GREEN SPACE MASTER PLAN

Approved by Council – August 2014

Prepared by Dillon Consulting Limited

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ACKNOWLEDGEMENTS

Dillon Consulting Limited and the Camrose Green Space Master Plan Project Team would like to thank the following groups and individuals for their input, advice and contribution to this Master Plan:

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- Camrose Residents
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1.0 INTRODUCTION

Parks and green space play a vital role in the quality of life in the City of Camrose. Creating a Green Space Master Plan (GSMP) for Camrose is an opportunity for all stakeholders and members of the public to influence the future of their community's green space, and work together to create a unified direction which meets their current and future social, environmental, cultural and economic needs.

1.1 Context: The City of Camrose

Located on Highway 13, approximately 70 kilometres southeast of Edmonton, is the City of Camrose, a community of approximately 17,236[1] and a regional service centre to more than 100,000.

Originally known as the Village of Sparling, its namesake was changed to Camrose with the arrival of the Canadian Pacific Railway (CPR), the opening of its first post office and its establishment as a Village in 1905. Settled predominantly by Norwegian immigrants, it has grown into a dynamic and diverse City. It was incorporated as Alberta's eighth city in 1955.

The region has some of the richest farmland in western Canada and a robust economy that is also based on industry, manufacturing, retail, health and medical services and education. As witnessed by the five provincial highways, two rail lines and a local airport in close proximity, transportation continues to play a vital role in the community. Camrose has several post-secondary education institutions including the University of Alberta Augustana Campus, Camrose Lutheran Bible Institute and Lakeland College.

Known as "the Rose City", Camrose is a scenic community with many parks and green spaces, including an extensive park and trail system, new sports centre, 18-hole golf course, cross-country ski trails, aerobic facilities and a biathlon track. The historical walkable downtown core includes many heritage buildings and a diverse range of shopping opportunities. The City also includes a hospital, extended care facilities and a wide variety of services for those seeking active retirement and the ability to age in place.[2] Map 1 shows the City of Camrose and its current landscape.

1.2 Why develop a GSMP?

Over the past decade, Camrose has experienced the steady growth pressure and population increase that faced many Alberta communities. The City's vision to be "a dynamic regional community focused on providing an exceptional quality of life" was put to the test as growth pressures and development mounted. While these pressures have subsided somewhat, there exists the need for a well-defined plan to provide a strategy and mandate for providing and protecting green space in the City.

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[1] Municipal Census (2011)

[2] The ability to live in one's own home and community safely, independently, and comfortably, regardless of age, income, or ability level.

1.2.1 Plan Purpose

Camrose's current Green Space System encompasses many hundreds of acres of land, predominantly owned by the City. This includes a wide range of parks that serve the local and regional community, and visitors. Until now, the City's Municipal Development Plan (MDP) was the only document that guided the creation and management of green space.

The purpose of the Green Space Master Plan is:

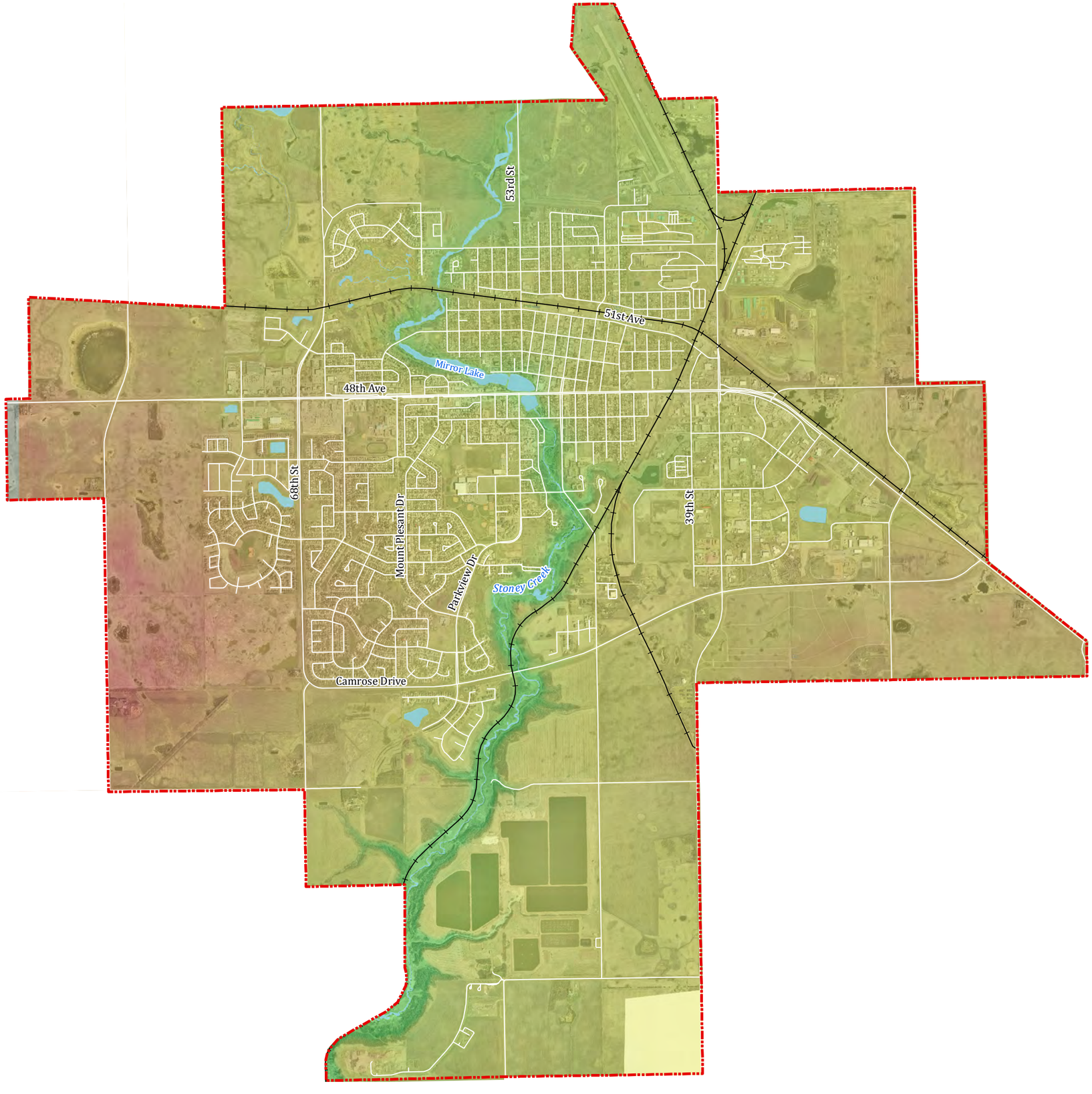
To develop and express the City's policy on green space allocation, development, management and protection within the boundaries of the City of Camrose.

1.2.2 Plan Requirements

In fulfilling this purpose, the GSMP will need to be consistent with other approved City Plans and provide balance between conservation and growth while maintaining the image of Camrose as a City with a diverse and visible abundance of green space. Fulfilling this is not an easy task. Protecting green space into the future always means making difficult decisions regarding the natural areas of a City that should be protected and those that should be permitted for urban development. However, with a clear vision of the future system provided by the GSMP, the City will be able to make strategic requests for green space, through Environmental or Municipal Reserve (ER or MR), from landowners who wish to develop (for example, along envisioned green corridors and nodes). Incorporating those land dedications can ensure a complete future green space system that is abundant, rich, and provides a high quality of life for the City's residents.

1.2.3 Plan Timeframe

It is intended for the GSMP to become the foundation for green space and park planning in the City for the next 15 years. Some Master Plans project 30 or 40 years into the future; while others focus on 5 or 10-year implementation plans. The Camrose GSMP seeks the right balance within that spectrum, and ensures that there are clear, priority actions for the near future, and also long-term goals to strive towards.



City of Camrose
Green Space Master Plan

Map 1

City of Camrose

- City Limits
- Roads
- Railroad
- Waterbodies
- High : 763
- Elevation (Metres)
- Low : 694

0 250 500 1,000 Meters

SCALE 1:33,000

N W E S

MAP DRAWING INFORMATION:
Data from Camrose. Converted from CAD.

MAP CREATED BY: Eric Hertzman, GIS Specialist
MAP CHECKED BY: Alex Taylor, Planner
MAP PROJECTION: NAD 1983 UTM

FILE LOCATION:
G:\GIS\11XXXX Camrose GSMP\Mapping by Eric Hertzman\
Map 1 - City of Camrose - Landscape Layout.mxd

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1.3 Why are Green Spaces Important?

Over the past century, parks and green spaces have become an important part of urban communities. Residents, planners, and community leaders alike understand the value of mixing parks and green spaces within their community. Parks and green spaces are particularly important to the residents of Camrose. The majority (90%) of residents who responded to the fall 2011 GSMP Questionnaire stated that they use parks and green spaces at least once a week and three-quarters of respondents said they use them more than once a week.

The features of parks and green spaces that are of great benefit to cities are often referred to as "green infrastructure". Green infrastructure refers to components of the landscape that allow ecological systems to survive and function. These can be areas that are created naturally, or areas that have been engineered to serve a particular function. There are many examples of green infrastructure including undeveloped natural areas, wetlands that retain stormwater, aquifers that provide drinking water, rooftop and community gardens that clean the air, and parks and greenways that link habitat and provide recreation opportunities.

The public has a growing expectation for biodiversity and a healthy ecosystem. Green infrastructure can assist in meeting these expectations as it has the capacity to naturally filter our water and air, absorb excess stormwater to help prevent flooding, recharge aquifers by slowly releasing stored water into watercourses to prevent water shortages, moderate extreme temperatures thereby reducing building operational costs, prevent soil erosion, and pollinate vegetation. In addition, by providing wildlife with the necessary habitat, green infrastructure allows for larger populations and more diverse species to thrive within a developed setting.

Green infrastructure also provides social value. Parks and green spaces help to keep people healthy through a variety of cultural and recreational opportunities. By providing areas for physical activity and recreation, costly health incidents can be reduced. As well, the enjoyment of aesthetically pleasing areas and green infrastructure can produce indirect health benefits through stress reduction and active living. People prefer access to livable communities and a healthy natural environment. As such, parks and green spaces can increase the aesthetics of the area. They have been proven to increase the value of adjacent land and of the community as a whole; the recreation opportunities they provide contribute to public health and increase quality of life.

Results from recent public polls, and trends from scholarly articles and government legislation are recognizing the importance of incorporating environmental plans into local planning decisions. Cleaner environment, lower operating costs, more successful business attraction, lower health care costs and overall happier citizens are just some of the reasons that parks and green spaces are extremely valuable to communities.

1.4 GSMP Methodology

To complete the Green Space Master Plan, the project team followed a five-step process over the course of 8 months (September 2010 to April 2012), which included:

1. Background Review
2. Community Engagement – Round 1
3. Drafting the Master Plan
4. Community Engagement – Round 2
5. Finalizing and approving the Master Plan

1.4.1 Background Review

The initial step in the GSMP planning process was to develop a comprehensive understanding of the current policy context, trends and best practices. To do this, the GSMP project team completed a background review that involved a policy review to understand the Camrose context, an examination of green space trends in North America that may affect Camrose, and a review of global best practices in parks and green spaces.

The policy review examined relevant policies that could affect parks and open space planning in Camrose at the national, provincial, and local/City levels. Relevant policies examined included those affecting green spaces, applicable acts (e.g. *Municipal Government Act)*, and City policies and documents (e.g. City Strategic Plan and Recreation Master Plan).

To illustrate national and international trends affecting green space demand, provision and service delivery, the project team reviewed its significant research database, keeping the local Camrose context at the forefront. This review assisted in highlighting some of the main trends that are expected to influence parks planning in Camrose.

Lastly, a review (including academic research) of best practices and case studies from Alberta, Canada, and the world including what is being done to provide answers to key issues, opportunities and challenges facing parks, and trends in the role/function, use/programming and development of parks, green spaces and natural areas was conducted. Through this review trends that will influence future park uses, activities, programs, functions and development in Camrose were identified.

To summarize the results of the background review, a Backgrounder Document was prepared which provides a discussion and illustrations on:

1. The Value of Parks and Green Spaces;
2. Trends in Green Space Development and Use;
3. Global Best Practices in Green Space Development and Use; and
4. Provincial and municipal policy that will help guide the GSMP.

The GSMP Backgrounder can be found in Appendix B.

1.4.2 Community Engagement – Round 1

As with any Plan or Strategy, public ownership is essential to its successful implementation. As a result, a comprehensive Community Engagement Process was used during the development of this Master Plan. It was designed to seek input from a wide variety of groups and sources. It allowed park staff and the consultant team to meet with park users and Camrosians to hear their views on the future strategic directions the City should take in relation to green spaces and the linkages that connect them. To ensure residents and stakeholders were involved in the process, two rounds of public engagement were held: Round 1 after the background Review, and Round 2 after drafting the GSMP.

During the week of November 14th, 2011, a series of events was held to engage Camrose residents and stakeholders in the development of this GSMP. In all, three stakeholder meetings, two classroom visits, and one Public Information Session were held. As a result of those sessions, 114 GSMP Questionnaires were also completed, giving the project team a very good idea of the current issues and challenges, and what residents and stakeholders would like to see the future Green Space System look like. Results of those sessions were integral in determining the structure, content and priorities of this GSMP.

1.4.3 Drafting the GSMP

Once the Vision was drafted and the gap analysis completed, the main part of the GSMP was drafted, including the objectives, policies, criteria and management recommendations for each green space type to be included in the future system. This step of the process also included the implementation plan, which prioritized policies and actions and identified key roles, responsibilities and funding. Once the Draft GSMP was completed it was presented to Community Services Staff in April 2012, other senior City staff in February 2013 and then Council for their review in March 2014.

1.4.4 Community Engagement – Round 2

Once the Draft GSMP had been vetted by Camrose Staff and Council, we again brought the process to Camrose residents and stakeholders, via a second round of community engagement which was held on June 5th, 2014. This round included a presentation and open house to build awareness, inform, and discuss the key highlights of the Draft Master Plan. Parks staff and consultants were available to actively engage participants and assist in the dissemination of information. A questionnaire was conducted as a part of these sessions to record opinions on the Draft Master Plan. More than 45 residents attended and twelve questionnaires were submitted.

1.4.5 Finalizing the GSMP

The last step in the GSMP process involved incorporating input received during the second round of community engagement and revising the Draft Master Plan. Once the Final Draft of the Master Plan was completed, it was again presented to City Staff and Council for review and approval. Lastly it was (adopted by Council) on XXX, 2014.

