

PARKS, TRAILS AND OPEN SPACE

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SECTION 1

Community Input and Values Statement



Overview

Understanding the needs and desires of the community was one of the first steps in preparing this plan. Through the planning process, citizens and their local representatives on the Comprehensive Plan Committee, the Parks and Recreation Committee (PRC) and City Council had a variety of opportunities to provide input and perspectives on planning issues. These findings provided the foundation for developing the parks, open space, and trail system plan. Through these interactions, a strong and consistent public statement has been made: **Preserve the sense of place and livability of the community while accommodating growth and evolving recreational and social trends.** These values have been extensively reflected in the system plan.

Public Input

Hastings' 2040 Comprehensive Plan Update's robust public engagement strategy included many opportunities for residents, businesses, and visitors to help shape the future of Hastings. Please see chapter two for more detail on the plan's public engagement process and specific responses related to parks, trails, and recreation planning.

Public input into the planning process occurred at several levels. The Task Force consisted of citizens, elected officials, and appointed boards and commission members from Hastings to ensure a cross-section of perspectives and opinions were heard throughout the process. Surveys, crowd-source mapping, focus groups, work sessions with the Comprehensive Plan Committee were used to gain public input and receive direction on key planning issues.

Public open houses and interviews with local recreation providers were also used as a means for direct input from citizens and organizations that benefit from the system. All meetings throughout the process were open to the public. The following summarizes the key findings and common perspectives gained through the public process.

Program Provider Input

As part of the planning process, local associations and program providers were interviewed and also filled out questionnaires to define current and future facility needs. The findings were instrumental in shaping planning decisions related to athletic facilities. The majority of the findings related to facility supply and demand are provided in Section 3 – Parks, Athletic Facilities, and Open Space Plan. General overall findings include:

- » The relationship between the City and School District has generally worked out well in meeting local needs for facilities, albeit there is still opportunity to expand this relationship to be more effective and efficient at meeting local needs
- » In the shorter-term (1-5 years), supply of facilities should be adequate to reasonably keep pace with demand, especially if the proposed improvements as defined in Section 3 are phased in
- » In the longer-term, additional athletic facilities will be needed at new or expanded sites to balance supply and demand and meet other objectives of the system plan

Copies of the completed questionnaires are available at City offices for review of a particular groups perspectives, as requested.

Committee, Commission and Resident Input

The Steering Committee and Parks and Recreation Commission provided insights into community needs and issues. Through open houses and public meetings, residents also had direct access to the process on numerous occasions and provided important perspectives about community needs, issues, and solutions. Key findings from these public interactions are detailed in chapter two of this plan.

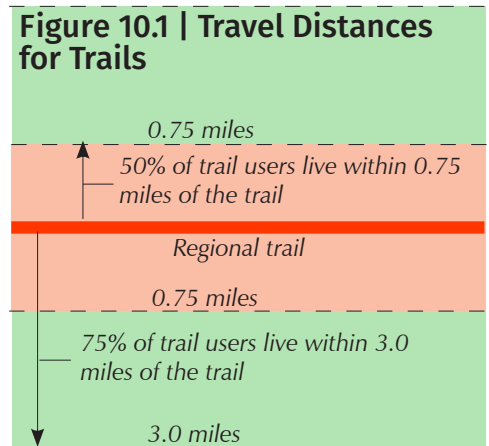
Regional Studies on the Influence of Parks

Over the past decade a number of regional studies have been conducted to determine recreational trends associated with the regional park system. These studies looked at residents' desires for a variety of recreational opportunities and their perspectives on current facilities and future needs. The main generalizations from these studies that have application to Hastings include:

- Walking around the neighborhood or in large natural parks remains the top activity, with over 85% of respondents being interested in this activity
- Individual sports are becoming more and more preferred over organized ones, at least at the adult level
- People value parks even if they do not regularly use them
- There is an especially strong desire to set aside land for nature areas/open space, bike paths, and general use trails

In terms of actual users of trails, recent research by the Metropolitan Council suggests that the majority of trail users live within three miles of the trail they are using, as Figure 1.4 illustrates. This suggests that the majority of trail use within the city will be from residents, not people driving to the area from outside the region.

The regional studies are consistent with some of the perspectives from Hastings residents, suggesting that there is a very strong link between local interests and those typically ascribed to the regional population. This reinforces the vision and basic precepts of the system plan as described in Section 2 – Vision Statement and Policy Plan. It also provides an additional rationale for developing a balanced system that offers recreational opportunities and values to the widest audience.



Influence of Public Input and Trends on Planning Outcomes in Hastings

The input received from residents during the public process, along with noted information, greatly influence planning outcomes and points of emphasis in the system plan. In spite of varying opinions on needs and uncertainties about trends, it is important to underscore that all residents that participated in the planning process consider parks, natural open spaces, trails, and recreational facilities very important quality of life indicators. To remain relevant to the community, the system plan has particularly emphasized the following key points:

- » The system must be balanced, diverse, and flexible enough to adjust to ever-changing needs of the community
- » Quality is as or more important than quantity for encouraging use of parks, trails, and recreation facilities
- » Providing trails and natural open spaces are as or more important than traditional parks, such as a neighborhood park or athletic facility
- » Other values of parks, open spaces, and trails also need to be maximized, ranging from increasing the economic value of properties adjacent to or near parks and open spaces to improving the overall aesthetic of the community through park beautification efforts

SECTION 2

Vision, Goals and Strategies



A Common Vision

The public process and open conversation that the City has had with its residents for the 2040 Comprehensive Plan was instrumental in creating a common vision for the community. A key underpinning of this vision is fostering a high quality of life through the provision of parks, open spaces, recreational facilities, and trails within the context of responsible land stewardship, long-term sustainability, and economic viability.

Mission Statement

The mission statement is an outgrowth of the common vision and reflects the City's commitment to its desired lifestyle and providing a balanced overall system. The mission statement is to:

“Promote a high quality of life in Hastings by providing a balanced and sustainable system of parks, natural open spaces, athletic facilities, and trails consistent with the historic sense of place in the community.”

Consistency with Other Plans

The Parks, Open Space, and Trail System Plan (System Plan) is intended to be consistent with and complementary to the vision, goals, and policies of the City's 2040 Comprehensive Plan.

and outcomes. Accompanying objectives qualify specific goals. Policy statements articulate strategies or actions necessary to achieve specific objectives.

System Plan Goals and Policies

The forthcoming goals are broad statements that chart the course for achieving the stated mission. They define desired future conditions

(Note that policies are not ordinances and thus allow for some discretion by the Parks and Recreation Commission (PRC) and City Council as to their application.)

Shared Goals with School District, Townships, Dakota County and MnDNR

The City will continue to foster mutually beneficial relationships with the School District, surrounding townships, Dakota County, and Minnesota DNR in serving local residents' parks, open spaces, and

trail system needs. Where applicable, the following goals and policies are intended to be consistent with and complementary to those of its partners.

Parks, Open Space and Trail System Goals and Strategies

Goal 1: Parks, Open Space, and Trail System Plan: To implement a cohesive, effective, and efficient comprehensive system plan.

Strategies:

1. To routinely evaluate and update the system plan and recreational needs of the community to ensure adequate parks, athletic facilities, open space, and trails are provided.
2. To use the plan for the purpose of guiding implementation.

Goal 2: Parks and Open Space Land Acquisition and Development: To provide residents with parks and natural areas for recreational uses, protection of the natural environment, as visual/physical buffering of land development, and as a means to maintain the sense of place, ambiance, appearance, and history of the community.

Strategies

1. To enhance the quality of life within the city by providing adequate parkland and natural areas to fulfill the present and future needs of residents.
2. To use the parks, natural areas, and interconnecting trail corridors as a major factor in shaping development.
3. To maintain and enhance the natural character and aesthetic qualities of the community by providing parks and natural areas.
4. To encourage sequential growth within the city in harmony with the natural environment.

Goal 3: Trail Corridors Acquisition and Development: To provide residents with a high quality interconnected trail system for recreation and transportation and as a means to tie parks and open spaces together.

Strategies:

1. To provide a trail system that emphasizes harmony with the natural environment.
2. To allow for relatively uninterrupted pleasure hiking, biking, and other uses to and through the City's park and open space system and developed areas.
3. To effectively tie the various parks together into a interconnected, high quality system; and to effectively tie the city trail system with those of adjacent townships and the regional park and trail system.
4. To protect users' safety from developmental encroachment and associated vehicular traffic.

Goal 4: Natural Resources Stewardship: To provide for the preservation and conservation of ecological systems and natural resources within the city.

Strategies:

1. To preserve significant natural resources as open space and a highly valued aspect of the overall open space system.
2. To maintain and enhance the character or appeal of the community through interconnected natural open spaces.
3. To encourage orderly and sequential growth within the community and in harmony with the

natural environment.

4. To ensure sustainable and desirable natural resource areas and ecological systems are protected and managed within the city.

Goal 5: Community Participation: To establish an effective, ongoing means of communicating and interacting with residents about issues related to parks and recreation facilities, programs, and future development. To provide residents with the opportunity to participate in recreational activities and programs through the City and various civic and volunteer organizations.

Strategies:

1. To promote active and ongoing interaction between the City and its constituents to ensure effective recreational programming and facility development.
2. To promote ongoing communication between the PRC and residents.
3. To promote ongoing volunteer programs and civic and athletic/youth organizations to encourage residents and community organizations to assist in park improvements, maintenance, and providing recreation programs.

Goal 6: Partnerships: To maximize the park and recreational opportunities available to residents through the development of fair and equitable working partnerships between the City and the local recreational program providers, local school district, adjacent cities and township, county, churches, and civic organizations.

Strategies:

1. To fairly and equitably integrate the City of Hastings parks and facilities with those of the other partners.
2. To fairly and equitably integrate the City of Hastings programs with those of the other partners.

Goal 7: Funding: To secure the funding necessary to carry out the mission of the Hastings Parks, Open Space, and Trail System Plan.

Strategies:

1. To define the funding options available for implementation of the system plan, and to maximize the use of each source.
2. To prepare an implementation plan that defines the relative timing and extent of acquisition and development of system components.

Goal 8: Recreation Programs: Working with local recreational program providers, the City will strive to provide residents with the opportunity to participate in recreation activities and programs through well-designed, effective, and interesting recreation programs.

Strategies:

1. To support local recreational provider's efforts to meet local recreation needs, including those of children, teens, adults, elderly, and the disabled.
2. To support and encourage a wide diversity of recreation interests within the community.
3. To work with program providers to provide adequate facilities for programmed use on a fair and equitable basis to ensure that all individuals and groups receive reasonable access to facilities.

Guiding Principles

A number of guiding principles support the vision and mission statements.

- » Implement a balanced system plan offering multiple community values
- » Allow for some flexibility in implementing the plan to adjust to realistic financial limitations and unforeseen events
- » Maintain a high and consistent standard of quality throughout the system
- » Plan and design parks for their entire life-cycle (i.e., 15 to 20 years)
- » Adhere to a standardized planning and design process for individual parks to ensure consistency in public involvement and outcomes

Achieving the Common Vision

Achieving the common vision will require the use of conventional and non-conventional approaches to planning, development, and funding. Successful implementation of the plan will also require a steadfast commitment to collaborating with the development community for a couple of key reasons:

- » The nuances of integrating open spaces, parks, and trails into new developments requires a high level of collaboration and flexibility to achieve the highest public values
- » The cost of implementing the system plan to its fullest potential is likely to be well beyond the City's means using conventional funding mechanisms, park dedication policies, and past approaches to acquisition and development. By combining standard regulatory controls with

alternative approaches to the development process (such as conservation development), achieving the vision and goals set forth in this and the City's Comprehensive Plan becomes more realistic. Lacking that, realizing the full potential of the system plan becomes significantly more of a challenge, and perhaps even unlikely.

Achieving the common vision will also require expanding on the cooperative relationship between the City and its partners as defined in various sections of this plan.



PARKS & TRAILS

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PARKS

- | | |
|------------------------------------|-------------------------------------|
| 1. Egan Blvd Park | 20. Southeast Park Ponding Basin |
| 2. River Falls Park | 21. Pioneer Park |
| 3. Featherstone Park Ponding Basin | 22. Wells Park |
| 4. Lake Redwood Park | 23. Pleasant Park |
| 5. Jackson Park | 24. Dakota Hills Park |
| 6. Lewis Park | 25. Westwood Park |
| 7. Oborn Grove Park | 26. Cori Agri Park |
| 8. Deane Park | 27. Old Mill Park |
| 9. Lake Isabel Park | 28. Winnebago Falls Park |
| 10. Greenwood Park | 29. Veterans River Lander Park |
| 11. Public Square | 30. Veterans Park Arboretum Complex |
| 12. Laird Park | 31. Cannon Park |
| 13. Wilson Park | 32. Riverwood Park |
| 14. Homestead Park | 33. Green Park |
| 15. Hastings Dog Park | 34. Carl Park |
| 16. Conestoga Park | 35. Burt's Acres Park |
| 17. Tansley Park | 36. South Prairie Park |
| 18. Rosemary Park Ponding Basin | 37. Tuttle Park |
| 19. C.P. Adams Park | |

FACILITIES

- PARKS
- SCHOOLS
- CITY BUILDINGS
- AQUATIC CENTER
- CITY HALL
- CHAMBER OF COMMERCE
- CIVIC ARENA
- FIRE DEPARTMENT
- POLICE DEPARTMENT
- PUBLIC DOCK
- FISHING PIER
- BOAT LAUNCH

POINTS OF INTEREST

- A. SCENE OVERLOOK
- B. RIVER DUNE TRAIL
- C. FERRIS LOCK AND DAM #2
- D. SCENE OVERLOOK
- E. HASTINGS BRIDGE PLAZA & RIVER OVERLOOK
- F. OFF LEASH DOG PARK
- G. LEWIS MANSION
- H. GOLF COURSE
- I. WERNICHER RIVER FALLS
- J. WASTE WATER PLANT
- K. WERNICHER RIVER BRIDGE
- L. OLD MILL PARK

SECTION 3

PARKS, ATHLETIC FACILITIES, AND OPEN SPACE PLAN



Overview

The system plan consists of parks, athletic facilities, open spaces, and trails serving a wide variety of active and passive recreational needs. This section considers each of these components, with the exception of trails, which are considered in Section 4 – Trail System Plan.

The system plan is based on current and anticipated needs of residents as defined in Section 1 – Community Input and Values Statement and Section 2 – Vision Statement and Policy Plan and Chapter 2: Planning Process and Public Engagement. However, this plan is dynamic and will require adjustments as changes occur in trends and resident expectations as Hastings continues to evolve as a community.

Interlinked Systems – Hastings and School District 200

The parks, athletic facilities, open space, and trail system within Hastings is intrinsically interconnected with School District properties. This is especially the case with athletic facilities, in which a high level of collaboration is necessary to effectively and efficiently serve local needs.

Currently, the City and School District have an aging (1973) joint powers agreement in place that has been mutually beneficial in serving local residents' recreational needs, especially as it relates to athletic facilities. This includes, to varying degrees, cooperation on use, operations, and maintenance of athletic facilities at a variety of sites. Continuing this relationship remains important in order to maximize the efficient use of land and funding resources to meet local needs.

Revisiting existing agreements to ensure that current needs are adequately addressed and in alignment with the updated system plan is important to the continued success of this partnership. This is considered in more detail in Section 6 – Implementation Plan and Administrative Provisions. Well thought-out and up-to-date agreements are especially important as the City and School District reach their respective population and enrollment thresholds, at which time balancing facility supply and demand becomes most important.

Park + Greenway Classifications

The system plan consists of a variety of parks and open spaces defined under various classifications. Each classification serves a particular purpose in meeting local park and recreation needs. Although some flexibility is warranted, classifying parks is necessary to ensure a well-balanced system and that all recreational needs are effectively and efficiently met.

The classifications applied to Hastings are based on guidelines recommended in the National Parks, Recreation, Open Space and Greenways Guidelines (National Recreation and Parks Association, 1996) and Planning and Urban Design Standards (American Planning Association, 2006), albeit expanded or modified to address circumstances unique to the city. The following table provides an overview of each classification used in Hastings. (Each of the classifications are further expanded upon later in this section.)

Classification	Common Guidelines	Application to Hastings
Neighborhood Park (and Mini-Neighborhood Park)	Neighborhood parks are the basic units of the park system and serve a recreational and social purpose. Focus is on informal active and passive recreation. Neighborhood parks are typically 5 acres or more, with 8 to 10 acres preferred for new parks. Mini-neighborhood parks, which are used only on a limited basis when securing more land is impractical, are 1 to 3 acres of developable land. Service area is ¼-mile radius for mini parks and up to a ½-mile for a typical neighborhood park, uninterrupted by major roads and other physical barriers.	Neighborhood parks remain a basic unit of the park system in Hastings. In areas with urban densities, a service area of ¼- to ½-mile radius remains appropriate. When new parks are connected with greenway-based trails, service areas can be expanded to ¼-mile radius or slightly more since the trails and open space become part of the park experience.
Community Park	Community parks serve a broader purpose than neighborhood parks. Focus is on meeting community-based recreational needs, as well as preserving unique landscapes and open spaces. Size varies, depending on function. 20 acres minimum preferred, with 40 or more acres optimal. Service area can be community-wide or several neighborhoods in a given area of the city.	Given the city's proximity to the riverfront and the natural areas that will be set aside in greenways, there is less overall need for traditional community parks beyond that defined under this plan.
Athletic Complex/Facility	Consolidates programmed adult and youth athletic fields and associated facilities to a limited number of sites. Tournament level facilities are appropriate. Size varies, with 20 acres or more desirable, but not absolute. 40 to 80 acres is optimal.	This classification has application to Hastings to meet local needs for athletic facilities (in concert with school sites.) As a growing community with many families, facility demand will continue to grow in sync with population growth.
Greenway/Natural Open Space/Conservation Areas	Lands set aside for preserving natural resources, remnant landscapes, and open space, and providing visual aesthetics/buffering. Also provides passive use opportunities. Ecological resource stewardship and wildlife protection are high priorities. Suitable for trail corridors. Overall land area varies depending on opportunity and general character of natural systems within a city.	Within the city proper, the potential for establishing greenways and preserving open space is more limited. This reinforces the importance of working closely with adjoining townships and Dakota County on setting aside land for greenways and interconnected trails systems.
Regional Park/Reserve	Larger scale, regionally based parks and open spaces focusing on natural resource preservation and stewardship. Typically a minimum of 500 acres and up to several thousand. Service area is regional, which generally encompasses several cities.	Although none are located within the city, the system plan emphasizes linear greenway-based trail systems that will connect Hastings to regional parks in Dakota and Washington Counties.
Special Use	Covers a broad range of parks and recreation facilities oriented toward single-purpose uses – such as a nature center, historic sites, plazas, urban squares, aquatic centers, campgrounds, golf courses, etc. Overall size varies, depending on need.	The use of this classification will be limited in Hastings at this time.
School Site	Covers school sites that are used in concert with, or in lieu of, city parks to meet community recreation needs. School sites often provide the majority of indoor recreational facilities within a community. Size varies, depending on specific site opportunities.	Continuing the established relationship between the School District and City is vital to successfully meeting the long-term demand for athletic facilities in a cost-effective manner.

Cumulative Park System Acreage Standards

In the past, acreage standards (i.e., optimal number of acres of park land per 1000 population) were often used to determine the overall land area necessary to meet community park and recreation needs. In the mid-1990's, reliance on this type of standard was discouraged under the National Park, Recreation, Open Space, and Greenway Guidelines (National Recreation and Parks Association, 1996) because it was found to be too arbitrary and did not adequately accommodate the individual nuances of park and open space opportunities and needs of individual communities.

The current guideline is for each community to evaluate and determine its own park and open

space needs and desired level of service through local public process, then, if necessary, compare that evaluation against similar situations within the region. Hastings' system plan falls within standard practices and compares favorably to other communities in terms of public land area and park distribution to service community needs. Nuances with Hastings' system include the opportunity for an extensive natural greenway/open space system surrounding the city and along the riverfront. This is a unique opportunity that sets Hastings apart from many communities of similar size.

Flexible Application of the Classifications

The system plan provides some flexibility in applying the park classifications to accommodate the ebb and flow of community needs as the system is being developed and in response to funding limitations. Flexibility is also needed to ensure that the city does not overbuild facilities if future demand is uncertain.

Through flexible-use policies, activities that are not normally desired or allowed in a given type of park would be acceptable under select circumstances. The most common example of this is using neighborhood parks for more programmed use than would be typically desired due to an interim shortage of athletic facilities. Another example is programming youth activities on adult-sized facilities when there is a temporary shortage of facilities.

Flexible-use policies are typically applied on a case-by-case basis in response to a given circumstance. Standard protocol for establishing these policies includes:

- » City staff identifies a use or need and defines the park or facility flexibility required to address it

- » PRC considers staff recommendations and prepares a specific flexible-use policy to address it, which should include a strategy statement about the long-term approach to resolving the situation
- » Flexible use policy is forwarded to City Council for approval
- » Flexible use policy is recorded as an attachment to the System Plan

In Hastings, flexible use primarily relates to the working relationship between the City and School District, as well as by the City in addressing temporary shortages of athletic facilities.

Note that although flexible use policies have their application, they should not be construed as long-term solutions to addressing facility supply and demand issues. Although flexibility is needed to meet community needs, the use of these policies by their nature compromises the system and therefore should not be considered permanent solutions.

Local Park System Plan

Although the greenway and park system functions as a cohesive whole, individual parks will continue to have a significant and defined purpose consistent with their classifications. The Parks, Open Space, and Trail System Plan (System Plan) illustrates the location and name of each park within the system, and the general areas where new parks will be needed as development occurs. The following table provides an overview of the total number of parks under each classification, along with approximate number of total acres.

Summary table of Park Number and Acreages for Active-Use Parks

Park Classification	Total Number	Total Combined Acreage
Neighborhood Park – Existing	19	100
Neighborhood Park – Proposed Future (Contingent on extent of future residential development and annexation; based on 6 acres/site)	8	48
Community Park and Special Use – Existing	9	118
Athletic Complex/Facility – Existing (Includes Veterans’ Park and Hasting Civic Arena site)	2	48
Athletic Complex/Facility – Proposed	1	40
Total Local Parks – Existing and Proposed Future	39	354

Neighborhood Parks

Neighborhood parks are the basic unit of the park system and serve a recreational and social purpose. Development focuses on informal recreation. Programmed activities are typically limited to youth sports practices and, very occasionally, games.

Existing Neighborhood Parks

As illustrated on the System Plan, there are 19 existing parks within the Hastings park system that serve neighborhood uses, including:

- » Eagle Bluff Park – 1.0 acres, with play structure and limited open green space
- » Crestview Park – 2.8 acres, with play structure, T-ball field, basketball half-court
- » Lions Park – 19.2 acres, with play area, hockey rink, ballfield, and open green space; a large portion of the park is devoted to open green space and storm water ponds
- » Wilson Park – 1.8 acres, with a play area as a main focal point; the park also contains a full basketball court, a ballfield with lighting, and a small area designated for winter skating, with a warming house nearby
- » Tierney Park – 2.0 acres, play structure, paved access trail, and open green space
- » Conzemius Park – 8.5 acres, with a nice mix of mature trees and open green space;

amenities include a play area, ballfield, open green space for informal use, and a nature trail connection from the park to the adjacent neighborhood

- » Pioneer Park – 5.5 acres, with two ballfields, a hockey rink, a warming house, an informal winter skating area, two full size basketball courts, and a children’s play area; pull-in parking is located on the south side of the park.
- » Westwood Park – 1.0 acres, with a ballfield, full size basketball court, picnic table, small children’s play area, and portable restroom
- » Dakota Hills Park – 2.8 acres, with a play area, 1/2 court basketball court, ballfield, and open green space for informal use
- » Pleasant Park – 7.4 acres, with a children’s play area, full size basketball court, paved trail connection to adjacent neighborhoods, open green space for informal use, and two large stormwater ponding basins.
- » Wallin Park – 14.1 acres, with paved trail loops, two ballfields, one hockey rink with an adjacent informal winter skating area, a warming house, a play container, and open green space for informal use
- » Riverwood Park – 8.1 acres, with a play area with seating areas, full basketball court, three horseshoe courts, paved trail connection, ballfield, open green space

for informal use, and a fairly large wooded area

- » Greten Family Park – 4.5 acres, with a fair amount of open space and a large stormwater ponding basin; amenities include a play area with adjacent seating and picnic areas, 1/2 court basketball court, portable restroom, and benches
- » Cannon Park – 4.0 acres, with a ballfield, open green space for informal use, children’s play area, and 1/2 court basketball court
- » Cari Park – 4.5 acres, with paved trails, play area, half-court basketball court, open green space for informal use, and a pond
- » South Pines Park – 2.5 acres, with an accessible paved trail connecting the street to the play structure, play equipment with a couple of unique climbing components, a 1/2 court basketball court, and open green space for informal use
- » Sunny Acres Park – 1.9 acres, with a ballfield backstop, 1/2 basketball court, and play area
- » Tuttle Park – 5.7 acres, with a ballfield, two soccer fields overlaying open green space, children’s play area, 1/2 court basketball court, and a direct trail connection from the southern park entrance to the northern entrance
- » Lake Isabel Park – 2.5 acres, with a children’s play area, full basketball court, open green space, and a few picnic tables

For the most part, the existing parks are capable of meeting the primary needs of the neighborhoods they serve and generally meet accepted standards for neighborhood parks. A significant functional issue is that some of the parks are on the smaller side, which limits the level of development that can occur and the size of the open green space. Although small-acreage parks should be avoided in the future, any current limitations can be overcome for the most part through good design and maximizing the use of the land that is available.

Another factor to consider is that the facilities and amenities in some parks are reaching the end of their life-cycle or do not meet optimal contemporary design standards. In addition, more attention needs to be given to master planning and park design to improve the aesthetic quality and overall appeal of the parks to enhance use levels.

Areas Where New Neighborhood Parks will be Required as Development Occurs

As illustrated on the System Plan, there are a number of areas within the city and areas subject to annexation where new neighborhood parks will be required to service local needs as development occurs. The locations for these

parks are conceptual and do not represent a specific parcel of land. Their actual location will be based on how they can be best integrated with new developments that the park will serve, and the following criteria.

General Criteria for Establishing the Location of New Neighborhood Parks

The distribution of future neighborhood parks is intrinsically linked to development patterns and layouts, as well as how a given park interlinks with greenways and greenway-based trail system. This is especially the case in future annex areas, where the greatest opportunity lies for blending neighborhood parks with greenways.

In situations where neighborhood parks are integrated with greenways and greenway-based trails, the spacing between individual parks can be greater than traditional standards suggest for two reasons: 1) the greenway is part of the park

experience; and 2) the trails within the greenway make it easier and safer to get to the park from a given neighborhood. Should the greenway system substantially change or not materialize, the distribution of the neighborhood parks would need to be reconsidered.

As a general guideline, a service area radius of around 1/2-mile or slightly more and uninterrupted by major roads or physical barriers is appropriate for annex areas where the parks are linked together by greenway-based trails.

Specific Site Selection for New Neighborhood Parks

Site selection for a neighborhood park is critical to its ultimate quality and success. Desirable criteria for selecting new parks include:

- » 5 acres or more, 6 to 10 acres preferred, with 3 acres the minimum size
- » Centrally located within the neighborhood area it serves
- » Site exhibits desirable physical and aesthetic characteristics, with a balance between developable open space and natural areas; lowlands and other lands not suitable for development are also not suitable for a neighborhood park
- » Connection to neighborhoods via trails or sidewalks; the more convenient the pedestrian access, the more use a park is likely to receive
- » Connection to a greenway or open space system to expand the sense of open space at the neighborhood level

Although natural amenities are desirable, designated wetlands or non-upland protected areas that cannot be developed for active or passive park uses should not be included in the acreage calculation for a neighborhood park.

