

## CHAPTER SEVEN

### PARKS, TRAILS, OPEN SPACE & NATURAL RESOURCES

#### INTRODUCTION

This chapter covers parks and open space planning as well as natural resources and surface water management. The information compiled in this chapter includes data taken from several resources including a Parks, Trails, and Open Space Citizen Survey 2005 (Citizen Survey); Parks, Trails, and Open Space Master Plan 2005, and Community Survey 2007. The City of Watertown recognizes that the quality of parks, trails and recreational facilities and the ability to preserve and protect natural resources are important to the overall health of the community and are valuable community resources that contribute positively to the quality of life.

Park planning is an integral part of City planning. Park planning enhances the quality of life in the community and provides recreational opportunities for its residents as well as protects and preserves locally and/or regionally significant natural resources. Watertown has a number of recreational facilities, including active and passive parkland the South Fork of the Crow River and the Luce Line Trail. (See Map 7-1; Figure 7-1). One of the components of this chapter is to determine approximate park locations and design as the City grows into its 2030 growth boundary area.

Providing quality recreational opportunities begins with proper planning. Watertown views the *quality* of parks far more important than the *quantity* of parks. To assure adequacy and maximum usability, recreation areas and facilities shall be developed with regard for the needs of the people they serve. Proper planning must take into consideration a number of factors including but not limited to:

- Location of existing recreational areas (i.e. proximity to the area served, separation from incompatible land uses)
- Adequacy of existing facilities
- Site planning for the location of future facilities
- Access to current and future facilities
- Provisions for recreation programs
- Financing
- Maintenance and management of existing and proposed parks, trails, and recreational facilities

Park and open space planning is a process that involves inventorying existing regional, and local facilities. Funding is a major consideration in park planning. Typically, a community obtains land for recreational purposes through one or both of the following approaches: acquisition and/or regulation. Acquisition refers to obtaining land through easements, eminent domain, donation or purchase, while regulation sets provisions for the dedication of parklands.

Current policy requires the developer to dedicate land for parks, playgrounds, public open spaces and trails as part of subdivision approval. The City may accept a cash equivalent in lieu of land dedication, and it will determine whether land or an equivalent market-

value fee will be required. Monetary dedications are determined by calculating the average pre-subdivision market value of the land according to the latest market valuation. Land to be dedicated shall be suitable for its intended use and shall be at a location convenient to the people to be served. Factors used in evaluating the adequacy of proposed park and recreation areas shall include size, shape, topography, geology, hydrology, tree cover, access, and location. Priority for high amenity areas will be taken to determine location of dedicated park land. Current policy states that wetlands, floodplain, ponding area and drainage ways shall not be considered in the parkland contribution to the City, but often times are deeded to the City for on-going maintenance and are part of the overall park system.

The City of Watertown has a Park Commission made up of seven adult members and one youth member. The Commission is dedicated to governing the use of parks and recreational facilities, preparing a five-year capital improvement plan and recommending policies and programs to develop and increase public awareness of community parks and recreational facilities. The Park Commission serves as an advisory committee to the City Council.

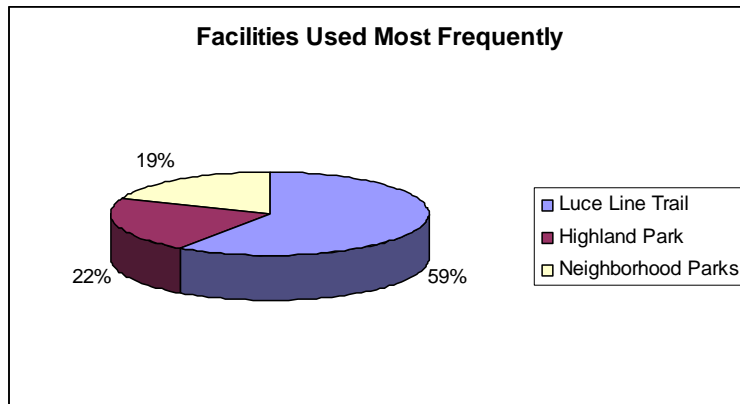
**FIGURE 7-1: Parks and Open Space Inventory, City of Watertown**

Park	Address	Acres (Size)	Play Equipment	Picnic Area	Basketball Court	Ball Field	Skating Rink	Sledding Hill	Volleyball Court	Trail	Pond	Open Space	Natural Setting	Fishing	Skate Park	Plaza	Portable Restrooms
Ann Street Park	329 Ann St	0.2	X	X													
City Center Park	112 Lewis Ave	1														X	
Evergreen Park	500 State St N	16				X				X					X		X
Grove Street Hockey Rink	401 White St NE	1					X										
Highland Park	420 High St SW	7	X	X		X			X							X	X
Kings Highlands	849 Newton Ave	12	X					X					X				
Kings Meadows Park	635 Chaucer Ln	8											X				
The Landings of Watertown	1250 Angel Ave	5										X	X				
Madison-Green Park	700 Madison St SE	2	X							X		X					
Old Mill Park	108 Territorial St	1											X	X			
Pocket Park	Madison St SE & Lewis Avenue	2		X					X			X	X			X	
Rick Johnson Park	300 Lewis Ave	4		X								X	X	X			X
Riverpointe Park	1498 Riverpointe Rd	21								X	X	X	X	X			
Sugarbush Park	801 Madison St SE	1	X	X								X					
Sunset Ridge Park	900 Aspen Cir	1	X														
Tuscany Village Park	800 County Rd10	4									X		X				
Waters Edge Park	900 County Rd 24	4	X								X						
Wildflower Park	202 Arnica Dr	0.3	X		X							X	X				

## PARK INVENTORY

According to the 2005 Citizen Survey, 34% of respondents do not believe the City's existing park system meets their needs and 45% agree that the system is adequate. Although more respondents feel the system is adequate, the City believes there is always room for improvement. The City of Watertown has studied how the existing system can meet the existing and future needs of its residents. As reported in the Citizen Survey, the main reasons that people use the park system include close proximity to home and the park provides a playground for children. The most frequented facilities in the City are the Luce Line Trail, Highland Park and neighborhood parks including Madison-Green Park and Wildflower Park. Citizens reported they would like improvements or additions to facilities and/or amenities for the future system to include playground equipment, paved trails, trail connectivity, picnic areas, and tennis courts.

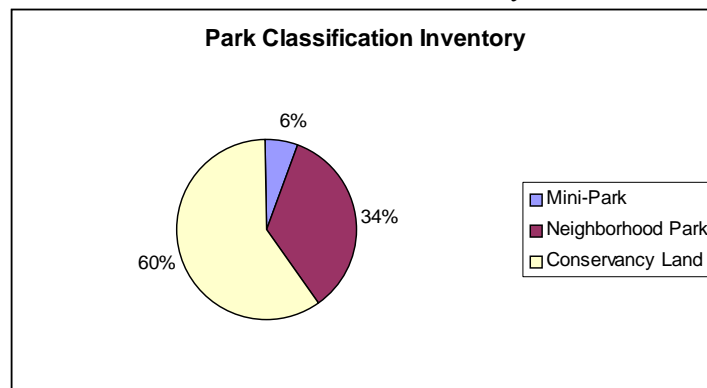
**FIGURE 7-2:** Parks Use Most Frequently, Community Survey Results (2007)



### *Existing Park System*

The City of Watertown contains approximately 88 acres of park land not including proposed facilities. There are approximately 5 acres of Mini-Park; 30 acres of Neighborhood Park; and 54 acres of Conservancy Land, as defined by the Metropolitan Council. This equates to a large percentage of conservancy land and neighborhood parks. Figure 7-1 illustrates existing facilities at existing parks within the City with attributes.

**FIGURE 7-3:** Park Classification Inventory



Source: City of Watertown, 2007

## ***School Facilities***

In addition to the City owned parks, the Watertown-Mayer School District has a number of facilities, fields, and play areas that are utilized for recreational activities. These parks are located at 500 Paul Avenue (Elementary School), 301 State Street NW (Primary School) and 1001 Highway 25 NW (Middle and High School).

The following is a list of facilities at the Watertown-Mayer Public School District:

### Primary School

- Playground with equipment
- Baseball/Softball field – 2
- Sledding hill
- Basketball Court – 1
- Fitness Trail

### Elementary School

- Basketball Court – 1
- Youth Soccer Field – 2
- Baseball/Softball Field - 2
- Playground with equipment

### Middle School / High School

- Sports Stadium – 1
- Practice Field – 2
- Softball Field – 2
- Baseball Field - 1
- All weather track – 1
- Indoor Pool – 1

## ***Regional Parks***

Other major components of the broader community's park system are County Parks including Carver Park, Baylor Park, Gale Wood Regional Park, Minnewashta Regional Park, and Lake Waconia Regional Park in Carver County, and Lake Rebecca Park, Baker Park, Lake Minnetonka Regional Park, located in Hennepin County. Regional parks provide visitors with access to unique features and attractions for the entire City, adjacent townships and beyond. Regional parks often accommodate large group activities and have infrastructure to support special events. Promoting tourism and economic development, regional parks can enhance the economic vitality as well as enhance the identity of the entire region. These parks offer a full range of recreational activities including swimming, boating, biking, camping, hiking, and some winter activities. City staff continues to coordinate with Carver County to reach the park and recreational goals of the community and a region as a whole.