2.0 THE CURRENT GREEN SPACE SYSTEM

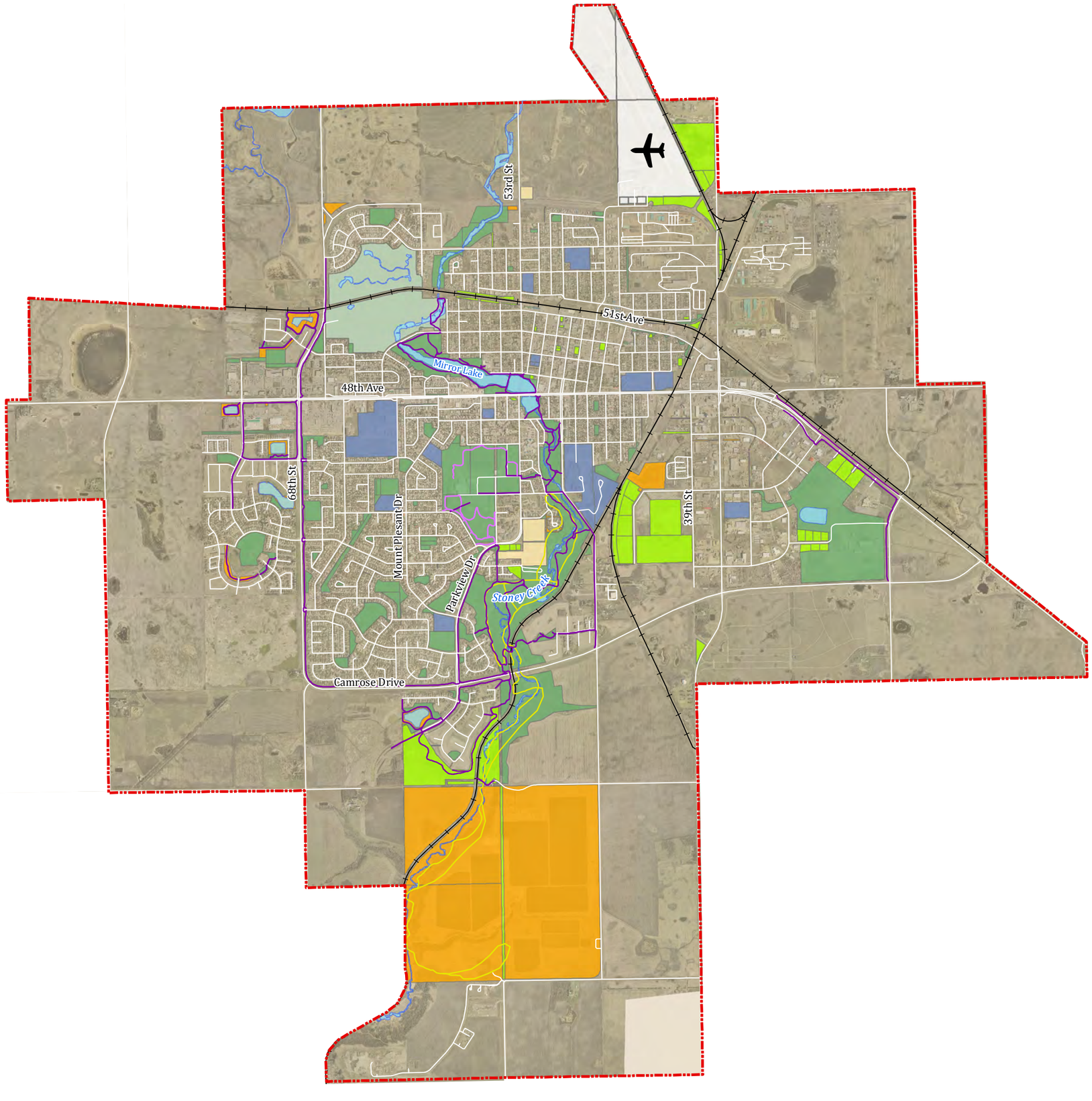
During Round 1 of the GSMP Public Engagement Program, stakeholders were asked what Green Space is to them. The word map below illustrates the results of that question, showing that people have varying thoughts when it comes to a City's Green Space, but that a number of themes emerge, including a feeling of open space, human use and activity.

A city's Green Space System is made up of a number of components (types), which when broken down, form a Green Space Typology. In any Green Space Typology there is a spectrum from permanent and developed, to semi-permanent and undeveloped. Section 2.0 of this GSMP looks at Camrose's current Green Space System and typology.

Camrose's current Green Space System has many different components and can currently be broken into four categories. Map 2 – Current Green Space System, on the following page shows a map of Camrose and the various components of its current Green Space System, while Table 1 shows the breakdown of each type and its representation of total land within Camrose. Overall, Camrose's Green Space System currently represents 19% of all land within the City.

Parkland and Green Space

The terms parkland and green space are used throughout this Master Plan. Green space refers to any City-owned natural open space including ravines, nature reserves and hazard lands (such as slopes and flood plains). The term parkland refers specifically to land set aside by the City that is part of an established public park. Camrose's current green space system is made up of parkland, school yards, the golf course and 'other' City land that is currently used for utilities, etc.



THE CITY OF CAMROSE
THE ROSE CITY

City of Camrose

Green Space Master Plan

Map 2

Current Green Space System

Green Space

- Parkland
- School Yards
- Golf Course

Other City Owned Green Space

- Cemetary
- Airport
- Utilities
- Non-contributing Green Space

Trails

- Paved
- Shale
- Nature

- City Limits
- Roads
- Railroad
- Waterbodies

0 250 500 1,000 Meters

SCALE 1:33,000

N W E S

MAP DRAWING INFORMATION:
Data from Camrose. Converted from CAD.

MAP CREATED BY: Eric Hertzman, GIS Specialist
MAP CHECKED BY: Alex Taylor, Planner
MAP PROJECTION: NAD 1983 UTM

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Map 2 - Green Space - Landscape Layout.mxd

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Table 1: Current Camrose Green Space System Statistics

Type	Area		Percentage of Total		
	Ha	Ac	Green Space	Developed Land	All Land
1. Parkland	275.2	680.2	32.7%	6.5%	6.2%
2. School Yards	54.9	135.7	6.5%	1.3%	1.2%
3. The Golf Course	59.4	146.9	7.1%	1.4%	1.3%
4. Other City-Owned Land	451.2	1114.9	53.7%	10.6%	10.2%
Total	840.7	2077.7	100%	20%	19%

Camrose is well known for its parks and the Stoney Creek Valley, and the statistics speak to the City's rich habitat due to its geographic location, ecological systems and abundance of wildlife, and the City's fortune of natural / semi-developed and developed parks and green spaces. While the City has not had a target in terms of green space per capita or percentage of total land within its boundaries, as illustrated by Table 1, it is well blessed with green space. Section 3 looks at both geographic and quantity gaps in the current system.

2.1 The Current Green Space Typology

As shown in Table 1, Camrose's Green Space System currently can easily be divided into four main categories: Parkland, School Yards, the Golf Course, and Other city-owned land. These four types are explained and outlined here.

2.1.1 Parkland

Parks are like snowflakes in that each one is physically different; however, it is what they provide that is most important. Parks are places that allow momentary reprieve from urban life, allowing residents a common safe space for recreation and leisure activities while simultaneously preserving nature. Parks are active lands that engage communities intellectually and physically, encouraging social interaction and personal development.

Camrose's Current Parkland

Camrose is very fortunate to have a very well-developed urban park system that incorporates the natural beauty of Stoney Creek, Mirror Lake, and a variety of other parks throughout the community. The park system allows citizens of all ages to enjoy many exciting aspects of the outdoors during all four seasons of the year.

History and Successes

The foundation of Camrose's urban park system began in 1989, when the City was the recipient of an Urban Park Grant from the Alberta Government's Heritage Fund. After two years of planning, which involved an urban parks committee, and numerous public meetings and surveys, construction began in 1991 and continued to 1996, with the completion of the majority of the system that exists today.

During the GSMP Public Engagement Program, members of the public were asked what park was closest to their house; the top responses included Mirror Lake Park, Duggan Park, Victoria Park, and the Stoney Creek Valley. Table 2 shows the statistics for the designated Parks in Camrose.

The Urban Parks Committee

Camrose was fortunate to have an active Urban Parks Committee from 1989 thru the mid-1990s. Through public involvement, the committee was responsible for envisioning and creating the City's current urban park system. Starting with a comprehensive trail system, the urban park system grew to encompass improvements to several parks including Jubilee Park, Stoney Creek Park and Bullrush Park. Over time the addition of playground facilities, a visitor and information centre and a swan shelter provided more recreation options for residents and visitors alike.

An early objective of the Committee was to ensure that the urban park development would provide year-round recreation opportunities. Today, park users are able to partake in activities throughout the year ranging from biking in the summer to skiing in the winter. In fact, Camrose's ski facilities are of such an excellent calibre that they are recognized internationally.

The urban park system has also benefitted from a strong community spirit that sees the involvement of a variety of clubs, businesses and private individuals. It is this spirit and community involvement that continues to build a sense of pride throughout Camrose.

Table 2: Current Parkland Statistics

Park	Area (Ha)	Area (ac)
Byers Park	0.35	0.88
Campground Park	8.90	21.98
Castle Park	1.25	3.08
Century Meadows Park	3.83	9.46
Duggan Park	5.57	13.77
Edgewood Park	0.38	0.93
Elliot Park	1.57	3.87
Grand Drive Park	5.21	12.87
Jubilee Park	8.54	21.10
Kamifurano Park	1.65	4.08
Kensington Park	3.54	8.75
Kinsmen Park	12.10	29.89
Mirror Lake Park	1.63	4.04
Mount Pleasant Park	0.87	2.16
Rotary Park	2.63	6.50
Rudy Swanson Park	12.53	30.96
Shuman Park	0.30	0.75
Sparling Park	0.17	0.42
Stelco Park	0.45	1.11
Stoney Creek Park	47.91	118.38
Valleyview Park	3.04	7.50
Victoria Park	2.65	6.54
Westpark Park	1.29	3.20
Total	126.36	312.22

Note: This list does not include all Camrose Parkland – only major, named parks.

Jubilee Park

Jubilee Park was developed during Alberta's Jubilee celebrations. Located near the centre of the City, the park serves as the City's main family and picnic area and is the location of a variety of events and gatherings. It became part of the Urban Park System in 1989.

Stoney Creek Park

Set in a natural area, the Stoney Creek Park offers residents and visitors alike the opportunity to enjoy the sights and sounds of nature year round. The area is known internationally for its ski facilities with all ski disciplines being accommodated for in the park. The trail system provides a natural setting for walkers and bikers in the off-season.

Mirror Lake Park

Mirror Lake Park is a recreation and tourist information destination in Camrose. The heart of the park is adjacent to Mirror Lake which is also the site of many other summer and winter activities. The park is accessible from various locations within the City and has become a vibrant and exciting place to be year round.

The Swan Program

Over 35 years ago, the City of Halifax gifted Camrose with two Polish Mutes launching the City's enjoyable swan program. The swan population has since increased to numbers as a high as 14 and now includes Trumpeter Swans. The swans spend the summer months in Mirror Lake and other waterways and winter in a facility at the Community Services yard.

Bill Fowler Centre & Mural

Named after a long time Camrose supporter, the Bill Fowler Centre is located along Highway One and provides visitors with their first point of contact with the City. This tourist information centre houses a series of interpretive panels outlining features of the Urban Park and historical highlights of the City. Attached to the centre, is a sculpture designed by Jim Marshall. Created in red brick, the mural depicts the plants and wildlife native to the area and has become a beloved tourist attraction.

Off-Leash Areas

Off-leash areas are formally designated areas within parks where dog owners can release their dogs from all forms of constraint and allow them to move about freely for exercise and / or socialization with other dogs and people.

Camrose currently has one year-round, off-leash, area, which is located in the northern portion of the City, just north of Highway 13, behind the eastern segment of the Cornerstone Development at 6800-48 Avenue. It can be accessed by driving to the back of the stores and parking in the designated area. The area is currently not fenced, but new developments immediately adjacent to the off-leash property will result in some perimeter fencing in the future. Springwood Developments, the owner of the Cornerstone property that provides access to the site, supports the off-leash designation and has granted permission for dog owners to use the specified parking area behind the stores (with some conditions).

A new interim / trial off-leash area was established in 2011 to be used during the fall, until snowfall. It was located in the valley on the ski trails south of the train trestle bridge. It is a non-secure (i.e., no fencing) multi-use area, that is also used by walkers, runners, and bikers.

Currently the City is embarking on an off-leash area assessment process with the goal of designating a more user friendly off-leash area that will be attractive to dogs and owners alike. Work is currently underway, in cooperation with a new off-leash area committee.

During Round 1 of the GSMP Public Engagement Program, 10% of respondents mentioned that they use the Green Space System for dog walking, helping to illustrate the importance of that component of recreation to the Green Space System.

Playgrounds, Playfields and Sportsfields

Many City parks have playgrounds, playfields and sportsfields. During Round 1 of the GSMP Public Engagement Program, many residents and stakeholders recognized the contribution these aspects make towards building a sense of community and adding to recreation opportunities. Playgrounds are usually formally designed and built, and provide a variety of recreational equipment such as swings, slides, jungle gyms, etc. Playfields are often large green spaces that give children space to play unorganized activities, and sportsfields are provided for organized sports. All these facilities offer open spaces for children to play, develop and foster physical coordination, strength, and agility.

Camrose currently has 26 City-provided playgrounds, as shown in Table 3. Other playgrounds exist on school property.

Table 3: Current Playgrounds in Camrose

Playground	Location
Bill Fowler Centre	East of Arbor
Byers	55th Street and 51st Street
Cascades	50th Avenue west of 70th Street
Castle	60th Street and 42nd Avenue
Century Meadows	Enevold Drive between Erickson Drive and Elliott Drive
Creekview	52nd Street and 34th Avenue
Duggan Mall	46th Avenue
Duggan Park	Marler Drive and 75th Street
Edgewood	South bend of Edgewood Drive
Elliot Drive	Elliot Drive west of 63rd Street
Jubilee Park	North of picnic shelter
Kensington	Mt. Pleasant Drive 39th Avenue and 58nd Street
Kinsmen Park	Climbing structure east of Diamond #2; swing set west of spray park
Lions Creative	64th Street and 50th Avenue
Mirror Lake Centre	West of Mirror Lake Centre
Mount Pleasant	Mt. Pleasant Drive and Montclare Drive
Parkridge	Tot lot located along west loop of Parkridge Drive
Shuman	48th Street between 47th Avenue and 46th Avenue
Sparling	53rd Avenue between 53rd Street and 54th Street
Stelco	46th Street between 52nd Avenue and 54th Avenue
Stoney Creek	East of Stoney Creek Centre
Valleyview Park	Valleyview Drive and 28th Avenue
Valleyview South	Corner of 23rd Avenue and 56th Street
Victoria Park	54th Avenue and 62nd Street
Village Estates	54th Avenue and 50th Street
Westview	74th Street and 45th Avenue

Facilities

Park facilities can range from simple and inexpensive, such as benches and restrooms, to more complex, such as splash pads and work-out facilities. The type of facilities included in each park typically depends on the type of park as well as park users. For example, benches at a playground will give adults a place to sit while their children play, but shower facilities would be unnecessary unless they were located at a beach or splash pad. In some cases, the more facilities located in the park, the more people may use it; for example, park benches located at various spots along a walking trail may encourage seniors who have mobility issues to use the trail. Despite residents and stakeholders appreciating additional facilities, facilities need to be added strategically, as they can be expensive and require frequent maintenance to ensure function and safety.