At the discretion of the PRC and City Council, “left over” land not suitable for residential development should not be accepted for neighborhood-park uses if it does not meet the desirable criteria. This includes storm-water holding ponds, which can only be integrated into the design of a neighborhood park under two conditions: 1) the ponds are a designed feature with either natural or ornamental qualities; and 2) the area of the pond is not considered as part of the neighborhood park acreage calculation. (Side note: Protected areas, such as wetlands, are still valuable aspects of the larger greenway system, but they are not a land substitute for neighborhood parks.)

Development/Redevelopment of Neighborhood Parks

The design for each neighborhood park should be consistent with the desired service level and tailored to the neighborhood it serves, rather than the generalized needs of the community. The following table provides a general palette of amenities typically found within neighborhood parks offering three different levels of service.

A community such as Hastings can typically afford an upper basic to medium service level. (Note: Section 6 – Implementation Plan and Administrative Provisions also considers this issues relative to priority setting.

Figure 10.4 | Overview of Neighborhood Park Service Levels

Service Level	General Site Parameters	Palette of Amenities to Consider
Basic Service Level (<\$200,000 in 2007 dollars)	Park size ranges from 1.0 to 3.0 acres; designed for active use, with limited passive use area given the smaller park size	<ul style="list-style-type: none"> • Smaller-sized children’s play structure with limited age separation (2,500-3,500 s.f.) • Accessible trail to play structure and key park features, plus a link to neighborhood sidewalk or community trail system • Smaller maintained green space for informal use (1 acre minimum preferred) • Basketball halfcourt or small hardcourt (for hopscotch, 4-square, etc.) • Limited general site amenities – benches, picnic tables, trash containers, etc. • Limited amount of ornamental landscaping • Limited natural landscaping and natural-based stormwater infiltration systems in non-developed areas • Relies on street lights for security lighting • On-street parking, or no parking (walk-to park)
Medium Service Level (\$200,000 to \$400,000 in 2007 dollars)	Park size range from 2.0 to 4.0 acres, with more of a balance between active and passive uses	<ul style="list-style-type: none"> • Modest-sized children’s play structure with more age separation (3,500-5,000 s.f.) • Accessible trail to play structure and key park features • Trail loop internal to the park, plus a link to neighborhood sidewalk or community trail system • Medium-sized maintained green space for informal use (1 to 2 acres preferred) • 1/2 to full-size basketball court • Small hardcourt area (for hopscotch, 4-square, etc.) • Modest amount of general site amenities – benches, picnic tables, trash containers, etc. also might include a drinking fountain • Modest amount of ornamental landscaping, particularly near active use areas • Greater use of natural landscaping and natural-based stormwater infiltration systems in non-developed areas • On-street parking, or small on-site parking lot (less than 10 spaces) • Small picnic shelter and picnic area • Modest emphasis on aesthetic improvements and architectural elements – arbor structure with benches, ornamental fencing, etc. • Limited ornamental and basic security lighting • Extensive emphasis on design details and quality aesthetic nuances – i.e., park is an important streetscape/urban design feature; the importance of design should not be underestimated, with aesthetically appealing parks far more likely to be used
Higher Service Level (>\$400,000 in 2007 dollars)	Park size range from 3.0 to 5.0 acres or more, with a balance between areas for active and passive uses maintained	<ul style="list-style-type: none"> • Larger-sized children’s play structure with extensive age separation (5,000-6,500 s.f.) • Accessible trail to play structure and key park features • Larger trail loop system internal to the park, plus a connection to neighborhood sidewalk or community trail system • Larger open maintained green space for informal use (2 acres minimum preferred) • Full-size basketball court • Larger hardcourt area (for hopscotch, 4-square, etc.) • Higher level of general site amenities – benches, picnic tables, trash containers, etc.; might include a restroom enclosure; also includes a drinking fountain • Extensive amount of ornamental landscaping, particularly near active use areas • Extensive use of natural landscaping and natural-based stormwater infiltration systems in non-developed areas • On-street parking, or small to medium on-site parking lot (from 10 to 20 spaces, maximum) • Larger family picnic shelter and picnic area • Higher level of emphasis on aesthetic improvements and architectural elements – arbor structure with benches, ornamental fencing, etc. • More extensive ornamental and security lighting • Tennis court – only if demand warrants • Extensive emphasis on design details and quality aesthetic nuances – i.e., park is an important streetscape/urban design feature; the importance of design should not be underestimated, with aesthetically appealing parks far more likely to be used

Developer-Related Agreements Related to Neighborhood Parks

In addition to stipulations about the amount, location, and character of land set aside for a neighborhood park, the developer's agreement between the City and developer should also define qualitative expectations and requirements. These include, but are not limited to, the following types of construction impact-related stipulations:

- » Tree and natural area protection – to ensure that all quality natural features will

- remain undisturbed during construction
- » Soil condition and compaction protection – to ensure that the site is not used for unauthorized soil mining/transfer and that native soils are not unduly compacted relative to native conditions
- » Excessive grading protection – to ensure that the site is not unnecessarily graded, hence creating drainage issues and soil quality and compaction concerns

Limiting the Use of Neighborhood Parks for Programmed Athletics

The athletic facilities strategically located within the city are intended, over time, to accommodate the vast majority of programmed athletic uses within the city. Importantly, neighborhood parks should not indefinitely be heavily programmed since that takes away from their capacity to serve local residents' day-to-day recreational needs. Although neighborhood parks can be used on

occasion for younger children's programs such as T-ball, doing so should be purposefully limited to avoid overuse issues, such as excessive parking in the neighborhoods, turf quality issues, and detracting from the neighborhood sense of place.

Interconnection of Neighborhood Parks to Local Neighborhoods

The interconnection of parks through the trail and sidewalk system is of particular importance to the success of the park system. This is especially the case with neighborhood parks, where safe and appealing access to them is critical to their use levels. Lacking these trail connections, any inequity in park distribution will become more apparent to the user because the parks will be harder to get to and from within a given residential neighborhood. The less convenient the access, the less use parks are likely to receive.

The integration of new neighborhood parks with the larger open space (greenway) system with interlinking trails is also an important factor in pushing the service radius of a neighborhood park to 1/2-mile or more. The rationale for this is that the greenways and trails provide easier direct access to neighborhood parks and that these corridors are perceived to be part of the park experience by the user. If the greenway system does not materialize, the location of any new neighborhood park warrants reconsideration to ensure adequate service is provided.

Overall Balance of Neighborhood Parks

Irrespective of any limitations associated with the location, size, and land characteristics of some of the existing parks, the overall system plan, once complete, will be reasonably balanced at

the neighborhood park level and will serve the community well. Any imbalances that remain can be largely mitigated through good park design.

Community Parks

Community parks typically serve a broader and more specialized purpose than neighborhood parks. Their focus is on meeting community-based recreational needs, as well as preserving unique landscapes and open spaces. The general palette of amenities typically found within this class of park includes:

- » Amenities common to a neighborhood park, albeit at a larger scale

Existing Community Parks

As illustrated on the System Plan, there are nine parks that fall under the community park classification, each serving the residents in different and important ways, as the following defines:

- » Levee Park – 3.8 acres, with picnic tables, benches, observation dock, Veterans memorial, seasonal ice rink, picnic shelter, musical playground, labyrinth, fireplace, indoor bathrooms, and pedestrian walkway/trail.
- » Vermillion Falls Park – 11.0 acres, with picnic shelter, overlook gazebo, stone monument, trails, parking lot, and scattered picnic tables. The falls is a major highlight of the park system and river corridor.
- » Old Mill Park – 9.2 acres, with main highlight being the ruins of an old grist mill. Other features include an access trail to ruins, part of a linear destination trail (including an old train bridge over the river), and picnic tables. A management plan has been prepared and is on file with the Park and Recreation Department.
- » Roadside Park/Aquatic Center – 8.0 acres, with an aquatic facility, six tennis courts,

- » Larger group picnic facilities
- » More extensive looped trail systems
- » Open maintained green space for passive and active use
- » Winter activities, such as ice skating, sledding, and skiing
- » Special use facilities having a community appeal.

larger children’s play area, picnic tables with grills, picnic shelter, sidewalk on north side, trail on south side, raised bed garden, stone monuments, and parking lots (by aquatic center and tennis courts).

- » C.P. Adams Park – 63.0 acres, with a large open green space, trails, sand volleyball court, basketball court, 18-hole disk golf course, horseshoe pit, gravel parking lot, and access drive. Much of the park remains as natural open space.
- » Con Agra Park – 4.1 acres, which is generally undeveloped open space with mature tree cover (leased property).
- » Jaycee/Lake Rebecca Park – 19.5 acres, with a boat ramp, parking lots, picnic tables, swinging benches, and trails at Jaycee Park. Lake Rebecca Park includes an 80-acre lake, a boat launch with parking, two larger parking areas, scattered picnic tables, a lake overlook/pier and trails. A master plan has been created for these parks. Note that these two parks function in concert with the larger Hastings River Flats area.
- » Oliver’s Grove – 2800 square feet, with a brick patio with wrought iron fence, picnic tables, and benches.

Development/Redevelopment of Community Parks

The design for each community park should be individually considered consistent with its intended use within the park system.

Interconnection of Community Parks to Surrounding Neighborhoods and Larger Community

As with neighborhood parks, the interconnection of community parks via the trail and sidewalk system is of particular importance to the success of these parks. Conversely, these community-type

parks are also important to the success of the trail system by providing a destination for users to go to when using the trail system.

Overall Balance of Community Parks

Each of the community parks contribute significantly to the overall quality of the park system. In their individual way, each park plays a role in providing a wide-array of recreational choices for residents and visitors alike.

experience within the existing parks. In addition to meeting defined needs, the design of these parks is also critical to creating a compelling sense of place that residents and visitors will return to time and again.

Given the extent of existing community park opportunities, there is little justification for adding new community park sites to the system. Instead, the focus should be on providing a quality

Athletic Facilities

The System Plan includes athletic facilities in a number of parks for varying levels of programmed uses. City-provided facilities are also complemented by School District athletic facilities. The following table provides recommendations on the level of use of each park for organized athletics. Note that this only relates to programmed use. Day-to-day use by residents is considered non-programmed general use and is therefore not specifically defined.

a higher priority. In all likelihood, changing use patterns will require a phased approach that may take years to implement due to resource limitations and practical options. Ultimately, redefining how parks are used is a policy issue to be addressed by the PRC and City Council, most likely on a site-by-site basis. That said, the impact that overuse has on a given park or neighborhood should not be taken lightly in that it does indeed affect the quality of the park experience (or living in a given neighborhood) if overuse issues are left unchecked.

Proposed use levels reflect desired outcomes relative to creating a balanced system, where each park unit serves its intended purpose to the fullest extent. However, the actual reduction of use levels on a given site is contingent on: a) the user group having a more appropriate facility to use, or finds another site to address their needs; or b) access to a given site is denied to achieve

Parks Used for Recreation Programs (as of 2007)

Park/Site Name	Classification	Proposed Level of Use for Programmed Athletics
Eagle Bluff Park	Neighborhood Park	Each of these parks are not well-suited for organized athletic programming. The overall objective is to ensure that these parks are available to neighborhood residents for informal recreation. They should only use for programmed activities under special permit as determined appropriate by the City, with even that use being generally limited to younger children living in the neighborhood.
Tierney Park	Neighborhood Park	
Greten Family Park	Neighborhood Park	
Cari Park	Neighborhood Park	
South Pines Park	Neighborhood Park	
Sunny Acres Park	Neighborhood Park	
Crestview Park	Neighborhood Park	As smaller neighborhood parks, programmed athletic uses should be reduced over time to levels more in keeping with a neighborhood park context. The primary focus of these parks is on informal neighborhood use with limited to no organized athletic programming. If used at all, it should be limited to practices for younger children. No older youth/adult use should be routinely allowed.
Wilson Park	Neighborhood Park	
Conzemius Park	Neighborhood Park	
Westwood Park	Neighborhood Park	
Dakota Hills Park	Neighborhood Park	
Pleasant Park	Neighborhood Park	
Riverwood Park	Neighborhood Park	
Cannon Park	Neighborhood Park	
Tuttle Park	Neighborhood Park	
Lake Isabel Park	Neighborhood Park	
Lions Park	Neighborhood Park	
Wallin Park	Neighborhood Park	
Pioneer Park	Neighborhood Park	
Levee Park	Community Park	As specialty community or nature parks, none of these parks are well-suited for programmed athletic purposes.
Vermillion Falls	Community Park	
Verm. R. Linear Park	Nature Park	
Old Mill Park	Community Park	
Roadside Park	Community Park	
C.P. Adams Park	Community Park	
Con Agra Park	Community Park	
Jaycee/Lake Rebecca Parks	Community Park	
Oliver's Grove	Community Park	
Veteran's Athletic Complex	Athletic Complex	Each of the sites are intended for extensive youth and adult athletic programming and organized sports. Over time, the vast majority of intensively programmed outdoor athletic activities will occur at an expanded Veteran's Athletic Complex, in conjunction with select school sites.
Hasting Civic Arena	Athletic Facility	

Relationship Between Hastings and Local School District Relative to Athletic Facilities

Although not individually described under the City’s park system plan, School District athletic facilities are important to meeting the needs of local associations and broader community. The system plan is based on the premise that this current relationship between the two partners will continue, with any changes having potentially profound impacts on meeting future facility demands. This approach offers several important benefits:

- » Maximizes efficient use of land and economic resources – achieved by having fewer and larger sites where facilities can be more effectively programmed, maintained, and operated by the City and School District

- » Maximizes program efficiency and effectiveness – by allowing local program providers to draw from a large enough area to ensure program success, especially since many of the programs are already school district-based and draw the majority of their participants from the city and surrounding townships.

Whereas continued collaboration with the School District is assumed given past practice, it should not be taken for granted. Revisiting existing agreements to ensure that current needs are adequately addressed and in alignment with the updated system plan is important to the continued success of this partnership.

Facility Types Needed to Service Local Athletic Programming Needs

Facility Name	Basic Facility Description (Optimal*)
Athletic Green/Soccer Field (for Soccer, Football, and Lacrosse)	Generically defined in terms of full-size soccer field equivalent, which is 75 x 120 yards (225' x 360'). Allow 5 to 10 yards between fields. This accommodates soccer, football, and lacrosse. Grading should allow for multi-directional play and smaller field layouts. Space requirement: 1.7 to 2.1 acres
Full-Size Baseball Field	90' baseline, 60'-6" pitching distance, raised mound, turf infield, agg-lime baselines, 320'-330' foul lines/380' centerfield, 8' to 10' fencing, and warning track. Space requirement: 3 to 3.85 acres.
Junior Varsity-Sized Baseball Field	75' to 80' baseline, 52' to 54' pitching distance, raised mound, agg-lime infield, 300' foul lines and centerfield, 8' fencing, and warning track. Space requirement: 2.0 to 2.5 acres.
Little League-Sized Baseball Field	60' to 65' baseline, 46' pitching distance, raised mound, turf infield, agg-lime baselines, 200' foul lines/250' centerfield, 6' fencing, and warning track. Space requirement: 1.2 to 1.5 acres.
General Purpose Ballfield	50' to 75' baseline, variable pitching distance, agg-lime infield, 200' to 280' foul lines and centerfield, and no fencing. Space requirements: 1.2 to 2.0 acres.
Adult Softball Field	70' baseline, 50'-6" pitching distance, agg-lime infield, 280 to 300' foul lines and centerfield, 8' fencing, and warning track. Space requirements: 2.0 to 2.5 acres.
T-Ball Field/Informal Playfield	60' baseline, agg-lime infield, 100' to 120' foul lines and centerfield, no fencing. Space requirements: 0.3 to 0.5 acres.
Outdoor Hockey Rink	85' x 200' rink size, boards, and warming house. Space requirements: 22,000 square feet.
Outdoor Basketball Court	50' x 84' plus 10' unobstructed space on all sides (3' minimum). Half-court size is 50' x 50'. Space requirements: 5,040 square feet.
Tennis Court	60' x 120' within fenced area for single court. Space requirements: 7,200 square feet.
Sand Volleyball Court	50' x 80' area for single court. Space requirements: 4,000 square feet.

Athletic Facility Supply and Demand

Staying on top of the demand cycle for athletic facilities is critical given the importance of efficiently using existing facilities in order to manage capital funding and operations/maintenance costs. Given the significant cost to redevelop or expand the system, having a solid understanding of the facility supply and demand is an increasingly important priority.

As a reference point, the following defines the supply and demand for various facilities based on interviews and questionnaires with local associations, user groups, and city staff. Note that this is a starting point for more detailed planning that more completely evaluates the specific needs of various user groups.

Athletic Facility Supply and Demand

Facility Name	User Group(s)	Nearer-Term Facility Demands (1 to 5 years)*	Longer-Term Facility Demands (6 or more years)*
Athletic Green/ Soccer Field	HYAA Little Raiders Football SEAS Soccer YMCA Youth Sports Hastings Lacrosse Club	System is at capacity, with little opportunity to rest fields. Quality of fields becoming more of an issue as use levels grow. Currently relying extensively on neighborhood parks to meet demand. Optimal nearer-term solution would be to add four more athletic greens at the athletic complex, plus lighting an existing field. This would take the pressure off of existing facilities and start the shift away from heavy programming of neighborhood parks. Additional attention also needs to be given to maintenance strategies that ensure good field quality.	Very likely that at least a 2 more athletic greens will be needed to meet demand and continue shift away from excessive use of neighborhood parks. Additional fields would also allow for more rest time of fields, thus improving quality.
Full-Size Baseball Field Junior Varsity Baseball Field Little League-Sized Ballfield Adult Softball Field General Purpose Ballfield T-Ball Field	HYAA Hastings Hawks	Similar situation to above. Optimal nearer-term solution would be adding a four-field complex at the athletic complex. This too would take the pressure off of existing facilities and start the shift away from heavy programming of neighborhood parks. The actual mix of facilities needs more evaluation and input from the user groups. Additional attention also needs to be given to maintenance strategies that ensure good field quality.	Longer-term demands are unclear and should be evaluated after nearer-term facility demands are met.
Outdoor Hockey Rinks	Hastings Hockey Boosters	Providing outdoor hockey rinks in Lions, Wallin, and Pioneer Parks, plus a School District site, remains a valid approach and should be adequate to address nearer term needs. Given weather uncertainties and desire to play indoors, adding additional facilities does not appear justified.	Adding new outdoor rinks over time in addition to nearer-term facility demands should be based on known demand.
Outdoor Basketball Courts	None	Basketball courts are popular amenities in neighborhood parks and should be considered as parks are developed, with input from local residents.	Same as nearer-term.
Outdoor Tennis Court	None	The demand for tennis courts is not linked to any specific program. No new courts are envisioned in the near term.	Adding new courts over time should be based on known demand.
Sand Volleyball Court	None	The demand for volleyball courts is not linked to any specific program. Adding new courts over time should be based on known demand.	Same as nearer-term.

The information gained from interviews with local associations provides a reasonable level of confidence about understanding nearer-term demands and developing a strategy that maximizes the efficient use of existing facilities. Although keeping track of athletic facility supply and demand in a more complete and objective way is a top priority for guiding longer-term decisions, the information gained as part of this process for nearer-term decisions is adequate since overall growth in facility demand has yet to reach its peak. In other words, any slight over-capacity that might occur in decisions made in the

next few years will ultimately be absorbed through growth in demand. Likewise, any shortages will be recognized and can be addressed in future facility development decisions. Notably, as the demand for facilities reaches its peak in the future, it will be increasingly important that the City be able to objectively understand true demand to avoid over or under development of facilities. Thereafter, the opportunity to make adjustments in the mix of facilities will be more difficult and costly. Figure 3.1 illustrates this important point.

Strategy for Athletic Facilities – Nearer-Term (Existing Sites)

The primary strategy for balancing nearer-term facility supply and demand is through phased expansion of the athletic complex as funding allows, then adjusting uses at other parks as new facilities are brought online.

To accomplish this, the City must work with the School District, local associations, and various user groups to more completely define the optimal mix of facilities at the various sites to meet current or projected demand. The table on page 10-26 should be used as the baseline, recognizing that a more detailed evaluation and design process may result in modifications or refinements. Accommodating the facilities listed in the table would require around 40 to 50 acres of land, depending on grading issues, drainage, and land configuration.

Note that expansion of the athletic complex has value beyond just providing more facilities. Consolidation of athletic facilities also allows for a closer association between players, parents, and coaches during scheduled events. Larger

complexes with more activity, participants, and spectators also creates a more dynamic social atmosphere that people tend to enjoy. Fewer sites also provide greater conveniences, such as parking, restrooms, and concessions, and the capacity to generate revenue. Operational and maintenance costs are also more efficient due to economies of scale.

For these reasons, it is recommended that the City focus resources on improving/expanding the athletic complex first and limiting development of facilities within neighborhood parks to what is appropriate for neighborhood-level uses. Under this approach, any new use pressure that might manifest itself in the next few years will be absorbed by designated athletic facilities. This will allow neighborhood parks to ultimately be used less for programmed games and practices and more for informal neighborhood play. Although some use of neighborhood parks will remain appropriate (and necessary), reduced reliance will be beneficial to local residents and athletic associations.

Strategy for Athletic Facilities – Longer-Term

In the longer-term, predicting the demand for specific types of facilities cannot be done with absolute certainty for a number of reasons:

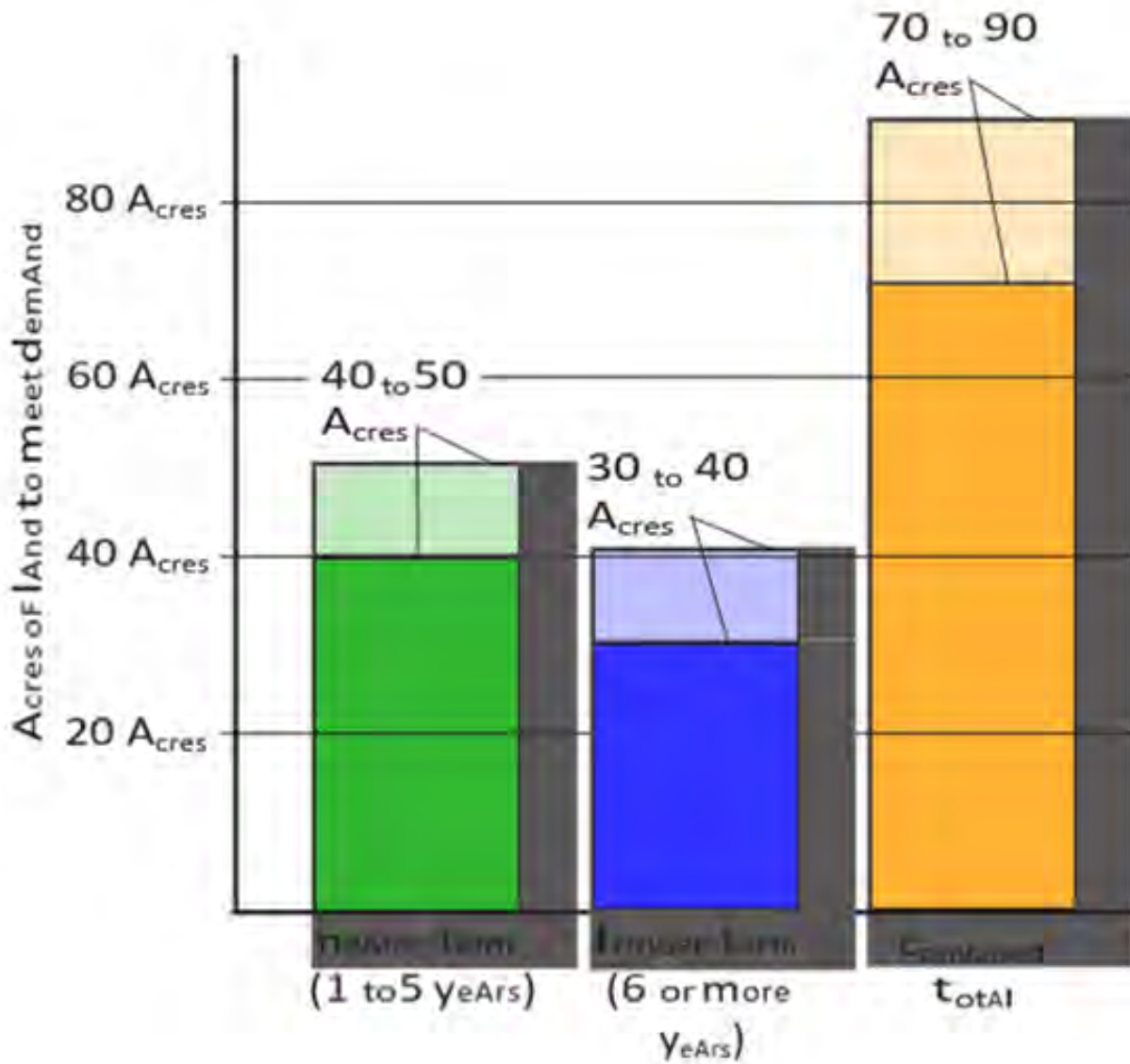
- » Demographic shifts and population growth will result in changes in recreational demands
- » Participation rates for existing programs may change over time due to evolving recreation trends
- » Programs may change in terms of season, in-house versus traveling teams, etc.
- » New sports may emerge and require space for practice and games

The lack of a formal and integrated participant registration and facility scheduling system between the City, School District, and local associations also limits the City's ability to predict demand for one type of facility over another in the longer-term. Whereas the information gathered from local associations is valuable for nearer-term planning, it is not stable enough to

be used to define specific longer-term demands with acceptable accuracy.

In spite of the limitations of predicting future demand, the need to set aside land to accommodate future programming growth is important before the opportunity is lost to other land use decisions. To this end, the City is encouraged to avoid being locked out of having adequate land to meet future needs. As a hedge against future demand, holding an additional 30 to 40 acres in reserve for athletic fields above the 40 to 50 recommended to accommodate nearer-term facility needs is recommended. This would provide enough flexibility over time to both accommodate growth in facility demand and the continued shift of programmed use from neighborhood parks. Figure 3.2 graphically illustrates nearer and longer-term land needs for athletic facilities.

Figure 10.6 | Potential acres of land needed for nearer and longer-term athletic facilities



Note that the projection for additional acres of land needed to service future demand must be periodically reviewed and adjusted as more precise information is available. Since the cost of land will only escalate over time, the City is encouraged to be conservative in setting aside

land for future athletic facility uses while it is still has the opportunity to do so. Waiting too long to do so will only result in higher costs for fewer acres in the future. Any excess land remaining after the peak demand threshold is reached can be sold off or used for another public good.

Keeping Track of Athletic Facility Supply and Demand as a Top Priority

Hastings and Community Education currently parcel out facilities on a permit basis to local user groups, with each group getting a certain percentage of available facilities relative to the number of participants, needs, and established relationships. Currently, the City and School District facilities support a multitude of local associations.

demand will require a more robust system for tracking true demand and managing facility use to ensure the right mix of facilities is available and that each is efficiently scheduled. Staying on top of the demand for athletic facilities is critical given the importance of athletics to families in Hastings and the costs to acquire and develop land and operate and maintain facilities.

Continuing growth programs and resultant facility



Natural Open Space (Greenway) System

The natural open space (greenway) system consists of publicly-owned lands (held by the City or other public agency) and privately-owned lands that would be perpetually preserved as natural open space, most often through the use of conservation easements negotiated with developers and landowners as land is developed.

Public Lands – Hastings-Owned

Currently, Hastings-owned lands included under the open space system include:

- » Vermillion River Linear Park – with trails, picnic tables, parking lot, and park benches. The river corridor and surrounding natural areas are the highlights of this park. Future development would continue to be limited to preserve the natural open space character of the river corridor.
- » Featherstone Ponding Basin – with trails and open green space used for soccer. Over time, this area would be transitioned into natural open space as athletic uses are shifted to other sites.
- » Southwest Ponding Basin – with trails and limited open green space used for field games. Over time, this area would be transitioned into natural open space as

athletic uses are shifted to other sites.

- » Rosemary Ponding Basin – as with Featherstone, this area would be transitioned into natural open space as athletic uses are shifted to other sites.

Although park dedication and direct acquisition will continue to be options for acquiring natural open spaces, those tools alone will not be sufficient to accomplish the full vision for the greenway system as defined by the plan. In all likelihood, the City will have to partner with other agencies, such as the MN DNR and Dakota County, as well as extensively with private developers to be successful. The following considers each of these options.