The City of Watertown is also affected by the Crow River Regional Trail Search Area. The Crow River area has been considered for a regional trail in the 2030 Regional Parks Policy Plan (Carver County). The trail is proposed to start in Norwood- Young America

and continue north into Wright County. Three Rivers Park District is exploring the extension of the Crow River Regional Trail in Hennepin County. The County is looking at ecological corridors as potential greenway areas for drainage, woodland corridors, and wetland fringe areas. The Crow River Regional Trail is master planned in the 2030 Carver County Comprehensive Plan.

## **PARK CLASSIFICATION SYSTEM**

Park classifications provide a systematic way of categorizing park land so decisions regarding design, capital improvements, and maintenance/operation are based on the types and function of parks. This classification system allows the design and use for each park type to be determined by analyzing the service area and identifying any gaps or duplications throughout the City and/or region. Park classifications can change over time just as the recreational desires change over time.

In general terms, a park is defined as an area utilized for recreational purposes that is usually publicly owned. Parks can provide recreational opportunities which are any form of play and/or amusement. A park system can be both passive and active providing opportunities for residents to observe and participate in the serene environment. Conservancy lands refer to vacant land void of structures and left in its natural state. In developing a comprehensive community park plan, the City of Watertown focused on the following four types of park designations: Mini-Park, Neighborhood Park, Community Park, and Conservancy. Figure 7-4 illustrates the Metropolitan Council Parks and Open Space Classification System. Figure 7-5 outlines the existing parks and their classification based on the Metropolitan Council definitions.

**FIGURE 7-4:** Metropolitan Council 2030 Parks and Open Space Classification System

<b>Classification</b>	<b>Use</b>	<b>Service Area</b>	<b>Size</b>	<b>Site Attributes</b>
Mini-Park	Specialized facilities that serve a concentrated or limited population or specific group such as tots or senior citizens; may be in locations such as apartment complexes, townhouse developments or commercial centers.	Less than 1/4 mile radius	< 1 acre	
Neighborhood Park	Area for intense recreational activities such as field games, court games, skating, and neighborhood centers.	1/4 to 1/2 mile radius to serve a population of 4,000-5,000	< 25 acres	Topography suited for intense development.
Community Park	Area of natural or ornamental quality for outdoor recreation such as walking, viewing, picnicking; could have some field and court games.	3-5 neighborhoods or one community	25-100 acres	Affords natural features with varied physiographic interest.
Conservancy Lands	Area of natural quality such as watercourses and wetlands that are preserved for environmental or aesthetic benefits to the community and/or because of the negative environmental or economic effects of development in them.	Municipality, township, county	Variable, based on extent of resources	Natural resources that merit preservation and that would be negatively affected by development.

Source: Metropolitan Council, 2007

<b>FIGURE 7-5: Classification of Parks/ Open Space</b>		
<b>PARK NAME</b>	<b>OWNERSHIP</b>	<b>CLASSIFICATION</b>
Ann Street Park	City of Watertown	Mini Park
City Center Park	City of Watertown	Mini Park
Evergreen Park	City of Watertown	Neighborhood Park
Grove Street Hockey Rink	City of Watertown	Neighborhood Park
Highland Park	City of Watertown	Neighborhood Park
Kings Highlands	City of Watertown	Mini Park/Open Space
Kings Meadows Park	City of Watertown	Conservancy Land
The Landings of Watertown	City of Watertown	Conservancy Land
Madison-Green Park	Church	Neighborhood Park
Old Mill Park	City of Watertown	Conservatory Land
Rick Johnson Park	City of Watertown	Conservancy Land
Riverpointe Park	City of Watertown	Conservancy Land
Pocket Park	City of Watertown	Conservatory Land
Sugarbush Park	City of Watertown	Mini Park
Sunset Ridge Park	City of Watertown	Mini Park
Tuscany Village Park	City of Watertown	Conservancy Land
Waters Edge Park	City of Watertown	Conservancy Land
Wildflower Park	City of Watertown	Mini Park

Watertown has developed key attributes for integrating activities and facilities into design planning based on the use for each classification. The City has also added a *Sports Complex* classification for a sports complex park.

**Community Park Key Attributes:**

- Service Area: Citywide, geographically distributed. 2-mile service area depending on geographic boundaries or limitations in access such as State Highways
- Must have three (3) points of public access. Two (2) must allow vehicular access directly from a public right-of-way.
- Focus is on meeting community-based recreational needs as well as preserving unique landscapes and open space.
- Must include off-street parking.
- Trails into and around the park from adjacent residential neighborhoods.
- Picnic shelter/bathrooms.
- Community parks may be developed in conjunction with elementary schools.
- 60% passive/40% active

**Neighborhood Park Key Attributes:**

- Must include an area to be utilized for soccer/football/lacrosse field or a baseball/softball field and any combination of three (3) of the following activities:
  - Children’s play equipment
  - Basketball and/or tennis courts
  - Outdoor hockey rink with boards or recreation rink with site for warming house.
  - Off-street parking (optional)

- Trails into and around the park from adjacent residential neighborhoods.
- Picnic shelter/bathrooms/warming house
- Waterfront access/swimming beach
- Neighborhood parks may be developed in conjunction with elementary schools.
- Must have two (2) points of public access. One (1) must allow vehicular access directly from a public right-of-way.

**Mini Park Key Attributes:**

- Typically provides a limited function with features that may include basketball, tennis court, or children’s play equipment.

**Sports Complex Key Attributes:**

- The location of a sports complex must accommodate the practical requirements of such a facility including suitable access to roads, parking, restrooms, and field lighting.
- Commercial developments offer suitable locations.
- Shall include services previously listed, plus concessions stands, athletic equipment storage, management office, maintenance equipment storage, off-street parking and must incorporated at a minimum three (3) of the following elements:
  - 2-4 softball fields, lighted
  - 2-4 baseball fields, lighted
  - 2-6 soccer fields, lighted
  - 2-4 hockey rinks, lighted
  - 1 recreational skating rink
  - 1 high-level community baseball field with grandstand and suitable parking
  - Pavilion with restrooms, concessions
  - Swimming pool
  - Indoor recreational facility

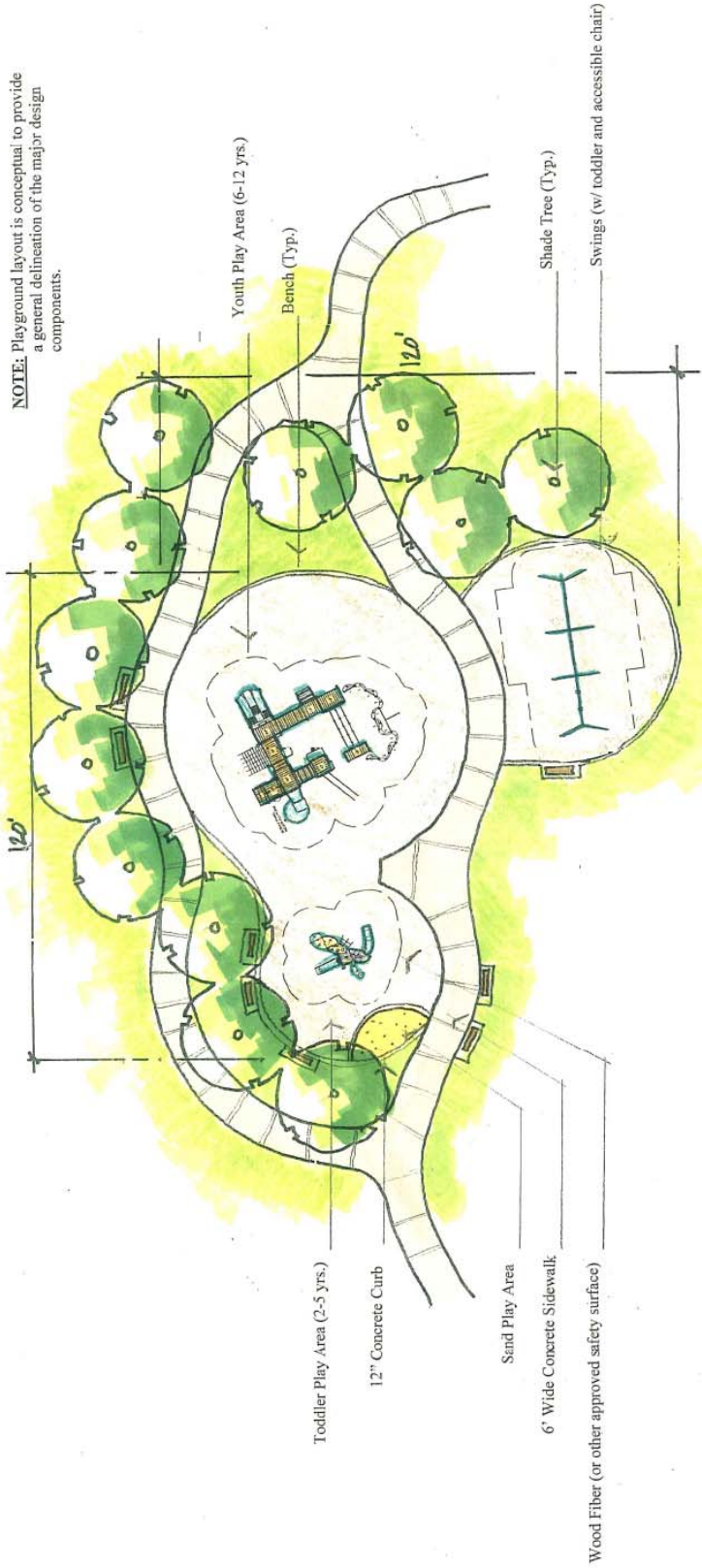
**Conservatory Lands Key Attributes:**

- Shall be comprised of significant natural resources such as a hardwood stand of trees, wetlands, key drainage ways, steep slopes with significant vegetation and lakes and ponds.