During Round 1 of the GSMP Public Engagement Program, many residents and stakeholders appreciated the facilities that are provided by the City, be they park furniture ("There are lots of places to sit"), washroom facilities ("There are lots of washroom facilities – at Mirror Lake & Stoney Creek Centre"), or waste management facilities ("the in-ground garbage cans work very well").

Over the past decade, the City has been very cognizant about providing adequate facilities for parks users, and has had a standardized bench for many years in the urban park system and golf course.

Public Art

Public Art is another component of many current City parks. It helps to define a community, acting as talking points for strangers, visual stimulation for passersby, and landmarks for residents. It can enhance green spaces, roadsides and public corridors alike. Similar to other characteristics of public parks already discussed, public art allows all individuals to enjoy an important aspect of life they otherwise might not experience. The art comes to express the community's positive sense of identity and values; therefore it brings communities together, offers social and education opportunities and may even promote tourism.

During Round 1 of the GSMP Public Engagement Program, a number of residents appreciated the public art & sculptures that have been installed in Mirror Lake Park.

The Skate Park

The current skate park was built in 2004 to address the desires of the city's youth. While it has been successful to date, it is beginning to show signs of deterioration with apparent cracks and shifting pavement. Administration has identified that the skate park may need renovation or overhaul in the near future to reduce safety risks caused by the declining conditions of the skate park.

The Campground

Until the late 2000s, Camrose owned and operated a campground at the edge of the Valley, near the Stoney Creek Centre; however, based on a recommendation from the 2000 Leisure Services Master Plan, the City shut it down and returned the campground land to the park system. Campground facilities are currently provided by a privately-owned facility beside the Camrose Regional Exhibition lands.

2.1.2 School Yards

School yards comprise the land directly surrounding Camrose's school buildings. Often these entail green space, playfields, playgrounds and other park facilities. As they are publicly owned and typically used by schools only during school hours, school yards easily become part of the City's Green Space System year-round.

While not directly owned and operated by the City, in 1981, the City signed an agreement with the Camrose Public and Separate School Boards for the joint use of school lands. The City's School boards own 54.9 ha of land that is, generally speaking, accessible for public use. The land owned by the Augustana Campus of the University of Alberta is also considered to be part of the City's Green Space System, as the Campus includes 12.3 ha of green space that is considered "semi-public". School yards make up 5.0% of the City's green space, 2.1 % of the developed land within the City, and 1.2% of the total land within the City.

2.1.3 The Golf Course

The City of Camrose has one golf course, which is city-owned and part of the Green Space System. Established in 1922, the Camrose Golf Course is an 18-hole public course that offers a well-stocked Pro- Shop, locker rooms, and a full service restaurant and lounge. The tree-lined fairways situated along the banks of Stoney Creek provide a variety of challenges for the seasoned golfer while remaining very playable for beginners. The golf course is open to the public for golfing during the summer months, and is open to walking, cross country skiing and other recreation in the winter. The Golf course is 59.4 hectares (146.8 acres) in size and makes up 5.4% of the City's green space.

2.1.4 Other City-owned land

While the first three types of Green Space are designated and publically accessible, the fourth type includes all other City-owned land that hasn't been designated as a park or golf course. This type includes land that has been designated as any of the following categories included in Table 4.

Table 4: Other City-Owned Land Statistics

	Area		Percentage of:		
Sub-type	Hectares	Acres	City-owned Land	Total Green Space	Total Land
Cemeteries	9.9	24.4	2.1%	1.2%	0.2%
The Airport	75.4	186.4	16.7%	9.0%	1.7%
Public Utility Lots (PULs)	277.3	685.2	61.4%	33.0%	6.3%
Other (Non-Contributing)	88.6	218.9	19.6%	10.5%	2.0%
Total	451.2	1,114.9	100%	53.7%	10.2%

Cemeteries

The City owns two cemeteries, the Valleyview Cemetery and the Poplar Grove Cemetery. The Valleyview Cemetery is operated by the City's Community Services Department, who aims to maintain it as a quiet resting place that honors loved ones who have passed on.

Cemeteries are often considered a component of the Green Space System, as they are often publically accessible, and contain a significant amount of vegetation and open space. They are also a component of what are considered historic or cultural sites. Cemeteries make up 2.1% of the 'city-owned land' category, 1.2% of the Green Space System, and 0.2% of total land in the city.

Use of cemeteries is managed through the current Camrose Municipal Cemetery Bylaw.

The Airport

The City owns and operates the Camrose Airport as it believes that aviation is a very important aspect of the community business environment. Offering services for private pilots, visiting aircraft, flight training, rental aircraft, medivac, helicopters, and aircraft, it helps service the needs of local companies. While airports are not usually regarded as publicly accessible open space, the Airport does form a component of the Green Space System, due to the habitat it may provide to small mammals and other wildlife, and ecological values that are protected as a result of a large city-owned land use. The Airport accounts for 16.7% of "City-owned land' category, 9% of the total Green Space System and 1.7% of all land in the City.

Public Utility Lots

Public Utility Lots are land that is currently used for utility corridors, easements, stormwater ponds, and other City infrastructure. Most of the land within the "Other City-owned land" category (61%) falls within this type. While not officially designated as parkland, Public Utility Lots are managed by the parks department, are usually open to the public, and are sometimes also used for recreation and other uses. These lands also hold potential to be designated as one of the other Green Space types in the future.

Other City-Owned Land (Non-Contributing Green Spaces)

Land within the "Other city-owned land" category of Green Space is often considered to be "Non-contributing Green Space". This category can include such things as grassed intersections, left-over green space, awkward locations / sizes / shapes, and Rights-of-Way (ROW), and municipal reserves that have not yet been designated for use. Municipal Reserves (MR) include land that has been obtained during the development process, under the Alberta Municipal Government Act, for future use as a park or school site. To be included in this category of the current GSMP inventory, these Municipal Reserves have yet to be designated as Parkland or School Yard, and so remain simply city-owned land, whose land use may be designated as any number of types. Camrose's Municipal Reserves are usually managed by the Community Services Department, but are not typically maintained. Municipal Reserves are important to identify in the current green space inventory, as they all represent potential opportunities for other green space uses, such as parks or school yards. While not of use to the current Green Space System (although they often become habitat and perform environmental functions) it is important to identify all other City-owned land and manage them into the future.

2.3 Trails

To complement the City's existing urban park system, is a well-developed network of trails that weaves in and out of many of the City's Green Spaces. Trails are an integral component of the system, and they can be a component of a number of different Green Space types, including parkland and school yards. The trail network has been broken into four types, as seen in Table 5.

Table 5: Current Trail System Statistics

Trail Type	Length	% of total
Paved	39.01 km	68%
Nature (grass)	12.99 km	23%
Shale	5.56 km	10%
Walkways	N/A	N/A
Total	57.57 km	100%

2.3.1 Paved Trails

The City currently has 39.01 kilometres of paved trails, which represent the majority of trails in the City. These trails are multi-use (walking, biking, roller blading, etc.) and are plowed in the winter. Dimensions vary, but the standard is now 2.2 metres wide.

2.3.2 Grass (Cross Country) Trails

There are 13 kilometres of grass trails that are mowed for walking, jogging and hiking in the summer, and groomed by the ski club for cross country skiing in the winter. They are mowed by the ski club twice a year. The dual use of the grass trails currently works well.

The Cross Country trail system is held in very high regard and is second in Alberta only to Canmore, host community of the 1988 Olympics and home of the Canmore Nordic Centre. The fact that the Camrose Cross Country Trail system is so extensive is a testament to the commitment and hours of involvement from local volunteers to build and maintain it.

2.3.3 Shale Trails

Camrose also has 5.56 kilometres of shale trails that are used for walking and jogging.

2.3.4 Walkways

The last component of the trail system includes the numerous walkways between residential developments in the City. These are usually on City street right-of-ways and are considered components of the sidewalk system, but play an important role in the green space system by providing connectivity.

2.4 Natural Heritage & Urban Forest

A city's Natural Heritage System consists of natural features (i.e., wetlands, forests, rivers, etc.) that provide ecosystem service benefits such as breathable air, livable climate and erosion control, and whose diverse ecological functions and interrelationships should be protected for the long term. Camrose has many features that contribute to the Natural Heritage System, including the urban forest, the Stoney Creek Valley, and other waterbodies and green space.

2.4.1 The Urban Forest

The Tree Canada Foundation (2004) defines the urban forest to be: "trees, forests, green space and related abiotic, biotic and cultural components in and around cities and communities. It includes trees, forest cover and related components in the surrounding rural areas (peri-urban forests)". Urban forestry can be further defined as:[3]

> *"… the sustained planning, planting, protection, maintenance, and care of trees, forests, green space and related resources in and around cities and communities for economic, environmental, social, and public health benefits for people. The definition includes retaining trees and forest cover as urban populations expand into surrounding rural areas and restoring critical parts of the urban environment after construction. Expansion at the urban/rural interface raises environmental and public health and safety concerns, as well as opportunities to create educational and environmental links between urban people and nature. In addition, urban and community forestry includes the development of citizen involvement and support for investments in long-term on-going tree planting, protection, and care programs"[4].*

The City of Camrose takes pride in the vast quantity and distribution of trees within its community, as noted in the City's *Municipal Tree Care Policy* (1999):

> *"The City of Camrose believes that trees are an asset to, and enhance the quality of life in, an urban setting. The foresight, planning and past tree planting practice of the City has made Camrose one of the most pleasant parkland- like cities in the province, and is considered to have an urban forest that is next to none for it size."*

The City has not engaged in a comprehensive study of its urban forest across all land uses; however, a partial tree inventory was completed in 2000 that determined there were approximately 12,000 boulevard trees in the city, south of 48th Avenue. Based on that partial inventory, it is estimated that the City has approximately 20,000 trees, which are likely worth in upwards of $25 million, which contribute to the green infrastructure system and the ecological functions that provide habitat for wildlife. Currently, when a new tree is planted, it is entered into the Geographic Information System (GIS) database.

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[3] Assistant Director of the United States Forest Services and author of *Urban Forestry in North America: Towards a Global Ecosystem Perspective*, Frederick J. Deneke.

[4] Deneke, F. 1993. *Urban Forest in North America: Towards a Global Ecosystem Perspective.*

2.4.2 Riparian Corridors

Riparian corridors are vegetated areas adjacent to rivers and streams. Riparian corridors are some of the most important ecological features in the City, providing moisture and shelter in the typically dry and windswept regional landscape. They help maintain water quality and help moderate floods. Due to their linear nature, many serve as strong connections between other natural heritage aspects and are used as wildlife corridors.

The Stoney Creek Valley is the largest of the City's riparian corridors, and provides a very robust green corridor for movement and habitat for deer populations, as well as other local fauna and flora. As a floodplain, it consists of very complex and dynamic environments that are pertinent for the survival of many species whose resilience and sensitivity to variations are quite distinctive. The Stoney Creek Valley is part of the larger regional watershed system. The Creek Valley currently offers passive recreation through multi-surface trails that meander through the valley floodplain. *Much of the Stoney Creek Valley is already protected as City parkland, but as the City grows, there is a need to ensure the entire valley is protected.*

2.4.3 Wetlands and Other Waterbodies

Wetlands occur in areas of poor drainage, and are a mix of open water, sloughs and marshes. They are very important for biodiversity and serve multiple ecological functions. They connect surface and groundwater, help to recharge aquifers, help to slow soil erosion, and help moderate flooding. They also provide habitat for a number of local and migratory birds.

Mirror Lake, other ponds and natural wetlands provide both hydrological and ecological values at both the local and watershed scales. The variations in the waterbody classifications provide opportunities for diverse flora and fauna, riparian vegetation and aquatic habitats.

2.4.4 Grasslands and Agricultural Land

Grasslands and agricultural land also contribute to a City's natural heritage. Agricultural land is usually a mix of cropland and pasture land for cattle grazing, and provides many of the same ecological benefits to a landscape.

3.0 TRENDS, ISSUES, OPPORTUNITIES & GAPS

Section 3.0 of the GSMP builds on the analysis of the current system (the current assets), and while understanding the Green Space System as a series of inter-relating layers superimposed upon the landscape, population and circulation network, identifies four key areas that will provide direction for the growth and improvement of the future Green Space System:

1. Trends in green space provision across North America, that are of particular relevance to Camrose;
2. Issues with the current system that need to be addressed and can be resolved by the GSMP;
3. Opportunities for growth of the Green Space System; and
4. Gaps in the current system that need to be filled in over time, to ensure all Camrose residents have access to a complete and diverse Green Space System.

The issues and opportunities that are identified here are based on comments and feedback that was received from residents, stakeholders and City staff during the first round of community engagement in November 2011. Gaps were identified through a comprehensive mapping exercise completed by the project team using Geographic Information System (GIS) technology, and is based on industry best practices and parkland standards. More detail is provided about the methodology in Section 3.3.

3.1 Trends

There are a variety of trends affecting green space development across North America. These trends range from social (population growth and urbanization) to environmental (biodiversity loss and climate change) to economic (rising fuel costs and tourism development). Overviews of these national trends are discussed in Section 3 of the Background Report (See Appendix B). Although all these trends should be considered when developing the GSMP, a few are of particular interest to the City of Camrose.

A Shift from Quantity to Quality

Slow and steady growth pressures in Camrose are expected to continue into the foreseeable future. To accommodate expected growth, the trend has shifted towards the *use* and *quality* of green space over *quantity*. Parks and green spaces will need to be flexible and capable of evolving to meet the needs of new residents and future green space development will need to find an appropriate balance between quality and quantity.