Public Lands – Owned or To Be Acquired By Other Public Agencies

Currently, a State Wildlife Management Area (WMA) administered by the MN DNR is located in the southeastern part of the city next to the Hasting Sand Coulee Scientific and Natural Area (SNA) which is also managed by the MN DNR. The following cutout of the 2040 Future Land Use Plan illustrates the WMA boundary and surrounding landscape.

The DNR has decided not to continue the use of this property as a WMA. They instead have purchased a larger area East of 4th Street for this purpose. They have begun selling this former WMA. A greenway though the property should be planned as part of a residential use. The City should remain open to options and partnerships with the DNR related to this property. This could include reconfiguration of the property boundary,

re-designation, or reconsideration of its value to the DNR. It terms of the City's system plan, providing more access to the property via trails (including possibly paved ones) and integrating the property into the larger greenway system would be the primary goals. Also, partnering with the DNR in reshaping the property (i.e, swapping one piece of land for another) for ecological values or other reasons is also something the City should remain open to for achieving its larger open space vision.

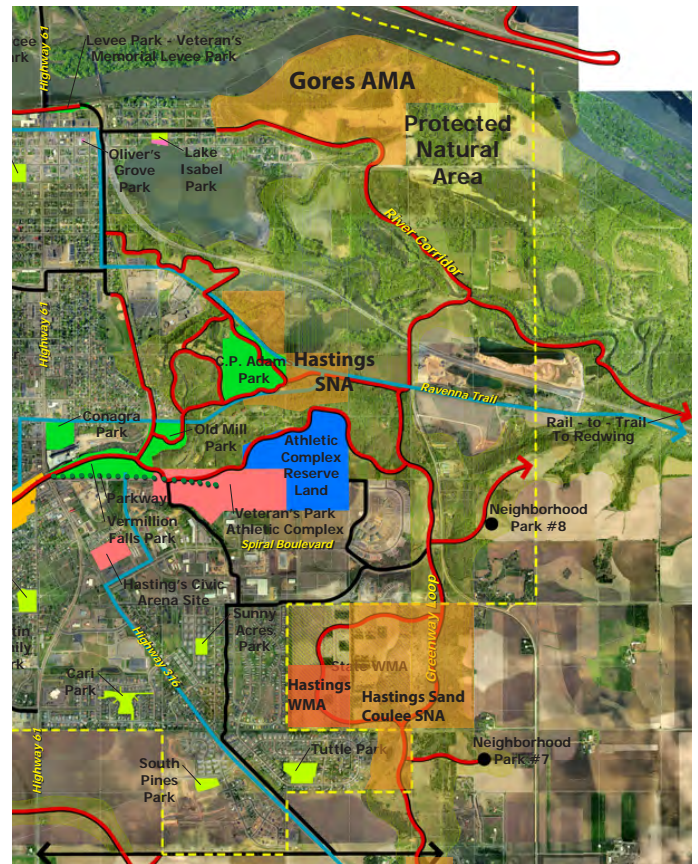
The Hastings Sand Coulee SNA provides a unique recreational opportunity to explore an undeveloped mostly intact landscape. Visitors may enjoy bird and other wildlife watching, hiking, snow shoeing and cross-country skiing and natural photography. This area is open to

the public but no formal trails are permitted as the primary focus of the SNA is to protect fragile species and ecosystems. A tributary stream to the Vermillion River meanders through all three parcels of this SNA, which serve to protect high quality native plant communities in an area otherwise dominated by agricultural land use and expanding housing developments. A remarkable assembly of native species find critical habitat within this SNA, among them plants such as James' polanisia, sea-beach needlegrass, and clasping milkweed, and animals such as the regal fritillary butterfly, Ottoe skipper, gopher snake, blue racer and loggerhead shrike.

Gores Aquatic Management Area is a 189.24 acre area acquired in 2008 that allows angling, non-motorized travel, wildlife observation and trapping allowed. The area does not allow hunting.

Gores Pool #3 Wildlife Management Area is a 7,049.03 acre WMA is located in both Dakota County and Goodhue County. The purpose of the WMA is to preserve and provide recreation in a large, unbroken area of floodplain forest, as well as preserving waterfowl and furbearer habitat. Only a small portion of this WMA is located within the City of Hastings.

The Hastings Scientific and Natural Area consists of two parcels totaling 64.9 acres. The northwest parcel, about 26 acres, is entirely in the Vermillion/Mississippi River floodplain and consists of floodplain forest and emergent marsh. The Vermillion River covers about 3 acres here as it meanders through this parcel. Silver maple dominates the forest, with green ash and small diameter American elm. The southeast unit, about 43 acres, is dominated by mesic oak forest, with old-growth red oak, sugar maple, and basswood on steep north-facing bluffs and bluff tops. Sugar-maple basswood forest covers a small section of the mid-slope, and emergent marsh, pond and floodplain forest cover low-lying areas.



Continuing to participate with the DNR, Dakota County, and other agencies on setting aside additional land along the Mississippi River (e.g., "Freitag Study Area") should also remain a high priority to preserve important natural open spaces around the city. Here too, the City should work with these agencies on developing an overall plan for these properties that defines public opportunities to access and appreciate these areas first hand. This includes paved trails as shown on the System Plan along with undefined natural surfaced trails that would traverse these open spaces in some non-motorized form. With all of these properties, addressing hunting and shooting issues would be important.

One important publicly-held open space that is already set aside is the former Flint Hills property that is now part of the Hastings River Flats area, which also includes Jaycee and Lake Rebecca Community Parks.

Privately-Owned Lands

As the System Plan illustrates, there is considerable opportunity to preserve natural open space in Hastings as part of an interconnected greenway system. Since the vast majority of these lands are privately-owned, setting aside any portion of them for open space will require a high level

of collaboration and flexibility between the City and landowners/developers to achieve win-win outcomes that serve everyone's best interests. It is very unlikely that this type of open space system can be realized through public funding alone.

Natural Open space characteristics

The natural open space corridors highlighted on the system plan relate to lands that either currently exhibit or could be restored to functional natural ecological systems. As shown, the greenway system plan combines these lands into a simplified color scheme. Although not fully defined, these lands would generally fall under two zones, as the following considers.

Natural Resource Protected Area (Wetlands): Generally consists of water bodies and wetland areas that have some level of protection under current regulatory controls and ordinances. Specific areas included in this zone:

- » Designated lakes and water bodies

- » Wetland systems – including those listed on the National Wetland Inventory and areas mapped as fens/seeps, cattails, and other wetland-type plant communities
- » Relevant plant communities listed on the County Biological Survey

Under protected status, development within this zone is extensively controlled and most often prohibited. Under established regulatory rules, any encroachment into these areas typically requires special permitting and mitigation. As protected lands, the City can generally rely upon existing regulations to preserve these areas as open space within the open space system.

Natural Resource Conservation Area (Uplands):

Consists of upland areas defined under various natural vegetative cover or soil types. Specific areas included in this zone:

- » Unique natural areas that support rare plant and animal species
- » Oak forest, aspen, maple-basswood, lowland forest, and other natural communities that are significant, especially those that are adjacent lands within the protected zone as previously defined
- » Floodplain areas and county ditches or streams
- » Previously restored natural areas
- » Agricultural lands that are defined as part of the desired greenway corridor

conservation area are linear corridors that link the higher quality natural areas together and provide space for the proposed citywide greenway-based trail system, as defined in Section 4. The aerial image highlights an area just outside the city that would, in part, fall into the desired greenway corridor.

Typically, development in the conservation area is inherently allowed in accordance with local zoning codes and development ordinances. Beyond these requirements, these lands are not inherently protected from development. In addition, land ownership and development laws give property owners certain rights to develop their property consistent with local zoning and development requirements. Because of this, the City will have to rely on a variety of strategies if desirable portions of these lands are to be preserved as open space when development occurs.

The areas encompassed by the conservation zone are those where preservation opportunities are often very high and where protection of these ecological systems is a foremost consideration as land is developed. Also included in the

Protection Strategy for the Open Space System

The extent to which land highlighted as part of the greenway system will actually be protected will be based on many factors, the most important being the incentives and flexibility the City gives to landowners and developers in exchange for protecting portions of their properties. The ever-increasing value of land coupled with the limited financial resources available to cities underscores the importance of collaborating with private developers to preserve open space as development occurs.

Realistically, only select portions of developable lands can be set aside as protected open space as part of a greenway. As a baseline, preserving a wide-enough corridor for the destination trails should be the minimum acceptable. As defined in Section 4, a minimum greenway width of 100 feet is recommended, with 500 feet or more being optimal. Anything less than 100 feet does not provide the desired separation between the

trail and the built environment and the critical mass needed for a legitimate natural greenway. As a reference, typical conservation developments guidelines often seek a minimum of 50% of the total land area within a development be set aside as open space. However, that standard is conditional and based on individual site circumstances and economic realities. The key goal is to set aside more land as open space through a collaborative development approach than would otherwise be achievable under traditional development controls.

Setting aside land for the greenway system will require approaches beyond those typically used for acquiring individual parks. The following provides an overview of various strategies for this purpose. The use of any of these will be dictated by the circumstances associated with a given development project and land area.

Standard Regulatory Land Use Controls

Land use guidelines, zoning, and traditional development policies and ordinances will continue to play a key role in managing development in Hastings, including protecting open spaces. Specifically, this includes:

- » Land Use Zoning Ordinance – establishes densities and land uses that are based, in part, on their compatibility with the system plan, especially greenways
- » Subdivision and Platting Ordinances – among other provisions, establishes setbacks and protection mechanisms for preserving natural areas. Provisions include, at a minimum, ordinances related

to wetland protection, tree preservation, shore land protection, floodplains, site grading, and setbacks between built and natural landscape features

Local ordinances and land use controls will continue to provide the regulatory strength behind the City's management of development. Stringent ordinances will also provide the incentive for developers to be more receptive to collaborating with the City to maximize the public values from a private development in an economically-viable way.

Other Strategies for Protecting and Managing Natural Resources

There are a number of other strategies and tools that can be used to preserve open space, depending on the circumstances and level of collaboration between the City and developer. These include, but are not necessarily limited to, the following:

- » Direct Purchase/Fee Simple Acquisition: Relates to purchasing the property when the parcel meets the long-term preservation objectives of the community and the parcel can be integrated into the larger parks, open space, and trail system. Priority is typically given to larger

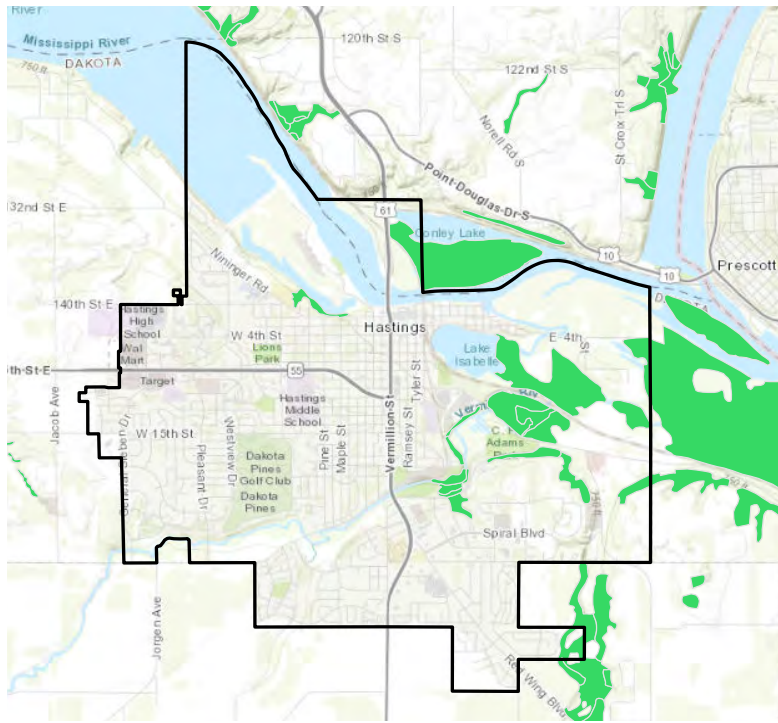
parcels. With limited fiscal resources, direct purchase is typically considered only after other protection methods have proven to be unsuccessful.

- » Conservation Easement: Restricts development of land while permitting the landowner to retain ownership of the property. It is filed in the public records of the property and binds current and future property owners. The landowner may sell or donate the easement to a conservation organization, but it is not required. Where the easement is donated to a qualified charitable organization, a tax benefit may occur to the owner.
- » Purchase or Transfer of Development Rights: A city, land trust, or other developer purchases the development rights to a property, while the landowner continues to maintain ownership. Once the rights are purchased, the land can only be used for a specified purpose other than development. The land would typically be protected under a subsequent conservation easement or other protection program. Transfer of development rights refers to protecting the natural values of one property by transferring or selling the right to develop that property to other properties within the city under strict guidelines. Both of these approaches ensure that there is no economic harm to the landowner or developer and that the city retains its desired development density.
- » Overlay Zoning: Refers to a type of resource protection zoning that is superimposed over traditional zoning to protect defined natural resource areas while still allowing the underlying use in an appropriate form. A flood plain zoning district is an example of this.
- » Bonus/Incentive Zoning: Is similar to transferring development rights except that the landowner or developer rights

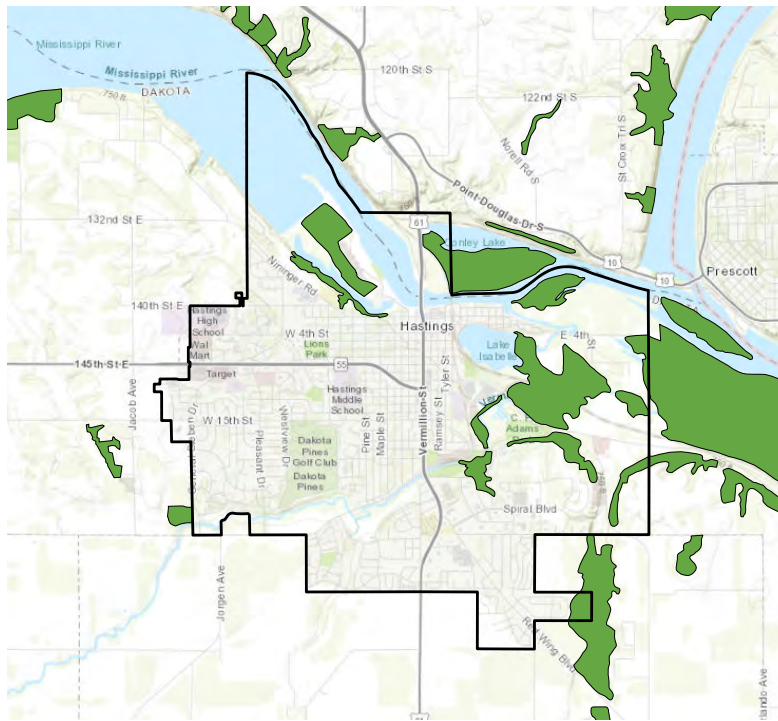
are used by the developer on the same property rather than purchased by another developer for some other property. This could allow a developer to develop at a higher density than normally allowed if the developer sets aside land in a conservation easement or greenway.

- » Clustering: Allows developers to cluster development on smaller lots to allow for the provision of conservation easements and greenways.
- » Natural Resource Protection Zones: Allows the city to impose a buffer along sensitive environmental areas. The buffer width varies depending on the situation, and can be fixed or flexible.
- » Land Trusts: Property owners can donate their property or a conservation easement to a conservation program. A number of these programs exist at the local, state, and national level. However, because of participation requirements (particularly with regards to parcel size), land trusts are sometimes of limited use.
- » Deed Restrictions/Mutual Covenants: Establish legally defined limits on the use of a property. They are put in place by the property owner or land developer and are carried forward by the owner or a legally established association. Typically, they need renewal after 30 years.
- » Stewardship Program: Land management practices may be voluntarily undertaken by a landowner to preserve open space. In some instances, a landowner may “register” their property with a conservation organization, thereby entering into a non-binding agreement to follow good land management practices. A landowner may also enter into a management agreement with a conservation organization, specifying how land will be managed.

DNR Native Plant Communities



Minnesota Biological Survey Sites of High Biodiversity Significance



Collaborative Approach to Land Development

The previously defined strategies are most effectively used as part of a collaborative approach to land development, which is often defined as a “public values collaborative approach” or an “open space design/ conservation development approach”. Under this context, cities allow themselves more flexibility to work with developers to achieve the desired public values within the context of the economic viability of a development. In Hastings, the current planned residential development (PRD) ordinance gives the City the authority to participate in this type of process and allows the City Council to decide which outcomes are in the best interest of the community. The same holds true with the use of the orderly annexation process on terms that are consistent with the vision for the greenways system.

The City, in collaboration with landowners or developers, will undoubtedly need to rely more heavily on the use of a well-managed collaborative process if it is to achieve the vision for the open

space system. The main value of this approach is that it allows for more creativity in development planning to accommodate specific public values being sought by the City consistent with its vision. Consistent with this plan, the public values being sought typically include:

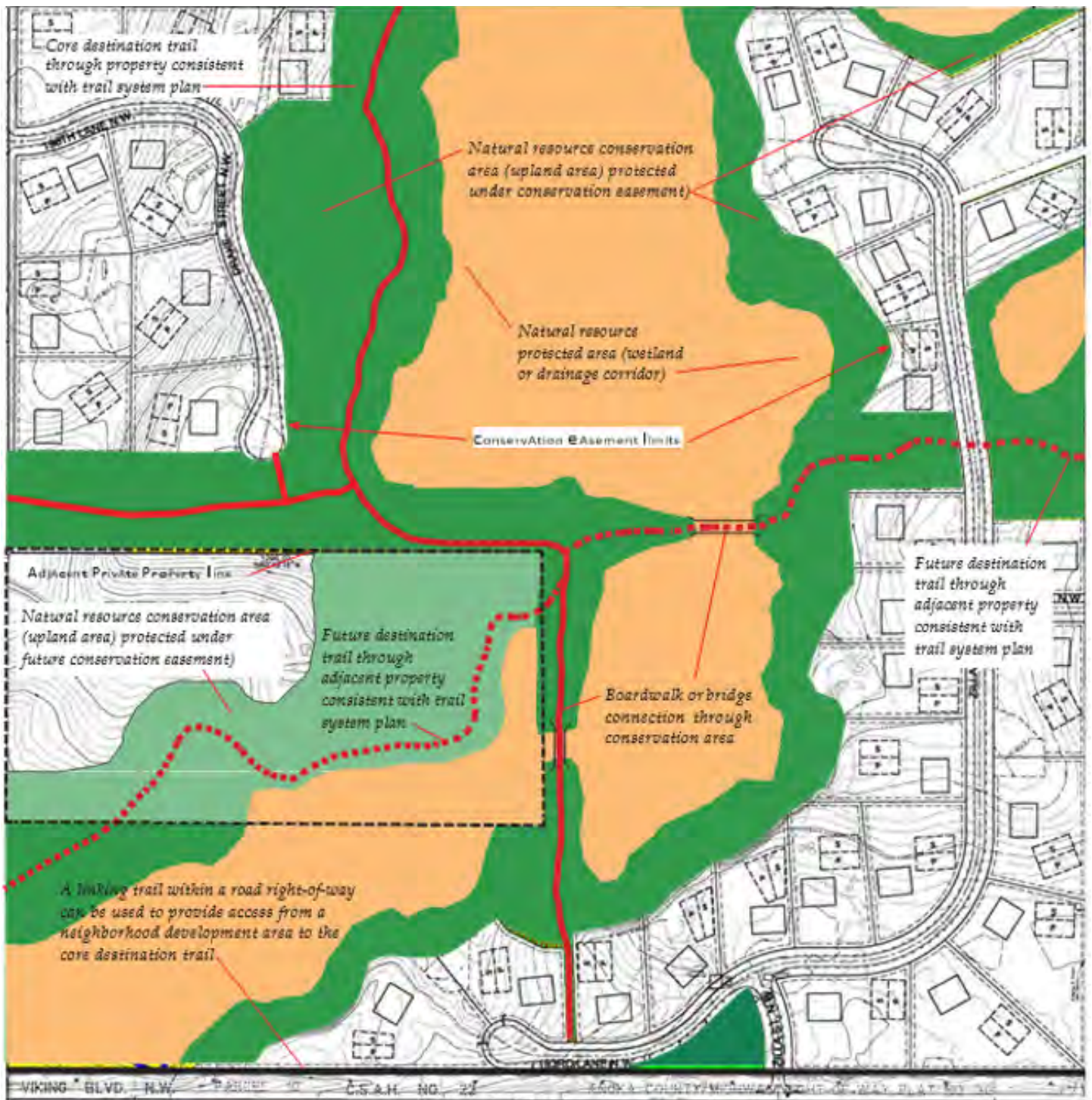
- » Preserving natural open spaces and greenways
- » Preserving or enhancing the quality of local ecological systems
- » Establishing a privately-funded endowment program for long-term natural resources stewardship
- » Managing stormwater/improving water quality through natural infiltration techniques
- » Providing public park and trail opportunities
- » Preserving the overall aesthetic quality and rural character of the community

Example of Collaborative Approach to Land Development

Figure 3.3 illustrates the intended outcome achieved through a collaborative approach between a city and private developer resulting in public values consistent with the greenway vision defined in this section. This example is used to

illustrate the level of cooperation needed for each development project if the City is to fully realize the vision set forth in this plan.

Figure 10.7 | Conservation Development Plan Example



The above development plan illustrates setting aside land in a conservation easement as part of a negotiated and collaborative planning process between a developer and the city. In this example, over half of the total land area would be protected under a conservation easement. In addition, conservation development agreements of this nature include establishing long-term endowment fund for ecological stewardship, and providing funding for park and trail-related improvements. In return, the city typically allows the developer more flexibility in lot sizes, densities, etc. in order to make the development economically viable and marketable.

Select Special-Use Facilities

In addition to the parks and athletic facilities previously defined, a number of special-use facilities are also part of the system plan, as the following defines.

Off-leash Dog Park

The Rivertown Dog Park is part of the City of Hastings Park System and is a safe off-leash facility for dog owners and their pets. Park users are expected to treat other patrons with respect,

to take responsibility for the behavior of their pets, and to solve disputes or animal behavior issues with common sense that fosters safety first and patron friendly environment.

Skateboard Park

As with the off-leash dog park, the desire for a skateboard park was brought up at a number of the public meetings. Here too, numerous communities of a similar size to Hastings have provided these facilities. If well designed, located, and managed, skateboard parks can be very successful. The importance of selecting a viable location for this type of facility should not be underestimated given the social nature of the activity.

If an advocacy group does emerge and the conditions as stated can be met, several sites are worthy of consideration. The first is the Middle School site due to its location and space availability. With respect to city parks, Con Agra Park would be a candidate site for the facility given its location and general character. One limiting factor here might be noise, which would require additional evaluation. Other issues with this site include potential impacts to trees and land lease constraints. Given the many variables, the City should undertake a separate public process working with a local advocacy group to determine the true demand for this type of facility and the best site for its location.

Stipulating specific conditions for developing this type of facility within the city is appropriate. Conditions in this context again refers to having a local advocacy group partner with the City to design, develop, operate, and maintain the facility to help ensure its success and responsible use.

Vermilion River Water Trail

The master plan prepared by the Friends of the Vermillion River Water Trail for development of a water trail along the Vermillion River offers numerous and even unique recreational opportunities. Relative to Hastings, the development of the kayak trail has considerable recreational merit as long as certain conditions can be met. These include:

- » Shared responsibility through a partnership approach with the advocacy group, MN DNR,

and others for development, management, and funding

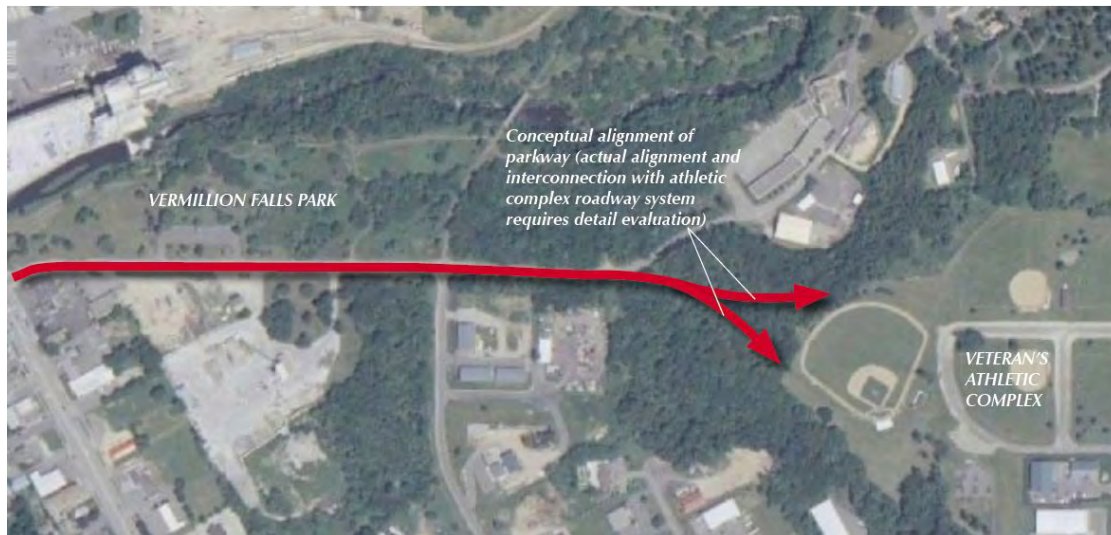
- » Adequately addressing liability issues associated with river safety and user responsibilities
- » Successfully integration of the river trail master plan with those of the surrounding parks; this includes providing amenities such as river access points, parking, observation areas, etc.

Lake Isabel Boat Launch

The existing boat launch for Lake Isabel remains a viable aspect of the system and should be maintained at its current level of service.

Vermillion Falls Park/Veteran's Athletic Complex

As illustrated on the System Plan, a new parkway is conceptually proposed adjacent to Vermillion Falls Park to provide a more direct and appealing vehicular connection between Highway 61 and the athletic complex. This connection would reduce the use of the current more circuitous route through an industrial area, where truck traffic can be an issue. The parkway would also help create more of a park-like sense of entrance to the athletic complex, which is currently lacking by entering through the industrial park. The parkway would also enhance the connection between Vermillion Falls Park and the athletic complex, opening up greater possibilities for the two sites to function together for larger events and tournaments. The aerial below illustrates the conceptual route of the parkway. Qualifiers to this proposal include:



- » Easement availability – the parkway would likely cross through portions of private property where acquisition or easement rights would be required
- » Grade issues – the parkway would traverse portions of a steeper slope where grades would need to be evaluated
- » Ecological impacts – the parkway would impact some mature trees and vegetation, as well as create some storm water management issues that would have to be evaluated
- » Private property encroachment – even with adequate space for an easement, the parkway would encroach on existing properties, the effects of which would have to be evaluated

Under the presumption that these issues could be resolved as part of a detailed evaluation, the parkway offers numerous advantages worthy of consideration.

Park Signage Program

A comprehensive signage program carried uniformly throughout the parks and trail system is important to providing a consistent message and information to park and trail visitors. Typically, a signage program includes park and trail names, direction to features, general information and rules, and ecological stewardship program and interpretive information. To ensure it remains an ongoing priority, an annual signage investment program is recommended.