**TYPICAL PARK LAYOUT**

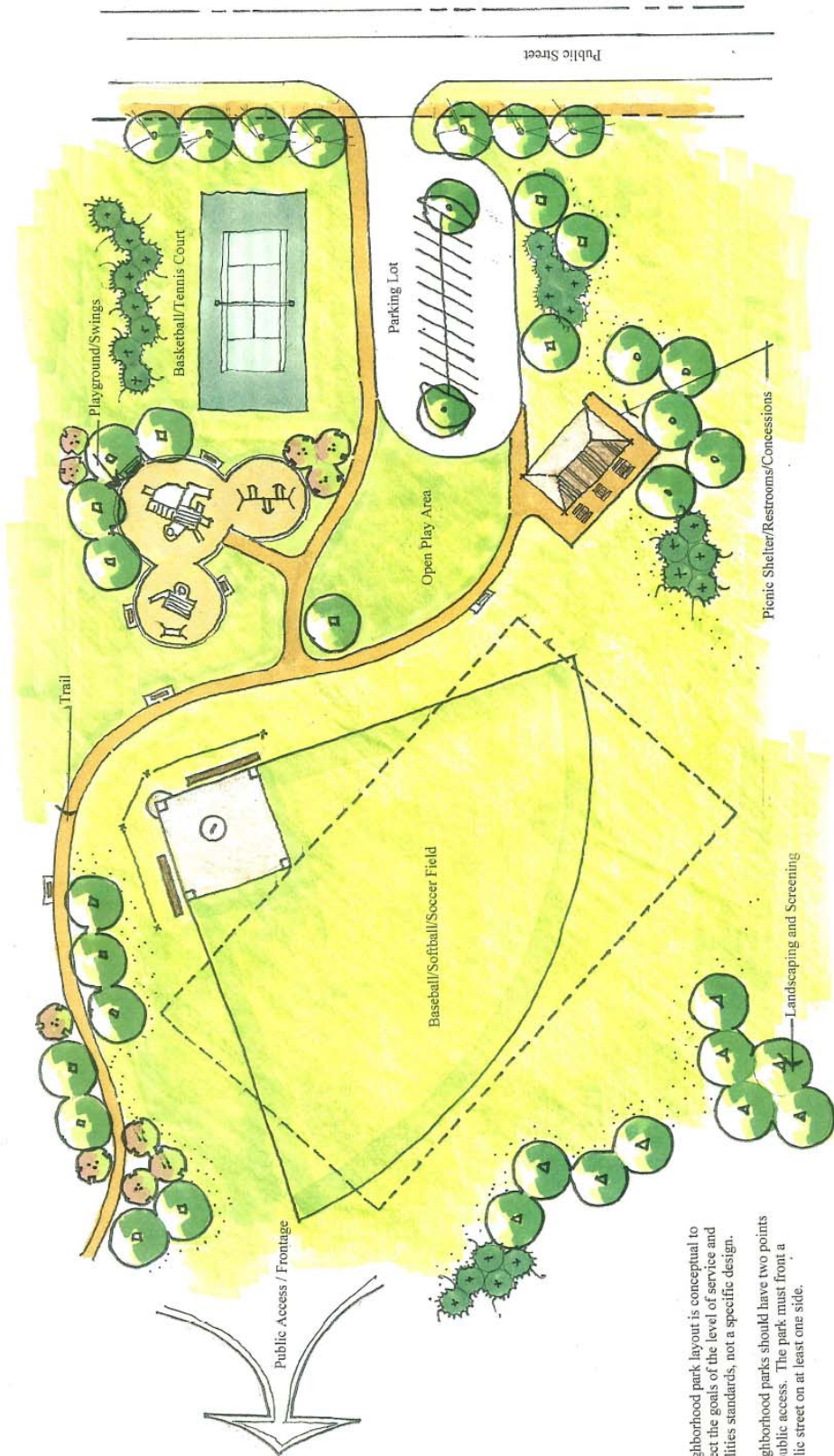
Typical playground plan and typical neighborhood parks are shown in a design concept on the next couple of pages.





**TYPICAL PLAYGROUND PLAN**

Not to Scale



**NOTES:** Neighborhood park layout is conceptual to reflect the goals of the level of service and facilities standards, not a specific design.  
 Neighborhood parks should have two points of public access. The park must front a public street on at least one side.

## TYPICAL NEIGHBORHOOD PARK

Not to Scale

## FUTURE PARK DEMAND

To determine the needs of the future population, the National Recreation and Park Association (RPA) recommends calculating the need for parks through the population ratio standard. This standard is expressed as a specific acreage of parkland per one thousand people. The Parks Commission determined the Watertown Park System Standard, which is slightly different than the RPA standard, placing greater emphasis on neighborhood parks, creating a more walkable community with smaller service areas therefore not relying on vehicles. The City does not intend to develop future tot lots or mini parks in addition to what is in the existing park system. Should developers want to create mini parks or tot lots in addition to neighborhood parks, no credit shall be given.

<b>WATERTOWN PARK SYSTEM STANDARDS</b>	
<b>Overall Park System:</b>	<b>15 acres per 1,000 people</b>
Neighborhood Park:	9 acres per 1,000 people
Community Park:	7 acres per 1,000 people (60% passive)
Open Space:	50 acres per 1,000 people (100% passive)

The service boundaries for park users depicted in Map 7-2 as the buffer around each park does not cross any State or County roads because these roads are barriers for pedestrians and youth park users. Until such time a underpass, overpass or alternative route is constructed, the State and County roads will continue to be a barrier.

According to the Watertown Park System Standards using a population range between 7,700-9,000, the City will demand 94-114 acres of designated land by the year 2030 in the overall active park system for community and neighborhood parks. (See Figure 7-6). Map 7-2 shows the approximate locations for eight (8) new neighborhood park, depicted as triangles within the 2030 Growth Boundary Area, averaging about 10 acres each. The future community, neighborhood, and conservatory parks are carefully placed with the consideration of wetlands, natural resources, and proximity to neighborhoods and future transportation routes. The number of

**FIGURE 7-6:** Estimated Current and Future Active Park Needs

	<b>Existing System</b>	<b>Future System by 2030</b>	
<i>Component</i>	<i>Existing Acreage</i>	<i>Required Acreage</i>	<i>Standard</i>
Total Park System	40	93--114	15/1,000 pop.
Community Park	0	54--63	7/1,000 pop.
Neighborhood Park	30	40--51	9/1,000 pop.
Mini Park	5	0	NA

<b>2010 Assessment of Need-Population 4,800*</b>			
<i>Component</i>		<i>2010 Acreage</i>	
Total Park System		54	
Community Park		40	
Neighborhood Park		14	
<b>2020 Assessment of Need-Population 6,500*</b>			
<i>Component</i>		<i>2020 Acreage</i>	
Total Park System		35	
Community Park		0	
Neighborhood Park		35	
<b>2020 Assessment of Need-Population 7,700*-9,000</b>			
<i>Component</i>		<i>2030 Acreage</i>	
Total Park System		21	
Community Park		0	
Neighborhood Park		21	

\*Met Council

parks and acres for each may increase to meet the desired park needs for residents due to placement and physical barriers like county and state roads that may limit the accessibility and service area for each park.

The City projects it will annex or develop 861 net acres by the year 2030. With the population range of 7,700-9,000, it is projected that the 2030 demand will be 54--63 acres of Community Park, and 40--51 acres Neighborhood Park. The City does not have a Community Park as defined by the RPA. The City is considering acquiring 30-40 acres on the east side of town to accommodate that need. Conceptually the park will be passive in nature with trails, an amphitheater, a skating rink, ponds, off-street parking, and multi-purpose fields (for soccer, baseball, football, etc.), and an area for community festivals. The existing and future park needs are show in Figure 7-6 for the years 2010, 2020, and 2030.