An Ageing Population

The proportion of elderly people in Camrose's population is much higher than most other municipalities in Alberta. With an ageing population, the use of parks and green spaces is changing. Therefore, the needs of the elderly must be met with innovative and targeted park and green space design. Older

adults have more free time and disposable income than other age groups and a greater life expectancy than previous generations, resulting in different expectations of the parks and recreation system: higher standards for the quality of facilities, more unstructured, informal activities, more arts and cultural activities and more opportunities for life-long learning. Trends in specific activities will also change to accommodate this ageing population. For example, the demand for therapeutic pools will likely increase. There is also an increasing demand for multi-purpose facilities to serve several programming demands, such as family recreation and library services. As baby boomers age, there will be more of a demand for multi-generational community centres with multiple purposes.

Equal Access to Green Space

People from lower income groups typically have less access to parks and green spaces and their lower participation rate in recreational activities needs to be addressed. The trend towards increased use of private facilities and programs by higher income bracket individuals may also place increased pressure on municipal programs to assist those who cannot afford to participate. Disadvantaged residents need to be targeted when addressing green space needs to ensure that these people have equal access. Camrose may need to consider options such as ability-to-pay models to ensure that people in lower income groups have equal access to recreational facilities and programs.

Pressures on Natural Capital and Biodiversity

Population growth and urban development continue to place pressure on Camrose's natural capital and threatening biodiversity. Parks and green spaces, particularly 'naturalized' green spaces, can play a very important role in maintaining healthy ecosystems and protecting the health of environmentally sensitive areas. However, in general, it is becoming more expensive to acquire and develop green space. The price of land throughout Camrose continues to increase, which means resources to purchase parkland do not go as far as they once did. Either budgets need to accommodate this increase or different ways of providing green space need to be pursued. Costs for operation and maintenance are also increasing, putting additional strain on already stretched City budgets.

The Contribution of Green Space to Quality of Life and Tourism

The trend towards parks and green spaces positively contributing to the quality of life and tourism development in the area continues to evolve both socially and economically. Residents and developers see the positive benefits in being in close proximity to green space. Camrose's reputation as the "Rose City" with amazing parks has been integral to attracting residents and businesses to the City. It is also an important visitor draw and can provide economic spin-offs. This reputation must be maintained and possibly increased through the GSMP.

Protecting the Urban Forest

As the number of Canadians living in urban areas increases each year, the need to protect and improve the conditions of a city's urban forest becomes critical to sustaining a healthy physical environment, associated ecosystems and well-being of urban residents. In Canada, urban forests are usually managed at the municipal level, through zoning and land use designation policies, development and subdivision

approval standards, green parking lot standards and many other guidelines. Until the last decade, much planning policy regarding trees focused on the protection of existing single mature specimens, relegating tree planting to maintain desirable views or sightlines and/or using plant material to reduce energy consumption, heating and cooling costs; however, over the past decade many cities have begun to look at urban forests as green infrastructure, completing analyses and forming strong urban forest policies and standards of their own, including Edmonton, Red Deer, Calgary and Toronto.

3.2 Issues

Based on the comments and feedback received through the first round of community engagement, issues were identified and grouped by theme. The key issues include:

3.2.1 Natural Environment

Many of the current issues related to the GSMP are in the area of the natural environment, including the debate around preservation, conservation and protection, wildlife habitat, wetlands and Environmentally Significant Areas (ESAs), flood risk areas, invasive species and the urban forest.

Preservation, Conservation and Protection

When considering green space there is a spectrum that can be used to describe the level of public use and access, which, depending on the objectives for each green space, may be limited. This spectrum can include three levels:

1. Preservation – Preservation often refers to keeping things as they are, and this would involve keeping green spaces as they are, with limited level of public use and access.
2. Conservation – Conservation often requires managing use of and access to green spaces.
3. Protection – to ensure that habitat for wildlife is protected and that the 'green infrastructure' benefits of green space can be maximized, often times green spaces need to be protected, which could mean putting a fence around it and restricting public use and access.

The future vision for the GSMP will need to consider the objectives for each type of green space and potentially restrict levels of public access as a result. One of the main areas residents wanted preserved was the creek valley.

Wildlife Habitat

Another issue that the project team heard extensively was ensuring habitat for wildlife is provided. In Camrose there are many types of animals that use green space extensively, including the following (among others):

- Pollinators (insects), which are the key to the wonderful flowers that Camrose enjoys throughout the spring and summer months. Letting grass grow naturally (rather than mowing) can help ensure they have habitat.

- Birds, including the Purple Martin, that call Camrose home during part of their worldly travels. Bird watching is widely understood as the second most popular pastime behind gardening in Canada, and ensuring habitat for birds is protected will keep the birds coming back each year.
- Deer, which are frequently seen in Camrose, enjoy the habitat provided by green spaces, predominantly in the Creek Valley.
- Swans, one of Camrose's trademarks, live on some of the City's waterways. Land around these waterways needs to be protected to ensure habitat and clean water for them.
- Dogs, while not often referred to as wildlife, pets such as dogs also prefer certain outdoor habitat, including natural grassy areas and naturalized parks.

Some species of wildlife are in decline due to habitat loss and alteration. The GSMP will need to outline how the City will protect wildlife habitat with anticipated growth.

Wetlands and Environmentally Sensitive / Significant Areas

Wetlands are often called the 'sponges of the land' and they help filter water pollution. Within the City there are also areas that are sensitive due to their flora and fauna, such as significant tree stands. None of these wetlands or sensitive / significant areas are classified or protected, but they need to be preserved and protected, as do the riparian zones along creeks and watercourses.

Flood Risk Areas

Alberta Environment and Water classifies areas of flood risk for many municipalities in the province, and is in the process of updating the flood mapping for Camrose. Good land use planning generally restricts development from areas of flood risk, usually allowing these areas to be designated green spaces and often used for parkland.

Invasive Species

Invasive species such as the thistle choke out native vegetation and can often alter habitat. Managing invasive species in City green spaces will be important for the future system.

The Urban Forest

Urban forests are under a range of pressures, most commonly associated with urbanization, growth and development, which threaten the vitality of its system. The City's urban forest is or will be under major stress in the upcoming years due to disease, such as the Dutch Elm Disease, Poplar Borer and Black Knot, which is reported as the major cause of death for the City's trees. The health and growth of the City's urban forest is constantly challenged by drought, gusty winds, dieback due to impacts on roots during development and the thinning/cutback of native stands by residents in newer developments. The City's urban forest is one of its significant assets, which includes streetscapes and boulevard trees. To manage it better, the City needs to measure the extent and value of the urban forest. The GSMP should also discuss whether the City needs staff, such as an arborist, to help manage the urban forest.

3.2.2 Parks Design & Development

There are also issues dealing with Parks design and development, which include:

Green Space Accessibility & Distribution

While there is a hub of green space at the geographical centre of Camrose (including Kin Park and Rudy Swanson Park) that is well-connected to the trail system, and Stoney Creek to Valley View is well connected, access to green space is an issue in some parts of the City due to its distribution, including:

- The northeast – Overall there is not much green space in that portion of the city.
- In new developments – There is little green space in new communities, and what is built needs to be better connected to existing green space. There are also no boulevards in many new developments, and often only mono-sidewalks, which limit accessibility.
- Downtown – Founders square is surrounded by parking lots.
- Dog Parks – Overall, more places for dog-owners to take their pets (off leash) are needed. Most dog-users who participated in the first round of community engagement said they would consider a multi-use facility.

Designing For An Aging Population

As mentioned in the previous section, the elderly segment of Camrose's population is increasing, partly as Camrose is seen as an attractive retirement destination, but also following national demographic trends. An increasing elderly population requires and emphasis on designing for mobility and elderly used, which are generally more passive. Future green spaces will need to be innovative and targeted in their design.

Quality of Parks

Also mentioned in the previous section, while Camrose has not yet seen a shift in emphasis from quantity of green space to quality, a shift may be required during the life of this Plan. New green spaces will need to focus on use and quality rather than quantity, and this will require flexibility in design.

3.2.3 Communication and Education

Education and Communication are two tools to increase awareness of the benefits of green space, and to increase community well-being.

Communication

Some municipalities are using many different methods of communicating uses and programming of trails, parks and green spaces. From using hi-technology such as the internet, Facebook and Twitter, to low-technology such as brochures and maps, municipalities are being innovative in how this information is communicated, to get information into the hands of as many residents as possible. In Camrose there is a need for increased awareness of the City's Green Space System, as illustrated through the community engagement program.

Education

Green Spaces are also a tremendous opportunity to educate residents in the area of environmental preservation and natural heritage. The GSMP can include some recommendations for education programs, such as suggestions for field trips that will encourage residents and children to experience the City's green spaces.

3.2.4 Parks Management and Operations

While a future Green Space System will have new components including parks and trails, it is important to consider how these spaces are managed, including how roles and responsibilities are assigned and maintenance programs.

Roles & Responsibilities

Within the City, the project team heard the need for better role alignment. This could include defining who takes on what responsibility (mandated vs. voluntary). Other City departments need to ensure integration of Plan findings and recommendations into their work. The GSMP can't be a document that sits on the shelf.

Ongoing Maintenance

An issue related to the level of naturalization of green spaces is the level of maintenance and mowing of grassy areas. Many residents have mentioned that dogs don't like manicured grass – they prefer natural areas, and reducing the amount of grass that the City mows helps to increase habitat, allows flowers to grow, increases water retention by green spaces, and saves money. The GSMP will need to recommend ideal levels of mowing for the various types of green spaces, and designate and new Natural Areas green space type – areas that are left in a natural state. Related to this is that the City will need to operate and maintain any future green spaces that the GSMP recommends.

3.3 Opportunities

Based on the comments and feedback received through the first round of community engagement, opportunities were identified and grouped by theme. The key opportunities include:

3.3.1 Connectivity

While the City's green space assets are extensive, there are many opportunities to improve their connectivity, whether through trails or greenways. Opportunities include:

- East-west connectivity along 48th Avenue, especially for people who work in the industrial area and may bike to work, and potentially with transportation and service road improvements along 48th Avenue.
- Developing bikeways throughout the City so that bikers do not have to either battle traffic on streets or walkers on pathways.

- Trails along the ring road and other areas. A number of future potential trails were included in the 2009 Transportation Master Plan, which are shown on Map 3.
- Designating "Greenways" as a green space type - areas that can be considered linear parks and serve connectivity functions by containing a variety of trails and walkways.
- Working with Walkability Camrose to identify ways the Green Space System can contribute to walkability in the City.

3.3.2 Green Space Amenities

There are opportunities to improve the amenities offered in many of the City's green spaces, including:

- Lighting, particularly in Jubilee Park and along the cross country trails, but not too much to avoid light pollution.
- Washrooms, in many areas of the Green Space System.
- Wayfinding Signage and Mapping of parks, trails, and particularly the cross country trails.

3.3.3 New Green Space Locations

Many opportunities for future green spaces were identified by residents and stakeholders, including:

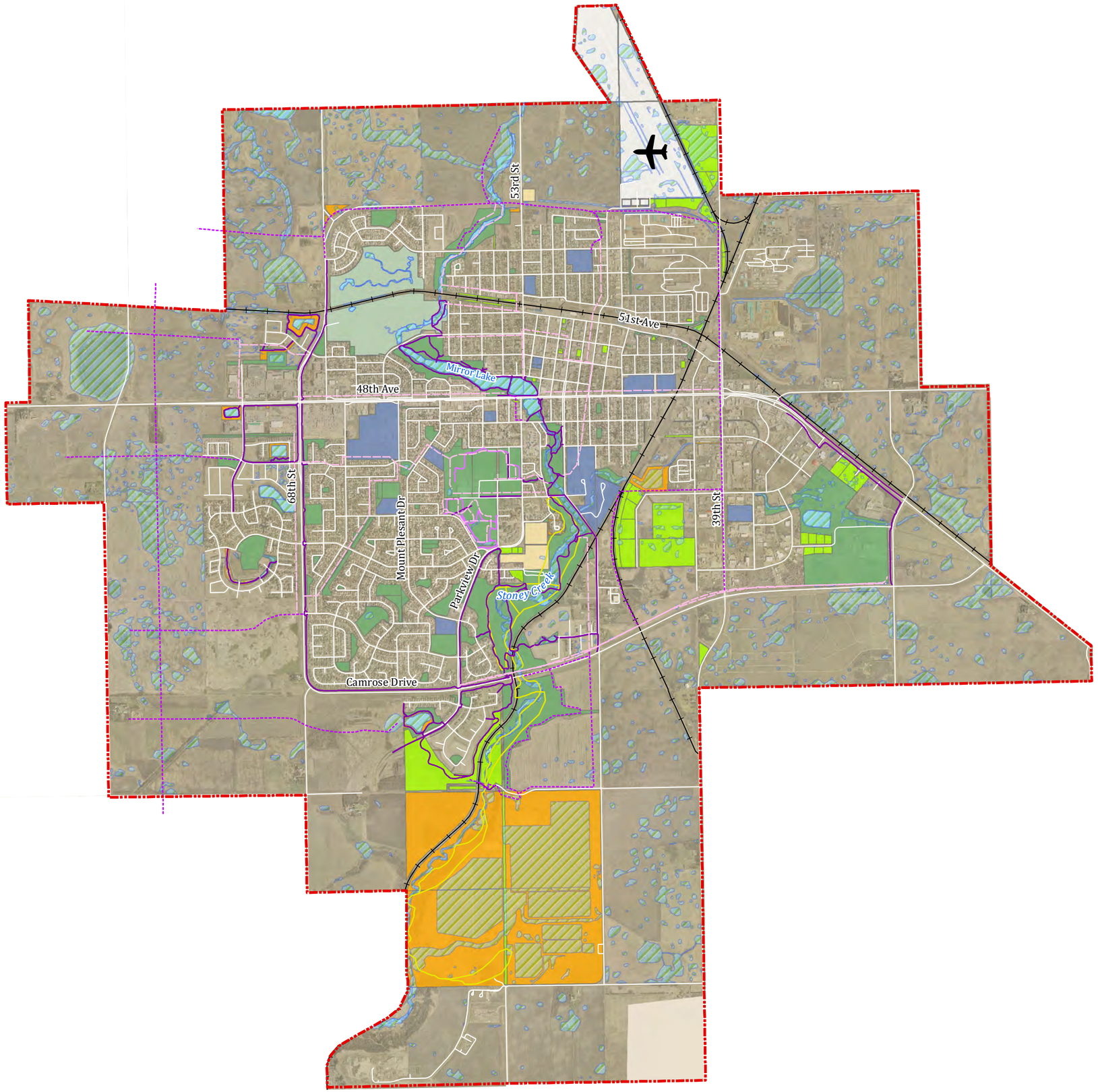
- The Lagoons – This area may have potential for green space development; it is not currently used much.
- Waterways – People like walking by the water, and creating green space around water helps protect sources of drinking water.
- Low-Lying Areas – a 2010 study completed for the City contained some preliminary mapping of some low-lying areas and potential wetlands. These have been shown in Map 3.