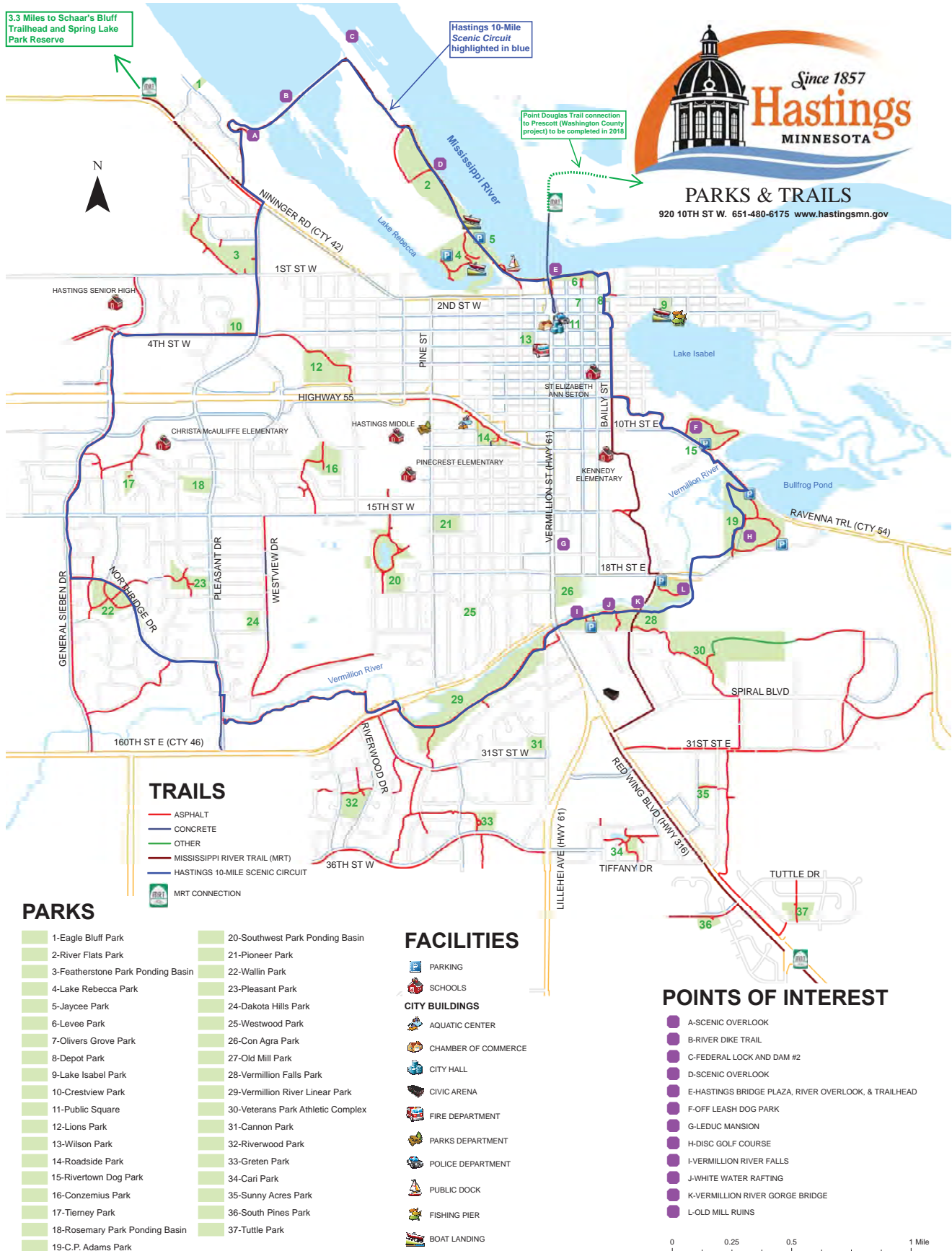
Park Master Planning and Facility Design Quality/Development Standards

The quality standard for built features within the park system should be consistent with industry standards for safety and durability. This is especially the case with play equipment, outdoor furniture, and other site amenities where strict standards apply.

The design of individual parks should also be of a consistent quality. Master plans should be

prepared for each park prior to their development to ensure that the right mix of amenities are provided and the park's design is cohesive with and complementary to the design for other parks and public spaces. The City's standard practices for public participation in the planning process should continue to be used for each park development project.

Existing Parks and Trails Map



SECTION 4

TRAIL SYSTEM PLAN



Overview

As with parks, athletic facilities, and open spaces, the trail system is underpinned by the common vision defined in Sections 1 and 2. The overarching goals of the trail system are to:

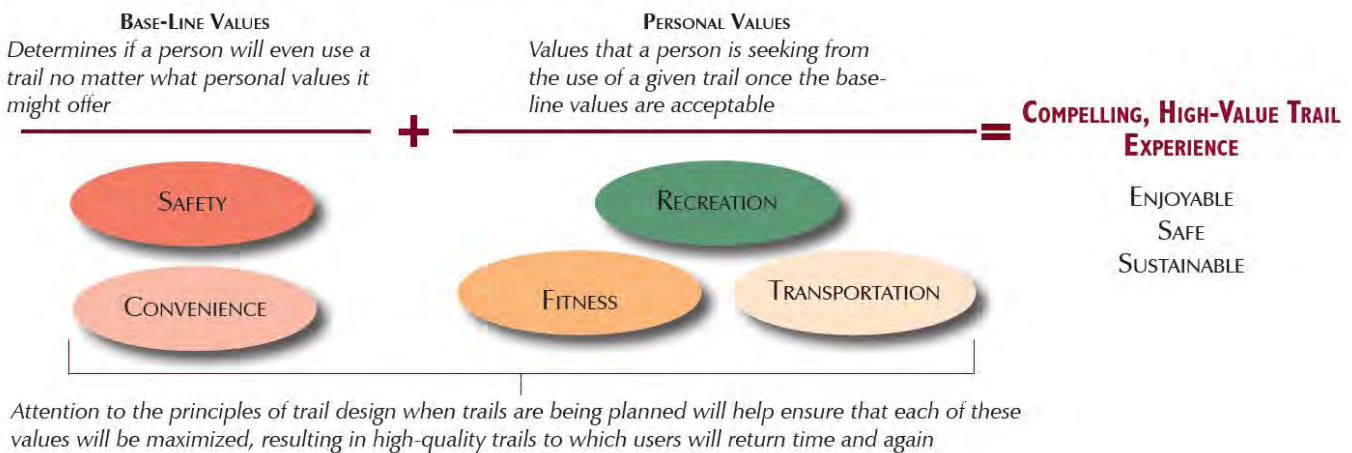
- » Develop an interlinking system of high value trails throughout the city that connect with regional and county trails
- » Provide reasonable trail access to the natural resource amenities within the community without unduly compromising their integrity and natural qualities
- » Provide an appropriate level of universal accessibility to trails throughout the system

General Trail Planning, Design, and Development Guidelines

The trail system plan is consistent with MN DNR’s Trail Planning, Design, and Development Guidelines for designing and developing sustainable trails. The DNR guidelines are recognized as the most comprehensive standards for trails and address trail planning, design, and development. All trail development should be consistent with these guidelines as applicable to the classifications used in Hastings.

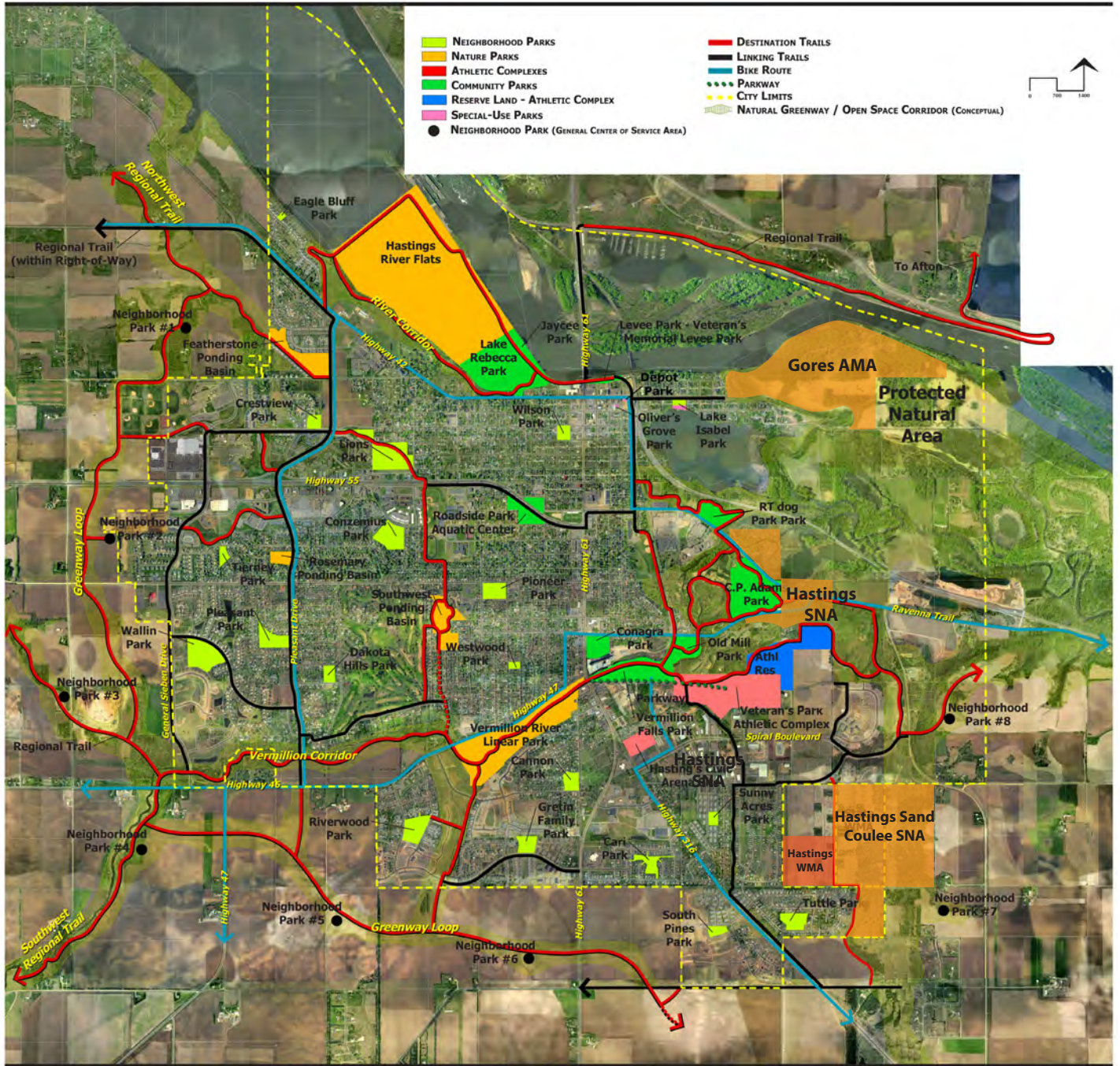
A key concept of the trail guidelines is maximizing the value of trails to local residents. The values ascribed to trails are important because they are at the core of why a person uses a particular trail on a repeat basis. Studies clearly indicate that trail users make a distinction between trails based on their perception of value, as figure 4.1 below illustrates.

FIGURE 4.1 – PERSONAL VALUES ASCRIBED TO TRAILS
Source: MN DNR’s Trail Planning, Design, and Development Guidelines (2007)



As the graphic illustrates, safety and convenience are base-line determinants for whether a person will even use a trail irrespective of its quality. Once these two values are perceived as being acceptable, then the personal values will be given more consideration by a trail user. The following considers each of these values in greater detail.

Planned + Existing Parks and Trails Map



Safety

A sense of physical and personal safety is the most important trail value in that without it people are disinclined to use a trail irrespective of how many other values it might provide. Physical safety can

Convenience

Convenience is important to day-to-day use of a trail. As defined in Section 1, studies have shown that the vast majority of shared-use paved trails are used by those living within a few miles of the trail they use most frequently.

Although convenience is important, its influence is still tempered by recreational value. No matter

Recreation

Of all the values ascribed to a trail, its recreational value is the most important in terms of predicting its level of use, assuming that safety and convenience are not issues. In general, trails offering a high-quality recreational experience are those that:

- » Are scenic and located in a pleasant park-like setting, natural open space, or linear corridor away from traffic and the built environment
- » Provide a continuous and varying experience that takes visitors to a variety of destinations and is a destination unto itself
- » Offer continuity with limited interruptions and impediments to travel

This underscores that trail planning must be

Fitness

Fitness is a growing value that cannot be overlooked. Fortunately, this value is generally achieved if safety, convenience, recreational, and transportation values are met. Most critical to accommodating this value is developing an

be relatively assured through good trail design. Personal safety, which relates to a sense of well-being while using a trail, is a less tangible yet still important factor that cannot be taken lightly.

how convenient, a poorly designed trail in an uninteresting setting will have limited recreational value. Alternatively, a well-designed trail in an interesting setting might draw users from some distance. The point is that trails should be located where they are both convenient and offer the recreational amenities that users are seeking.

based on criteria that go beyond simply providing miles of trail – with considerable emphasis on the quality of the trail experience as much or more than quantity.

In Hastings, creating trails with high recreational value inherently affects community planning and development. Planning for trails that follow greenways that seamlessly traverse public open spaces and private developments alike is considerably different than planning for trails that follow road rights-of-way. While greenway-based trails often pose more challenges to plan and implement, the value of these trails to the community has proven to be very high and worth the investment. Cities that have successfully integrated these types of trails often highlight them as key aspects of the community's quality of life.

interlinking trail system that provides numerous route options with trail lengths necessary for the types of uses envisioned.

Transportation (commuting)

The transportation (commuting) aspect of trails is valuable to a growing subset of the user population. This is especially the case with shared-use paved trails, where bicycling, in-line skating, and walking are viable means of transportation, especially for people in urban and suburban settings.

On-road bikeway facilities are also viable and important means of transportation if developed

to acceptable standards. Importantly, promoting the use of trails and on-road bikeways for transportation will only be successful if the system is perceived as safe and convenient relative to skill level. Without such a system, residents will simply use their vehicle.

Trail Classifications

The system plan consists of a variety of trails, bikeways, and sidewalks defined under various classifications. Each classification serves a particular purpose in meeting local trail needs. The distinction between trail types is important due to the variability in their recreational value, which greatly affects the value of the system to residents and the degree to which a trail or system of trails will be used.

The classifications applied to Hastings' trail system are consistent with the MN DNR's Trail Planning, Design, and Development Guidelines. The following table provides an overview of the classifications for trails in Hastings. Each of these classifications are further defined later in this section.

Classification	Common Guidelines	Application to Hastings
Destination Trails	Destination trails are paved trails for walking, jogging, bicycling, and in-line skating located within a greenway, open space, park, parkway, or designated trail corridor.	Destination trails will be the backbone of the greenway-based trail system that loops the city and connects to adjoining communities and regional parks.
Linking Trails	Linking trails emphasize safe travel for walking, jogging, bicycling, and in-line skating to/from parks and around the community. Linking trails are most often located within road rights-of-way or utility easements.	Linking trails will be primarily used as a means to connect neighborhoods and developed areas to the destination trail system.
Sidewalks	Sidewalks emphasize safe travel for walking and jogging within residential areas and business districts and to/from parks and around the community. Although biking and in-line skating are allowed on sidewalks, the narrower width and concrete surface limit their use for this purpose. Sidewalks are most often located within road rights-of-way of a local street.	Sidewalks work in concert with linking trails and are primarily used as a means to connect neighborhoods and developed areas together and to the destination trail system.
Natural Trails	Nature trails are commonly used in areas where natural tread is desired and harmony with the natural environment is emphasized. Use is limited to hikers and joggers in Hastings.	Nature trails will be primarily used in natural parks and as secondary connections to the destination trail system, especially within a preserved natural area or conservation easement.
On-Road Bikeways	Bike routes and lanes are on-road facilities that primarily serve fitness and transportation bicyclists and in-line skaters, as well as recreationalists with a higher skill and comfort level being around automobiles.	Bikeways augment, but do not take the place of, the trail and sidewalk system.





Character and value comparison between trail classifications

Each of the trail classifications defined above:

- » Accommodate specific types of trail users
- » Provide a certain type of recreational experience and value to pedestrians, bicyclists, in-line skaters, and wheelchair users
- » Are located in a specific type of setting appropriate for the activity
- » Follow design guidelines that allow for a safe and enjoyable use of the facility

The following table considers the expectations of the most common types of trail users in Hastings, and the values and preferences that are likely to be of most importance.

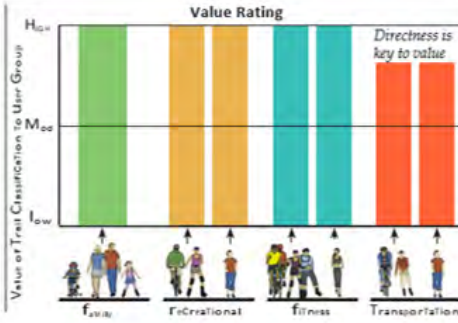
Figure 10.8 | Comparative Analysis of Trail Classifications Relative to User Group Values and Preferences

User Group	Values and Preferences	Symbols
Family Group – Various Modes	Safety and convenience are top priorities, followed by a pleasant recreational experience. Controlled, traffic-free access to sidewalks and trails is preferred. Length of trail is less important than quality of experience. Will typically only use low-volume residential streets when biking or skating, and rarely busy streets even with bike lanes or routes.	 Family
Recreational Walker, Bicyclists, and In-Line Skater	Same as family user group, with trail continuity and length also being important for repeated use. 20 miles of connected trails are needed for bicyclists, at a minimum. This user group is also more comfortable with street crossings. Bicyclists and in-line skaters will use roads that are not too busy. Loops are preferred over out-and-back routes for variety.	 Recreational
Fitness Walker/ Jogger, Bicyclists, and In-Line Skater	Length of trail and continuity are most important, although an appealing setting is also desired. Bikers are reasonably comfortable on busier roads, but prefer bike lanes/routes to provide separation from vehicles. Bikers will often use a combination of roads and trails to create a desirable loop, which is much preferred over out-and-back routes.	 Fitness
Transportation Walker, Bicyclists, and In-Line Skater	Directness of route is important. Will use a combination of sidewalks, trails, residential streets, and roads that are relatively safe, convenient, and direct. Bike lanes/routes are preferred on busy roads to improve safety. Bicyclists are not overly dependent on trails, but will use them if convenient and not too heavily used by families and recreational users, who tend to slow them down. Walkers need a trail or sidewalk.	 Transportation

destinationOn trail – greenwaySetting



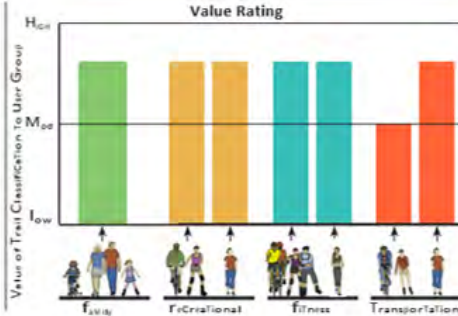
Value Statement
 Desirable and safe environment for family and recreational outings in appealing setting away from traffic and distractions. If continuity is provided and design standards adhered to, also serves fitness users very well. Sometimes lack of directness reduces value to transportation user.



destinationOn trail – Parkway Setting



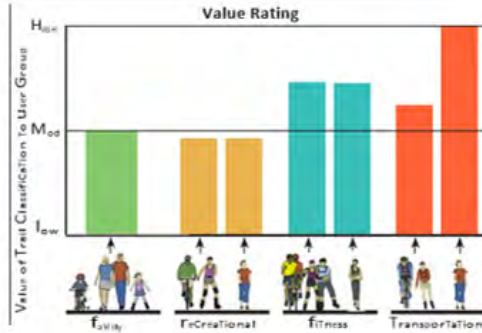
Value Statement
 Desirable and safe environment for family and recreational outings in appealing setting. Can be of lower recreational value due to proximity of traffic, increased frequency of road crossings, and distractions like noise. Bicyclist transportation users will often stay on the road, so the trail has less value to them.



linking trail – Road Right-Of-Way Setting



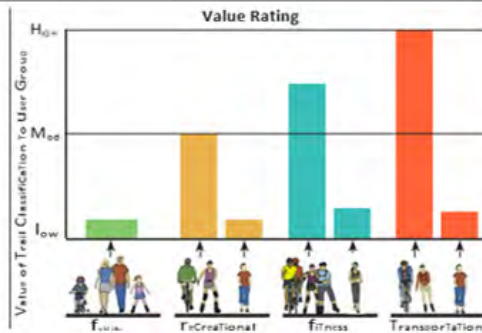
Value Statement
 Provides safe and often convenient travel for families, but recreational value diminishes as separation from traffic decreases and traffic volumes increase. If continuity is provided, still has value to fitness and transportation users getting from one place to the next.



On-Road bikeway – bike lane and bike routes



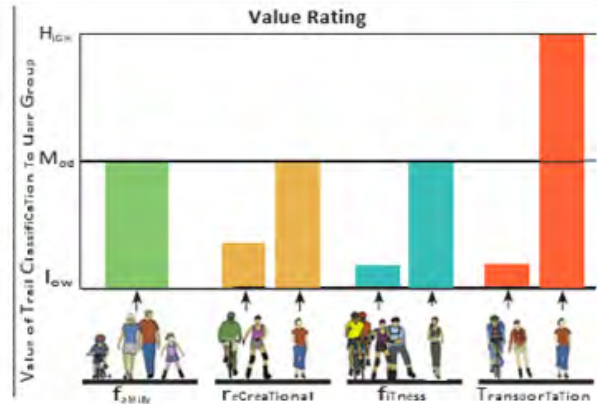
Value Statement
 Families will rarely use for perceived safety reasons. Recreational users will occasionally use as a means to connect to another trail or less-busy street. Fitness and transportation users will use if convenient and direct. Meeting desirable design standards is important.



Sidewalk



Value Statement
 Families will use to get to a park, trail, or around the neighborhood, as is the case with recreational walkers. Less friendly to family bikers. Recreational bicyclists and in-line skaters will use streets to avoid sidewalks. Fitness and transportation users will use which ever is most convenient.



As the comparisons illustrate, the type of trails (and resultant quality of the experience relative to expectations) provided within the system greatly affects whether or not a given targeted user group will routinely use a particular trail corridor. For example, as illustrated, a destination trail within a greenway setting has decidedly higher value to families and recreational users than that of

a linking trail along a roadway or sidewalk. The important point is that quality of experience indeed matters and that any deviation from an optimal classification, alignment, and design detail will directly affect whether or not the trail system is fully successful (i.e., routinely used). The system plan presented in this section is based on this fundamental premise.

Local Trail System Plan

The trail system plan includes existing and proposed trails that collectively form an integrated trail system. The plan is based on three key principles:

- » Using high recreational-value destination trails to form a core system of trails
- » Using linking trails and sidewalks as a means to connect the destination trails together, and provide pedestrian-level transportation routes to schools, public parks, other public facilities, and commercial districts that cannot otherwise be reached by destination trails
- » Using on-road bikeways to serve recreational, fitness, and transportation bicyclists comfortable riding on the road
- » Developing a system plan that is ambitious in its vision, yet realistic and achievable in the context of resources available to the City.

The System Plan illustrates each type of trail included as part of the trail system plan. The total potential miles of each trail type, and the system as a whole, are defined in the following table.

POTENTIAL TRAIL SYSTEM MILEAGE WITH FULL DEVELOPMENT

Trail Classification	Total Combined Miles
Destination Trails*	37.5
Linking Trails**	14.5
Total – All Trails***	52

* Destination trail mileage does not include regional destination trails as illustrated on the *System Plan*.

** Linking trail mileage does not include sidewalks

*** Does not include mileage for on-road bikeway facilities

Destination Trails

Destination trails are paved trails located within a greenway, open space, park, parkway, or designated trail corridor. As the name implies, the high recreational value of this type of trail often make it a destination unto itself. Destination trails have a particular emphasis on continuity and are the major conduits for travel within and between trail systems. The figure below illustrates a typical destination trail, accompanied by a photo on the next page highlighting this type of trail in a

greenway-type setting offering high recreational value.

Destination trails emphasize a natural, scenic setting and creating a sequence of events that make the trail appealing to the user. Any deviation from these design principles incrementally diminish its value.

FIGURE 4.3 – DESTINATION TRAILS IN NATURAL GREENWAY-TYPE SETTING

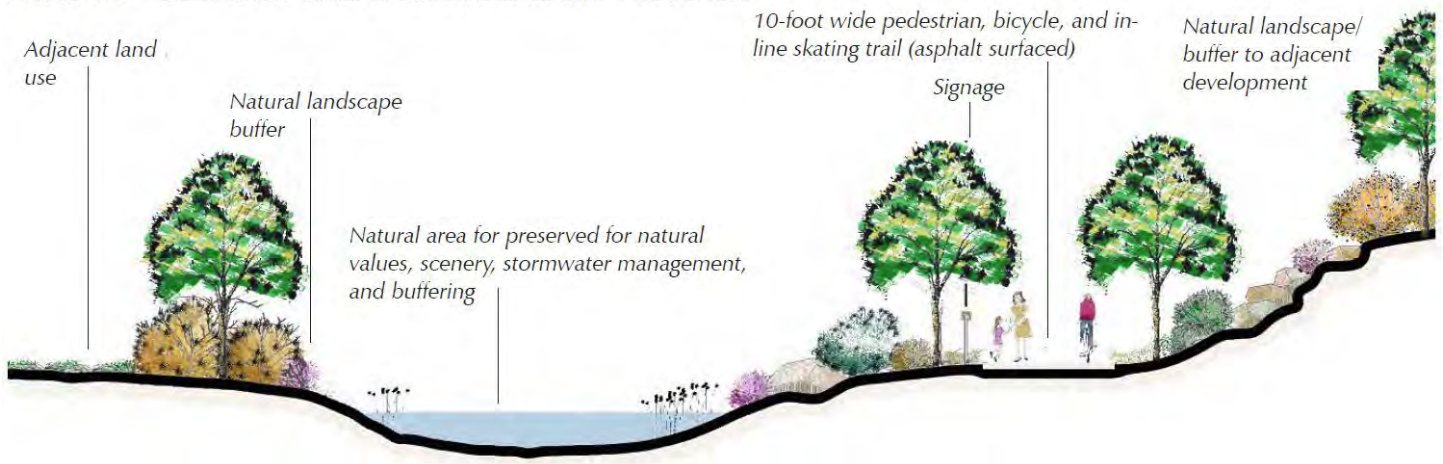
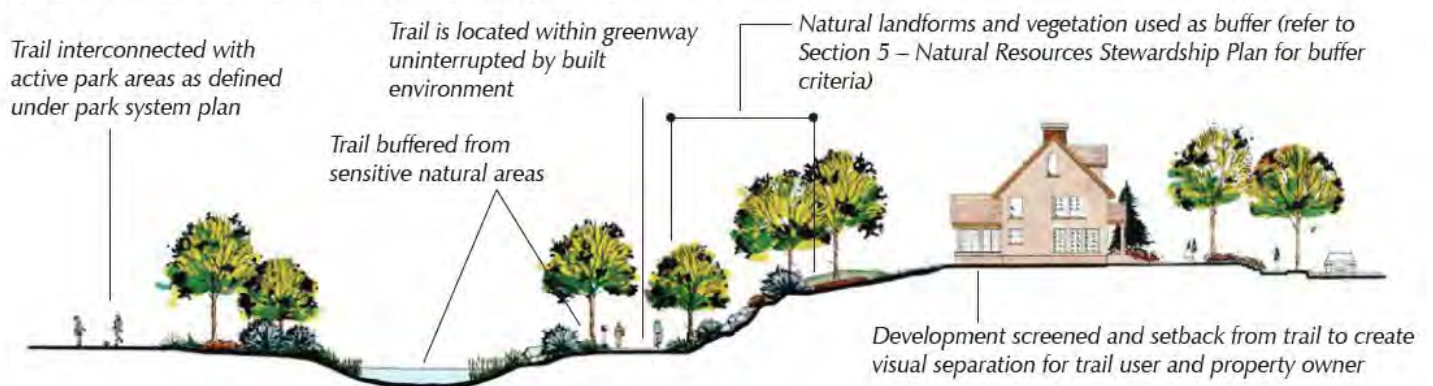


FIGURE 4.4 – GREENWAY-BASED TRAILS AND ADJACENT DEVELOPMENT



Development of Destination Trails

The destination trails traversing through the city as shown on the trail system map represent trail corridors which:

- » Traverse multiple parcels of land, many of which are privately-owned
- » Align, where feasible, with greenway corridors exhibiting natural qualities to create a pleasant aesthetic setting for a trail
- » Provide contiguous routes of travel from one area of the city to another, with particular emphasis on connections between neighborhoods and local and regional parks

The uninterrupted character of destination trails is essential to their recreational value. If continuity is lost, the value of the trail diminishes and, in some cases, can effectively change its designation

from destination to linking trail.