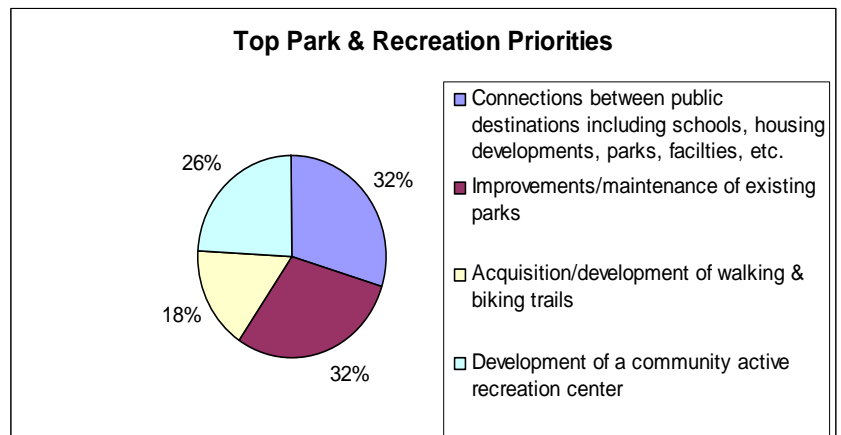
In determining the City of Watertown’s park needs for the future population, the Park Commission identified gaps in the community’s existing system. The following list details facilities that can be added to the system through park dedications fees from new subdivisions and redevelopment. Existing parks will also be reviewed to determine potential multi-use facilities within the park to add additional park facilities.

- Two (2) soccer fields
- Two (2) baseball fields
- One (1) hockey rink
- One (1) horseshoe pit
- Skateboard park
- BMX bike park
- Cross-country ski trail
- Mountain bike trail
  - Bike/hike paths
- One (1) softball or baseball field, lighted
- Three (3) tennis courts
- Frisbee golf course
- No vitacourses
- No additional volleyball courts
- Picnic areas
- Community pool
- Dog park
- Basketball court
- Outdoor amphitheatre

***Expansion of Existing Facilities***

The community survey also collected data on park and recreation priorities. Residents

**FIGURE 7-7: Top Park & Recreation Priorities, Community Survey Results (2007)**



top priorities were connections between public destinations, including schools and housing developments, parks, facilities, etc., and improved/maintenance of existing parks (see Figure 7-7).

Community members also discussed their use of the City’s parks, trails and open space areas and provided input on park and trail issues they felt should be addressed. Nearly one-third of respondents said they regularly use the City’s current system of parks, trails, recreation opportunities and open space areas. Additionally, more than half of respondents would like to see more City owned parks (Figure 7-8). Some residents provided specific suggestions for improving the City’s trails, such as “*I would like to see the trails extended/furthered in Wildflower area and to have more trails linking to parks and to the Luce Line Trail.*” Other suggestions were more general; “*I would love to see my tax dollars go towards parks, walkways, trails, etc.*”

**FIGURE 7-8:** Citizen Survey results regarding Parks & Trails Issues by Percent of Respondents, 2005

57%	Residents who would like to see more City owned parks
41%	Residents who strongly agree that the Luce Line State Trail should be integrated with the downtown, including the Crow River
30%	Residents who regularly use the City’s current system of parks, trails, recreation opportunities and open space areas <ul style="list-style-type: none"> <li>• 57% of those residents report using the walking trails on a regular basis</li> <li>• 39% report using biking trails on a regular basis</li> </ul>

Each park or open space located in the City is unique providing attributes that make each park distinguishable as shown in Figure 7-1. Before developing the list of improvements, the Park Commission inventoried the facilities in May 2007. The following list, as outlined in the 2005 City of Watertown Parks, Trails and Open Space Master Plan, highlights the assessment of facilities based on standards provided by the National Recreation and Park Association and the American Academy for Park and Recreation Administration as well as incorporates the recommendations from the Park Commission during the park inventory.

**Improvements**

- ANN STREET**.....Wood chip flooring for playground
- CITY CENTER**.....Decorative trash receptacle, replace center tree
- EVERGREEN**.....Additional lighting, restrooms, concession stand, pave parking, upgrade skate park
- GROVE STREET HOCKEY RINK**.....Permanent warming house, basketball hoops

<b>HIGHLAND PARK.....</b>	Wood chip flooring for playground, additional sign, upgrade playground equipment
<b>KINGS HIGHLAND.....</b>	Shade trees, benches, sign
<b>KINGS MEADOWS.....</b>	Passive wood chip trail, multi- sports facility ie. soccer, baseball, basketball
<b>THE LANDINGS OF WATERTOWN.....</b>	Passive wood chip trail, stabilization of Crow River bank
<b>MADISON GREEN PARK.....</b>	Wood chip flooring for playground, upgrade playground equipment, shade trees, gazebo, picnic tables
<b>OLD MILL.....</b>	Lighting, sign
<b>RICK JOHNSON PARK.....</b>	Pave parking area, turf reestablishment, permanent restrooms, lighting for picnic area, walking river bridge, canoe rack for future portage, trees, trail connection to downtown, Crow River bank stabilization
<b>RIVERPOINTE.....</b>	Gazebo, fishing pier, sign
<b>SUGARBUSH.....</b>	Trail, picnic table, benches
<b>SUNSET RIDGE PARK.....</b>	Trees, sign, additional playground equipment, benches, picnic tables, grill, drinking fountain
<b>TUSCANY VILLAGE.....</b>	Playground, sign
<b>WATERS EDGE PARK.....</b>	Benches, picnic tables, sign, handicap



accessibility

**WILDFLOWER**.....Landscaping, wood chip flooring for playground, bike rack, additional play equipment ie. Spacenet

Proposed park improvements will be reviewed annually by the Parks Commission and will become part of the City’s Capital Improvements Plan for the park system. The City has also developed a Park Maintenance Plan that determines how each park shall be appropriately maintained as well.

**OPPORTUNITIES FOR SENIORS**

Providing a variety of recreational opportunities for seniors involves understanding the needs and demands of the community’s aging population. The *2007 Master Plan to Create Communities for a Lifetime* describes the need for senior recreational facilities, and it envisions, “well coordinated, affordable, readily accessible park and recreational opportunities/services offering mental, physical and social interaction that is consistently available to persons of all ages,” (p. 23).

Communities for a Lifetime (CFAL) would like to incorporate recreational programs geared for seniors that would provide barrier-free opportunities for regular activity. The group is interested in pursuing ongoing coordination and collaboration with various committees to reach out to special populations. The City of Watertown will consider fitting or retrofitting future and existing parks with senior-friendly components to accommodate the needs of elder adults. The CFAL document suggests incorporating signage, pedestrian linkage, transportation to and from park facilities, and other ideas that offer seniors accessibility to parks.

The City of Watertown recognizes the benefits of incorporating age-appropriate recreational opportunities for senior residents. The development and implementation of senior-friendly programs ought to be considered when planning for future parks. For example, a community garden might provide seniors with the benefits of social interaction, a sense of belonging and responsibility, as well as moderate or non-strenuous physical activity.

Additional recreational options for seniors must be considered as the City and residents make decisions together for future parks.

**WALK WATERTOWN**

The City will use active living principles to integrate physical activity into daily routines through community and park design. Research shows a link between urban design and inactivity, obesity and health problems. Evidence also indicates that physical activity plays an essential role in promoting good health and preventing chronic diseases. Creating walkable communities can improve the health and overall quality of life in a community. The City has created a Walkable Communities Action Plan identifying

short-term and long-term goals, as well as the need for funding considerations, increased public awareness and support and strengthened partnerships. (See Appendix I)

In committing to promoting and increasing physical activity, these policies will guide future interdisciplinary collaboration in active living initiatives as well as guide the City in future open space and park improvements.

## **GREENWAY CORRIDORS**

The connectivity of the trail and park system is crucial to the vision of an interconnected community. As the park system develops, it should have as a central feature “connectedness”. This “connectedness” should be achieved through a series of parks and trails woven together with the concept of a Greenway Corridor. The ultimate goal should be seamless access within the park and trail system.

A Greenway Corridor is proposed to be a unique greenway which would provide a seamless connection between parks, open spaces and residential neighborhoods and would consist of a trail in concert with open spaces and natural corridors. (See Map 7-3) This feature should utilize existing natural amenities such as the Luce Line trail, existing woodlands, wetlands, lakes, ponds and streams. The corridor should generally connect community amenities such as the existing parks, downtown, schools and neighborhoods. The width of the corridor will vary based on actual field conditions and development layout. A Greenway Corridor should include a minimum corridor width of 30 feet (will most often be greater in width), and any of the following amenities:

- bituminous trail or regional trail
- open play areas
- woodland areas
- wetland areas
- lakes and ponds
- connection to public roads
- connection to other local or regional trails
- waterfront access
- schools

## **TRAIL SYSTEMS INVENTORY**

### ***Local Trails and Sidewalks***

Local trails are limited in the City. Sidewalks are located primarily in the Central Business District, portions of Angel and Westminster Avenues, and in newer subdivisions built after 2001. A Comprehensive Sidewalk and Trail plan displayed as Map 7-3 depicts approximate locations for future trails and sidewalks throughout the City, in coordination with Carver County efforts.