In creating new green spaces, there was a suggestion to sell some of the small, unusable city-owned parcels, to pay for the future system.

3.3.4 Tourism & Walkways

With walkways being "the new thing" in tourism, there is an opportunity for Camrose to create more interpretive trails. Walkways create interesting trips, and the new Canmore to Banff trail now has 300 users per day. Using walkways is an increasing trend among older people, as they are still active and use walking trails extensively. Some municipalities are combining walkways with public art to create "sculpture walks," or similar "cultural walks" – opportunities that exist in Camrose.

Issues and opportunities that are spatial in nature and can be portrayed on a map of Camrose are shown on Map 3: Green Space Issues and Opportunities on the following page.



City of Camrose

Green Space Master Plan

Map 3

Green Space Issues and Opportunities

Trails

- Paved
- Shale
- Nature

Future Trails

- 20 Years
- 5 Years

Green Space

- Parkland
- School Yards
- Golf Course

Other City Owned Green Space

- Cemetary
- Airport
- Utilities
- Non-contributing Green Space

- Low-Lying Areas
- City Limits
- Roads
- Railroad
- Waterbodies

0 250 500 1,000 Meters

SCALE 1:33,000

N W E S

MAP DRAWING INFORMATION:
Data from Camrose. Converted from CAD.

MAP CREATED BY: Eric Hertzman, GIS Specialist
MAP CHECKED BY: Alex Taylor, Planner
MAP PROJECTION: NAD 1983 UTM

FILE LOCATION: G:\GIS\11XXXX Camrose GSMP\
Mapping by Eric Hertzman\Figure 2a - Green Space.mxd

DILLON CONSULTING

PROJECT: 11-5528
STATUS: DRAFT
DATE: (4/17/2012)

3.4 Gaps

As a fourth component of Section 3.0, a comprehensive gap analysis was conducted, using Geographic Information System (GIS) technology. It involved the use of various assessment tools and parkland standards, which are outlined here.

Assessment Tools

Although measuring equal resident opportunity and access to green space will never be an exact science, within the scope of this GSMP, two measures help provide a reasonable assessment:

1. Quantity / amount of green space – usually expressed as a target number of hectares per 1000 people (either per neighbourhood or City-wide). In 2004, about half of Canada's major municipalities had quantity standards in place, ranging from 0.7 to 6 hectares / 1000 people, with an average of 2.79 hectares / 1000. At that time, most cities met or exceeded their goals.[5]
2. Distance or travel time – usually expressed as a maximum distance of green space from each resident, only a few of Canada's major cities have a distance-based standard.

Parkland Standards

Parkland standards are one of the key tools used by municipalities to help bring clarity and consistency to green space provision and ensure adequate provision of facilities and equal opportunity for residents. However, the absence of nationally or internationally recognized or widely applied standards for green space – while allowing municipalities to be sensitive to local conditions – has meant that standards vary widely across jurisdictions and they remain one of the more debated areas of parks planning in North America.

For this GSMP gap analysis, park standards throughout North America were examined and a new set of standards were established for Camrose (see Table 6 on the following page). With the recognition that "one size does *not* fit all", these standards should serve as a guide only, and need to be coupled with conventional wisdom and judgment related to the particular situation and needs of the community. Many park planners recognize the inadequacy of applying typical park standards to Green Space Systems, as they do not account for the quality of landscape design, ecological health or biodiversity, or the appropriateness of design for diverse users and activities. A set of standards should play only a part in properly developed green space strategies and action plans; however, by applying these service provision standards to Camrose, gaps and surpluses in parkland are revealed.

This gap analysis for the GSMP included three main components:

1. Gaps in the overall quantity of parks and trails (service levels) across the City;
2. Geographical (distance) gaps in parks and trails; and
3. Policy gaps.

[5] Evergreen, 2004.

Table 6: Recommended New Green Space Standards for Camrose

Type	Subtype	Typical Size / Width	Service Area
Parks & Green Space	Parkette	Less than 1 acre	< 400m (5 minute walk)
	Neighbourhood Park	1-10 acres	800 m (10 minute walk)
	Community Park	10-50 acres	2 km (20 minute walk, 2 minute drive)
	City Park	> 50 acres	10 km (10-15 minute drive)
	School Park	Varies	N/A
	Natural Park	Varies	N/A
	Golf Course	100-250 acres	Whole municipality
Trails	Paved	2.8 metres	800 metres (a 10 minute walk)
	Shale	N/A	
	Nature	N/A	

3.4.1 Quantity Gaps

To measure their ability to meet municipal green space needs, many municipalities establish a parkland standard expressed as a target number of hectares or acres per 1,000 people. In 2004, a survey of municipalities across Canada found that around half of municipalities had a standard in place, ranging from 0.7 hectares (~1.7 acres) to 6 hectares (~15 acres) per 1,000 people, with an average of 2.79 hectares (6.9 acres) per 1,000. Most municipalities surveyed were meeting or exceeding their goals. Through the comprehensive green space inventory, the amount of green space per 1,000 is shown in Table 7 (based on a 2011 City population of 17,236).

Table 7: Amount of Green Space / 1000 Residents

Green Space Type	Hectares		Acres	
	Total	/1000	Total	/1000
Parks	275.20	15.97	680.20	39.46
Parks & Schools	330.10	19.15	815.90	47.34
Parks, Schools & Golf Course	389.50	22.60	962.80	55.86
All Green Space	840.70	48.78	2077.70	120.54

Even when only parkland is taken into account, Camrose has one of the highest levels of green space per capita in the country, at just over 39 acres (16 hectares) per 1,000 residents. When schools and the golf course are taken into account, the City has 55 acres of green space per 1,000 residents. Based on this, it can be concluded that Camrose does not have any Park or green space *quantity* gaps, although a standard should be put in place to ensure this ratio is maintained.

3.4.2 Geographical Gaps

To determine the geographical gaps in the Green Space System, distance to parks and trails was mapped using the Geographic Information System (GIS) analysis. By creating what are called "walk-sheds" (the area within walkable distance of a park or trail), the map shows places that are not currently within walking distance, and thus not adequately served, by a park or trail. The analysis used two service distances for Green Space (Parks, Schools and the golf course) and trails: 250 metres (a 2 minute walk) and 400 metres (a 5 minute walk). The results of the distance gap analysis can be seen on Map 4 – Gap Analysis: Green Space and Map 5 – Gap Analysis: Trails. Using census data, the project team was also able to calculate the percentage of the City's population that was within these service areas.

Green Space Gaps

As shown on Map 4 and calculated using census data (shown on Table 8), the vast majority of Camrose residents live close to a City-owned Green Space (the gap analysis was applied to Parkland and the Golf course). 99.9 % of the population lives within 400 metres of a City green space, and 99.7% live within 250 metres of a City Green Space. Even when the golf course and school yards are removed from the equation, approximately 97 % of Camrose residents live within 250 metres of a City Park.

Looking at the map, large gaps in green space accessibility can be seen in downtown Camrose and in the eastern industrial area. These are gaps that should be filled in the future.

Trail Gaps

As shown on Map 5 and calculated using census data (shown on Table 8), trails are less accessible than parks, with many more gaps visible on the map and the analysis revealing that approximately only 82% of residents live within 400 metres of a trail, and only 67 % living within 250 metres of a trail. Looking at the map, the Stoney Creek Valley and central Camrose are well-served by trails, as are the new communities along the western edge of the City, along the ring road. Major gaps in trails in the northeast portion, as well as the eastern industrial park are visible, as are major gaps in east-west connectivity, with only one trail connecting the Stoney Creek Valley to western Camrose.

These gaps were evident during the GSMP Public Engagement Program. While a majority of people responded they were within 500 metres of a park (67%), much fewer (43%) noted that they were within 500 metres of a trail. This difference in accessibility between parks and trails is especially noted here in the gap analysis, which shows large gaps in the trail system, especially in relation to the park system as a whole.

While forming a significant portion of the trail system, sidewalk data was not available for the gap analysis; however, they remain an important component of the system, and efforts need to be made to ensure connectivity and filling of gaps between sidewalks. Links need to be made between the sidewalk and trail systems, where they don't exist.

Table 8: Gap Analysis Using Census Data

Type	Subtype	Approximate population within:	
		250m	400m
Green Space	Parks	97.5 %	99.7 %
	Schools	60.6 %	74.5 %
	Parks + Schools + Golf Course	99.7 %	99.9 %
Trails	Paved/Shale	67.0 %	82.2 %
	Cross Country	10.9 %	17.6 %
	All	67.1 %	82.2 %

3.4.3 Policy Gaps

Parkland Standards

As mentioned earlier in this section, parkland standards are one of the key tools used by municipalities to help bring clarity and consistency to green space provision, and ensure adequate provision of facilities and equal opportunity for residents. However, Camrose has not previously had any such standards. To conduct the gap analysis, new parkland standards for quantity (per capita) and service levels (distance) were proposed. A classification system was also developed to aid planning of future green spaces.

Development Setbacks

Historically, when new communities were developed, little thought was given to setbacks for development from green space. There is a feeling that new houses are being built too close to the valley, creating a need for development setback standards to be established and explained. Safety, the wildland-urban interface and fire-smart guidelines need to be part of the discussion. There also needs to be a better transition from the natural to the built environment, and for green space to act as a buffer between land uses.

Design Guidelines

Identified both through the Community Engagement process and the background review, there are a variety of guidelines that could be developed for green space and park design. Such guidelines would help residents, stakeholders and developers understand the design requirements for green space. These can include guidelines for:

- Landscaping – There are currently no landscaping guidelines. Basic guidelines need to be incorporated into the GSMP and potentially other policy documents.
- Park Furniture – Guidelines could be developed for park furniture such as benches, tables, and garbage and recycling cans.
- Signage – Some residents mentioned that they were not aware of the trails and green space in their backyard. When asked what park was closest to their house in the GSMP Community

Questionnaire, some respondents commented that they did not know the park names. In Camrose, major parks have signs, while minor parks do not. The GSMP should suggest which types of parks that should have signage and what it could look like.

Cash-In-Lieu

When new communities are developed, the Municipal Government Act (MGA) allows the City to take up to 10% of the land for municipal reserve, or cash-in-lieu. Money that is taken in lieu of land can be used to upgrade or develop a park where there are gaps rather than where the development is located. Often, the developers of a new community would rather give land, but there are instances when cash-in-lieu would be more beneficial to the City. To date, the City has rarely taken cash-in-lieu. Guidelines need to be established to help City planners evaluate when to take land, and when to take cash in-lieu.

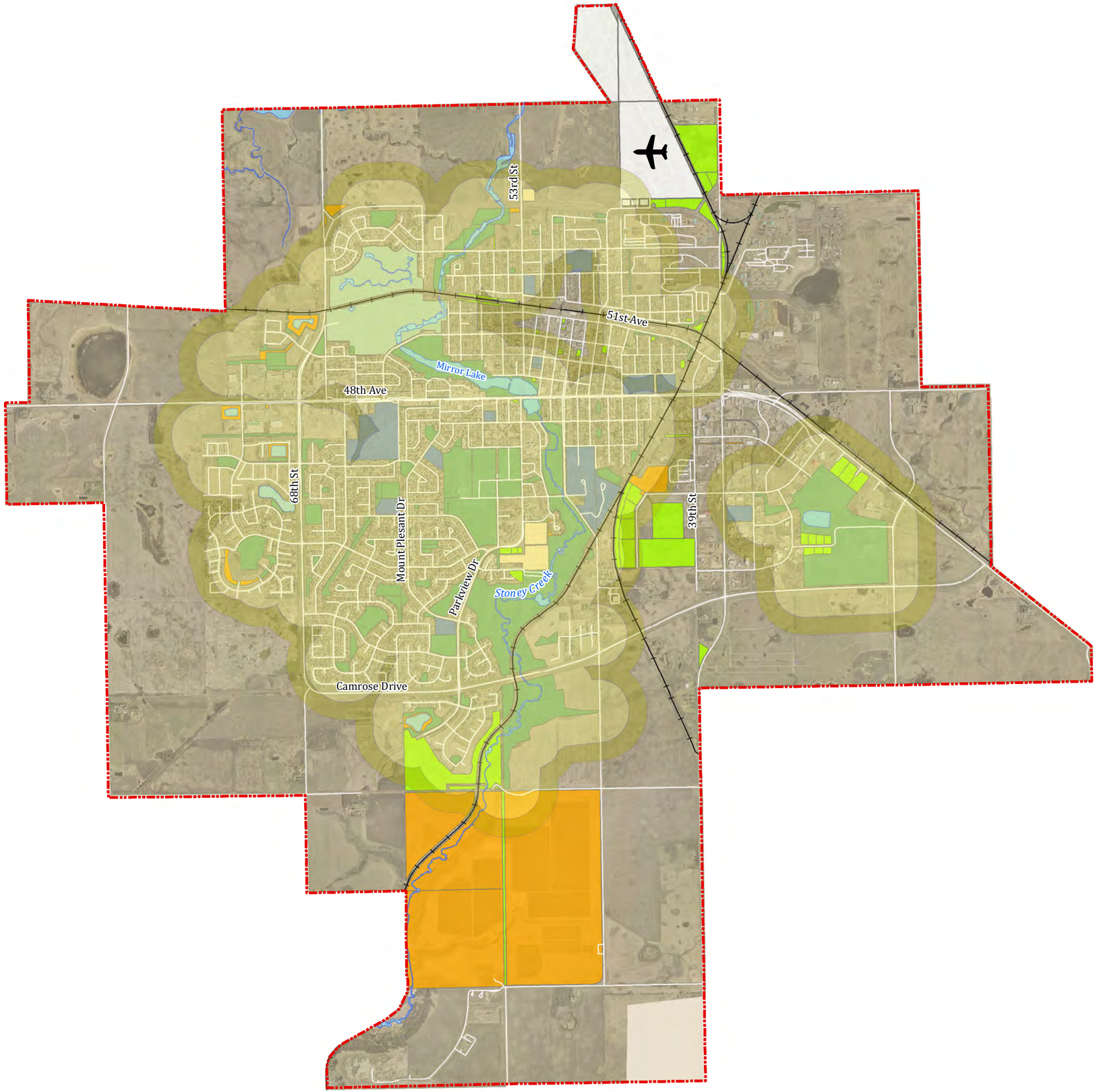
Parks Bylaws

Parks and green spaces in Camrose are regulated by a number of various City bylaws, including the Land Use Bylaw, Animal Control Bylaw, and Public Property Bylaw, among others. There is a need to create a Parks Bylaw that can better manage use and issues in parks.