The conceptual alignment of the destination trails as shown on the trail system plan are considered optimal at a citywide planning scale. The actual alignment of these trails will be determined as part of the development process as deemed appropriate by the PRC and City Council. The location of a trail relative to a residential development is also important to maintain a high level of quality. Figure 4.4 illustrates the character of the greenway-based trail and its general relationship with adjacent development.

Integrating trails into the fabric of the community's built form as it is being developed is critical to the realization of this type of greenway-based trail system. Once development occurs, the likelihood of retrofitting this type of trail into a developed area is exceedingly difficult.

Descriptions of Primary Destination Trail Alignments

To add context, the table on following page describes the essential aspects of each of the core destinations trails illustrated on the System Plan.

Overview of Core Destination Trail Alignments

Corridor	Location and Description
Greenway Loop	<p>This corridor traverses larger-tract undeveloped land mostly on the outside of the current city limits where the opportunity to integrate a greenway-based trail into future developments still exists. The actual width of the greenway will be dependent on many factors that consistent with the City’s Comprehensive Plan and further considered at the point of development planning and actual annexation. Realistically, setting aside land will require a creative approach to development in which the greenway and trail are provided within the context of an economically-viable and marketable development plan.</p> <p>At a minimum, a greenway width of 100 feet is recommended, with 500 feet or more being optimal. Anything less than 100 feet does not provide the desired separation between the trail and the built environment and the critical mass needed for a legitimate natural greenway setting.</p> <p>As illustrated on the <i>System Plan</i>, the western and southern sections of this corridor traverse agricultural lands, which offer flexibility in the final location of the greenway and trail. The eastern section traverses through a more extensive natural landscape where the trail will have to be integrated to provide a compelling trail experience while limiting ecological impacts to established natural plant communities.</p> <p>(Notably, this greenway and trail corridor factor into the location of neighborhood parks in future development areas. This issue is consideration in greater detail in Section 3.)</p>
Vermillion Corridor	<p>This corridor is essentially a continuation of the existing trail traversing through park property along the Vermillion River. The intent is to continue a robust greenway along the river heading west until its connection with the Greenway Loop. To the east, the trail would intersect with the trail system shown for C.P. Adams Park/Old Mill Park/ Athletic Complex Area, as described below, and ultimately connect with the River Corridor. The same development parameters as defined for the Greenway Loop have application here as well.</p>
River Corridor	<p>This corridor traverses through the proposed protected open space/greenway area along the river to the east and proceeds west through Levee, Jaycee and Lake Rebecca Parks. Other than the section of linking trail in the downtown area, this corridor is intended to build to a destination trail standard. On the eastern end, flexibility will be required in the final location of the trail to take into consideration ecological issues (especially wetlands), bridge locations, and the extent to which natural open space is protected in this area.</p> <p>As illustrated on the <i>System Plan</i>, providing a loop around on the southwest side of Lake Rebecca is proposed to take full advantage of this scenic lake and riverfront area. Given that this is private land, the same development parameters as defined for the Greenway Loop have application here as well.</p>
Central Corridor	<p>This corridor traverses through existing parks, school sites, and rights-of-way as available to provide a central North-south trail link through the city that would offer higher recreational value than a linking trail through the same area. The connection through the private golf course is conceptual and is only shown as being desirable should the opportunity present itself over time – whether that is in concert with a) its current land use or b) if the property was ever redeveloped, at which time a trail corridor could be integrated into any future development plan for the site. (Note: This is only conceptual. The current land owner has not been approached with this concept, nor suggested any interest in other land uses.)</p>
C.P. Adams Park/ Old Mill Park/ Athletic Complex Area	<p>A series of destination trails are shown in this general area that traverse across city-owned lands and those currently owned by the MN DNR. The intent with these trails is to provide localized loops and interconnection with the larger greenway-based trail corridor system. In areas outside city parks, the City will have to work through final alignment and easement issues with the MN DNR. In some cases, individual trail segments may have to be realigned in consideration of ecological and other concerns that MN DNR may have in these areas. With C.P. Adams Park, the development (grades, alignment, road crossing) and related safety issues associated with the trail along 10th Street need particular attention.</p>
Highway 61 Bridge Crossing	<p>Connection of the Hastings trail system to the emerging regional trail system being developed north of the Mississippi River is contingent on getting across the river via the bridge. Any improvements made to the bridge over time should include provisions for regional-level trail facilities to ensure that access to the regional trail system is safe, convenient, and appealing. Providing adequate trail width, separation from vehicular traffic, and taking advantage of scenic views with overlook areas are top priorities.</p>

Development Standards and Guidelines

The destination trails should be consistent with regional trail standards, which is a 10-foot wide asphalt trail suitable for walking, bicycling, and inline skating. 8-foot is a standard width for a neighborhood trail, which is adequate within most subdivisions where use levels are lower and space for a trail corridor often more limited. All of

these trails should meet accessibility standards whenever possible, which as a general rule means grades of 5 percent or less. The Minnesota Trail Planning, Design, and Development Guidelines provide the baseline standards and guidelines for developing destination trails.

Neighborhood Trails

The destination trails illustrated on the system plan are complemented by neighborhood trails that link an individual development area or neighborhood to the core trail system. Since these trails are incorporated into development plans

as they occur, the location of neighborhood trail connections are not shown on the system map. Figure 4.5 illustrates the relationship between the destination trails as shown on the trail system plan and local neighborhood trails.

Figure 4.5 – Relationship between destination trails and neighborhood trails



As the graphic illustrates, destination trails shown on the trail system plan are complemented by neighborhood trails that link an individual development area or neighborhood to the larger trail system. Since these trails are incorporated into development plans as they occur, the location of neighborhood trail connections are not shown on the system map. Easy access from residential areas to the core trail system is critical to encouraging high levels of use on a daily basis.

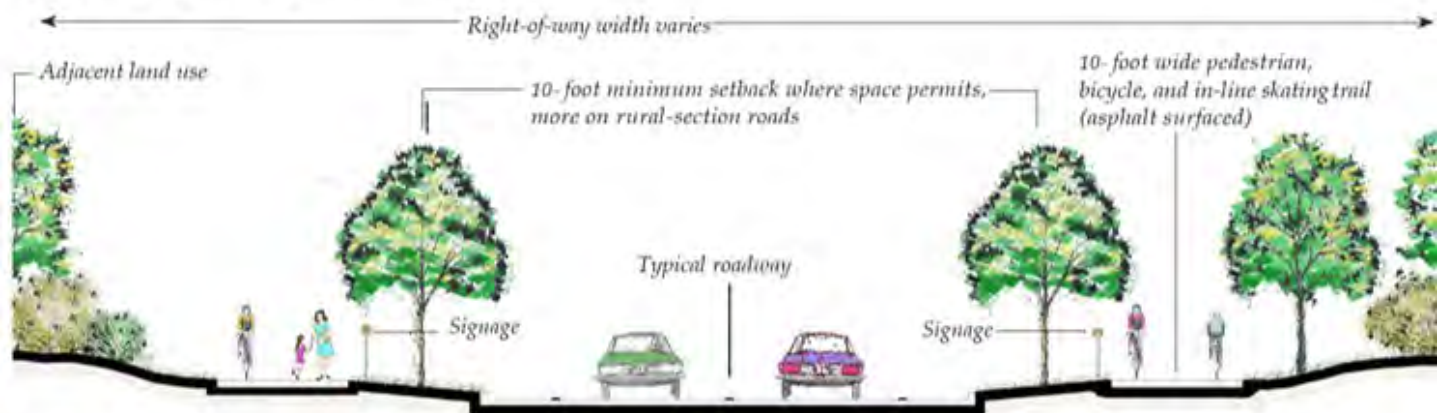
Linking trails

The main difference between linking and destination trails is their location, which can significantly affect their recreational value. Whereas destination trails emphasize a recreational experience in a greenway or parklike setting, linking trails emphasize safe travel for pedestrians to and from parks and around the community. Linking trails are most often located

within road rights-of-way or utility easements.

Linking trails do provide recreational value, but not to the level of destination trails due to vehicular traffic (safety, noise, odors) and a less visually attractive setting. Figure 4.6 illustrates a typical linking trail, accompanied by photos of actual trails.

Figure 4.6 | Right-of-way-based linking trails



Depending on the circumstances, linking trails can be developed on one or both sides of the roadway, although that should only occur when heavy use patterns are anticipated, which is not expected in Hastings.

Development of Linking trails

The linking trails shown on the system map are essential in cases where destination trails are not an option. In most cases, linking trails are located within road rights-of-way. The main variable is the side of the road the trail would be located on, which will be determined by the City at the time of implementation.

As defined in Section 6 – Implementation Plan, providing a network of linking trails remain a development priority because of their importance

to tying the system together and getting users safety around the community. Note that although typically located in an existing road right-of-way, the City is encouraged to develop linking trails at the same time that roadway and subdivision development occurs since it is often more difficult and costly to retrofit afterward. The extent to which linking trails are ultimately developed will be based on the demand from residents for links from established or new neighborhoods to the destination trail system as it takes shape.



Development Standards and Guidelines

As with destination trails, linking trails should be consistent with regional trail standards, which is a 10-foot wide asphalt trail suitable for walking, bicycling, and inline skating. An 8-foot width can also be used in situations where the linking trail provides access from an area with limited development or the trail serves as a neighborhood connection as opposed to a through trail.

All linking trails should meet accessibility standards

whenever possible, which as a general rule means grades of 5 percent or less. The Minnesota Trail Planning, Design, and Development Guidelines (MN DNR 2007) provide the baseline standards and guidelines for developing linking trails. Other applicable standards, such as the MNDOT Bicycle Facility Design Guide, should also be referenced, especially if specifically required for grant funding or if the trail crosses roadways.

Sidewalks

The difference between sidewalks and linking trails is their location, width and surfacing – each of which can significantly affect the user groups that are accommodated. Whereas linking trails are typically asphalt and 10 feet wide, sidewalks are concrete and 5 to 6 or 8 feet wide. Sidewalks are most often located within road rights-of-way within a neighborhood, downtown area, or commercial district.

Sidewalks do provide recreational value, but generally only serve walkers, joggers, and children on bikes. Older bicyclists and in-line skaters will not routinely use sidewalks because they are too narrow and the crack control joints make for a rougher riding surface. The following aerial image and accompanying photos illustrate sidewalks in Hastings.



The location of existing sidewalks varies considerably across the city. In the older, more established neighborhoods, sidewalks are more common, at least on select local streets and along busier roads, as is the case near Wilson Park shown in this image. In newer parts of town, sidewalks are quite limited, often occurring only along collector-level streets. Even some areas it is not uncommon for a sidewalk to abruptly end. Where provided, sidewalks do add value to the trail system by providing a safe means for local residents to migrate to the established trail system or get to a local park.

Development of Sidewalks

As a general guideline, sidewalks should be provided in all new neighborhoods as determined appropriate during the subdivision design process to complement and interconnect with the larger trail system. The extent to which sidewalks are provided should be consistent with the City's subdivision ordinances and development standards, which should be referred to for detailed requirements.

In established neighborhoods, retrofitting sidewalks can be a challenging proposition given

encroachment issues and resident expectations. In these cases, sidewalks should be provided if and when they are desired by the neighborhood to improve access and safety for pedestrians. From a practical standpoint, development of the destination and linking trails will likely take precedence over retrofitting sidewalks given costs, variability of resident expectations and values, and the previously defined challenges. That said, sidewalks can add considerable value to the overall trail system and should not be overlooked, especially in new developments.

Development Standards and Guidelines

Sidewalks should be consistent with local standards for development, which is typically a 6-foot wide concrete surface in a residential

setting. All sidewalks should meet accessibility standards whenever possible, which as a general rule means grades of 5 percent or less.

Natural trails

Nature trails are commonly used in areas where a natural tread is desired and harmony with the natural environment is emphasized. Nature trails are surfaced with native soils, turf, crushed

aggregate, or other selected non-asphalt or concrete surface. Figure 4.7 illustrates a typical nature trail, accompanied by photos of actual trails.



Development of Natural Trails

Natural surface trails complement the paved destination trails and provide more natural trail opportunities for residents. Natural trails in Hastings are appropriate in two situations:

- » Secondary connections from a neighborhood to the destination trail system through natural conservation areas or open spaces where a less developed trail corridor is more appropriate than a paved trail; select trails in Old Mill Park fit

into the nature trail category

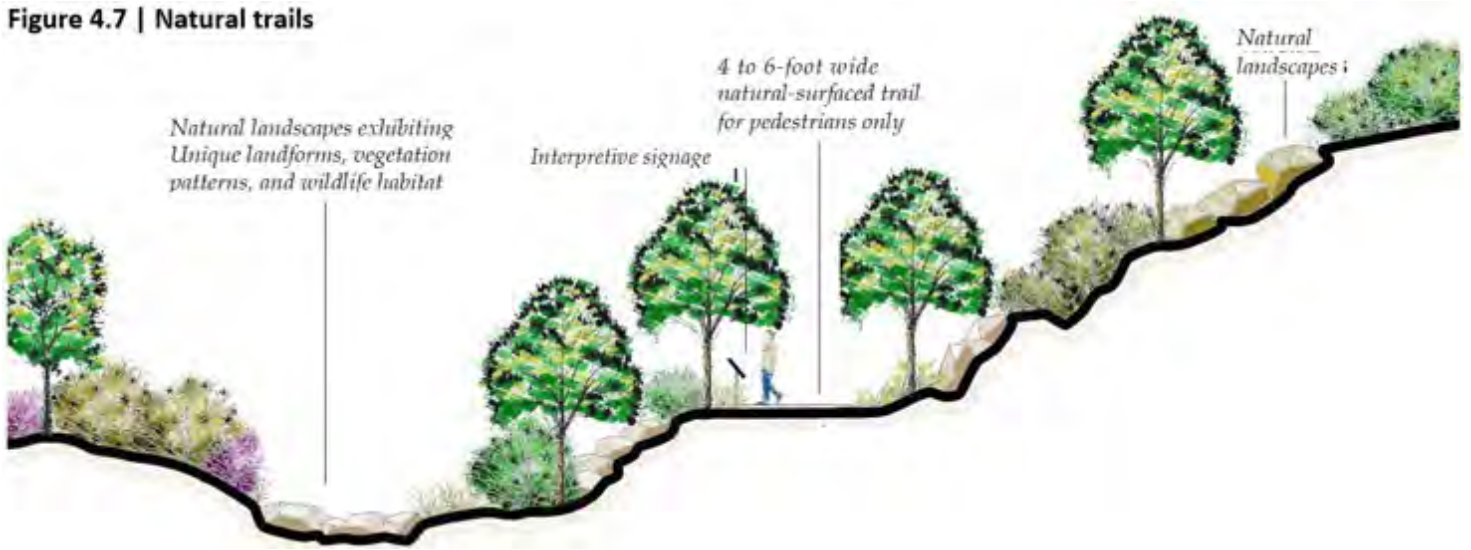
- » Within natural parks, open spaces, or preserve areas for interpretation and general hiking; this includes select regional parks, wildlife management areas, and scientific natural areas as defined under master plans prepared independently or cooperatively by Dakota County and MN DNR; the “Freitag” area offers particularly appealing opportunities for nature trails, if acquired for public use

Development Standards and Guidelines

For most natural trails, a width of 4 to 6 feet is appropriate when designed for hiking-only use. The difficulty level for natural trails used for this purpose should be relatively “easy” whenever possible, consistent with accepted standards. The

Minnesota Trail Planning, Design, and Development Guidelines (MN DNR 2007) provide the baseline standards and guidelines for developing natural trails, including defining difficulty levels.

Figure 4.7 | Natural trails



Development Standards and Guidelines

For most natural trails, a width of 4 to 6 feet is appropriate when designed for hiking-only use. The difficulty level for natural trails used for this purpose should be relatively “easy” whenever possible, consistent with accepted standards. The

Minnesota Trail Planning, Design, and Development Guidelines (MN DNR 2007) provide the baseline standards and guidelines for developing natural trails, including defining difficulty levels.



Bikeways

On-road bikeways (i.e., bike lanes and bike routes) are paved segments of roadways that serve as a means to safely separate bicyclists from vehicular traffic. Bikeways generally allow a cyclist to go faster than on many trails and offer more continuity in surfacing and intersections. Complementing shared-use trails or sidewalks with on-road bikeways enhances the overall trail system by making it more complete and user friendly. For advanced bicyclists and some in-line skaters, bikeways are important conduits to longer routes outside of the city limits.

The distinction between a bike lane and bike route is the level of exclusiveness and the setting. A bike lane is a designated portion of the roadway defined by striping, signing, and pavement markings for the preferential or exclusive use of bicyclists. A

bike route is a shared portion of the roadway that provides some separation between motor vehicles and bicyclists. State statutes define a bike route as a “roadway signed for encouragement of bicycle use.” Most people would recognize a bike route as a paved shoulder with signage and striping. In Hastings, bike routes are envisioned over bike lanes given the character of the route and expected level of use. The photos illustrate the most common types of bike routes. The routes shown on the plan follow main arteries through the city, create an on-street loop, and connect with the trail system in multiple locations.

As a general guide, the MN/DOT Bikeway Facility Design Manual provides tables that relate bikeway types to roadway characteristics, as figure 4.8 illustrates.

Figure 4.8 – Bikeway types based on roadway characteristics

Source: *MN/DOT Bikeway Facility Design Manual as illustrated in the MN DNR's Trail Planning, Design, and Development Guidelines (2007)*

BIKEWAY DESIGN OPTIONS FOR ROADWAYS

The following tables provide recommended bikeway design options for various roadways. The tables relate to urban section (with curb and gutter) and rural section (no curb and gutter) roadways. Note that *wide curb lane* refers to a right through-traffic lane is wider than 12 feet. *Shared lane* relates to travel lanes that can be legally used by bicyclists, but are less than 12 feet. *ADT* relates to average daily motor vehicle traffic.

		ADT (2 lane)						
		< 500	500–1,000	1,000–2,000	2,000–5,000	5,000–10,000	>10,000	
		ADT (4 lane)						
		N/A	N/A	2,000–4,000	4,000–10,000	10,000–20,000	>20,000	
Urban Section Guidelines	Posted Speed	≤ 30 mph	Shared lane	Wide curb line	Wide curb lane	Bike lane	Bike lane	Bike lane
		30 mph	Shared lane	Wide curb lane	Bike lane	Bike lane	Bike lane	Bike lane
		35–40 mph	Wide curb lane	Bike lane	Bike lane	Bike lane	Bike lane	Bike lane
		> 40 mph	Bike lane	Bike lane	Bike lane	Bike lane	Bike lane	Bike lane
		ADT/Lane						
		< 1000*	1,000–2,500	2,500–5,000	5,000–10,000	>10,000		
Rural Section Guidelines	Posted Speed	≤ 30 mph	4' paved shoulder	4' paved shoulder	4' paved shoulder	4' paved shoulder	6' paved shoulder	
		30–35 mph	4' paved shoulder	6' paved shoulder	6' paved shoulder	6' paved shoulder	8' paved shoulder	
		35–45 mph	6' paved shoulder	6' paved shoulder	6' paved shoulder	8' paved shoulder	10' paved shoulder	
		> 45 mph	6' paved shoulder	6' paved shoulder	8' paved shoulder	10' paved shoulder	10' paved shoulder	

* Shoulders are not necessary when the ADT is less than 500, unless the roadway is heavily used by truck or heavy commercial vehicles. In these situations, bicyclists should be accommodated with a shared lane.

For each of the routes shown on the plan a more detailed evaluation of roadway conditions and striping configurations will be necessary before any of the routes can be designated as a bike route. The most important aspect of this relates to intersections, in which a combination of traffic

flow issues associated with turn lanes will have to be balanced against providing adequate space for a bicyclist to safely maneuver. Notably, in some cases this evaluation may result in a particular route being determined to be not appropriate as a designated bike route facility.

Connections to the Regional Trail System

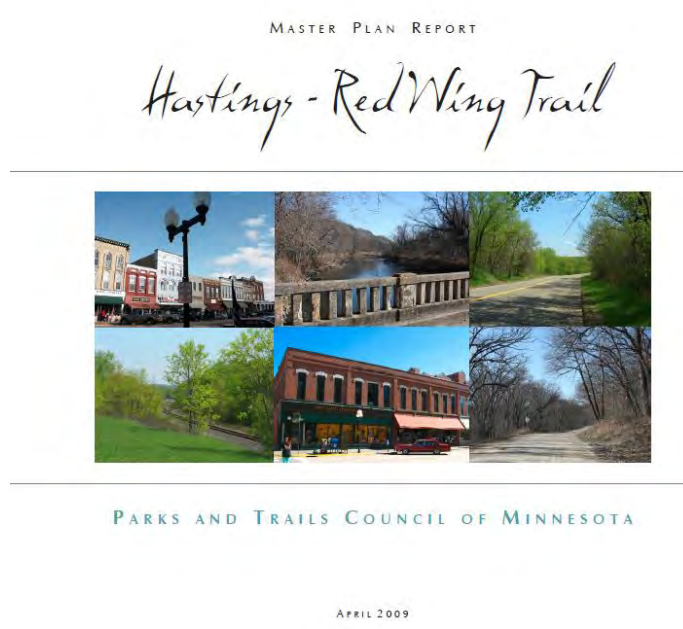
As illustrated on the System Plan on page 10-41, the local trail system is well-positioned to connect with existing and proposed regional trails in Dakota and Washington Counties. Once fully developed, this network of trails will create a high-value recreational opportunity that is quite unique in this region. The following provides an overview of the key interconnections with the regional system.

Mississippi River Regional Trail – Dakota County

The Mississippi River Regional Trail enters Hastings from the north following the river corridor. As shown, the trail makes a direct connection to downtown Hastings and Levee Park. To the north of Hastings, the trail will eventually connect Harriet Island in St. Paul to Spring Lake Park Reserve in Dakota County, and then continue south into Hastings.

In 2009 the cities of Hastings and Red Wing along with Dakota and Goodhue Counties partnered on the preparation of Hastings-to-Red Wing

Trail Master Plan following the river corridor between the two cities. When the plan is fully implemented the Mississippi River trail corridor would essentially continue uninterrupted from Hastings to Red Wing following one of several route options. This trail would also make a direct connection to the existing Cannon Valley Trail, further enhancing recreational options for this area. Click on the following link to view the 2009 Hastings - Red Wing Trail Plan <https://www.red-wing.org/media/files/departments/planning/hastingstoredwing.pdf>



Vermillion River Greenway Regional Trail – Dakota County

As illustrated on the System Plan, the Vermillion River Greenway Regional Trail follows the Vermillion River corridor into Hastings from the southwest. Although no formal master plan has been completed by Dakota County, this trail

corridor would provide a regional trail connection between Hastings and Empire Wetland Regional Park, as well as direct linkage to the greater regional trail network in Dakota County, and points beyond.

Point Douglas Regional Trail - Washington County

The Point Douglas Regional Trail is located in the Southern Part of Washington County and the northern part of Hastings. One of the starting points is located on Hasting Rd South and goes into Prescott along the River. The trail runs east west along side the main channel of the river providing beautiful views. It is 2.5 miles long and a key link in the regional trail network. it connects to the Mississippi River Bikeway, the planning St. Croix Valley Regional Trail, trails in Dakota County and St. Croix County.

Parking areas/trailheads

In the initial years as the trail system is implemented, local parks and schools should be defined on Local Park and trail maps as parking areas for trail users. This will avoid duplication of infrastructure and make it clear to residents where they can expect to park.

The development of stand-alone trailheads are not anticipated as being necessary since many of the trail users will be accessing the system by foot, bicycle, or in-line skates from their home or a local street.

In the longer-term once the system is more fully developed and use patterns more defined, stand-alone trailheads may be necessary in select

locations where parking problems in a given neighborhood or along a specific street become a more significant issue. These cases should be considered on an individual basis. If parking is provided at some point, it should be located on the edge of park or other publicly-owned property where feasible.

The overall size of the parking area should be kept as small as possible to accommodate documented demand. Provisions for expansion should be provided, but only occur if demand warrants. Over development of parking areas is not recommended due to cost, storm water management issues, long-term maintenance, and increased needs for policing.

Trailside amenities and development standards

In most cases, trailhead amenities should be limited to signage. The Minnesota Trail Planning, Design, and Development Guidelines (MN DNR 2007) provides baseline standards and guidelines

for trailside amenities and should be used as the primary reference to ensure consistency with other trail systems in the region.



SECTION 5

NATURAL RESOURCES STEWARDSHIP PLAN



Overview

As part of the system plan, a general review of natural resource mapping within the city was undertaken to gain a sense of the overall extent and condition of natural resource areas. This review was used as the basis for the natural resources stewardship plan presented in this section. The plan applies to all public parks and open space parcels included under the system plan that exhibit natural plant communities and ecological systems. For consistency, the program also has application to privately-owned properties or those that are held by other public agencies. (This section complements the protection strategy for open space defined in Section 3, which addresses lands desired to be set aside as natural open space and greenway corridors.

Natural Resources Stewardship Philosophy

The stewardship plan promotes an ecosystem-based approach to managing natural systems. An ecosystem is essentially where things live and represents an interacting group of physical elements (soils, water, plants, animals, etc.) that inhabit a particular place.

Ecosystem-based management views people as part of the community, and as such maintaining a healthy ecosystem is the best way to meet human needs as well as those of other organisms. General goals of this philosophy are to:

- » Enhance the health of the ecosystems in the city
- » Preserve and enhance the biological diversity of native habitats
- » Provide an appropriate balance between resource preservation, recreational use, and development

The stewardship plan focuses on achieving a sustainable landscape quality. This is defined as the point at which Hastings can indefinitely maintain a certain acceptable level of resource quality within the context of realistic limits – which is contingent upon two primary factors:

- » Public understanding of and commitment to natural resource preservation and stewardship programs
- » Undertaking ecological restoration and management programs that are scientifically sound and technically feasible

Through a well-defined stewardship program and a concerted, ongoing effort to protect natural areas, confidence can be gained that current threats (e.g., inundation of invasive species, impacts of new development, degradation of water quality) can be effectively mitigated or managed.

Stewardship programs inherently need to be flexible due to the changing nature of the living systems. The framework plan presented here should be viewed as a starting point and is neither conclusive nor absolute. It is the beginning of an ongoing process that relies on monitoring, research, and cost evaluations to provide feedback on program effectiveness and intensity.

Achievability and sustainability of ecological stewardship programs

To be successful, restoring and managing ecological systems must be both achievable and sustainable. Achievable refers to what is scientifically and economically viable and feasible. Sustainable refers to the level to which restoration and management programs can

be scientifically and economically maintained over an extended period of time. The following considers achievability and sustainability from the two distinct but interrelated perspectives of ecology and economy (human/economic capital).

Ecological Perspective

From an ecological perspective, what is achievable and sustainable is defined in scientific terms based on testing and research. Scientifically, human intervention through well thought-out and carefully implemented programs over a period of time can help reverse the current downward trend in the ecological quality of the city's natural systems (as measured by biodiversity and general ecological health). A successful program requires a full understanding of the ecological problems being faced and a defined course of action that is based on science. As defined in this section, human intervention will be required given the current conditions found within these systems.

Although dramatic improvements can often be made, restoring the landscape to pre-settlement conditions is not realistic from a scientific perspective. Past impacts to the land since man first settled and introduction of invasive alien plants simply preclude this possibility. However, it is achievable to restore and manage many ecosystems to sustainable and productive levels, resulting in considerable human and ecological value that can be perpetuated for generations to come. The key point here is that Hastings must set realistic goals and expectations as to what can be achieved and sustained through restoration and management programs.