According to the 2005 Citizen Survey, of those residents who frequently use the City’s current system of parks, trails, recreation opportunities and open space areas, 57%



residents report using the walking trails on a regular basis and 39% report using biking trails on a regular basis.

### ***Regional Trail***

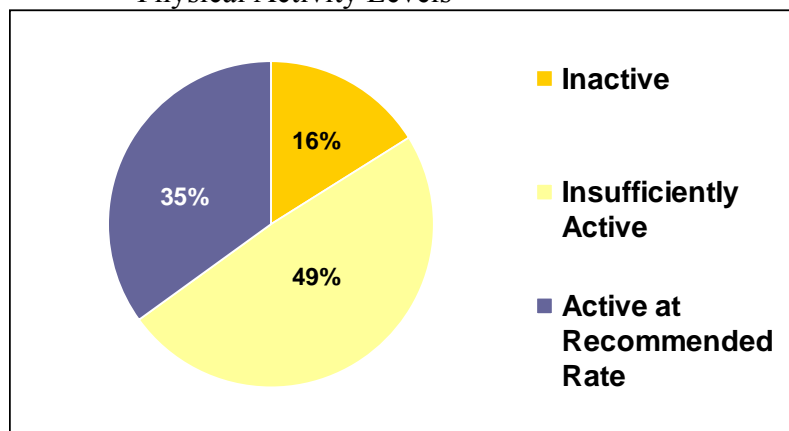
The premier recreational facility in the City of Watertown is the Luce Line Trail, which extends 64 miles from Plymouth to Cosmos. The Luce Line passes through Watertown near the downtown. The trail is a former railroad line that was abandoned in 1970 by the Chicago Northwestern Railway and developed as a recreational trail in 1976. This significant natural greenway corridor draws a number of people from throughout the region to Watertown, and it serves to promote both local recreational opportunities and commerce from tourism.

### **CREATING A WALKABLE COMMUNITY**

Creating walkable communities can improve the health and overall quality of life in a community. In September 2007, the City of Watertown and Carver County Public Health hosted a Walkable Community Workshop to assist the City in creating a more walkable Watertown. The workshop focused on safe routes to schools and its goal was to highlight ways in which local planning decisions regarding land use and transportation can affect walking habits, personal health and overall physical activity. The workshop resulted in an action plan identifying short-term and long-term goals, as well as the need for funding considerations, increased public awareness and support and strengthened partnerships.

As indicated in the Watertown Walkability Report (Appendix I), although daily activity has long been recognized as an essential part of a healthy life, many people are inactive. In Minnesota, 16% of the population is inactive and 49% are insufficiently active, which means they do not achieve the recommended 30 minutes of activity per day (Figure 7-9). This inactivity is due in part to the designs of our communities, which frequently lack safe and accessible walkways, bikeways, and transit opportunities that would otherwise accommodate and encourage activity.

**Figure 7-9.** Minnesota Adults Meeting Recommended Daily Physical Activity Levels



Walkable communities are those that accommodate all types of transportation, including cars and transit, as well as provide safe and convenient environments for pedestrians. Features in walkable communities include:

- Wide sidewalks, walking and biking trails or paths
- Crosswalks
- Aesthetic landscapes, gathering spots and benches
- Traffic calming techniques (i.e. streets with landscaped medians, speed bumps)
- Compact development in downtown core, downtown shopping, windows at the street level

These features create opportunities to improve communities by increasing residents’ levels of physical activity, providing children with accessible routes to walk to school, attracting window shoppers, and encouraging social interaction among neighbors. Equally important is to provide a safe and accessible multi-modal infrastructure that links key destinations throughout the City by providing connections between parks, schools, developments, downtown, and other destination points in the community. Figure 7-10 describes the links between features of the built environment and increased levels of physical activity.

**Figure 7-10.** Data supporting strategies to increase levels of physical activity

<i>Mix of Land Use</i>	<i>19% increase in walk/bike trips in areas with appropriate land use mix</i>
<i>Presence/Proximity of Convenience Services</i>	<i>27% increase in walk/bike trips in areas having high presence and good proximity</i>
<i>Perceived Traffic Safety</i>	<i>88% increase in walk/bike trips in areas perceived as more safe</i>
<i>Perceived Aesthetics</i>	<i>50% increase in walk/bike trips in areas perceived as more aesthetically pleasing</i>
<i>Development of Bikeway</i>	<i>57% increase in bicycling in areas with dedicated bikeways</i>
<i>Availability of Parks and Trails</i>	<i>75% of inactive people believe there are too few parks and recreation facilities. 56% of respondents would use trails if provided in their community</i>
<i>Policy Support</i>	<i>55% support more bike paths, 62% more sidewalks, 60% for improved connections to destinations, and 57% improving mass transit.</i>

According to Watertown’s Walkability Report (2007), between 1969 and 2001 children’s walking and bicycling trips to school declined by 62%. Today, only about 15% of U.S. students walk or bike to school and nearly 70% of all children’s trips are made by car. Consequently, today’s youth are less active and less independent. Fewer walking and bicycling trips not only lead to decreased levels of physical activity, but they also contribute to increased traffic congestion. Distance and traffic are two commonly

reported barriers to walking and biking to school (See Figure 7-11). Creating walkable communities can help reduce these types of barriers.

**Future Trail Demand**

In March 2007, as part of the City’s Comprehensive Plan process, Watertown residents completed a community survey. When asked what they like most about the City of Watertown:

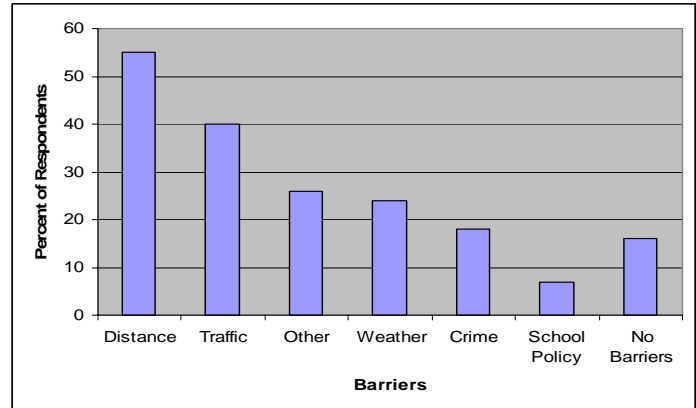
- 46% of residents liked the community’s character,
- 42% liked family and friends,
- 33% liked schools,
- 27% liked the parks and trails.

Each of these response categories either contribute to or benefit from walkable communities. The most serious transportation issues reported by residents also support the need for the development of a more walkable Watertown. The top transportation issues include the identification of safe pedestrian routes, increased amount of traffic and loss of small town character (See Figure 7-12). One resident states, *“The greatest issue the City faces is maintaining fiscal responsibility, while continuing to control organized appealing growth: Expand parks and trail systems to keep Watertown the best healthy community it can be.”*

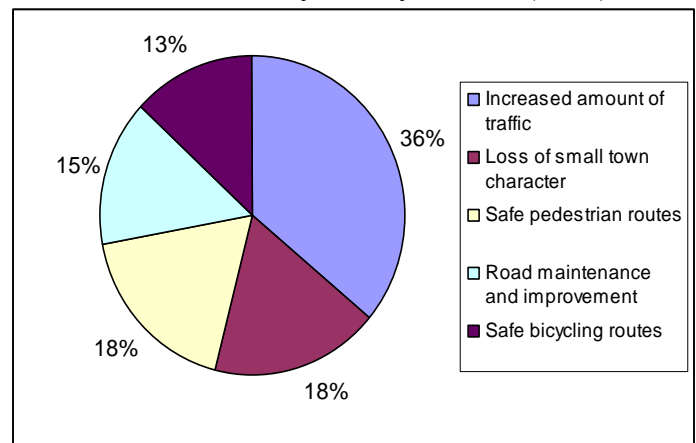
**CONNECTING SENIORS**

The City of Watertown is taking a proactive approach in strategizing and incorporating the needs of seniors and the future senior population with applicable components of the 2030 Comprehensive Plan. According to the *2007 Master Plan to Create Communities for a Lifetime in Carver County*, drafted by the Communities for a Lifetime Senior Commission (CFAL), pedestrian safety and accessibility are important concerns for seniors. The Plan highlights strategies that support active-living principles among the senior population such as promoting “City and County efforts for walkability and other infrastructure that supports exercise and healthy lifestyle options,” and the implementation of “incentives and rewards that encourage healthy choices for exercise and nutrition.”