Tree Protection Policies

The City of Camrose has a great natural corridor, defined mainly by the Stoney Creek Valley as well as many parks and other green spaces. Although the City has not engaged in a comprehensive study of its urban forest across all land uses, a partial tree inventory in 2000 counted approximately 12,000 boulevard trees in a portion of the City.

The *Municipal Tree Care Policy*, which provides direction for continuous enhancement of the City's urban forest, is currently being reviewed by City staff to address tree removal practices, current and future risk of disease, and other urban forest management practices. The Policy lacks provisions that encourage and promote the retention and enhancement of the city's urban forest. Requiring tree conservation plans in the development process would ensure the protection of existing mature and healthy trees during site development and building construction. Trees in Camrose can further be protected via a Private Tree Bylaw, Alberta Heritage Tree Project and by clearly outlining and enforcing penalties for any associated offenses.



THE CITY OF CAMROSE
THE ROSE CITY

City of Camrose
Green Space Master Plan

Map 4
Gap Analysis: Green Space

Green Space
- Parkland
- School Yards
- Golf Course

Walking Distance Radius
- 250 Metre
- 400 Metre

Other City Owned Green Space
- Cemetary
- Airport
- Utilities
- Non-contributing Green Space

- City Limits
- Roads
- Railroad
- Waterbodies

0 250 500 1,000 Meters

SCALE 1:33,000

N W E S

MAP DRAWING INFORMATION:
Data from Camrose. Converted from CAD.

MAP CREATED BY: Eric Hertzman, GIS Specialist
MAP CHECKED BY: Alex Taylor, Planner
MAP PROJECTION: NAD 1983 UTM

FILE LOCATION: G:\GIS\11XXXX Camrose GSMP\
Mapping by Eric Hertzman\Figure 2a - Green Space.mxd

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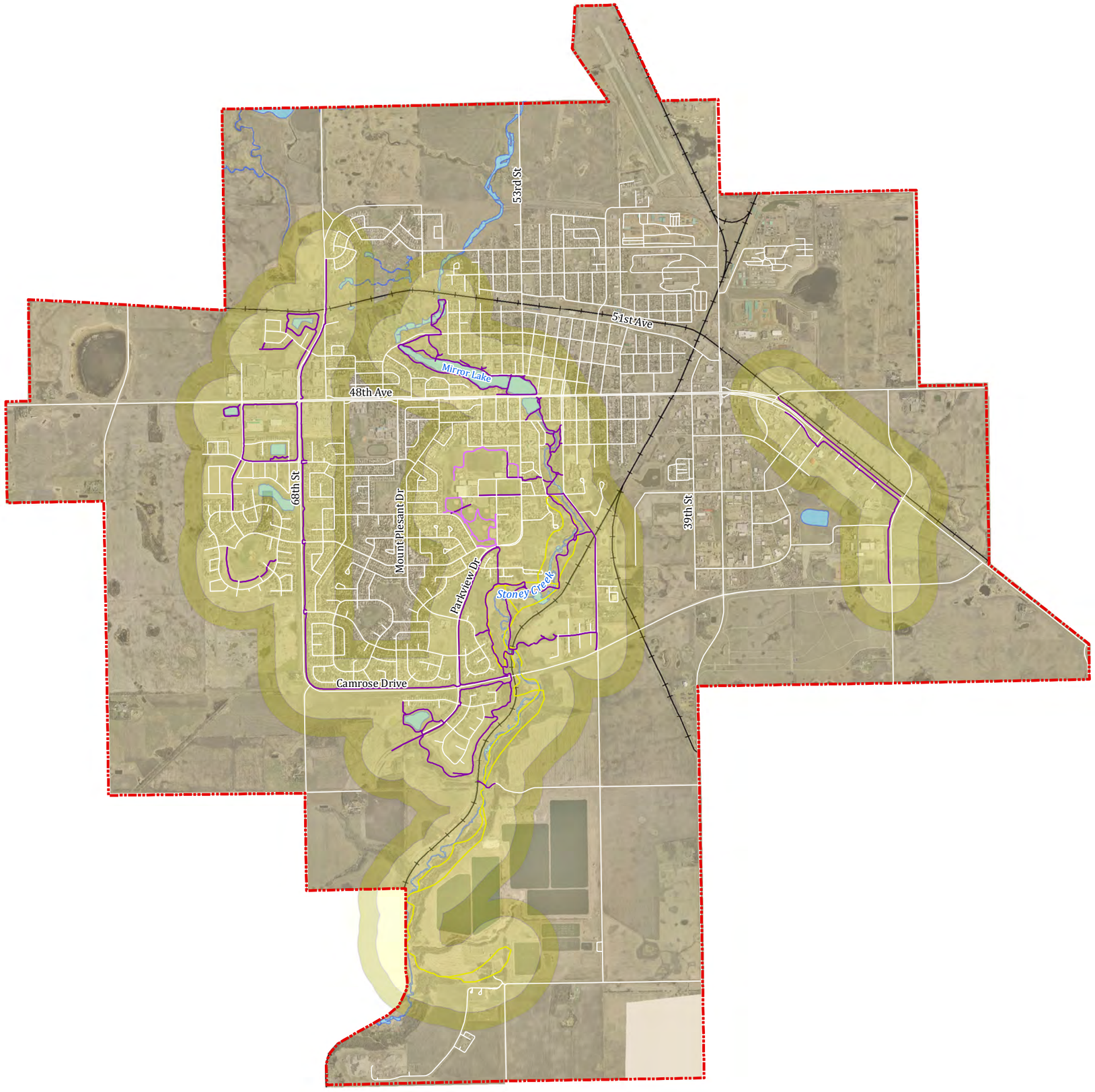

City of Camrose
Green Space Master Plan

Map 5
Gap Analysis: Trails

Trails
- Paved
- Shale
- Nature

Walking Distance Radius
- 250 Metre
- 400 Metre

- City Limits
- Roads
- Railroad
- Waterbodies

0 250 500 1,000 Meters

SCALE 1:33,000

N W E S

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4.0 THE FUTURE GREEN SPACE SYSTEM

Based on the analysis of the current Green Space System, the comprehensive gap analysis, and review of the issues and opportunities that were identified through the first round of community engagement, a picture of the future Green Space System was developed. This section outlines the future green system that is envisioned, and the goals, objectives and guiding principles that will help reach that vision.

This section outlines those two components:

1. The Vision, which includes the guiding principles, and
2. The Future Green Space Concept and the foundational elements that were used to develop it.

4.1 A Vision of the Future Green Space System

The foundation for a City's future Green Space System must begin with its current vision as a city, which has been expressed and approved in the Municipal Development Plan, Strategic Plan and the Sustainability Plan. The vision for the City is:

> *The City of Camrose: A dynamic regional community focused on providing an exceptional quality of life.*

Based on the input received from the first round of GSMP community engagement, the green space vision is:

> *An extensive, well developed and well-managed Green Space System provides recreation, amenities and services to all Camrose residents, and is one of the main contributors to the quality of life in Camrose. The future Green Space System is supported by the 'backbone' of the Stoney Creek Valley, and includes an interconnected network of parks, green spaces and trails, which form a web that extends throughout the City in all directions. All residents have equal access to a beautiful, sustainable, safe, welcoming, efficient and useable Green Space System, which helps preserve all things good about the regional landscape and natural environment.*

The GSMP Vision acts as the foundation for the future system, and all recommendations must follow the direction set by the vision.

4.1.1 Guiding Principles

Through the first round of community engagement, six guiding principles were also developed that help to steer the future green space vision and the goals, objectives, policies and recommended actions of the GSMP. Residents have confirmed that the issues that define these principles are important to them and their level of satisfaction with the Green Space System. The guiding principles include:

1. Environmental Design – Green spaces and related amenities will be developed with quality and safety in mind. New green space locations will emphasize the natural beauty of the regional landscape, be seen as an investment in the community, and enhance quality of life in Camrose.

2. Balance – Ensuring a balance of active and passive green space uses will result in a diverse range of opportunities and programs for residents and visitors. Ensuring a balance between protecting natural areas and encouraging human use of and access to green spaces will result in a healthy environment and sustainable City into the future.

3. Sustainable – The City's future Green Space System will be socially inclusive, environmentally friendly, and cost effective for present and future generations to enjoy.

4. Connected and Accessible – Green spaces and related infrastructure and amenities will be developed to be interconnected through greenways and trails, and accessible to people of all ages and abilities, including children, seniors, and the disabled. Access to all parts of the system will be maximized through roads, transit, water and trails.

5. Active Living – The Green Space System will provide recreation opportunities for people of all ages, abilities and fitness levels to engage in active living. The Green Space System will build on the trail system which provides recreation and leisure amenities, as well as an active transportation alternative to automobiles.

6. Education and Awareness – The City's Green Space System offers a wealth of natural, cultural, and heritage experiences that provide educational value. The Green Space System, future improvements to it, and the decision-making process around it, will be engaging and educational for the enjoyment of all.

4.1.2 Goals and Objectives

Building off the Vision and Guiding Principles, eight goals, related objectives and policies have been developed for the Camrose Green Space System as a whole. Following each objective is a link to the section where detailed objectives, policies and priority actions are outlined.

Goal 1: Create a Clear Vision

a. *Involve the community* – Create the Vision through collaboration with all stakeholders and residents.
b. *Provide guidelines* – Provide clarity to the development process, including development guidelines, to ensure consistency and transparency.

c. *Instill a multidisciplinary approach* – by engaging all City Staff, instill a multidisciplinary approach to green space planning and development within the City organization and culture.

Goal 2: Maintain the Green Space Ratio

a. *Create new green spaces* – Provide new green space nodes that will act as destinations and provide balance to the Stoney Creek valley, which is the backbone of the City's Green Space System.

Goal 3: Improve Accessibility and Connectivity

a. *Create new green space links* – Plan compatible and efficient linkages (such as trails, greenways and linear parks) between green spaces, and between the Green Space System and other land uses.

b. *Promote universal accessibility* – Accommodate all users by designing green spaces for people with various levels of needs and abilities.

c. *Serve the extremes of the age spectrum* – Incorporate youth and aging friendly designs and functions in the future Green Space System.

Goal 4: Help the City reach Sustainability and Livability Targets

a. *Beautification* – Provide for visual improvements throughout the Green Space System to boost tourism, commerce, and reduce safety hazards.

b. *Ecological value* – Educate the public on the ecological values of the well-established Green Space System that supports a diverse ecosystem, habitats and movement through natural corridors.

c. *Green infrastructure* – Promote the use of the City's urban forest system for heating/cooling effects on residential properties, local stormwater retention, strengthening the local ecological integrity and improvement in the City's natural water cycle.

d. *Gathering places* – Integrate a central gathering place into the Green Space System to assist in placemaking and "identify" a focal point for the City's Green Space System.

e. *Public art* – Promote public art and sculptures in a range of park elements and future design.

Goal 5: Conserve Camrose's Natural Heritage

a. *Protect Environmentally Significant Areas (ESAs)* – Include ESAs (both designated and yet to be designated) such as steep slopes, Stoney Creek and its associated valleys, Mirror Lake, wildlife habitat and urban wildlife corridors in the Future Green Space System.

b. *Protect the urban forest* – Ensure that the urban forest is identified, valued and properly managed within the Green Space System.

c. *Identify development setbacks* – Identify appropriate development setbacks from aspects of the Green Space System, with emphasis on top of valley development.

d. *Promote invasive species management* – Develop recommendations for flexible and diverse invasive species management to protect sensitive ecosystems.

Goal 6: Improve Usability and Flexibility of Green Spaces

a. *Wayfinding* – Promote wayfinding and signage in strategic and appropriate green spaces.

b. *Public safety* – Ensure appropriate environmental design of trails and green space to prevent crime and reduce life safety concerns.

c. *Environmental education* – Consider environmental education opportunities through signage and other park design features.

d. *Year round use* – Provide opportunities for all season use of the trail and Green Space System.

e. *Off-leash areas* – Ensure that pet owners have access to dedicated off-leash areas while also reducing conflicts and minimizing environmental impacts.

f. *Parking management* – Follow environmentally friendly planning principles for high use parks, events, and future parking lot design.

Goal 7: Improve Maintenance and Operation of the Green Space System

a. *Infrastructure improvement* – Allow for the timely replacement of rundown benches, play structures, and related items in order to reduce safety hazards and provide for a quality recreational experience.

b. *Consider municipal budgets* – Carefully consider the funding of operation and maintenance of green spaces, as municipal resources are finite.

c. *Review maintenance standards and practices* – Look for efficiencies in how green spaces are maintained.

Goal 8: Build Partnerships

a. *Developers* – Ensure the development community plans and delivers high quality developments with benefits for all.

b. *Others (Business, schools, county, NGOs, Rotary, ski club)* – Provide opportunities to enhance the Green Space System through new or improved agreements and working relationships.

c. *Neighbouring municipalities* – Identify potential intermunicipal green space connections, such as major creek parks to the north and south.

4.1.3 City-wide Policy Directions

Based on the objectives, the following general policy directions have been developed for the entire Green Space System as a whole. At the City-wide scale, policy direction is meant to provide overarching guidance to City departments, with an interest in promoting and developing public green space for residents and visitors.

1. The creation of green space in the City of Camrose should adhere to the Green Space Master Plan and any subsequent related policy development.

2. All City of Camrose departments shall refer to the Green Space Master Plan during any type of land use development planning (e.g., infrastructure improvements, all land uses, energy infrastructure, etc.).

3. The Community Services Department should maintain the recommendations and help other departments administer policy and standards contained in the Green Space Master Plan, through assessing and making potential amendments to the Municipal Development Plan (MDP), Land Use Bylaw (LUB), Landscaping Policy and engineering and development standards.

4. "The City will support the protection and conservation of natural areas within private developments and/or within the public open space system where such areas are characterized by significant biophysical functions or features" (*MDP Parks, schools and open space area policy 6).*

5. Areas within the floodplain shall be designated for the purpose of parks, recreation facilities and wetlands compatible with the flood risks. The City will acquire these lands through various mechanisms, such as dedication as Environmental Reserve (MDP *Parks, schools and open space area policies 9 and 10).*

6. An environmental corridor (setback) should be enforced along all watercourses, significant sloughs and potential wetland areas (see Map 6). This corridor has been identified as environmentally significant to help protect its ecological integrity while allowing evolution of the trail system.

