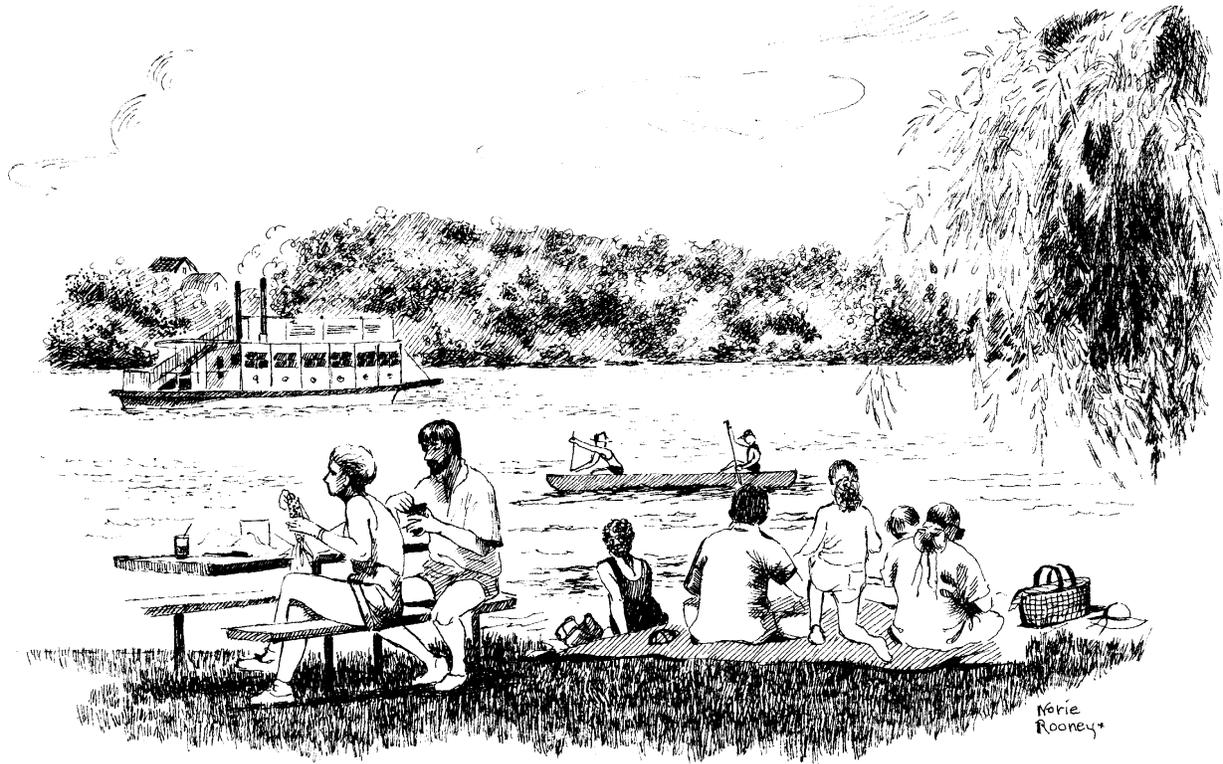
As discussed in the Community Image Chapter, open space has a profound effect on the perceived character of the community. Specifically, open areas create community form. They do so by defining the exterior boundaries of the community and by enhancing the interior. Well planned open space areas (large and small) perform an identity function and give the community character. Open space can be one of the critical characteristics that makes St. Charles unique.

The physical character of St. Charles is also shaped through a variety of tools including setbacks, landscaped and natural buffer strips and planting areas. Setbacks can insure proper proportion and scale between buildings and between buildings and streets. Landscaped and natural buffer strips may be used between adjoining properties with different land use or zoning classifications. Planting areas such as courtyards and gardens can provide visual relief to the man-made landscape. Where possible these planning tools should be incorporated into development projects through the use of private easements, deed restrictions, set-aside areas, conservation areas, etc.