**Figure 7-11.** Reported Barriers to Walking & Biking to School (1999)



**Figure 7-12.** Most Serious Transportation Issues in Watertown, Community Survey Results (2007)



Within the Transportation and Mobility section of the CFAL document, desirable community features for seniors include: safety features in roadway design; signage and markings to consider the size, font, reflective characteristics and proper placements of signs throughout the community. In keeping with the plan, CFAL supports creating accessible and efficient pedestrian linkage systems in close proximity to elderly housing and goods and services.

## **NATURAL RESOURCES**

### **INTRODUCTION**

Natural resources are of prime importance to the community. In addition to serving as aesthetic amenities that enhance the quality of life in the area, natural areas perform important ecological functions.

Environmental features, such as bodies of water or changes in topography, as well as man made elements determine the extent and direction of development and growth. Therefore, it is necessary that special consideration be given to such features. Typically, environmentally sensitive areas include river corridors, floodplains, vegetation, wetlands, steep slopes and soil limitations.

Using the elements of Watertown's current ecosystem, the existing native habitat and its health can be enhanced while balancing preservation, recreational use, and community development. Watertown will ensure that conscience conservation steps are taken to ensure the preservation of all natural resources for future generations to enjoy. It is important that Watertown be proactive in their planning approach relating to natural resources. Being proactive will help enhance and preserve natural resources in the future.

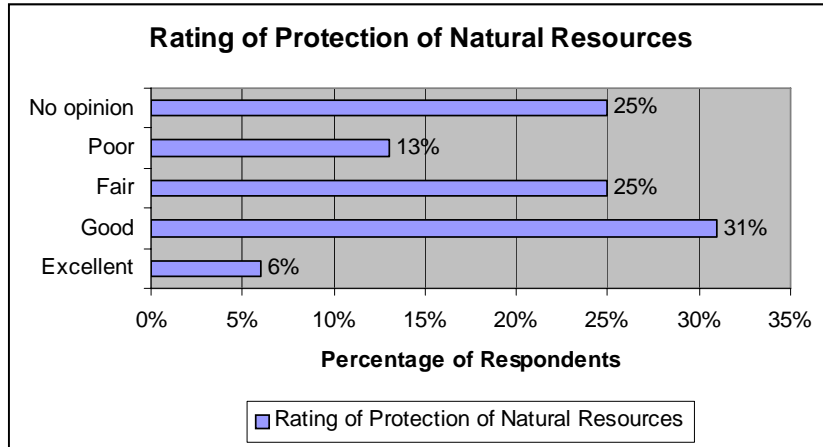
Protection and enhancement of the natural resources in and surrounding Watertown is essential. The City's environmental qualities are excellent and will continue to be maintained and improved. The design and development of new property will need to sensitively preserve and integrate natural resources. Preservation of natural resources is integral to maintaining the community's rural identity and small town atmosphere. Watertown intends to continue striving towards sustainability of the regions natural resources so that they can be enjoyed by future generations.

Using the existing zoning and subdivision regulations, Watertown can ensure that the area's natural resources are preserved, enhanced and maintained. To this extent, Watertown will continue to use its regulations to preserve the natural resources identified in this plan. Watertown will challenge new development to preserve and maintain natural resources in the undeveloped portions of the City and annexation area. Using a variety of tools that are already in place or yet to be developed, Watertown will protect, maintain, enhance and preserve its natural resources.

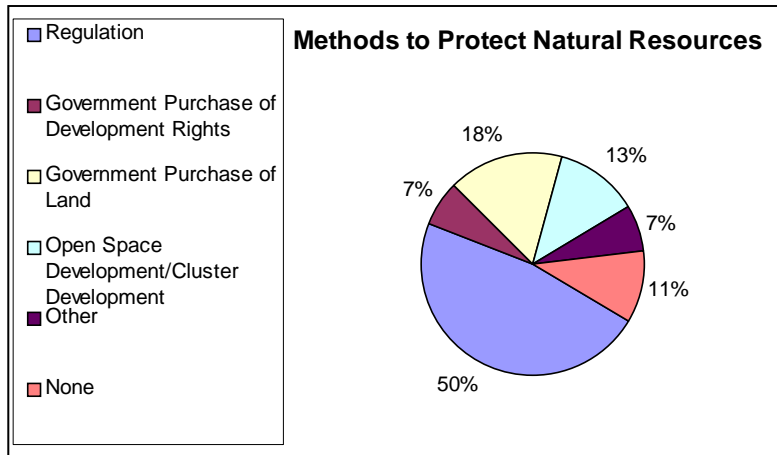
Figure 7-14 illustrates the rating of protection of natural resources viewed by the residents of Watertown and surrounding area. Thirty-one percent (31%) rate that the protection of natural resources in Watertown is good while fifty percent (50%) either

have no opinion or view the protection of natural resources as fair. Outlined in Figure 7-13, fifty percent (50%) agree that regulation is one of the best ways to protect natural resources. After the Comprehensive Plan is adopted, the City will review the City ordinances to create ways more natural resources can be protected, either through regulation, government purchase of land, purchase of development rights, through open space development/cluster development or other methods.

**FIGURE 7-13: Rate How Well the City Protects its Natural Resources (lakes, wetlands, forests), Community Survey Results (2007)**



**FIGURE 7-14: Methods to Protect Natural Resources Residents Would Support, Community Survey Results (2007)**



**NATURAL RESOURCE ASSESSMENT**

In order to identify the location of existing natural resources and amenities within the county, Carver County completed county-wide land cover inventory in 2007. All land within the county was mapped using the Minnesota Land Cover Classification System (MLCCS), including the location of elements of the county’s green infrastructure: lakes, wetlands, streams, forests, and other natural areas. Using the MLCCS data as the base,

the County developed a three-phase GIS-based tool to prioritize its green infrastructure and identify areas where natural systems should be preserved and/or restored.

A Natural Resource Assessment (NRA) was created and mapped by the County to be used to identify and prioritize remaining high quality and high functioning natural areas. A ranking system was created to make land use decisions and prioritize natural areas for preservation which ultimately has implications to future development and design. More information is available in the Carver County Comprehensive Plan on the methodology of the NRA.

Map 7-4 from Carver County, highlights all high natural resources including National Wetland Inventory (NWI), floodplain designation (FEMA), water (DNR), Minnesota Land Classification (MNCLS). With input from Elected Officials, planning staff, DNR, etc. areas were ranked into exceptional and high quality categories based on scientific data. Furthermore, the Comprehensive Plan Task Force determined areas for preservation based on local knowledge and assessment of natural features of certain areas. Those areas are also identified on Map 7-4. Future development should preserve and work around the existing natural vegetation as much as possible, as well as planting additional vegetation where appropriate.

## **EXISTING NATURAL FEATURES INVENTORY**

### ***Water and Wetlands***

The South Fork of the Crow River represents the most significant natural feature in Watertown. The river represents a critical amenity and provides a strong focal point for the community. Therefore, it is imperative that proper measures are taken to maintain the integrity of the river through the preservation of water quality and scenic and recreational opportunities. Map 7-5 shows wetlands according to the National Wetland Inventory and waterways classified by type.

A portion of the City is located within the 100-year floodplain of the Crow River, thus limiting development along this water body. The Mapes Creek floodplain north and west of the City boundary will impact future development as well. As a means of protecting the public health, safety, and welfare, Watertown has adopted a floodplain ordinance that is consistent with State and Federal standards. These provisions restrict development within the river's floodway and limit development in the flood fringe and floodway. In an effort to reduce the impact of development on the floodplain, current policy adopted by the City does not allow floodplain or wetlands to be a part of subdivided, private lots. All future development and redevelopment within the designated floodplain district shall conform to a specific set of regulations and shall be subject to additional review by the DNR and the Federal Emergency Management Agency (FEMA). With new developments and the impacts they may potentially have on the floodplain district, the City will review the City ordinance and may implement additional regulations to the floodplain ordinance to collaborate with the DNR shore land provisions, which would address land use, lot size and setbacks.

The majority of the floodplains and wetlands in the area lie west of the current Watertown City limits. There are scattered patches of wetland areas within Watertown, with the most extensive section lying in the newly annexed southeast corner. The Wetland Conservation Act of 1991 regulates the alteration of wetland areas. The City is the Local Government Unit (LGU) that reviews and oversees the impacts future development may have on wetlands.

### ***Vegetation***

Woodlands provide habitat, prevent soil erosion, provide protection from wind, and provide a natural boundary for the framework of design for developments. With the exception of the Crow River corridor and a few pockets of remnants of Big Woods, the City of Watertown is void of significant, forested area. However, because of the age of the City, there is significant mature urban forest within the developed neighborhoods. Wooded and natural areas provide a unique character and highly desirable amenity for both residential and recreational development. Therefore, efforts should be made to preserve existing vegetation.