7. To the extent possible, new parks, green space and trails should be developed as a connected system, as envisioned in the Future Green Space Concept.

8. New green spaces should be developed to the standards included in this GSMP and to other applicable park design standards.

9. All green space development should investigate the potential for multiple use opportunities.

10. Capital and operational funding for parks and green spaces should be at a level consistent with the current and future needs for public use and conservation.

11. Natural systems (creeks, wetlands, woodlands) should be integrated into new communities and the Green Space System as natural areas or parkland.

12. All new parts of the Green Space System should be planned through close community consultation.

13. While it is understood that all city-owned land is available for municipal uses, all designated green space should be protected from other municipal uses, which may include (but not be limited to): stormwater infrastructure use (unless the two can co-exist), municipal buildings, emergency service buildings, etc.

14. Public green space that is used for stormwater management facilities should be designed to be visually and physically accessible to more than the immediately adjacent properties (*MDP Parks, schools and open space area policy 8).*

15. Where plausible, all new comprehensive development and / or subdivision in Camrose shall comply with this GSMP, and Concept Plans shall (*MDP Parks, schools and open space area policies 2, 3, 4, 5, and 7)*:
    i. establish a conceptual system of future parks and public green spaces that is based on the GSMP Future Green Space Concept;
    ii. provide for major recreational parks (5+ acres) at central locations within comprehensively planned residential areas;
    iii. provide for future school sites, which should be centrally located within a residential area with appropriate access considerations, rather than on the edge of the residential district or community or adjacent to industrial or other non-compatible development;
    iv. identify any land to be designated as Environmental Reserve; and
    v. identify Municipal Reserve land (a maximum of 10% as allowed under the Municipal Government Act) for public parks, school reserves or municipal and school reserves in consultation with affected school boards.

4.1.4 The Future Green Space Concept

The Future Green Space Concept was developed to consider the Vision and Guiding Principles noted above, and fulfill some of the overarching goals and objectives of the GSMP. It also considered:

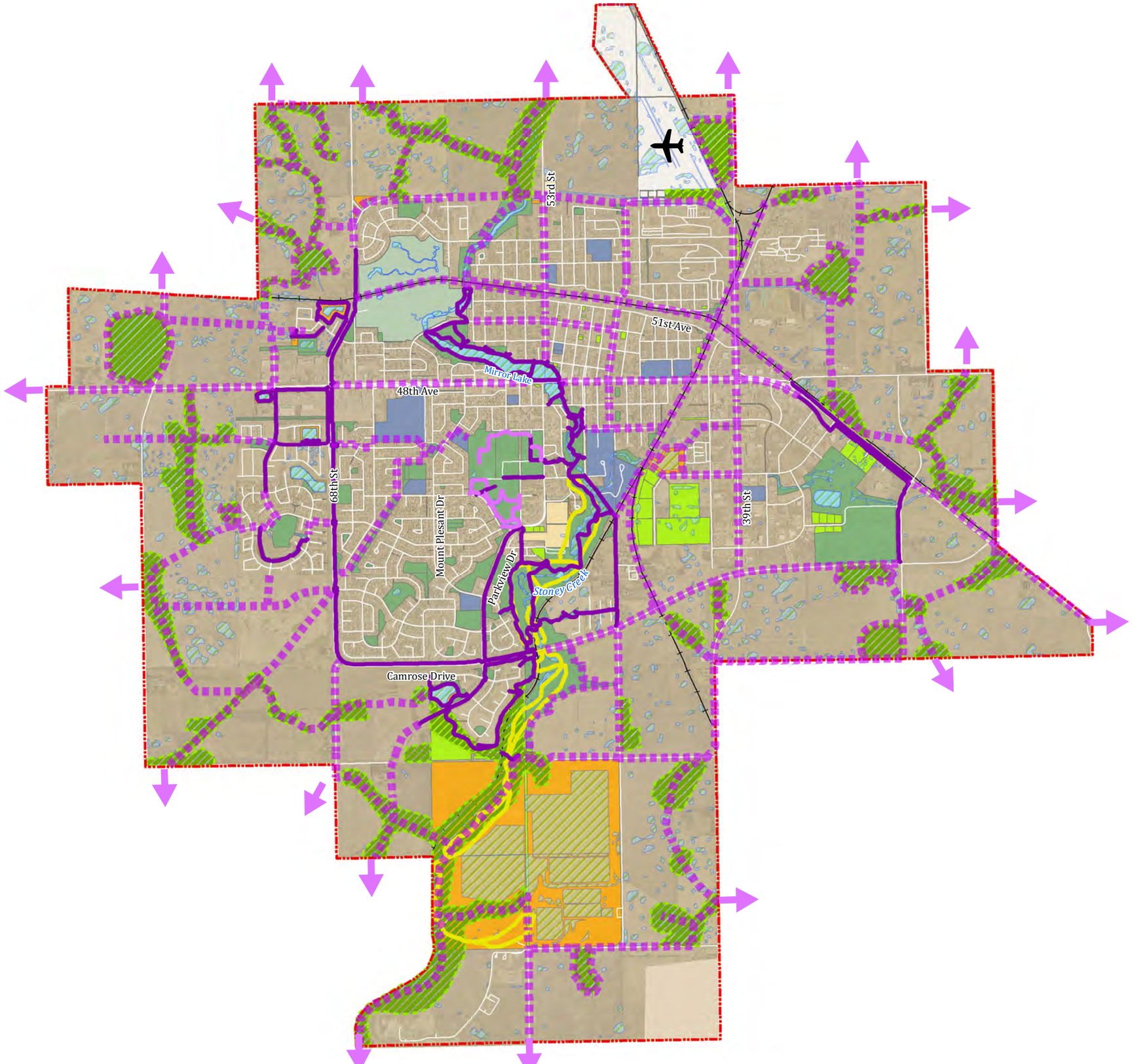
- Population – growth nodes / future development;
- Proximity to existing green space and gaps;
- Low lying areas – in the absence of municipally designated Environmentally Significant Areas (ESAs), these were used to help identify ecological assets that should be preserved as part of the Green Space System;
- Transportation corridors and future trails that were proposed in the 2009 Transportation Master Plan; and
- Proximity to intermunicipal assets or open spaces.

While development of the future green space concept followed more specific objectives, and has some recommended policies and priority actions, the future green space concept is implemented through additional policies and recommended actions for each green space type (Section 5) and each management component (Section 6).

The proposed future Green Space System (Map 6: Future Green Space Concept) is comprised of several elements that build on the vision of creating an interconnecting network of open spaces and trails. The concept is based on the unique landscape of Camrose and provides green space opportunities for all Camrose residents. The Concept builds on the inventory of City-owned green spaces, and attempts to provide a good relationship with the landscape.

Policy

1. Map 6: Future Green Space Concept provides the general framework for the future Green Space System and should not be referred to in isolation of the remainder of the GSMP document.



City of Camrose
Green Space Master Plan

Map 6

Future Green Space Concept

- Future Intermunicipal Connections
- Future Links (Trails)
- Future Green Spaces

Green Space

- Parkland
- School Yards
- Golf Course

Other City Owned Green Space

- Cemetary
- Airport
- Utilities
- Non-contributing Green Space

0 250 500 1,000 Meters

SCALE 1:33,000

N W E S

MAP DRAWING INFORMATION:
Data from Camrose. Converted from CAD.

MAP CREATED BY: Eric Hertzman, GIS Specialist
MAP CHECKED BY: Alex Taylor, Planner
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FILE LOCATION:
G:\GIS\11XXXX Camrose GSMP\Mapping by Eric Hertzman\
Map 6 - Future Green Space System.mxd

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4.2 Future Green Space Typology

This section is organized by the future green space typology, which is based on the current green space typology identified in Section 2. One of the first recommendations of this GSMP is to create two new green space types: Natural Areas and Greenways. Based on these additions, the future green space typology includes:

1. Natural Areas (new);
2. Parkland (existing);
3. Greenways (new);
4. School Yards (existing);
5. Golf Courses (existing); and
6. Other City-Owned Land (existing).

Section 4 also includes directions for other major components of the Green Space System: Trails and the Natural Heritage and Urban Forest System.

4.2.1 Natural Areas

Natural areas are parcels of land that have not been disturbed by human activity (such as agriculture or urban development) and have been left in their original state. Examples of natural areas include woodlands, grasslands, wetlands, open and running water, ecological reserves or urban forests. Most natural areas are directly related to the landscape, and identifying the green spaces that are based on, or associated with, natural areas or ecological features is important in establishing an ecological framework for the Plan. Natural Areas are valuable for a number of reasons, including habitat for wildlife and fish, biological and ecological diversity, quality of life for residents and visitors, and they help to provide the "green" infrastructure that Cities are beginning to understand the need for. Natural Areas also have intrinsic ecological value, and may have greater potential for recreation or interpretation purposes.

Natural areas in Camrose will include green space areas that are dedicated for reasons related to environmental conservation, aesthetics or protection from natural hazards. Recreation uses and some level of development for utility purposes may be permitted within natural areas, as long as it does not detract the primary objective of natural areas: preserving the land in its natural state.

Additional policies regarding the City's natural heritage and urban forest can be found in Section 4.4.

Standards of Provision: Distribution & Size

As they are created by natural processes, Natural Areas are usually not evenly distributed on the landscape. In this context, Natural Areas are created as components of the Green Space System as a City develops around them. Their size can also vary widely, based on the original landscape features. It should be recognized that what is of value to a city, region, or culture, may vary from time to time. For

example, wetlands were at one time considered to be a nuisance and a hindrance, and now they are considered to have great ecological and amenity value. Values may change in the future, and thus the provision of Natural Areas allows a City to maintain flexibility with regards to its future Green Space System.

Objectives – Natural Areas

- Ensure that the natural landscape is valued in the Green Space System, and that all residents have access to Natural Areas.
- Preserve creeks and adjacent areas, woodlands, and wetlands, and incorporate into new development where possible.
- As they are to be maintained in their original state, ensure that development and management of Natural Areas is minimal.

Policies – Natural Areas

- The City shall reclassify existing green spaces that fit the objectives of this green space type as Natural Areas.
- Map 6: Future Green Space Concept identifies areas that, due to a preliminary analysis of existing tree stands, low-lying areas and potential wetlands, should be incorporated into the green space system as Natural Areas. This includes the Stoney Creek Valley and flood risk areas, north and south of existing Valley Parkland, to the City limits.
- Future green spaces identified on Map 6 that fit the objectives of the Natural Area green space type should be acquired through a combination Environmental Reserve or Municipal Reserve dedication during the development process, or other acquisition methods as identified in Section 4.6.
- All land acquired by the City through Environmental Reserve dedication shall be designated as Natural Areas.
- Until the City develops a Natural Heritage and Urban Forest Management Plan (See Section 4.4), all new development and / or subdivision proposals, where applicable, shall be required to include, in concept or area structure plans, a biophysical assessment of proposed developable lands. Such an assessment shall identify local Environmentally Significant Areas (ESAs), and potential impacts on natural ecosystems, habitat and other aesthetic qualities (e.g., viewsheds). All ESAs identified as part of this process should be considered for acquisition by the City as Environmental Reserve and designated as Natural Areas.
- Other green space types located adjacent to Natural Areas should be developed in a way that will ensure compatibility.
- All Natural Areas shall be managed so they maintain their natural character and integrity, and should be developed primarily for passive recreation opportunities, with minimal infrastructure.
- Access to Natural Areas shall be prohibited, controlled, or limited to trails only, via regulations and / or fencing that requires users to stay on the trails.
- No portions of Natural Areas shall be manicured, and use of pesticides should be limited to only help manage particularly aggressive or invasive species that threaten the biological health of the Natural Area.

Priority Actions – Natural Areas

- The City should develop a Natural Heritage and Urban Forest Management Plan, which will identify sensitive areas and all aspects of the City's Natural Heritage System, including the Urban Forest, within the City boundary and provide recommendations for their management. See Section 4.4 for the recommended scope of that Plan.

4.2.2 Parkland

As outlined in Section 2.1, the City of Camrose is very fortunate to have a very well-developed urban park system which allows citizens of all ages to enjoy many exciting aspects of the outdoors during all four seasons of the year.

Standards for Provision: Distribution and Size

The size, distribution and service objectives of parks depend on the location and design of each. To ensure a broad distribution of parks in Camrose, the GSMP recommends that parks should be further classified into four categories:

1. City Parks – City parks are intended to serve all City residents and visitors, and functions can include community events, unique leisure experiences and sports tournaments. City Parks will be very well developed and maintained, and should include infrastructure and fields that can accommodate both organized and non-organized sports, and leisure opportunities to the entire City. City Parks should be located adjacent to major roadways and transit routes. Although most are larger than 50 acres (~20 hectares) there is no recommended size for City Parks - they should be as large as necessary to serve the entire City.

2. Community Parks – Community parks are intended to serve several neighbourhoods (an area of approximately 800 metres radius, a 10 minute walk), and functions can include athletic fields, playgrounds and picnic areas. They should be centrally located, also near major roadways, and may usually be adjacent to a school, library or community centre. The minimum size should be between 10 – 50 acres (approximately 5 – 25 hectares).

3. Neighbourhood Parks – Neighbourhood parks are intended to serve a single neighbourhood, defined as an area containing 2,000 to 4,000 residents. They should be located at centrally in a neighbourhood, often away from major roadways, and there should not be any barriers for access within the neighbourhood. Functions can include play areas and passive green spaces. They should serve an area of approximately 400 metres radius (5 minute walk), and the minimum size should be around 1 acre (0.3-0.4 hectares).

4. Parkettes – Parkettes (also known as pocket parks or mini-parks) make up the smallest of common park types. Often located on irregular pieces of land or previously developed properties, they are intended to serve the local population (a block or portion of a neighbourhood). Occasionally they are created as a public amenity of a larger (usually medium to high density) residential or commercial development. Usually too small to facilitate physical activities such as jogging or even walking, they provide green spaces where there were none previously, facilitating passive park uses such as sitting outdoors, reading, and occasionally a

small children's playground. They also can provide habitat for birds and provide green infrastructure function. In urban downtowns, where land is expensive, parkettes are one of the only options for creating new green space without large-scale development. Parkettes are normally less than 1 acre, and should serve an area smaller than 400 metres radius.

As highlighted in Section 3.4, new parkland standards are proposed for Camrose, which include the following:

Table 9: New Parkland Standards

Subtype	Typical Size	Service Area
Parkette	Less than 1 acre	< 400m (5 minute *walk)*
Neighbourhood Park	1-10 acres	800 m (10 minute *walk)*
Community Park	10 – 50 acres	2 km (20 minute walk, 2 minute drive)
City Park	> 50 acres	10 km (10-15 minute drive)

Objectives – Parkland

- Ensure that all residents have access to Parkland.
- Provide recreation opportunities, including playfields, manicured grassed areas, playgrounds, trails, etc. for City residents.