Economic (Human/Economic Capital) Perspective

From an economic perspective, what is achievable and sustainable is based on the amount of human and economic capital that can be committed to ecological programs now and in the future. The importance of this cannot be overstated in that the long-term viability of any ecological program undertaken is directly related to the long-term commitment made to it in terms of human and

economic resources. Ultimately, how the collective community values land stewardship and ecological health relative to other quality of life issues will define the extent to which ecological programs can be successfully implemented. Recognizing this, it is critical that Hastings undertake ecological programs in a pragmatic and paced manner that keeps pace with available economic resources.

A Public-Private Partnership

Undertaking a natural resource stewardship program across the city will require a close partnership with landowners, and private developers to be successful. The City alone will not likely have the financial resources to both set aside land for open space or parks and provide stewardship for those lands. As defined in Section 3, setting aside land for preserved natural areas and providing perpetual stewardship of those lands will have to be accomplished as part of the development process if it is to occur. Achieving these goals will have to be balanced against flexibility given to the developer to maintain the economic viability of a development.

Overview of Ecological Condition

As defined in Section 3, the proposed natural open space system strives to preserve the highest quality and most unique landscape features of the city. The quality of the natural ecological systems found within these areas range from relatively healthy natural and undisturbed systems to those that have been highly impacted and degraded by past land uses or lack of management.

In virtually all cases, the lack of natural processes, such as wildfire, along with impacts from past development and other land uses has resulted in a significant threat to the overall health of native plant communities as the years have passed. In many cases, certain species of plants – native and non-native – are out-competing other native plant species when natural processes are disturbed, fragmented, or halted. This is resulting in a trend toward substantial reductions in biodiversity, function, and visual beauty.

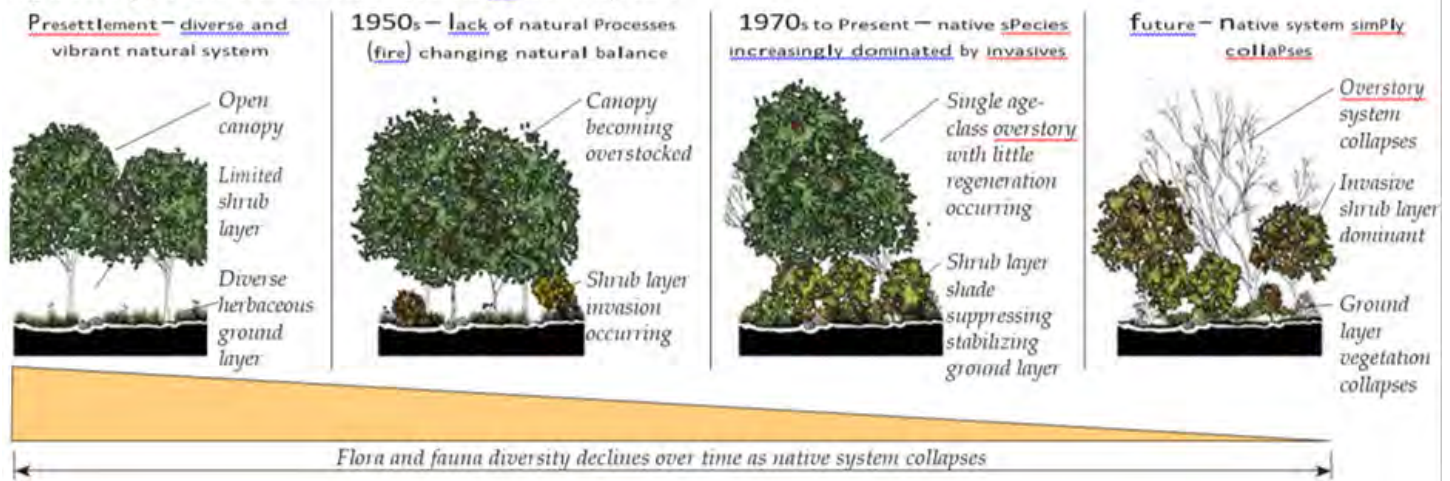


Observed trends in ecological systems

Without human intervention and conscientious stewardship, the overall trend of ecological systems across the city will be toward continued decline, as measured by biodiversity and

general ecological health. For example, figure 5.1 graphically illustrates the current trend in a typical oak savanna or forest system found in this and many other Midwestern regions.

Figure 5.1 | Current trend in Oak Savanna Or forest system



This example is reflective of what is happening to varying degrees in all of the ecological systems found throughout the region. Although some of the ecological degradation cannot be entirely reversed, there are also many opportunities to forestall further decline and make substantial progress toward achieving a more sustainable and healthier landscape over time.

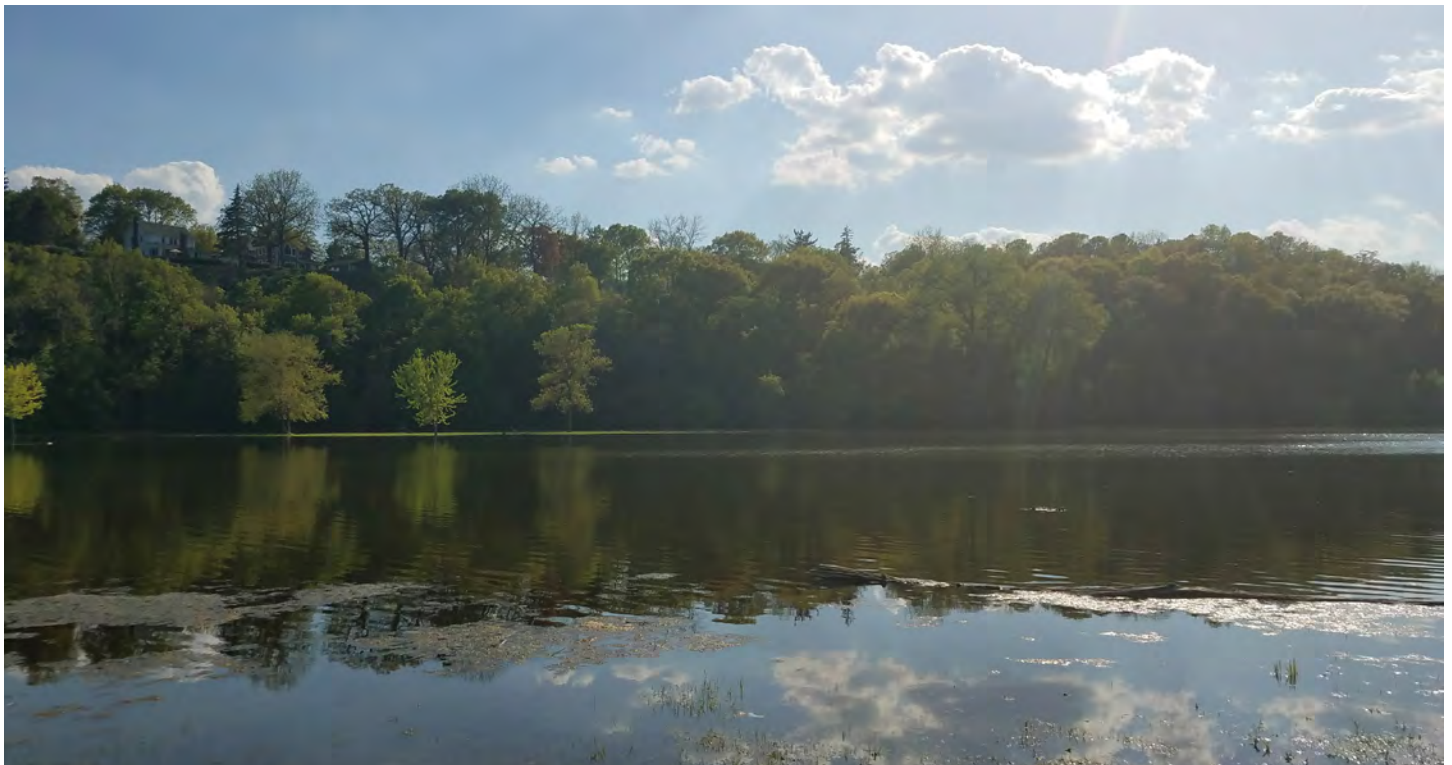


Figure 5.2 | Trend Analysis

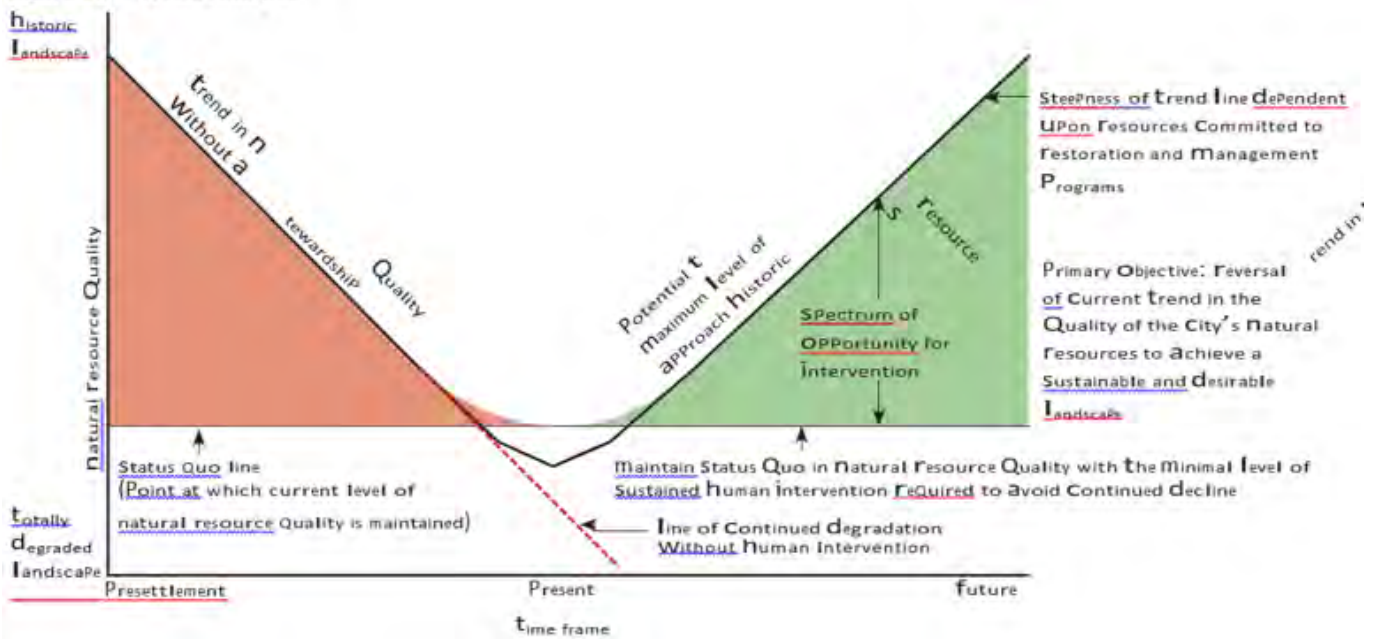


Figure 5.2 graphically illustrates the current overall trend in ecological quality, as well as defining the spectrum of opportunity for reversing this trend.

Related threats to ecological systems

In addition to the overall trend in ecological conditions, there are some other significant threats facing the natural resources within the region. The following considers those of most concern.

Ecological Systems Fragmentation: The ecological communities within the city are becoming increasingly fragmented, which refers to the division of the various native plant communities into smaller, more isolated areas by roads, farm fields and pastures, old and new development, and a variety of other land uses. The fragmentation of ecological systems reduces overall native plant diversity and health and the quality and quantity of food and cover for wildlife. Within the context of greenway planning, habitat fragmentation is a significant concern and an important consideration in determining how new development is accommodated in the city.

Erosion: As surface and groundwater hydrology

change in response to new land uses, the likelihood of erosion greatly increases due to higher concentrations of stormwater. Of equal concern is erosion along lake shorelines and wetlands, where soil migration from upstream locations is a significant concern.

Inappropriate Uses: The occasional misuse of public property can be found across the city and surrounding countryside. This includes encroachment of private land uses and activities onto public properties that causes disruption to natural systems. Mowing natural areas and dumping debris are common examples of encroachment. Although the extent of this activity does not appear to be excessive, if left unchecked it can lead to substantial degradation to ecological systems and soil structure. To forestall this activity, the city should remind citizens of what is legal and illegal on public property and encourage them to report such instances to local authorities for enforcement.

Dual Track Stewardship Strategy

The comprehensive stewardship program entails a dual-track strategy. The first track relates to publicly-owned parks and natural open spaces. The second track relates to privately-owned natural open space that are protected under conservation easements or land trusts. (Note that in this context, private and public relates to direct ownership, not access. As defined in Sections 3 and 4, many privately-owned natural open space parcels will be accessible to the general public (via trails) as part of developers' agreements associated with establishing open spaces and destination trails as development occurs.) Each of these tracks requires different stewardship strategies.

Stewardship strategy for public parks and natural open spaces

The stewardship strategy establishes a road map toward realizing a more healthy and vibrant natural landscape and achieving the stated vision. The following defines the action steps for developing and implementing a stewardship program as it relates to public lands.

Action Step 1 – Develop Overall Mapping of Ecological Systems

Using MLCCS mapping protocol, the vegetative communities across the city will have to be mapped. Refinements should continue on an as-needed basis. Additional ecological evaluations will also continue through partnerships with other agencies and private developers as development occurs.

Action Step 2 – Develop Ecological Prototypes for Healthy and Unhealthy Systems

Ecological prototypes refer to the general structure, site conditions, vegetative species lists, and other variables attributed to each of the ecological communities found within the city. Prototypes assist restoration and management efforts by helping compare existing conditions against measurable criteria for healthy systems and in recognizing possible causes resulting in ecological changes. By recognizing what a healthy system looks like, specific targets or models for management and restoration programs can be developed and implemented.

Preparation of ecological prototypes and an accompanying implementation plan will require assistance from a trained professional familiar with natural resource stewardship issues in this region. As a basic resource, figure 5.3 provides an

overview of ecological prototypes and a listing of relevant publications defining ecological systems in the region and invasive threats to those systems.

Action Step 3 – Develop Detailed Stewardship Plan

The detailed stewardship plan is a technically-based document that defines the restoration and management approach for the natural areas throughout the city. The plan typically includes a definition of restoration techniques, management and restoration strategies for each ecological unit, time lines for program implementation, and monitoring protocol. The plan also includes costing information for each phase of the program.

Action Step 4 – Prioritize Public Lands for Stewardship

In the context of funding limitations, a multi-phased approach will be required. The baseline strategy for publicly-owned lands is to sequentially address stewardship needs based on established priorities. The key priorities include:

1. Continuing to manage ecological communities that have already been restored.
2. Mitigating immediate threats to natural areas and ecological systems
3. Protecting and enhancing the highest quality systems within existing parks, with an emphasis on areas readily observable by the public.
4. Systematically expand stewardship activities, with an emphasis on areas that are adjacent to previously restored areas to reduce habitat fragmentation, create sustainable systems, and maintain stewardship efficiencies.

Action Step 5 – Establish an Annual and Five-Year Budget for the Stewardship Program

Critical to the success of the stewardship program is consistent year-to-year funding. The PRC should recommend to the City Council a five-year plan that defines funding levels associated with priorities. The plan should be updated each year to ensure that stewardship program planning is in alignment with funding allocations.

Action Step 6 – Undertake Stewardship Program for Priority Sites

Consistent with the approved budget, a phased approach should be implemented at the priority sites.

Stewardship Plan Implementation

Initially, stewardship budgets will likely be modest, with the key objective being to establish the program and to position the city for grant opportunities and leveraging any funding opportunities that emerge as part of the development process.



Stewardship Strategy For Privately-Owned Natural Open space

Establishing a stewardship program for privately-owned land is tied to the development planning process, as is the actual setting aside of land for open space as defined in Section 3. Since these programs are not inherently mandated, the City will have to rely on collaborations with the developers and landowners if stewardship programs are to be integrated into land development packages.

The technically based practices, techniques, and phases associated with private stewardship programs are consistent with those ascribed for public land. The primary difference is that these programs are generally funded as part of an overall developer's agreement with the City. Depending on the economies of a specific development and the public values ascribed to the area, the City may also participate in some aspects of these stewardship programs.

To protect all interests, the developer's agreement as it relates to stewardship programs should include the following provisions:

- Definition of a stewardship program – relates to the construction, restoration, maintenance, and monitoring of natural ecological systems as part of the designated development proposal.
- Fund agreement – relates to the establishment of a perpetual funding source for long-term stewardship program within the designated development. The fund typically consists of

some combination of an endowment (that bears yearly interest) and yearly association fees that are a stipulated part of the purchase agreement for a residential lot.

- Areas covered under the stewardship program – defines the specific land areas where stewardship would occur, most often being legally defined under a conservation easement.
- Stewardship program phases – typically includes two phases: 1) development phase and 2) long-term stewardship phase. Under the development phase, the developer would bear the cost of stewardship. Once the development is complete, a homeowners association takes over stewardship responsibility through an established fund.
- Stewardship program technical requirements – defines the technical specifications for restoring, managing, maintaining, and monitoring designated natural areas.
- Restriction of uses within conservation easements – defines uses that cannot occur in conservation areas.
- Signage of the conservation easement – stipulates the type of signage required to define the limits of the preserved areas.
- Protocol for administration of the stewardship program – stipulates the administrative procedures for program oversight and the city's legal authority to take action if the agreement is not fulfilled.

STEWARDSHIP PROGRAM IMPLEMENTATION PHASES

Classification	Common Guidelines	Application to Hastings
Phase I – Testing and Education	Broadens understanding of restoration needs, options, and opportunities. Also increases local residents' knowledge and understanding of restoration issues. The need for extensive testing prior to restoring larger tracts diminishes over time in line with knowledge.	Small test or demonstration plots are the backbone of the initial testing to determine the restoration practices best suited for the setting. Direct exposure to restoration practices and their impact on the surrounding environment will give park visitors working knowledge of stewardship programs.
Phase II – Remedial Phase	Involves the major restoration and management tasks and consequently is the more expensive phase. Its focus is on returning the land to the biological and structural conditions necessary for a healthy ecological landscape to emerge and prosper.	The remedial phase employs a variety of restoration techniques in a major effort to restore vegetation and habitat structure and biological diversity and restore ecological functions.
Phase III – Maintenance Phase	Represents the routine tasks that are conducted annually at strategic times to maintain specific ecological and biological objectives set for each unit and subunit.	After significant investments during Phase II, the stewardship program shifts to a lower level of intervention during the maintenance phase. This is inherently less costly and provides an excellent opportunity for long-term citizen and student involvement as volunteers.

Timeframes for implementing stewardship programs

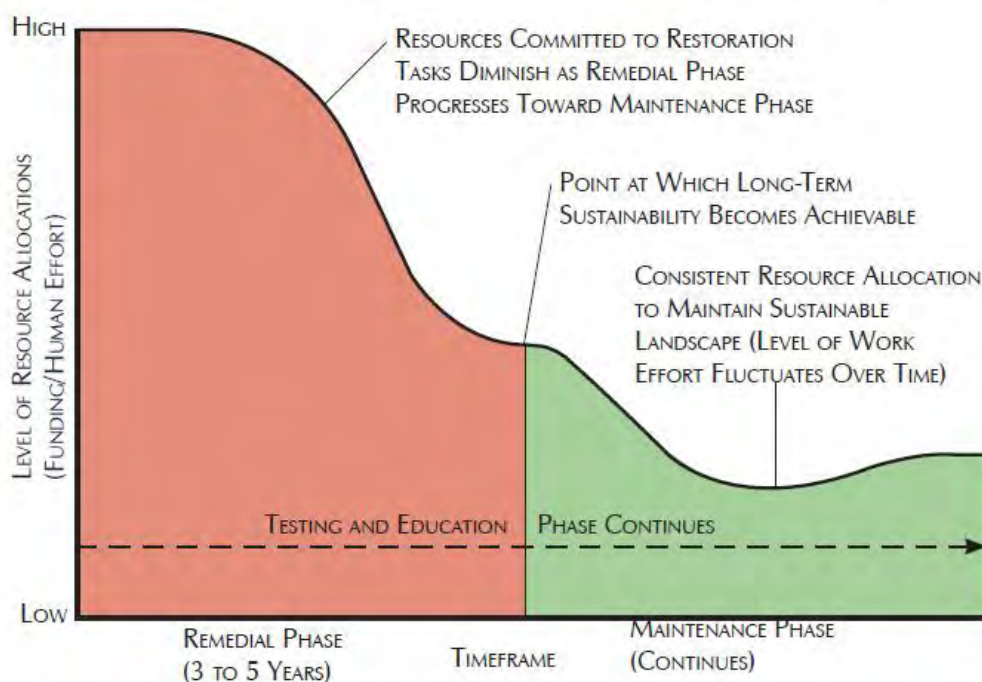
In general, the techniques involved in restoring and managing the City's natural resources remain relatively consistent between phases and between ecological systems. Common techniques include a combination of prescribed burning, weeding and brushing, seed harvesting and disbursement, and planting. Using these techniques, a step-by-step process would be implemented over an extended period of time to achieve defined desired results.

Although stewardship techniques are relatively consistent between phases, the main distinction lies in the intensity of the work involved to achieve a set of objectives, and the use of one restoration technique over that of another in a particular situation. For example, the initial removal of dense clusters of buckthorn in a given area may require substantial effort during the remedial phase. Under the maintenance phase, continued removal will still be necessary, but require substantially less effort. Figure 5.4 illustrates how the level of restoration effort lessens as the management plan moves from the remedial into the long-term maintenance phase.

As figure 5.4 illustrates, the remedial phase often takes three to five years (or more) to complete for each ecological community within a given land unit. This timeframe is highly dependent upon the magnitude of the work involved to complete restoration tasks and the resources committed to the effort.

The maintenance phase begins once remedial work is completed and continues on indefinitely at a sustainable level. As illustrated, the work effort under the maintenance phase will fluctuate due to the ever-changing conditions found across the site. The actual schedule for implementing the stewardship program would also likely be staggered to ensure that the work undertaken in any given year is manageable and affordable. Realistically, implementing a stewardship program across the entire community is a long-term effort, with the maintenance phase continuing indefinitely at some level. This underscores the importance of establishing a stewardship program as soon as possible and building on that program over time.

FIGURE 5.4 – RESTORATION EFFORT RELATIVE TO PHASES AND TIME LINES



Providing Buffers to Protect Sensitive Ecological Systems

Maintaining buffers between built features and adjacent sensitive natural areas is essential to ensuring their long term ecological quality, diversity, and habitat value. Irrespective of how well subdivisions are designed, all development has an impact on the adjoining natural resource, including habitat fragmentation, soil compaction, increased runoff, and erosion.

For these reasons, providing adequate buffers is an essential part of development planning and design.

Buffer Definitions

Buffers refer to the area between a sensitive ecological system and the edge of a development or construction related to development. It is an area in which no development should occur, with the exception of restoration, management, and stewardship of natural resources. Managing storm water through the use of natural infiltration techniques can occur in this zone if it is done in harmony with the natural systems that are found on the site.

The term “sensitive ecological system” refers to lands where ecological systems exhibit qualities that would be unacceptably degraded (i.e., health, function, diversity, etc.) due to development if a

buffer was not provided. Under this definition, the term is inclusive of all ecological systems that hold the promise of being stable, functioning, and productive systems if managed and cared for through a routine stewardship program.

Consistent with common practice, wetlands, riparian areas, and water bodies are always considered sensitive ecological systems irrespective of their location and current condition. This also holds true for steep slopes and other landscape or geological features that if disturbed would significantly impact other ecological systems. In each case, adequate buffering is essential to protecting these systems.

Buffer width guidelines

Buffer widths vary in response to a number of conditions, including:

- » Sensitivity of the ecological systems being impacted
- » Size and scale of the natural area being impacted (larger areas allow for more liberal buffers)
- » Type of development being proposed and its potential for creating ecological impacts

The type of development is an important consideration when establishing buffer requirements for development. This includes the

trails that will be placed in the greenway system. As a general guideline, figure 5.5 on the next page highlights recommended buffer widths primarily associated with riparian areas. Notably, these guidelines may also have application to non-riparian areas that are considered to be ecologically significant. Given the variability of the situations that may be encountered, the extent to which buffers are provided adjacent to a given trail or development should carefully considered by a trained specialist as part of the development planning and design process.

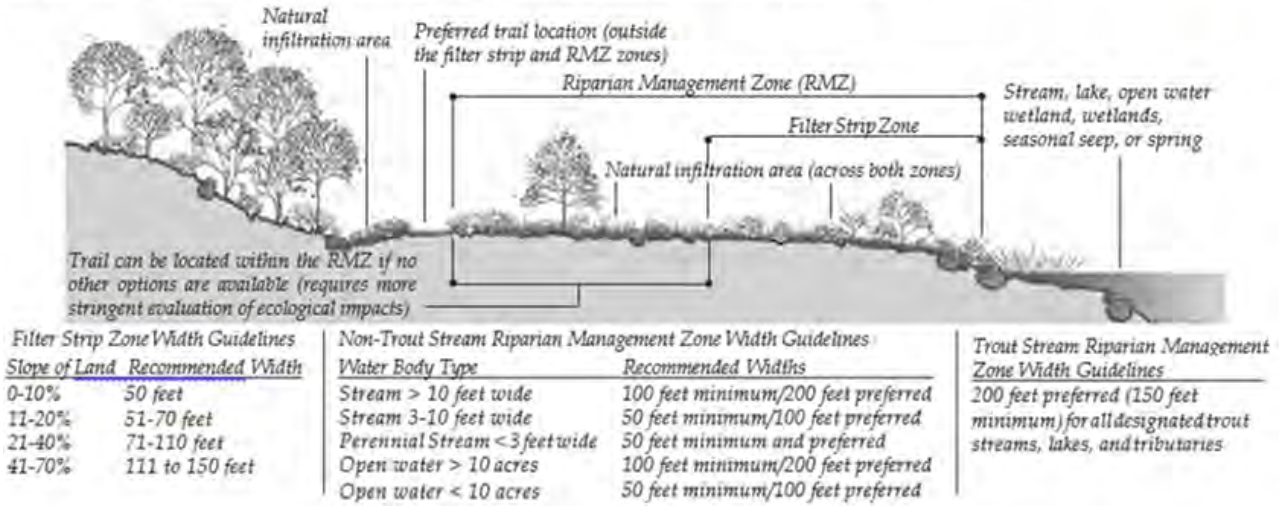
Figure 5.5 – Trails On the edge

General Buffer Guidelines for Riparian Areas

The buffer guidelines are consistent with those recommended in the following publications: *MN DNR Trail Planning, Design, and Development Guidelines (2007)* and *Sustaining Minnesota Forest Resources Handbook (Minnesota Forest Resources Council, 1999)*.

These publications define buffers as “filter strips” for managing non-point pollution near surface water and wetlands associated with timber harvesting, prescribed burning, and construction. The guidelines have application to trail and other forms of development adjacent to perennial and intermittent streams, lakes, open water wetlands, wetland inclusions, seasonal seeps, and springs.

The guidelines also make a distinction between filter strips and riparian management zones (RMZs). Filter strips help minimize the runoff of sediment, debris, nutrients, and pesticides into water bodies and wetlands. RMZs encompass the area of land and water forming the transition from aquatic to terrestrial ecosystems along streams, lakes, and open water wetlands. Within this zone, a higher level of protection is recommended to protect the intrinsic qualities of these ecosystems. This includes greater scrutiny of trail alignments. The graphic and related text define the width guidelines for filter strips and RMZs.



Buffers associated with ecotonal areas

Ecotonal areas are the transition zones between ecological systems where native plant diversity is often the greatest. These areas are also notable corridors for wildlife where animals travel from one type of habitat to another. Poorly placed development can pose significant impediments to travel for some species, even creating “sinks” that trap animals in an isolated area.

Understandably, ecotonal areas also appeal to humans and it is very tempting to place development right along or through the edges of these diverse landscapes. Finding a balance between providing the experience of being in proximity to an ecotonal edge while still protecting the ecotone is a major consideration. A robust understanding of these systems is critical to aligning a trail, for example, in the least disruptive

manner. Even locating a trail a few feet one direction or another can substantially improve the protection of ecotonal areas without diminishing the experience.