### ***Wildlife***

Watertown and the surrounding area have a diverse array of wildlife species. The diversity is a result of the varied habitats which make up the area. The Crow River also provides an excellent habitat and protection for a magnitude of wildlife. The wildlife species in Watertown and the surrounding area include white tailed deer, fox, coyote, cottontail rabbit, geese, duck, ring-necked pheasant, squirrel, muskrat, beaver and mink. Songbirds and a plethora of fish are also found, including walleye, crappie, sunfish, bullhead and carp.

### ***Air, Noise, and Light Pollution***

The air quality is an important issue for communities and is becoming a regional and global problem at an increasing rate. While Minnesota's air quality is good on most days, in recent years, Minnesota has experience about a dozen days a year where ozone and fine particle levels have triggered air quality alerts. There are no USEPA non-attainment areas for ozone or particulates within Carver County, the nearest non-attainment areas are in eastern Wisconsin and central Missouri.

Residents and officials have indicated they wish to retain the small town atmosphere of the community. Residents value the peace and tranquility of the City and natural resources. Light pollution detracts from the intended purpose of outdoor lighting to provide safety and convenience and is often caused by poorly designed lighting, which causes "light trespass" (light shining outward and upward where it is wasted) and glare (light brighter than our eyes can process). Modern advances in lighting design and devices greatly control light trespass and glare. Often times such advances are more cost and energy efficient. Lighting standards can assist the City in curtailing light trespass, light pollution and glare. The existing ordinance requires cut-off type lighting which reduces trespass, pollution and glare.

Excessive noise should be restricted to help protect public's health and welfare against hearing loss, annoyance and activity interference. Common sources of noise complaints include, but are not limited to: airports/aviation facilities, railways, high volume roadways, barking dogs, leaf blowers, construction equipment, etc. The City's noise ordinance includes provisions to assist the City in limiting noise nuisances.

### ***Slopes***

Although the majority of Watertown's undeveloped land is described as flat or gently sloping, a number of areas, particularly along the west side of the Crow River and heavily forested areas on the east and west sides of the City, contain slopes that exceed eighteen (18) percent. (See Map 7-6) Steep slopes typically hinder the ability of the land for development. Steep slopes should be protected so that the variety of landscape is maintained for future generations to enjoy. New development should be designed so as to integrate steep slopes into the development rather than alter or simply abut. Development must be sensitive to the preservation of the natural vegetation and other stabilization practices to prevent erosion. Topography and steep slopes in the City will impact the design of development. Management and maintenance of steep slopes and other valuable topographic features will be critical to the design of development and redevelopment in the City of Watertown.

### ***Soils, Sand and Gravel***

Map 7-7 illustrates soils within the City of Watertown and surrounding area. The data survey is from U.S.G.S. database. Soils are the basic features which all plants and animals depend on. Many of the decisions about planning and environmental feasibility are based on the kind of soil that exists and the capability of the soil to support the planning function. While planning for the future, the characteristics of the soils in the City and surrounding area are researched in order to make the best decision to be compatible with the land and protect the natural environment. Soils in the City control the area's overall development pattern and map increase the limitations and sensitively to future development and redevelopment. Particular area of concern is soils along the Crow River, around the wetlands in the southeast and west quadrant.

As stated in the Carver County Management Plan, the following descriptions of soil types are found in the City of Watertown and surrounding 2030 Growth Boundary Area.

#### ***Cordova-Webster-LeSueur Association:***

Primarily composed of fine textured black clay loams. These deep soils are poor to moderately well drained and have a high moisture storage capacity. This soil pattern is generally associated with nearly level broad upland flats.

#### ***Lester-LeSueur-Peat Association:***

Primarily composed of medium textured clay loams. These deep soils are moderately to well drained and have high moisture storage capacity. This soil pattern is generally associated with gently rolling slopes and broad upland flats.

#### ***Lester-Hayden-Peat Association:***



Primarily composed of medium to fine textured loams with a subsoil of clay loam. These deep soils are well drained and have a moderately high moisture capacity. This soil pattern is generally associated with rolling slopes in the upland areas.

*Estherville-Talcot Association:*

Primarily composed of medium texture loams with a subsoil of loams or sandy clay loams and a gravelly substratum. These moderately deep to shallow soils are poorly drained and tend to have a lower moisture storage capacity. This soil pattern is generally associated with broad flats and drainage ways.

The various types of soils present different opportunities as well as limitations for developments. Developments may be required to undertake soil corrections also. As stated above, may of the outlining area beyond the current City limits are wetlands or hydric soils. The presence of wetlands and these types of soils can be a limitation to growth, density and design of development, but they also can be an opportunity to provide natural amenities among urban settings.

***Solar***

Ensuring that all properties have equal access to sunlight is a priority for energy conservation. The protection of property and aesthetic values is a secondary purpose. Solar access protection is provided for by the uniform implementation of lot and structure standards adopted as part of the Watertown Municipal Code. Requirements such as maximum building height and minimum setbacks are implemented for the purpose of creating separation between structures and allowing equal sunlight access such that a property is not in the shadow of an adjacent building.

**PARKS, TRAILS, OPEN SPACE, & NATURAL RESOURCES  
GOALS, POLICIES AND IMPLEMENTATION STRATEGIES**

**1. GOAL**

Establish a visual project identity in harmony with the physical context that reflects and respects the City of Watertown’s rural characteristics, historical past, and future with design solutions that are innovative, efficient, durable, beautiful and economically viable.

**POLICIES**

- Create more *Neighborhood Parks*
- Provide a framework to guide planning, development and park administration decisions.
- Determine the needs and uses of each park and facility in accordance with community’s standards.
- Maintain a level of service that is consistent with that which is provided today by the existing parks and facilities.
- Create a *Community Park*

**IMPLEMENTATION STRATEGIES**

- Update the Comprehensive Park and Trail Plan

- Where appropriate, accept park fees in lieu of the land dedication required by the Subdivision Ordinance
- Update the Subdivision Ordinance to ensure it adequately provides for the implementation of Comprehensive Plan.
- Identify the locations of parks and trails prior to new development or redevelopment

## **2. GOAL**

Uphold the safety of our children so they can reach schools and parks safely

### **POLICY**

Create safe routes for children to walk and bike to schools and parks

### **IMPLEMENTATION STRATEGIES**

- Supply two crossing guards for wide streets
- Enforce reduced speed limits at school and park crossings
- Paint “SCHOOL” on each high-speed approach to a school crossing
- Paint *stand back* lines on sidewalks to show children where to stand while waiting
- Develop “Safe-Routes-to-School” walking plans for parents and students
- Create school zones and adopt a zero-tolerance speed enforcement at those zones
- Provide school crossing guards with brightly colored and reflective vests and hats
- Include walking and bicycling safety education curricula in schools
- Develop “Walking School Bus” programs and “School Pools” where students walk to school in groups accompanied by responsible adults (versus carpools)

## **3. GOAL**

Provide community with plenty of affordable choices for physical activity and recreational opportunities for people of all ages.

### **POLICY**

- Introduce additional recreational infrastructure:
  - Parks
  - Trails
  - Open Space
  - Natural Resources
  - Ball Fields
  - Hockey Rink
  - Skate Park
  - Shelters / Recreational Rental Equipment
  - Playground Equipment

### **IMPLEMENTATION STRATEGIES**

- Require site planning for the location of future facilities
- Acquire additional park land

## **4. GOAL**

Provide ample safe and clean park and trail facilities for everyone to enjoy.

## **POLICIES**

- Ensure that adequate park, open space and trail facilities are incorporated into new development and redevelopment prior to development approval
- Collaborate with MN DOT, Carver County, the Watertown-Mayer School District, parents/guardians, and residents to develop Safe-Routes-to-School programs and other educational programs intended to increase pedestrian safety

## **IMPLEMENTATION STRATEGIES**

- Develop better access to current and future facilities by developing pedestrian linkage system
- Ongoing maintenance and management of existing and proposed parks, trails and recreational facilities

## **5. GOAL**

Achieve excellence in the health and overall quality of life in our community

## **POLICIES**

- Create a “Walkable Community”
- Encourage all residents to incorporate activity into their daily routines

## **IMPLEMENTATION STRATEGIES**

- Require new development and redevelopment to incorporate Active-Living principles into design plans and built space
- Develop community governing and planning processes to address Active-Living principles
- Create provisions for recreational programs in the Subdivision Ordinance
- Develop and implement methods to educate the public on the importance of daily activity
- Develop method to measure and evaluate progress

## **6. GOAL**

Preserve, maintain, enhance and protect the regions natural resources

## **POLICIES**

- Ensure that land dedicated to the City is usable and/or high-quality land and an asset to the existing park and open space system
- Obtain land for more parks and conservancy purposes
- Recognize systems theory for conservancy: that the whole system is more than just the sum of its parts
- Encourage the preservation of wetlands through regulations.