Of particular concern are the major roadway entrances or gateways to St. Charles. These gateway areas are the first indication of community character for visitors and residents. The open space map identifies landscape corridors for the City's gateways. These landscape corridors are along the highway frontages within the gateway corridors. Design guidelines should be developed to establish consistent criteria for landscaping, signage, setbacks, sidewalks and bicycle paths within these corridors.

Within the City mini-parks or neighborhood parks create a sense of scale and continuity. They promote the image of St. Charles as a hometown community. These smaller parks become a focal point for a neighborhood. The creation of mini-parks should be encouraged in new neighborhoods as well as older neighborhoods.

Private open space significantly contributes to the character of the region. Conservation easements that will permanently preserve private open space should be encouraged. Private open space can also be protected and maintained through the use of land trusts, property owner associations, special service areas, and other means. Public agency sponsorship of educational programs and publications can increase appreciation for and improve stewardship of private open space.



III. GOALS AND OBJECTIVES

A. Maximize the recreational opportunities for all citizens in St. Charles.

1. Play an active role in Park District and Kane County Forest Preserve District recreational and open space planning.
2. Work with the Park District in providing and developing mini-parks, neighborhood parks and community parks throughout the community.
3. Provide for the local developed open space needs of new development by requiring dedication of 10.5 acres per 1,000 population.

B. Protect the integrity of remnant natural areas within new and existing developments.

1. Expand requirements for tree surveys as part of the City's project review process.
2. Develop a tree replacement ordinance.
3. Adopt and utilize the Kane County Natural Areas Survey rating system for project review.
4. Develop woodland development regulations.
5. Encourage the provision and retention of private open space.

C. Protect the scenic and recreational value of the Fox River.

1. Encourage and assist in the acquisition of as much riverfront property as possible.
2. Encourage and participate in the development of open space and recreational facilities and activities along the river's edge and particularly in the downtown area.

D. Develop an open space linkage network throughout the community.

1. Support the system of planned regional greenway corridors through the use of zoning, subdivision regulation, land/cash donations, public and private easements and acquisitions.
2. Require new developments to provide local open space corridors and linkages to connect neighborhoods and recreational facilities.

E. Preserve, protect and enhance natural areas.

1. Support the efforts of the Forest Preserve District in the acquisition of natural areas.
2. Discourage the rezoning of natural areas requiring protection from disturbance and development.
3. Strive to maintain floodplains and wetlands in their natural condition and encourage the restoration of altered stream corridors and wetlands wherever possible.

F. Establish and work toward a community-wide goal of 16 percent open space within St. Charles.

1. Work closely with the Park and Forest Preserve Districts in coordinating open space/recreational plans and projects.
2. Continue the use and refinement of the Park/School Land/Cash Ordinance.
3. Encourage the set aside of private open space.

G. Create an identifiable, physical community form for St. Charles, based on open space.

1. Develop a City landscaping strategy designating green space and open space areas throughout the community and along major roadways and gateways.
2. Encourage the development of more mini-parks or neighborhood parks.

IV. IMPLEMENTATION STATEMENT

The City of St. Charles needs to look beyond as well as within its boundaries in addressing the demand for open space. Cooperation with other bodies of government and groups is critical. The bonds between the City, the St. Charles Park District and the Kane County Forest Preserve need to be continued and strengthened. Along with the Park District and the Forest Preserve District the community needs to work with additional groups such as the Nature Conservancy, the Illinois Nature Preserves Commission, and interested citizen groups.

This Chapter focuses on providing adequate open space and linkages. The City needs to use every available resource to accomplish this including the protection and/or purchase of natural areas of community value. The value to the community should be decided collectively based upon development pressures, the overall open space system and funding available at the time.

This Chapter calls for blending the City's urban form with the rich natural beauty of the Fox River Valley. The five-year implementation plan for achieving open space and recreation goals and objectives include the following:

1. Review and incorporate relevant policies and standards of the St. Charles Park District whenever it updates its Master Plan.
2. Review and amend the City's Land/Cash ordinance to incorporate revised open space standards as they are updated and acreage dollar values annually.