Typically, the ecotonal edge is the first 50 to 100 feet on either side of a vegetation transition line, although this can vary considerably. For example, locating a trail or other form of development right along the ecotonal edge should be the exception, not the rule. If trails are located within this zone, careful consideration should be given to minimizing the impact on these diverse systems. As with buffers in general, this typically requires technical evaluation by a trained specialist. Figure 5.6 provides examples of trails on the edge of ecotonal areas.

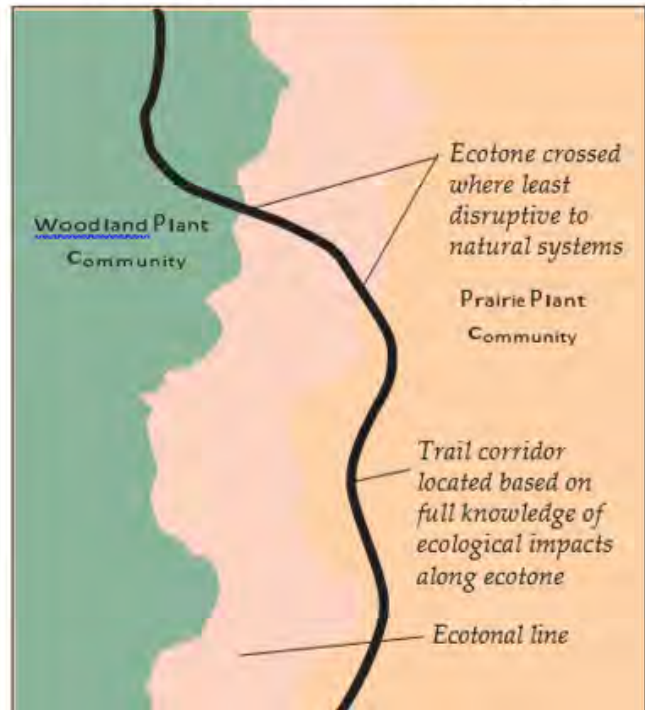
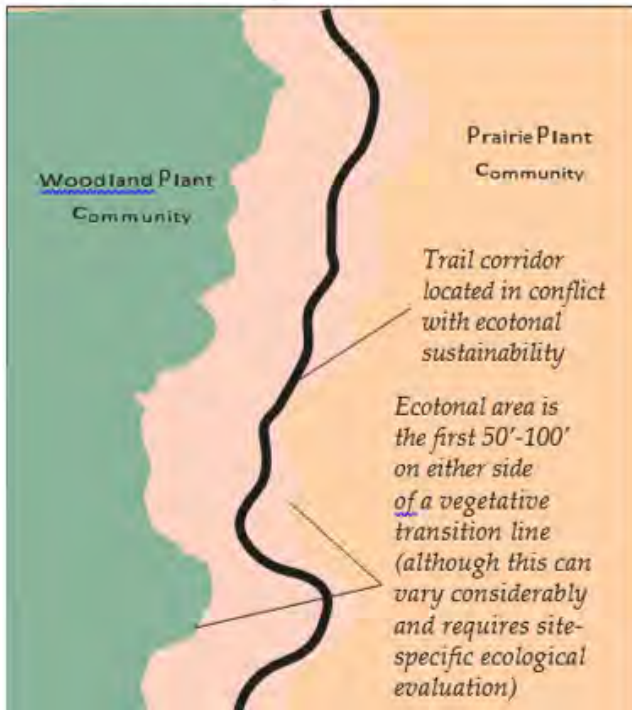
Figure 5.6 – buffer width guidelines associated with filter strips and riparian management Zones

Trail in Conflict With an ecotone

A trail located right along the edge of the ecotone impacts the most diverse area of native plants and disrupts the primary wildlife corridor. It also makes it more challenging to manage the ecotone with prescribed burning since the trail creates an unnatural fire break.

Trail in harmony With an ecotone

A carefully located trail on the periphery of an ecotone but still close enough to enjoy the “edge effect” makes for a pleasant trail that is sustainable. Although all trails impact the site, through thoughtful design they can be much more sensitive to native plant communities and wildlife.



Enhancing Wildlife Habitat

Wildlife habitat is a function of ecological quality. The healthier and more diverse the ecological systems found in the community, the more diverse and rich the array of wildlife that can be sustained. Today, the city still retains a capacity to support a diversity of wildlife, albeit that will become less robust as development occurs over time. Preserving as many of the innate natural qualities of the city, its landforms, access to water, and ecological diversity are especially important to wildlife, especially avian and waterfowl species.

Limiting Habitat fragmentation

Mapping ecological systems, carefully managing the development footprint, and providing buffers adjacent to development collectively reduce habitat fragmentation. In spite of these efforts, fragmentation can still occur if wildlife needs are not specifically considered as development occurs, including development associated with parks and trails.

Limiting the fragmentation of ecotonal areas is especially important with wildlife since many species tend to concentrate along these edges. This is especially true of riparian areas, along the edge between forests and meadows, and areas adjacent to steeper slopes and wetland edges.

The less a trail or other development encroaches into these areas, the less fragmentation will occur.

To reduce habitat fragmentation, the physical design and management of trails and other forms of development should incorporate the needs of wildlife and protect the ecological values that are most important to species of greatest conservation need. The publication entitled *Tomorrow's Habitat for the Wild and Rare: An Action Plan for Minnesota Wildlife* published by the MN DNR is an important resource in this regard and should be referenced as specific development projects are implemented.

Water Resources Management

Water resources management refers to managing storm water across the city in an ecologically-sound manner consistent with the larger ecological vision for the community. The main principles are to manage storm water using natural infiltration methods and preserve natural hydrology across the city as development occurs. Under this approach, storm water runoff from roads, buildings, and other built features will be effectively captured and treated prior to reaching downstream wetland, pond, and lake systems. The following provides a framework for water resource management.

Natural infiltration method as an underpinning for an ecologically-based approach to storm water management

The natural infiltration approach to storm water management relies on passive, overland routing of runoff, as opposed to storm sewers, engineered ponds, and other built structures. This approach offers a couple of distinct advantages over conventional storm water systems (i.e., stormsewers, engineered ponds, and other built structures), including:

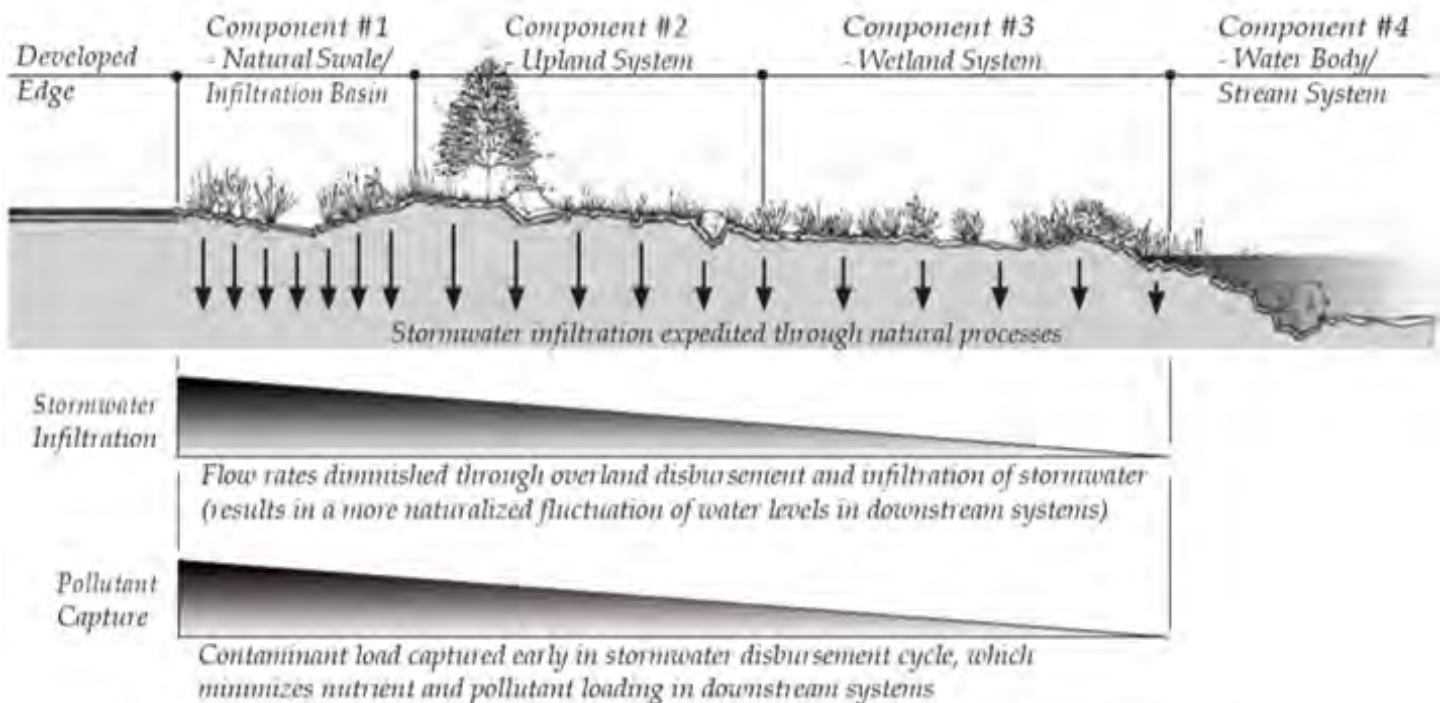
- » Introduced contaminants picked up by runoff are removed at the initial stages of water flowage, rather than being transported to downstream locations and accumulating in wetland, lake, and river systems. This greatly reduces degradation to water quality and vegetative health in downstream systems.
- » Storm water flow rates and volumes more closely emulate natural conditions. This greatly reduces unnatural fluctuations in water levels in downstream systems (wetlands and lakes) and therefore reduces

impacts to the natural condition of water systems and vegetation.

For these reasons, the use of natural infiltration for managing storm water is fundamental to creating sustainable developments where impacts to adjacent ecological systems are kept to a minimum. These systems typically consist of four primary components, as illustrated in figure 5.7.

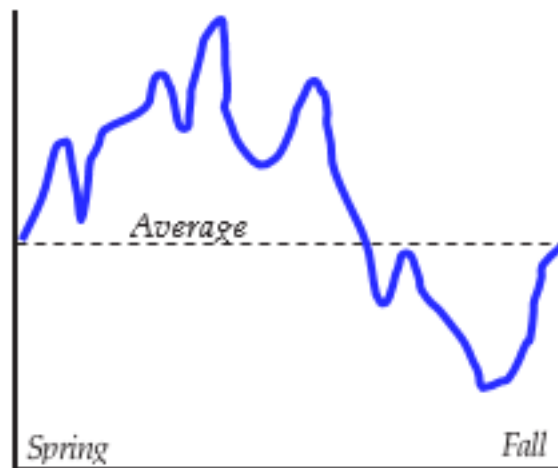
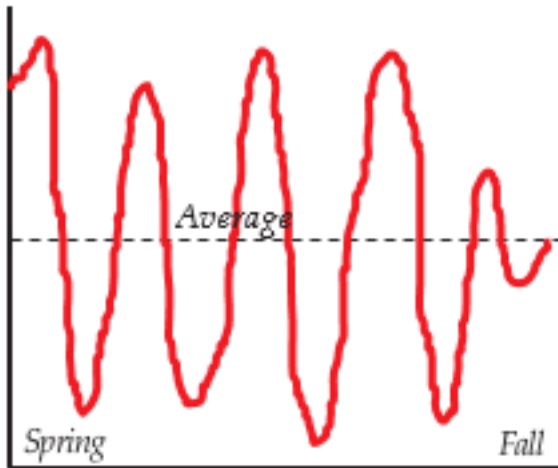
A rain garden is an example of a natural infiltration system increasingly being used in housing developments, parks, and along trails to help manage storm water. The following graphic images provide examples of the growing body of information about rain gardens and similar infiltration approaches. The city should encourage the use of rain gardens and other techniques whenever their application would be beneficial to adjoining natural systems – which is almost always the case.

Figure 5.7 | Natural infiltration system



Hydrograph associated with natural and flow rate control approaches

The use of a natural infiltration system also produces a much more natural hydrograph, resulting in lower peak flows and higher base flows relative to the hydrograph of a typical engineered flow rate control approach, as illustrated in figure 5.8.



Flow-control approach to hydrology:

- » Unpredictable swings in water levels
- » Creates biological instability
- » Promotes habitats for weeds and invasive species
- » Poor aesthetic qualities
- » Promotes poor water quality

Ecological approach to hydrology:

- » Annual seasonal high and low water levels
- » Predictable hydraulics and seasonal trajectory
- » Promotes habitat for stable yet dynamic plant communities
- » Diversity of plants and animals

As the graphic illustrates, there are numerous advantages to using an ecological approach to storm water management, making it the preferred method whenever possible. Engineered or mechanical systems for conveying storm water should only be used when natural approaches are technically not feasible.

Best Practices for storm water management

There are a variety of best practices related to managing storm water, preventing erosion, and limiting non-point water pollution that have application to future development and

complement the guidelines provided in this section. The following highlights several publications that are recommended resources covering many relevant best practices.

Minnesota Pollution Control Agency

The Minnesota Pollution Control Agency (MPCA) has developed a manual entitled Protecting Water Quality in Urban Areas to help local government officials, urban planners, developers, contractors and citizens prevent storm water-related pollution. The manual contains detailed information about BMPs that can be used to protect lakes, streams and groundwater from storm water-related pollution. The manual is available online through their website (<http://www.pca.state.mn.us/water/pubs/sw-bmpmanual.html>) and covers the following topic areas:

- » Water quantity and quality
- » BMP selection
- » Comprehensive storm water policies and plans
- » BMPs for storm water systems
- » Storm water-detention ponds
- » Erosion prevention and sediment control
- » Pollution prevention
- » Models and modeling

Urban small sites best management Practice manual

Available through the Metropolitan Council, The Urban Small Sites Best Management Practice (BMP) Manual provides information on tools and techniques to assist municipalities and watershed management organizations (WMOs) in guiding development and redevelopment. The manual includes detailed information on 40 BMPs that are aimed at managing storm water pollution for small urban sites in a cold-climate setting. The BMP Manual is available online on the Metropolitan Council's website. (<http://www.metrocouncil.org/environment/watershed/bmp/manual.htm>). Key sections that have application to trail development include the following:

- » Runoff pollution prevention
- » Impervious surface reduction
- » Pavement management
- » BMP maintenance
- » Landscape design and maintenance
- » Grading practices
- » Soil erosion control
- » Mulches, blankets, and mats
- » Vegetative methods
- » Sediment control
- » Silt fences
- » Inlet protection
- » Temporary sedimentation
- » Basins/traps
- » Check dams
- » Storm water treatment BMPs
- » Infiltration systems
- » Infiltration basins
- » Infiltration trenches
- » Filtration systems
- » Bioretention systems
- » Filter strips
- » Wet swales
- » Retention systems
- » Wet ponds
- » Detention systems
- » Dry ponds
- » Dry swales

Minnesota storm water manual

This manual is a valuable tool for those involved in storm water management and conserving, enhancing, and restoring high-quality water in Minnesota's lakes, rivers, streams, wetlands, and ground water. The manual is a dynamic document

and revisions will take place every two years, with the most recent version posted on the MPCA website (www.pca.state.mn.us/water/stormwater/stormwater-manual.html#manual)

SECTION 6

IMPLEMENTATION PLAN + ADMINISTRATIVE PROVISIONS



Overview

The system plan establishes an overall vision for the community that is ambitious yet realistic if incrementally implemented. This section sets forth an overall implementation strategy and establishes baseline priorities to guide that process.

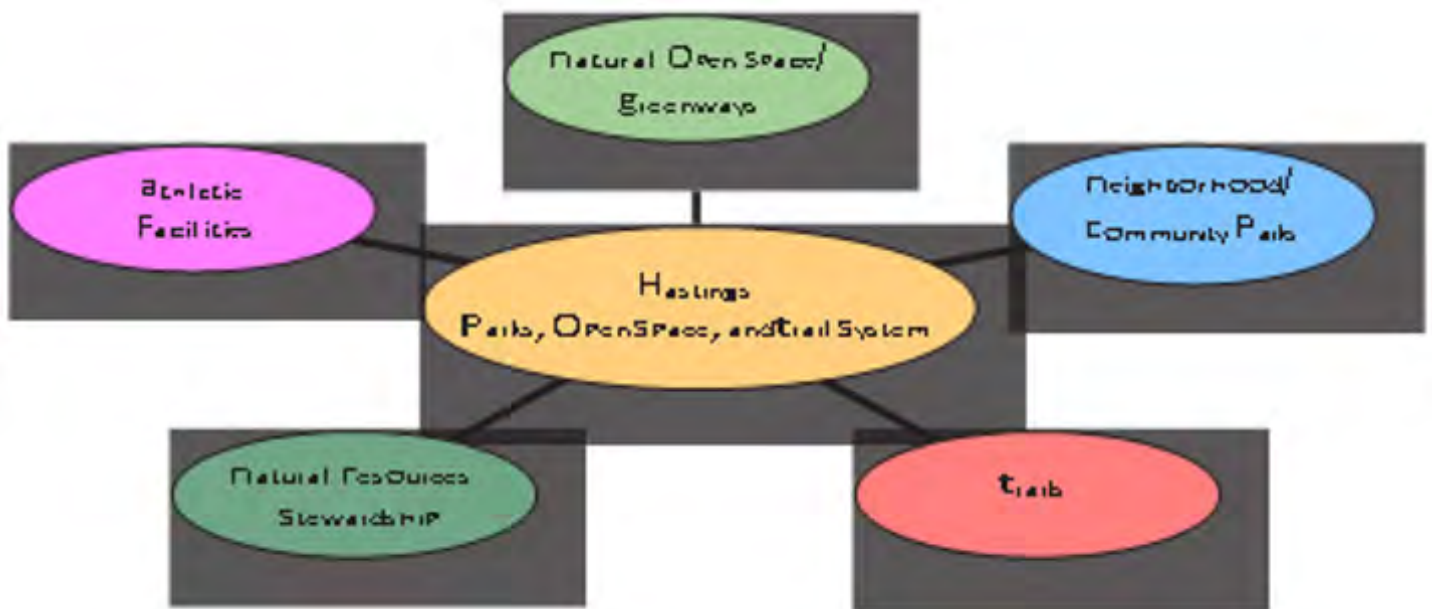
The city at a threshold point

Within the next decade, growth in Hastings will likely continue at a steady, yet manageable pace, bringing along with it new demands for parks, open spaces, athletic facilities, and trails. Thoughtful and prudent implementation of the system plan will be critical to being successful in meeting needs in a fiscally responsible and balanced manner. By taking an assertive role in managing implementation of the plan in sync with

community development, the City can gain greater assurance that the quality of life values held by residents will be realized in the future. Success in this regard will require insightful leadership and a willingness to use a variety of approaches to managing development and leveraging financial resources (public and private) to achieve desired public values.

A Balanced Approach to Implementation

As defined in Section 2 – Vision Statement and Policy Plan, a key principle of the plan is taking a balanced approach to implementation to ensure that multiple community values are being realized and that the wide-ranging interests of residents are well served as time goes on. A balanced approach also provides the City more latitude in taking advantage of opportunities as they arise. As the following graphic illustrates, the system plan consists of five implementation categories, each having its own set of priorities.



An overall implementation strategy and set of priorities for each of these components is defined in this section.

A Disciplined Approach to System Investments

An important consideration in developing an implementation strategy is that the opportunities to enhance the system are quite substantial and diverse. The magnitude of potential investment to achieve full plan implementation will undoubtedly require setting priorities that respond to realistic limitations of resources.

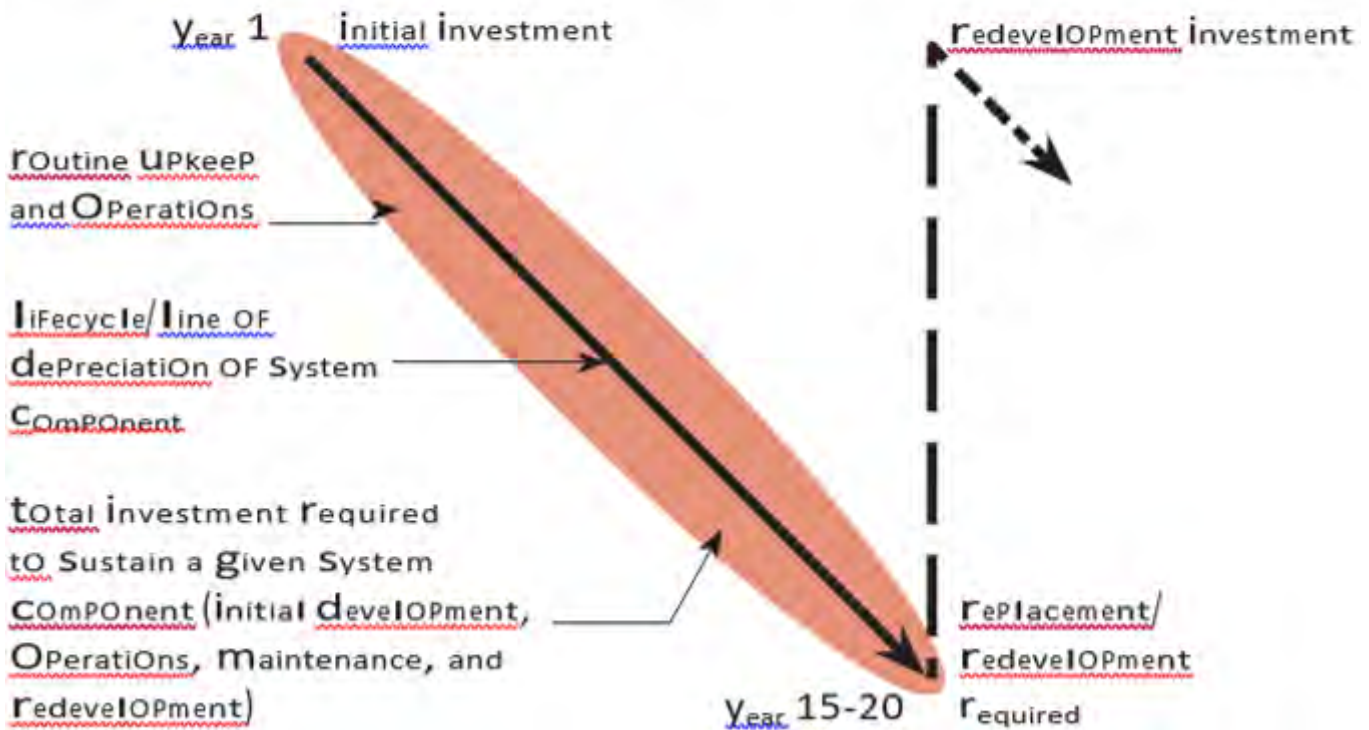
The temptation to spread investment dollars too thinly across the entire system is also a major implementation consideration. Unfortunately, this strategy often falls short in that limited improvements do not have a major effect on the public perception that the quality of the system has improved. This often leaves residents with a sense of unmet expectations, which can result in a decrease in the perceived value of the system, rather than an enhancement.

By focusing on raising the level of service through strategic and prioritized investments, the role that the system plays as a defining element in the City's infrastructure can be strengthened.

Long-term Commitment to a Sustainable System

A sustainable system is the point to which the community is willing to support implementing the system plan to receive desired public benefits. Benefits relate to cultural (personal and social), ecological, and economic values that individual residents and the larger community find important and are willing to support by making investments in the system.

Figure 6.1 – lifecycle costs and long-term commitment to sustaining each system component



To be sustainable, implementation of the plan must take into account the long-term commitments required to develop, operate and maintain, and ultimately replace each aspect of the system as it moves through its life-cycle. Figure 6.1 illustrates this important point.

As illustrated, the total investment required to sustain a given component of the system is the cumulative cost for initial development, routine operations and maintenance costs, and redevelopment once a given park or trail reaches the end of its useful life-cycle. Given the major implications to long-term funding, the City should define the level of service it can indefinitely sustain at the point of initial implementation.

Prioritization Criteria for System Initiatives

The following table outlines general criteria for prioritizing plan implementation. The criteria are broad enough to encompass the predominant factors in the decision process, yet limited enough to be manageable for decision makers to gain consensus and take action.

Evaluation Criteria	Criteria Description
Community Demand	Action is warranted due to identified community demand based on needs assessment studies and defined trends.
Recreation Program Need	Action is warranted based on current and projected city and local associations' recreation program facility demands.
Redevelopment/ Upgrading of Facility	Action is warranted due to facility being: <ul style="list-style-type: none"> • In an unsafe condition or of poor quality • Old and at the end of its useful lifecycle • Ineffective at servicing current needs
Development Patterns and Population Density	Action is warranted to service the needs of an area based on: <ul style="list-style-type: none"> • Current and projected residential development patterns • Current and projected population and demographic profiles
Funding Availability/ Partnership Opportunity	Action is warranted due to: <ul style="list-style-type: none"> • Funding availability for specific use • Partnership opportunity for specific type of development
Preservation of Significant Natural Resources	Action is warranted to preserve and/or enhance significant natural resources in the city.

Prioritization Criteria for System Initiatives

The strategy for implementing the system plan and establishing priorities is underpinned by two objectives:

1. Developing a balanced system offering multiple community values
2. Taking advantage of opportunities as they arise

At times, these objectives will be in conflict in that opportunities to develop various aspects of the system will present themselves in an unbalanced, “out-of-order” manner. As such, the implementation of the plan inherently requires some degree of flexibility to respond to opportunities as they arise. The PRC and City Council will have to consider these issues as they occur and determine the best course of action, which could include a rethinking or departure from the stated priorities.

Implementation priorities between system categories

The following table establishes priorities between categories and the underlying rationale for one priority over another. Note that this is not absolute, which means that if an opportunity to implement a lower priority presents itself, the City should take advantage of it before the opportunity is lost.

Priority	Category	Overall Priority Statement
1	Relationship with School District	The interdependency of the park, open space, and trail system and recreational programming between Hastings and the School District is vital to effectively and efficiently meeting local needs. Ensuring that this is accomplished in a fair and equitable manner is critical to long-term success. As such, reevaluating the relationship and updating formal agreements is a top priority that can be acted upon in the nearer-term.
2	Athletic Facilities	Athletic facilities are listed near the top in terms of priority due to the importance of 1) setting aside reserve land for future use, 2) the need to address existing imbalances in supply and demand, and 3) enhancing the City's capacity to track demand.
3	Open Space and Greenways	Setting aside lands for open space and greenways is a top priority because it is intrinsically linked to community development. Setting aside this land must occur as part of that process if it is to occur at all. Following through on the system plan will also require a close working relationship with adjoining townships in terms of managing development to achieve desired ends.
3	Trails	The implementation of many of the highest-value trails is also intrinsically linked to community development, especially the destination trails that would traverse the greenway system in future areas of annexation. Given its routine rating as the highest value recreational activity by people across age groups, developing the trail system is justifiably a very high priority within the city. As with the greenways, most of the destination trails need to be established as part of the development process if they are to occur at all.
4	Parks	Continued development of the park system remains important to serving traditional recreational needs. This falls slightly behind the other priorities larger due to the greater immediacy of addressing athletic facility supply and demand issues and taking advantage of opportunities as development occurs. In addition, the upgrading of many of the neighborhood parks first requires shifting programmed athletic uses to the athletic complex or select other parks. The extent to which this occurs will have an effect on the design for a given park.
5	Natural Resources Stewardship	With the ever increasing value that society places on preservation of remaining natural areas, establishing a stewardship program will become an increasingly significant priority. It is rated lower at this point since much of this relates to lands that have yet to be set aside as future open space and greenways, which will occur as development pushes out into surrounding township.

The following defines the implementation strategy and priorities associated with each to the categories listed in the above table.

Implementation strategy for enhancing the relationship with the school district

Hastings and the School District each play a vital role in the success of the system plan. Whereas this partnership offers many benefits, it also requires diligence in terms of defining responsibilities and commitments to fairly and equitably implementing the plan over time. Key action steps include:

1. Preparing or updating existing formal agreements related to planning, land acquisition, development, operations, and maintenance of joint use facilities involving Hastings and School District; this is especially important with respect to athletic facilities.
2. Preparing or updating existing formal

agreements related to recreation programs serving Hastings residents; this will also involve the School District and local associations as providers of recreational programs and services.