## **IMPLEMENTATION STRATEGIES**

- Develop provisions for the protection of wildlife areas and essential natural resource corridors, particularly along the Luce Line Trail
- Require park dedication or fees in lieu of with all new developments
- Explore options to obtain financing for acquisition of park land through grant research and other means

- Integrate the trail system along the Crow River with the Luce Line and other trail locations
- Prohibit development of steep slopes.
- Require the preservation of existing significant vegetation.
- Implement the floodplain ordinance to minimize the impacts of flooding.
- Identify and preserve natural amenities and features.
- Develop and adopt a shoreland ordinance.

## **7. GOAL**

Achieve ongoing and regular involvement of community in the planning of parks and open space

## **POLICY**

Develop and maintain partnerships with various agencies, organizations, surrounding communities and residents

## **IMPLEMENTATION STRATEGIES**

- Encourage resident participation in the planning and development of recreational and open space facilities through advertisement and postings
- Continue to offer residents and interested parties with educational opportunities (i.e. Seminars and/or workshops) to learn about parks, trails, open space, and natural resources
- Continue ongoing monthly Parks Commission meetings
- Regularly meet with Carver County and surrounding jurisdictions to integrate regional park plans.
- Coordinate with federal and state agencies in the protection of wetlands within the City.
- Encourage the relocation of incompatible uses along the banks of the Crow River.

## **8. GOAL**

Continue to explore creative options to incorporate principles into the community that enhance and encourage more daily activity

## **POLICIES**

- Achieve a *Walkable Community*
- Design pedestrian-scale buildings that encourage mixed uses, compact design within the downtown core, and a variety of transportation choices

## **IMPLEMENTATION STRATEGIES**

- Utilize the Luce Line Trail as a viable option for pedestrian linkage throughout the City
- Design internal pedestrian transportation routes that facilitate convenient access to local services
- Provide incentives to encourage people to live near where they work
- Provide walkways and greenways particularly in downtown area through shared off-street parking lots
- Encourage adaptive reuse of historic or architecturally significant buildings
- Conduct regular walkability audits

# **SURFACE WATER MANAGEMENT EXECUTIVE SUMMARY**

## **INTRODUCTION**

The Surface Water Management Plan (SWMP) has been prepared by Bolton & Menk, Inc. to analyze the effects of impending growth around the City on the existing municipal storm drainage system and to ensure that the effects of growth are not detrimental to the area resources. The plan also recommends development goals and policies that are designed to reduce the potential of flooding and storm water pollution associated with the development of unimproved land surrounding the City. The complete plan is located in Appendix J.

The watersheds and their sub-watersheds within and around the City have been mapped and this data will be used as method of quantifying the effects of various rainfalls on the existing and proposed storm sewer systems.

## **REGIONAL SYSTEM**

The most efficient and most economical retention basins serve large areas. An effort has been made to locate regional retention ponds instead of dispersing smaller basins through the City. Topography and available space must provide optimum locations for regional ponds and sometimes this is a hindrance.

One significant drawback to regional pond planning is the funding mechanism to purchase needed land and finding ways to have new development assist in the construction of the pond. Ideal planning of regional basins includes the purchase of the needed land while constructing the basins using funds generated from area charges on new developments.

### ***Carver County Soil and Water Conservation District***

Update of the Watertown SWMP will occur after the Carver County updates their plan to comply with new techniques, goals, policies, and strategies of the Carver County Soil and Water Conservation District. Carver County anticipates to have its SWMP updated in 2009.

### ***Comprehensive Outlook on Surface Water Management***

The Watertown Surface Water Management Plan demonstrates the best scenario combining both regional and isolated localized development pond designs while monitoring the effects on the properties and resources downstream. The Plan will be used as a planning tool and the goals, policies and implementation strategies will be used to move forward with any new development in the City under certain guidelines outlined in the Comprehensive Plan. Each development will need to be incorporated into a computerized model as part of the plan review process.

## **SURFACE WATER MANAGEMENT SUMMARY**

The existing storm water system including culvert piping, ditches, swales, and/or ponds should not be affected by future development. Due to the topography of the growth area, future storm sewer systems will function independently to the existing system. Improvements made to the existing system and the future storm sewer system will improve the water quality of the whole area. Although there are several alternative methods to accommodate growth, the desired practice is through the construction of regional retention ponds. As the storm water system continues to expand and the on-going maintenance of not only the existing system but also as the new system increases, it is important to appropriately collect fees from both new and existing residents, as well as developers, either per acre and/or by user fees. Any determined storm water management charges or area charges for new developments shall be reviewed annually to ensure annual fee adjustments for land acquisition, construction costs, etc. are included.

## **SURFACE WATER MANAGEMENT GOALS, POLICIES AND IMPLEMENTATION STRATEGIES**

### **1. GOAL**

Maintain the City's storm water management system.

### **POLICIES**

- Demonstrate the importance of planning a Capital Improvement Program and implementation to adequately address identified problems.
- Maintain or enhance the water quality of the Crow River, area wetlands, and watercourses.
- Enhance pond design criteria and work with the County to achieve its goal of regional ponding.

### **IMPLEMENTATION STRATEGY**

- Conduct a fiscal impact analysis to review alternative methods of funding the various projects and programs.
- Implementation of funding sources such as storm water utility and a development charge to pay for water management projects.
- Partner with Carver County to fund projects involving large-scale storm water management issues (regional basins, etc.)

### **2. GOAL**

Preserve, maintain, and expand the storm water storage and detention systems to control excessive runoff volumes and rates, prevent flooding, protect public health and safety, and minimize public capital expenditures.

### **POLICIES**

- Future developments must apply appropriate storm water treatment as well as address the potential for infiltration techniques to aid in groundwater recharge and the reduction of runoff volume.

- Provide improved water quality treatment through regional ponding and infiltration techniques as development and/or redevelopment occurs, as well as investigate new treatment alternatives for the existing storm sewer (i.e. oil/grit separators, etc.).

### **IMPLEMENTATION STRATEGY**

- Improving water quality treatment of storm water runoff through implementation of Best Management Practices for construction activity.
- City will work with Carver County to fund further investigation into alternatives, costs, timing issues for new technologies for in-situ storm water treatment.

### **3. GOAL**

Enforce the Minnesota Wetland Conservation Act (WCA) in attempting to avoid impact on wetlands whenever possible, limit the impact on wetlands when impact is unavoidable, and requiring mitigation of wetlands, where affected by growth, in accordance with state law.

### **POLICIES**

- Enforce a wetland buffer to help protect existing wetlands and improve the effectiveness of newly constructed wetlands.
- City will work with Carver County to achieve the county's goal of countywide wetland restoration.

### **IMPLEMENTATION STRATEGY**

- Revisions/additions to City ordinances to address water management issues (e.g. wetland buffer, floodplain, etc.)

### **4. GOAL**

Enforce the most recent extension of the 1987 Amendment to the Federal Water Quality Act which includes the NPDES Phase II requirements for Erosion and Sediment Control from construction sites disturbing greater than 1 acre.

### **POLICIES**

- City of Watertown must comply with Carver County's rules regarding erosion and sediment control, which will be enforced by the City.
- Prepare to address future NPDES storm water permit requirements and maintaining the SWMP.

### **IMPLEMENTATION STRATEGIES**

- Protect the existing capacity of the City's storm water management system by:
  1. Preventing sediment build-up
  2. Preventing flooding
  3. Maintaining water quality of runoff
  4. Correcting existing erosion and sedimentation problems
- Sump basin and sediment removal devices require routine maintenance to ensure consistent removal.

## **5. GOAL**

Properties with Individual Sewage Treatment Systems (ISTS) will be connected to the City sanitary sewer as soon as possible provided it is available and not cost prohibitive.

### **POLICIES**

- As the City expands, properties with ISTS may be incorporated.

### **IMPLEMENTATION STRATEGY**

- Work with Carver County who will continue to regulate the ISTS as stated in the County ISTS ordinance, including inspections and pumping notifications.

## **6. GOAL**

Increase public awareness, understanding, and involvement in water and natural resource management issues through cooperation with the County program.

### **POLICY**

- Encourage and enforce the need for community education programs regarding water resource management.

### **IMPLEMENTATION STRATEGY**

- Provide support and participation in Carver County's environmental education plan.

## **7. GOAL**

Protect and enhance fish and wildlife habitat and recreation opportunities.

### **POLICY**

- Reduce sediment loadings leaving the City and protect the recreational uses of the Crow River and area waterways, whether it is for maintenance of waterfowl habitat, canoeing, fishing, etc.

### **IMPLEMENTATION STRATEGIES**

- Adopt a shoreland ordinance consistent with Carver County rules.
- Continue to work with Carver County and the DNR to implement programs in Watertown that educate people on the importance of protecting wildlife habitat (i.e. Fishing in the Neighborhood program)

## **8. GOAL**

Eliminate potential non-point sources of groundwater and surface water contamination in the area.

### **POLICIES**

- As the City expands, properties containing feedlots may be incorporated.
- Encourage development of ponds in areas that currently contribute agricultural runoff to the River.

### **IMPLEMENTATION STRATEGY**

- City will continue to rely on the County for enforcement of its feedlot ordinance and permitting requirements.