3. Formalizing the coordination between Hastings, School District, and local associations on tracking registration and participation in recreational programs; this includes the use of a common scheduling system to ensure the efficient use of recreational facilities.

Implementation strategy for athletic facilities

The implementation strategy for athletic facilities centers on making sure that adequate reserve land is set aside so that longer-term facility needs can be efficiently and effectively met. This is especially important given that developing one larger complex is the most efficient and desired approach relative to developing several smaller facilities. It also centers on starting to shift programmed uses away from neighborhood parks to the athletic complex over time. Key action steps include:

1. Formally set aside reserve land in order to ensure that adequate land is available for expansion of facilities over time

2. Prepare a 5-year Plan for development/redevelopment of select athletic facilities as defined in Section 3; focus should be on reducing organized athletics within the neighborhood parks and moving them into an athletic complex for all of Hastings.
3. Initiate implementation of a common system between Hastings, the School District, and local associations for tracking registration and participation in recreational programs and managing facility scheduling where appropriate.

Implementation strategy for preserving natural open space

Implementing the natural open space will require the use of a variety of strategies as defined in Section 3 – Parks, Athletic Facilities, and Open Space Plan. The most important of these is greater reliance on a collaborative approach to land development where open space, trails, and park amenities can be more fully integrated into private developments.

The use of alternative strategies defined in Section 3 are relatively straightforward but also represent a significant departure from traditional land development practices. Making this transition will require a good-faith partnership between the City, landowners, and developers – along with a willingness by all parties to be flexible. Key action steps to enhance each parties' confidence with this approach:

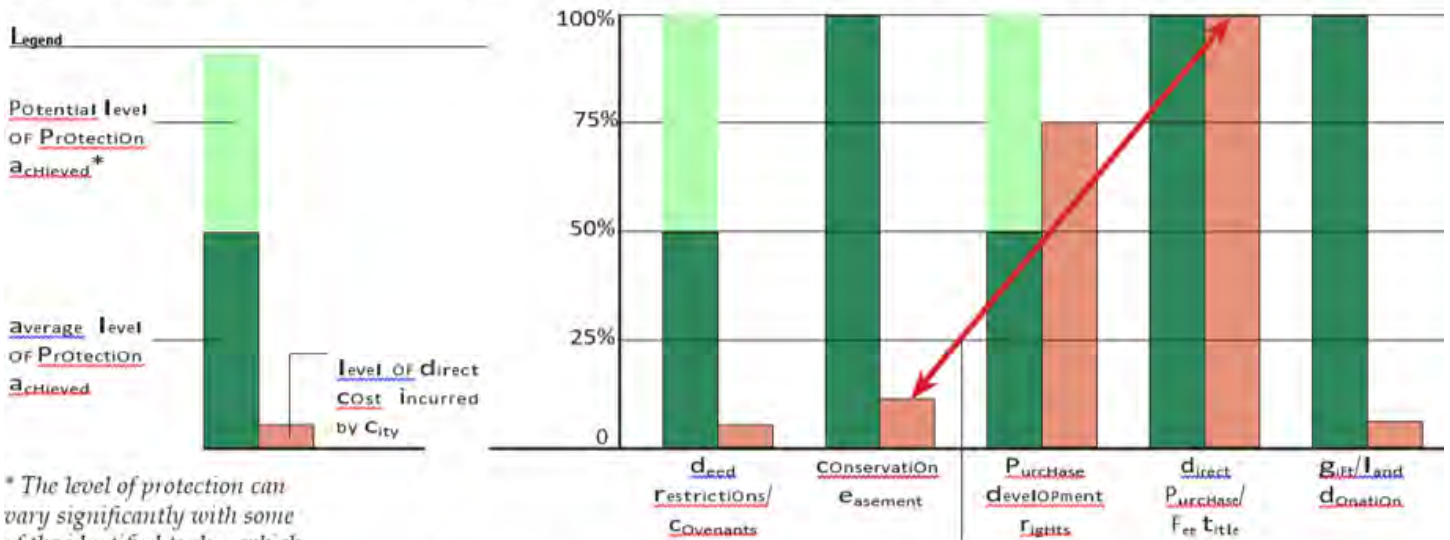
1. Develop a prototype process for public values-based or conservation development approaches through a hands-on working collaboration between the City and developers for select development parcels.
2. Formalize the use of alternative approaches as part of the City's tools for managing development; this includes updating the Comprehensive Plan and zoning, subdivision, and platting ordinances to reflect these approaches.

The importance of thinking differently about managing development cannot be overstated. Lacking the flexibility that the aforementioned alternative approaches provide both the City and the developer, implementing the open space system plan to its fullest potential becomes much more uncertain, if not unrealistic.

One of the key values of the alternative approach is that it allows the mixing and matching of strategies for protecting and managing natural resources, as defined in Section 3. Figure 6.2 illustrates the cost-benefit to the City associated with a number of these strategies.

As the graphic illustrates, gifted or donated land offers the highest cost-benefit to the City. However, this cannot be relied upon as the primary tool for setting aside open space since most decisions on land uses will be driven by economics. Second to this, conservation easements offer the greatest cost-benefit to the City under the assumption that perpetual easements can be negotiated with a landowner or developer during the development process. Stringent attention to the details of the conservation easement is also critical to ensuring long-term protection of the resource.

Figure 6.2 | lifecycle costs and long-term commitment to sustaining each system component



* The level of protection can vary significantly with some of the identified tools – which underscores the importance of selecting the most predictable tool whenever possible to ensure long-term protection of the resource.

In Hastings, direct purchase of land for greenways and natural open spaces to the extent envisioned under the system plan will likely be cost prohibitive, especially as land values continue to escalate. Therefore, the use of other lower direct-cost tools such as conservation easements will be imperative if the City is to achieve its vision.

Deed restrictions are also a low cost alternative, but the level of protection is at the discretion of the landowner, which can change from year to year. Direct purchase is also an option for full protection, but carries with it the highest direct cost to the City of any of the options.

to development is that it leverages the economies of the development itself to fund desirable public values, such as conservation easements. In other words, this approach works toward the greatest level of open space protection (and other public values, such as trails) with the least amount of direct City capitalization.

One of the strengths of the alternative approach

Implementation strategy for trails

The implementation strategy for greenway-based destination trails parallels that which is recommended for the greenway system. Specifically, these trails should be considered one of the public values being sought as part of the development process. As with greenways, the City will need to collaborate with developers to leverage the economies of each development to help fund these trails. Direct public funding may also play a role in implementing the greenway-based trails consistent with its standard trail

development policies.

The strategy for other trails within the system will be consistent with past practices of prioritizing and developing trails in line with available resources. The City should establish a five-year trail program that defines key priorities. Trails that serve the greatest public good in terms of recreational, transportation, and safety values will be the highest priorities.

Implementation strategy for Parks

Based on the limited funding available from outside sources, implementing the neighborhood and community park system plan in the near term will continue to rely on traditional funding sources (i.e., park dedication fund and, at the discretion of the City Council, CIP or referendum funding.) Under this scenario, development of individual parks will continue on a priority basis consistent with past practices and available funding. Under a limited funding scenario, being disciplined to funding key parks first will put the City in the strongest position to meet the basic recreational needs of the community.

In the longer term, the City should continue to monitor citizens' support for alternative funding programs (i.e., referendum). Key action steps for

developing the park system include:

1. Establish an initial five-year park improvement program specifically focusing on neighborhood and community parks as defined under the system plan. This should include a determination of desired service levels throughout the system, as figure 6.3 considers. The program should be consistent with anticipated funding levels.
2. Prepare a master plan for priority parks consistent with the five-year park improvement program. This should include a development cost estimate and listing of priorities for each park.
3. Undertake park improvement projects consistent with funding availability and set priorities.

Figure 6.3 | Potential development costs for Parks



The potential development cost for a neighborhood-level park is highly variable and depends on the service level desired by the community. Basic service levels are most common in small communities with limited population and tax base to fund development. A community like Hastings typically falls into the upper basic to medium service level, with \$200,000 to \$300,000 being common general budgets for new neighborhood parks. Higher service levels are typically in urban or suburban areas where population density is higher, as are expectations for park and recreation services.

Implementation strategy for natural resources stewardship

Developing and implementing a natural resources stewardship program is also an important priority. As defined in Section 5 – Natural Resources Stewardship Plan, a formal program will be needed as open spaces are preserved if the long-term health of the natural systems within these areas are to be assured. This is particularly important in that stewardship is a long-term endeavor where results from near-term actions (or the lack of action) will be most evident years into the future. The action steps defined in Section 5 outline the specific strategy for developing this program. The most critical factor in this endeavor is securing a perpetual funding source. Lacking this, gains made during initial phases of the program can be easily lost if not followed by continued investment in management in future years.

The funding requirements for each phase of stewardship varies considerably. Figure 6.4 provides an overview of how the three phases relate to each other in terms of funding levels.

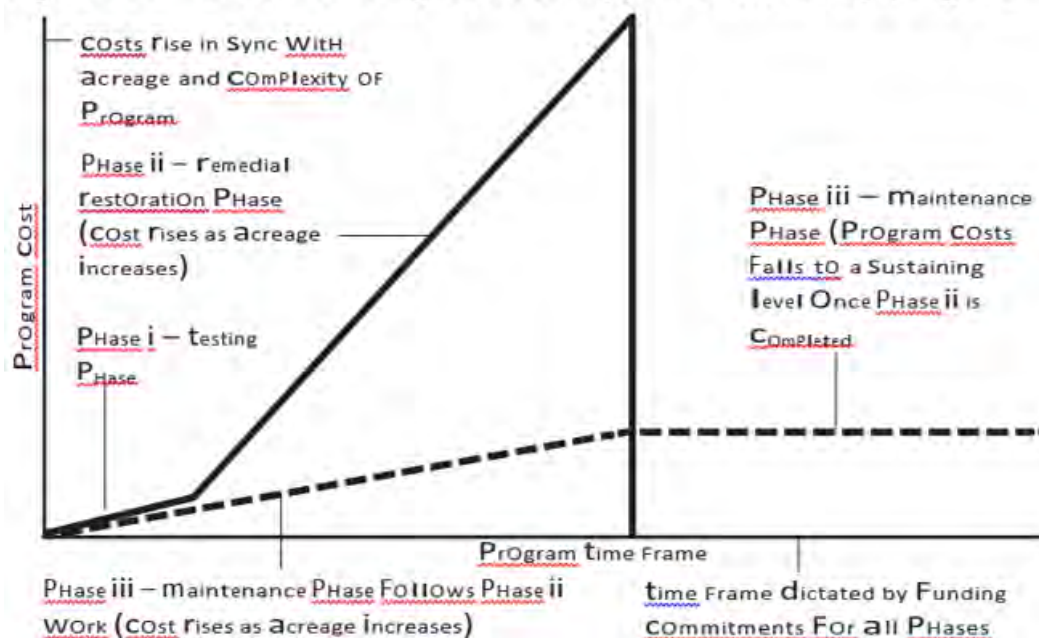
As the graphic illustrates, the cost for restoring or stabilizing natural systems far out-paces the costs of taking care of it once that is completed. Through proper management, the extra costs associated with restoration can be controlled over

time as long as the maintenance phase continues indefinitely. Also, the longer that natural systems remain in a state of decline before efforts are made to manage them, the more expensive and scientifically challenging it will be to restore them.

Key action steps for establishing a stewardship program for publicly-owned lands and other open space lands set aside in conservation easements:

1. Establish a formal process for negotiating stewardship programs and funding mechanisms as part of new developments where land is set aside in conservation easements. The program should set forth funding level requirements and administration/oversight of funding use to achieve stewardship objectives.
2. Establish an initial five-year stewardship program for publicly-owned natural open space lands. The intent is to begin the process of managing natural resources and building the City's capacity to fund the program on a long-term basis. This should include a formal process of defining new ways in which this type of program can be funded given the potential long-term costs of the program. (It is unlikely that sole reliance on CIP type funding program will be sufficient to accomplish this goal.)

Figure 6.4 – shifts in funding levels to support stewardship program



Funding Options

The availability of funding to implement the System Plan will have direct impact on the level of development that can be undertaken. At the local level, the vast majority of direct funding will come through the park dedication fund, CIP, local referendum, and (increasingly) partnerships with developers to set aside open space and provide long-term stewardship funding.

Local level funding options

The park dedication fund provides funding for parks as long as community development continues to occur. Any controls imposed on the extent (i.e., total number of units) or rate of development (i.e., number of units per year) allowed within the city will limit the revenue generated under this fund. In cases where land is taken in lieu of fees, the fund balance for park development is further reduced. This reality underscores the need for the City to regularly review its park dedication policy relative to park needs and land values. As justified, fees should be periodically adjusted to keep pace with park development costs if the park dedication fund is to remain a viable tool for improving the park system.

Even with periodic adjustments, park dedication fees alone will not be adequate to fund the system plan to an optimal level. Realistically,

both new and existing residents will have equal responsibility to bear the costs of developing the system through local taxes. Practically, the local CIP will have to be relied upon to a greater extent for funding portions of the system plan if it is to be implemented. The City also has the option of undertaking a local referendum to provide capital for system improvements.

At the local level, indirect funding of the system will also be vital to implementing the system plan. This is especially the case with greenways, greenway-based trails, and natural resource stewardship programs. Collaboration with the development community and leveraging the economies of the private sector will be critical to realizing these aspects of the system plan.

Operations and maintenance funding

As with capital investments, funding ongoing operations and maintenance is a local government responsibility. The challenge lies in that it is difficult to use capital dollars generated from park dedications, certain taxes, or a bond referendum for operations and maintenance functions. In general, funding for operations and maintenance is covered through the City's annual budget.

The most critical aspect of operations and maintenance funding is that it keeps pace with the overall development of the system. To ensure that this happens, the City should define potential increases in operations and maintenance costs as part of all capital improvement projects and budget for these costs accordingly.

Other funding sources

In addition to local funding sources, there are a number of other potential sources of funding, as

defined in figure 6.5 on the following table.

Figure 6.5 – lifecycle costs and long-term commitment to sustaining each system component

Source	Description/Overview	Probability
State Outdoor Recreation and LCCMR Grants	The State of Minnesota annually allocates funds for park acquisition and development projects that meet recreational needs identified by the State Comprehensive Outdoor Recreation Plan. The grants are competitive and awarded through the Department of Natural Resources according to project merits.	Qualifying for funding for restoration and management of the City’s natural resources has some potential. Very competitive.
Land and Water Conservation Fund	The federal government allocates monies each year to states for public acquisition and development projects. The State of Minnesota administers these grants through the Department of Natural Resources.	Funding availability through this program has been limited in recent years. However, there is a growing likelihood that this program will be funded at a higher level in forthcoming years.
ISTEA / T-21	The federal government allocates monies each year for alternative forms of transportation, which includes bicycle trails that focus on transportation.	Funding availability through this program has been robust in recent years. The potential for receiving funding for local trails is relatively high.
Fees/ Enterprise Funds	Minnesota statute allows cities to prescribe and provide for the collection of fees for the use of any city park or other unit of the city park system or any facilities, accommodations, or services provided for public use therein.	Becoming a much more relied upon funding source, especially for singular use facilities ranging from ballfields to picnic shelters.
Partnerships	Relates to partnerships formed with adjacent cities, the county, and school districts to develop, maintain, and operate parks and recreational facilities on a joint-use basis.	With limited funding options, forming partnerships to spread the cost of providing a specific type of service will play a critical role in funding park and recreation initiatives.
Donations	Relates to cash donations, gifts, volunteerism, and professional services donated to the park for planning, acquisition, or development purposes.	Limited potential from a cash perspective, but important with respect to the use of volunteers to offset some program costs.

Although these grant and alternative programs can provide meaningful local funding for certain types of developments, they can only be counted on for augmenting local sources. Ultimately, it will

be up to the local citizens to decide the value that they put on the parks, greenways, and trails in the community, and fund them accordingly.

Administrative Provision – Interrelationship with Community Education

For many years, School District 200’s Community Education program has provided a variety of educational and recreational programs for the residents of Hastings and throughout the school district. In concert with Community Education, the City will continue to refine its approach to recreation programming and leisure services based on feedback from the community and cost-benefit analysis. As determined appropriate by the PRC and City Council, the City will continue to collaborate with Community Education to ensure that residents have extensive opportunities to participate in a variety of recreational and enrichment programs and services. Through an effective working partnership, it is believed that local residents will have ever-increasing opportunities to participate in programs that are locally-based and cost effective while fostering community spirit and enhanced quality of life.

As part of this process, the City should closely monitor the cost-benefit of services it receives to ensure that residents receive the highest value relative to resource investments. As part of this, existing agreements should be reviewed and updated to make sure they are consistent with current needs and expectations. Evaluation of fees and charges should also occur on a scheduled periodic basis.



Administrative Provision – Interrelationship with Local

The main purpose of the facility use policy is to prioritize scheduled access and use of parks and facilities in the City of Hastings. The following outlines both mandatory and suggested guidelines for managing this issue.

General relationship between the city and local associations

The City of Hastings fully supports organized local athletic associations providing programs and services for the betterment of youth and adults in the city. To this end, the City is committed to providing facilities and material support deemed reasonable by the PRC and City Council to support these programs. Further, the City, in concert with Community Education, will actively coordinate program offerings to effectively and efficiently meet community needs while avoiding duplication of efforts.

In return, local associations must commit to the City that program offerings are mindful of the public health, safety and welfare and are fair and equitable to all residents. In addition, it is the City of Hastings's policy that the public is best served when there is only one independently incorporated local association per sport or activity. The City also understands and supports that in some cases the public and volunteers are best served by having the traveling component of a particular sport administered by its own independent local association. In such cases, a clear link between associations must be apparent, that each complements the other, and that duplication of effort and use of facilities is avoided.

At its discretion, the City of Hastings may charge differing facility use fees as deemed appropriate by the PRC and City Council to discourage formation of new local associations that compete with existing athletic associations and/or create a need for duplicate services, which the City of Hastings views as not in the public's best interest. Further, any new associations that compete with existing athletic associations will be of lower priority and will not be assured of timely access to facilities or other material support.

The City of Hastings will not provide any administrative or professional recreation staff liaison assistance to competing local associations determined to be duplication of service and not in the public's best interest.

The City of Hastings also expects local associations to provide programs in a manner that is in keeping with the City's vision and policy plan as defined in Section 2, or otherwise documented by the City.

Scheduling priority for facilities provided by the city

Scheduling priority for facilities relates to all parks and recreation facilities owned or operated by the City as defined in this document or otherwise provided by the City. Examples include athletic fields, outdoor basketball courts, outdoor hockey rinks, etc. At all times, the City reserves the right to determine if a facility is considered “a scheduled facility” or not. In other words, the City may decide that it is in the public’s best interest to periodically not schedule specific facilities for purposes of the need to rest a field for maintenance or safety or make a specific park or facility available to the public at large due to demand or its classification. At the discretion of the PRC and City Council, certain City-owned facilities may be exempted of this policy and be administered under separate policy.

Local associations that meet the stated guidelines and request permitted use of a facility for a single use or ongoing program will be granted that opportunity based on the following priority of use schedule, and within the adopted standards for number of uses per team.

Priority #1 - City Programs

City provided programming and services will be the top priority for facility use. Examples include summer playground programs and special events open to the entire community.

Priority #2 – Youth Programs

Youth programs (18 and under) that are members of an independently incorporated local association currently recognized by the City of Hastings as the official organization for that particular program offering. One association per sport/activity will be given priority status based on seniority and number of participants. All recognized non-profit organizations must follow these general guidelines:

1. 75% of participants shall be City of Hastings, defined as youth residents 18 years old and under living in Hastings, or who go to school in Hastings
2. Association or Club is a non-profit organization as defined by State statute
3. Association or Club must file a financial

statement with the City each year that will be made public upon request; this statement must indicate revenue, expenditures and fund balances

4. Association is open to all Hastings residents and may not discriminate based on race, ethnic background, or religion, or ability; however, team assignments may be based on ability
5. All board meetings are open to the public, with the exception of personnel issues and litigation
6. Organization must have an open process for parents to discuss concerns or recommend changes to the organization
7. Teams are playing during the designated “primary season”
8. The organization must abide by the City of Hastings core values and strategies for promoting healthy youth through involvement in programmed activities as may be developed in forthcoming years

Priority #3 – Community Education Programs

School District 200 Community Education programs, such as curriculum programs, interscholastic team practices, games, tournaments, etc.

Priority #4 – Adult Programs

Non-profit adult associations or organizations that have 60% or more Hastings residents during the designated primary season. Adult “residents” must either live or work full-time in Hastings.

Priority #5 – Service Groups

Hastings non-profit public service groups using City facilities to raise money for the benefit of the entire community.

Priority #6 – Local Businesses and Groups

Businesses and neighborhood groups located in Hastings during the designated primary season.

Priority #7 – Youth Programs, with Lower Percentage of Resident Participants

Non-profit youth associations or organizations that have 60% or more Hastings residents during the designated primary season.

Priority #8 – Secondary Season Youth Programs

Priority #2 local associations during a secondary season.

Priority #9 – Non-Affiliated Associations

Youth and adult teams not affiliated with a Hastings non-profit organization. These teams are scheduled on a first come, first served basis after

Field use fee

The City will set fees prior to each season of use by the various local associations and other prioritized uses. All fees, any outstanding bills, and a complete participant roster (where applicable) must be submitted to the Parks and Recreation Department before any scheduling needs will be considered for a given season or event. This fee will be used to cover basic services including, but not limited to, coordination of scheduling and maintenance, providing portable toilets at select locations, and general field set up for games. Excluded items include maintaining a field more than once each day, providing extra portable

Facility use permit

Priority #3 through #9 teams must have an approved Hastings Park and Recreation

Preemptive clause

The City of Hastings will make every effort to avoid preemption of scheduled events once a facility has been reserved and all requirements are met. However, the City reserves the right

Administrative Procedures

The following procedures will be used for administering facility use policies:

1. Fees for use of scheduled facilities will be subject to change each year at the discretion of the PRC and City Council.
2. The City will establish dates each year by which teams must commit requests for reservation use in order of priority status. After that date, fields, or facilities will be reserved on a first come, first served basis.
3. If associations or organizations are at the same priority level offering the same sport activity

higher priority teams have had an opportunity to schedule their season. At least 50% or more of the participants on each team must either live or work full-time in Hastings. Facility reservations will be limited to home games only, and team practices are limited to a maximum of one per week (may only have one game plus one practice per week maximum).

toilets and/or cleanings, or moving bases.

At the City's discretion, fees for priorities lower than #2 as previously listed typically covers use only. No maintenance will be performed nor may any changes be made to facilities by the persons/groups making the reservation unless expressly allowing in the permit. Any maintenance or changes to fields may be requested and will be reviewed for feasibility. If the City is able to honor requests, fees will be assessed based on actual expenses incurred as determined by the City.

Department Facility Use Permit to have access to scheduled facilities.

to preempt a scheduled event at a scheduled facility when in the City's best judgment, the preemption is in the community's best interests.

for the same age group and gender, then the team or organization that has the highest seniority will receive the higher priority status for reservations.

4. Any organization that fails to provide for and follow the guidelines set forth by the City, or provides false information on a permit application, is subject to revocation of its permit at the discretion of the PRC and City Council.
5. No organization will be allowed to sublease the City's facilities without City approval.

Administrative Provision – Shared Responsibility Agreements

As defined in other sections, maximizing the level of cooperation between the City and School District is at the core of economically and effectively servicing all of the community's parks and recreational needs. It is important to recognize that the objective of these joint-use agreements is for the City to derive some quantifiable benefit from forming a partnership, versus going it alone, even though the agreement itself may not represent an even split with respect to commitment or responsibility.

Having very clearly defined shared responsibility agreements in place between partners is critical to describing each party's commitments to equitably and predictably implementing the system plan. Key elements of these agreements include:

- » Equal representation – each partner, through mutual agreement, should appoint a staff person to represent their interests in any agreement
- » Ongoing communication – between representatives should be undertaken to define the issues and take action on directives from elected officials
- » Implementation planning – clearly defines the commitments and responsibilities of partner on an overall basis and on a specific facility basis

On an overall basis, the shared responsibility agreements should clearly define mutual goals and general principles of the process. The goals, objectives, and policies as defined in Section 2 – Vision Statement and Policy Plan should provide a starting point for this process.

On a specific facility basis, the shared responsibility agreements should clearly define the specific responsibilities of each partner involved in the acquisition, development, operation, and maintenance of a particular facility. These detailed agreements are vital to the success of the system plan because it is at this level at which actual implementation takes place.

General agreement Parameters

The following defines the general format for shared responsibility agreements associated with recreational facilities:

- » Name of Project/Park Site: Defines the name for the site and its classification as part of the system plan
- » Parties to the Agreement: Defines the parties involved in the agreement and key points of contact/administrator
- » Date and Term of Agreement: Defines the starting and ending date of the agreement, and any provisions for annual review (to assure that the agreement is meeting its objectives) and terms of renewal (often automatically on a yearly basis unless requests are made for revisions)
- » Site Description: Clearly defines the property limits, including legal descriptions as appropriate
- » Ownership: Clearly defines legal owners of the property and specifies any long-term ownership intentions with the property
- » Lease Agreement: If a particular parcel of property is leased to the City (or visa-a-versa), the conditions of the lease arrangement should be clearly defined
- » Development Program and Site Master Plan: Clearly defines how the site will be developed in the future; this should include a written program defining all facilities and site amenities along with a graphic master plan illustrating the layout of key development features
- » Land acquisition responsibilities: Clearly defines each party's responsibility related to funding land acquisition; the time frame for acquisition should be clearly defined
- » Development Responsibilities: Clearly defines each party's responsibility related to funding development and

administration of the development process through final construction; the time frame for development should also be clearly defined

- » Operations and Maintenance Responsibilities: Clearly defines each party's responsibility related to operating and maintaining the facilities; this should be very specific and include a facility-by-facility breakdown; also important is to define which party has the authority to limit use of a particular facility for maintenance purposes, which is typically given to the party who is responsible for maintaining the facility; the expected level of maintenance should also be defined, such as "safe, sanitary, and operable conditions shall be maintained at all times"
- » Programming and Scheduling: Clearly defines each party's use of the various facilities and the manner in which they are scheduled, including which party or users have priority status

- » Insurance: Clearly defines the level of insurance each party must carry; typically, each party carries liability insurance for the site and lists each other as "additional insured"
- » User Fees and Income from Activities: Clearly defines how user fees, if collected, and other income will be used; typically, user fees and income are used to off-set debt and operational/maintenance costs
- » Review Process: A provision should be included establishing an agreement review process
- » Rules: Clearly defines the standard operational rules, such as time of operation, reservations, use of facilities, etc.

Although shared responsibility agreements have legal standing, it is important that they be written to be understandable by those responsible for implementation, namely the PRC and City of Hastings' and School District's staff, maintenance crews, and programmers.

Administrative Provision – Public Involvement

Hastings is committed to continuing public involvement through the implementation of the system plan. The degree to which this will occur will vary depending on what aspect of the plan is being implemented. For larger scale projects, such as the development or redevelopment of a neighborhood park, public involvement in the actual design process will be fairly extensive and involve representation from key stakeholders.

In addition, forums for broader public input (e.g., open houses and presentations) would also be used as needed to communicate and exchange ideas with interested citizens. For smaller scale projects, notifications of interested parties would be a more appropriate approach.

The objectives associated with involving citizens in the implementation process include:

- » Determine who the stakeholders are and their interest in a particular development initiative
- » Understand their needs and unique perspectives
- » Identify and understand concerns and problems
- » Develop alternatives and find appropriate solutions with input from stakeholders

In addition to formalized processes for particular projects, Hastings will use the PRC to advise the City Council on development initiatives as they occur. The public is welcome to attend its regularly scheduled meetings. Also, Hastings uses numerous tools to provide a consistent level of communication with interested citizens.