Policies – Parkland

- All new parks shall be designated according to the Park Classification contained in this GSMP.
- All existing parks may be classified according to the Park Classification contained in this GSMP, if appropriate.
- All new parks should be sited for easy and safe access by every resident of every neighbourhood.
- The City shall refer to the future green space concept for the creation of new parkland in new communities, which will be acquired through Environmental Reserve, Municipal Reserve provisions outlined in Section 4.6.
- Land identified for future parkland, and especially for use as playing fields and other recreational uses, shall be of good quality that is appropriate for such uses.
- All new parks shall be developed in conjunction with complimentary facilities and amenities, and developed appropriately according to its designated park type.
- Where possible, all new parks should provide on or off-street parking.
- Pesticide management in parks shall be evaluated and limited if possible. Spraying should only be done as permitted by the Weed Act.
- Land acquired by the City that does not qualify for Natural Areas, shall be dedicated as Parkland.

Priority Actions – Parkland

- The City should explore the creation of a central green space within the 'downtown', either on current City-owned land, or through acquisition.

Off-Leash Areas

Dog management and the establishment of permanent and additional pilot off-leash areas has been a priority for the City over the past couple of years. Dog management remains an important discussion in Camrose and generates many opinions and concerns, from impacts of dogs in ecologically sensitive areas to public health and safety issues. Pet ownership is likely to increase in Camrose, placing additional demands on the Green Space System.

Dogs are currently managed in Camrose through the Animal Control Bylaw.

Objectives – Dog Management

- Ensure that all dog owners have access to a dedicated off leash areas(s).
- Minimize human - dog conflict in Camrose's green spaces.
- Ensure protection of the natural environment and green space assets from the impacts of pets including dogs.

Policies – Dog Management

- The City shall work with dog owners to plan and develop components of the Green Space System for use by residents with dogs.

Priority Actions – Dog Management

- Develop a Dog Management Program to address and manage dog related issues in green spaces. It should be based on Best Management Practices for dogs and follow the objectives outlined above. Working with a community advisory committee, it should include:
    - A review of the supply of dog off-leash areas in Camrose in comparison to other nearby municipalities and the provincial average, understanding that dog off-leash areas are often popular regional destinations;
    - A review of the existing Animal Control Bylaw and options to establish additional designated, fenced dog off-leash areas with lighting;
    - An evaluation of management options to help minimize the environmental impacts of dogs in parks, including the costs and benefits of providing habitat protection fencing, and options for a sustainable dog waste disposal program (i.e. doggy bags, pick-up areas);
    - A dog education program that will promote responsible dog etiquette, using signage, pamphlets, updated maps and other communication tools;
    - Guidelines for design and operation of dedicated off-leash areas; and
    - Consideration of increasing dog license fees to offset costs associated with managing dogs in parks.

Playgrounds

Camrose is currently well served with playgrounds, with 26 city-provided playgrounds distributed across the City in various parks (see Section 2.0). They range from small tot lots to larger, more complex playgrounds. Most playgrounds are provided through the development process, but the City has also

made financial contributions to playgrounds on some existing parkland and school yards. Playgrounds are an important component of many parks; however, a number of actions need to be followed to ensure equal distribution and appropriate design.

Objectives – Playgrounds

- Provide a network of playgrounds throughout the City which meet the full range of play needs for all children, regardless of age or mobility.
- Ensure play structures are accessible to the extent possible, to all children, regardless of age and mobility.
- Ensure play structures can adequately address the needs of preschoolers and teens.
- Ensure playground equipment can serve the full range of a child's play needs, including active play (provided through climbing structures, swings, etc.), cognitive / creative play (digging, molding, shaping, constructing), group or social play (talking, pretending, acting) and individual or quiet play (daydreaming, observing, imagining).
- Ensure all playgrounds have complimentary facilities (benches, shade trees, etc.) for the use of parents and other family members.

Policies – Playgrounds

- All City playgrounds shall be located in designated parks.
- All new playgrounds proposed in community shall follow the design guidelines included in this GSMP (See Section 4.8).
- All new playgrounds should include at least one accessible component.

Priority Actions – Playgrounds

- Replace and upgrade playgrounds with new equipment, as required, to meet or exceed CSA playground standards.
- Explore the potential for developing one fully accessible playground, at a strategic, central location, and incorporate aspects of accessible, barrier free play equipment, site designs, play elements and play opportunities in all playgrounds, to foster and integrate play for all children, especially those with physical and developmental disabilities.
- Continue to evaluate the need for additional playgrounds throughout the city, ensuring playgrounds fit the demographics of the neighbourhood and incorporate age appropriate equipment.
- Where appropriate, consider integrating playgrounds with adult and senior fitness components.

Park Facilities and Buildings

As covered in Section 2, the City has a wide variety of facilities in its green spaces, including benches, garbage cans, restrooms, and recreational facilities. It also incorporates a number of buildings, which have a variety of ages and conditions. The City should continue to explore the use and requirement for additional facilities, especially recreational facilities, as the City grows.

Objectives – Park Facilities and Buildings

- Ensure City residents have access to the required Green Space facilities, including amenities and recreational facilities, throughout the life of this plan.
- Ensure aging park buildings are maintained and retrofitted to successfully serve residents and the Green Space System.

Policies – Park Facilities and Buildings

- The City shall continuously monitor community needs for additional facilities that could be provided in City Green Spaces.
- The City shall explore innovative active green space uses such as splash pads and work out facilities.
- The City shall continuously monitor the conditions of park buildings, and remedy and deficiencies that are discovered.

Priority Actions – Park Facilities and Buildings

- The City should conduct periodic reviews of the Leisure Services Master Plan to ensure that as the City grows, service levels of recreational facilities are maintained.
- The City should undertake a Parks Building Condition Assessment Study, which will provide a comprehensive evaluation of exterior and interior finishings, plumbing and electrical systems and fixtures, hazardous materials and building code standards.

Public Art

Public Art is becoming an important aspect of many of Camrose's green spaces. It can include creative ideas that are integrated into a range of park design elements, such as signage, fountains, sculptures, backstops, fences, benches, paving, architectural elements and lighting.

Objectives – Public Art

- Ensure that public art continues to be a part of City the Green Space System.

Policies – Public Art

- The City shall, as resources permit, integrate public art into parks and other City green space, in collaboration with the public.

Priority Actions – Public Art

- In the short-term, the City should continue to collaborate with the public and other City departments to integrate art pieces into green space design and elements, where appropriate.
- In the long-term, the City should develop a Public Art Policy.

The Skate Park

The skate park was built in 2004 and while it has been successful, it is beginning to show signs of deterioration.

Objectives – The Skate Park

- Ensure Camrose's youth have access to a well maintained skate park for recreation purposes.

Policies – The Skate Park

- The City will work with community organizations to maintain the skate park for Camrose residents, especially youth.

Priority Actions – The Skate Park

- The City should conduct an assessment of the skate park to determine if improvements are needed.

Campgrounds

Until the late 2000s, Camrose owned and operated a campground at the edge of the Valley, near the Stoney Creek Centre; however, based on a recommendation from the 2000 Leisure Services Master Plan, the City shut it down and returned the campground land to the park system. Campground facilities are currently provided by a privately-owned facility beside the Camrose Regional Exhibition lands.

Objectives – Campgrounds

- Ensure the City does not expose itself to financial risk while helping to support a local campground within City limits if demand warrants.

Policies – Campgrounds

- The City shall maintain its direction on campgrounds, and let the private sector provide such services within the City limits if demand suffices.

Community Gardens

Community gardening is becoming increasingly popular as a recreational activity and important as an education and community-building tool. Communal gardening can help seniors stay active, produces locally grown food and improves social interaction.

Objectives – Community Gardens

- Continue to explore opportunities for urban agriculture and community gardens on City green space.

Policies – Community Gardens

- The City will explore supporting community gardens, pending interest from the community.
- The City will encourage the incorporation of community gardens into new developments and communities, as public amenity spaces.

Priority Actions – Community Gardens

- The City should consider opportunities to incorporate community gardens and other forms of urban agriculture in parkland and other City green spaces, including utilities and non-contributing green space (laneways and street right-of-ways).
- The City should create a pilot project community garden to generate excitement and enthusiasm. This will require fencing an area, providing water supply, dividing into plots, creating an allocation strategy, and finding a community organization to coordinate it.

4.2.3 School Yards

Camrose's School Yards Green Space Type includes school grounds and the University of Alberta Augustana Campus. New schools will be built in new communities, as growth requires, and they will continue to be treated as semi-public components of the Green Space System.

Standards for Provision: Distribution and Size

As the locations of school yards are determined as new communities are built, and generally follow school board criteria for catchment areas and service population areas, the City will continue to allow the school boards to determine the best locations for new school yards.

Objectives – School Yards

- Ensure school yards are cooperatively managed for resident use.
- Ensure new schools are built in appropriate locations and added as components of the City's Green Space System.

Policies – School Yards

- The City shall continue to cooperate with the School Boards and the University of Alberta (Augustana Campus) on provision of semi-public green space and access.
- The location of Municipal Reserves (that may become school land) must consider proximity to current and future, planned green space links and nodes.
- The City shall adopt clear criteria to guide decisions on the acquisition of school yards and make sure that the rationale for any recommendation on a proposed acquisition is clear.
- The City shall continue to work with the School Boards to help manage use of and access to School property for green space use.

4.2.4 Greenways

Greenways are the linear components of a Green Space System. They can include trails, pathways, bikeways and linear parks, and are often the connections between other components of the Green Space System, including natural areas and Parkland. In an urban setting they can also include streets, boulevards, and other right of ways.

Greenways are important as recreation pathways and access points to ecological areas and recreation fields, and many are related to existing green spaces. Other linkages between open spaces may already exist, and one of the objectives of the GSMP is to identify where potential connections between existing

and future green spaces can be strengthened. This will help to allow the Green Space System to become increasingly interconnected by a system of paths and trails. Many existing streets and linear parks provide opportunities for development of this system.

Standards for Provision: Distribution and Size

This green space type connects other types, and is a system in itself. It should be based on the environmental framework and should link major green space nodes. All residents should have easy access to the system.

Objectives – Greenways

- Ensure that all significant green spaces are linked by a multi-modal path system.
- Ensure that new development links to the existing open space system.

Policies – Greenways

- Existing green spaces that fit the objectives of the green space type should be designated as Greenways (i.e. any existing linear parks).
- The City will support, enhance and expand a regional pathway system to promote healthy living, and sustainable recreation and transportation. Optimally, regional pathways should be designed for walkers, runners, cyclists, and persons with reduced mobility. Designs should also consider access, safety and adequate signage.
- Regional pathway connections should be routed along the edges of Environmentally Significant Areas (ESAs) or into locations with less ecological sensitivity to minimize their impacts.

Priority Actions – Greenways

- The City's transportation and Community Services departments will work together to explore opportunities at incorporating Greenways into major capital projects (improvements, enhancements) that involve the transportation system. This will include incorporating bikeways, bike lanes, and accommodating other alternative forms of transportation. These will include upgrades to major transportation routes, such as 48th Avenue, 39th Street and the Camrose Drive Ring Road.

4.2.5 The Golf Course

The golf course is well managed and maintained by the City. Based on the findings of this GSMP, the only recommendation is for the City to maintain ownership of the Golf Course and continue to evaluate its success as a component of the Green Space System.

Standards for Provision: Distribution and Size

As a component of a Green Space System, there are no recommended standards for provision. The GSMP does not foresee the City of Camrose acquiring or developing a second golf course during the lifespan of this Plan.

Objectives – Golf Course

- Protect the golf course as a component of the City's Green Space System.

Policies – Golf Course

- The City shall continue to manage the golf course as a component of the City's Green Space System, and shall work to protect and enhance it as such.

4.2.6 Other City-Owned Land

The sixth component of the Green Space System includes all other City-owned land, such as the Cemetery, Airport, Public Utility Lots (PULs) and all other land (which is categorized in the GSMP as non-contributing green space).

All parks, trails and green spaces should contribute to a comprehensive plan and be developed as one of the green space types listed above. The City has a number of parcels that could be listed as non-contributing green space as they do not contribute to the public Green Space System and provide no public benefit, other than providing green infrastructure services.

Through development and construction processes, there can often be "leftover" parcels of land which are provided to a municipality as Municipal Reserve and called "Park". These often-isolated spaces have no real connection to the community nor do they connect with another type of open space.

Right-of-Ways (ROWs) provide area for infrastructure improvements and also act as utility easements. These spaces are often highly maintained turfgrass, and occasionally include trees and other plantings.

While there are many ROW open spaces that are considered unusable as green space, others may be incorporated into the Green Space System. Moreover, an ROW considered unusable from an active open space perspective may offer visual relief or provide a buffer zone along roads or rail lines.

Standards of Provision: Distribution and Size

As non-typical components of a Green Space System, there are no standards of provision for cemeteries, airports, public utility lots and non-contributing green space.

Objectives – Other City-Owned Land

- Continue to manage city-owned cemeteries as part of the Green Space System.
- Ensure that future Green Space planning accounts for new cemetery space when and if needed.
- Continue to contribute to the management of the airport to ensure protection of its environment and protecting it as a component of the Green Space System.
- Ensuring public utility lots are either formalized as components of the Green Space System (as one of the types above) or managed to ensure their contribution to the City's green infrastructure.
- Reduce or eliminate all existing, and avoid the creation of new, non-contributing green space in Camrose.

Policies – Other City-Owned Land

- All new proposed open space must contribute to the overall system of public green space, and shall be designated Natural Area, Parkland, School Yard, Golf Course, or Greenway.
- Development plans shall indicate all proposed green space, and no non-contributing green space shall be permitted, except where essential in the provision of utilities.
- All existing non-contributing open space should be evaluated for its use and potential reuse. Spaces identified as non-contributing shall be removed from the City's green space inventory, and mapping corrected.
- The Community Services Department shall be consulted on all new ROW construction to provide comments on integration with the Green Space System, and landscaping and maintenance requirements.

Priority Actions – Other City-Owned Land

- The City should monitor the need for new cemetery space and ensure the Cemetery Bylaw remains current.
- The City should review all non-contributing green space to determine how best to deal with existing spaces that do not contribute to the system and how to avoid this type of space in the future. It should also review the list of non-contributing green space to make a shortlist of parcels to possibly divest/disburse, with sale funds being used to support and build the future Green Space System.

4.3 Trails

Trails, and the related green space components like pathways and bikeways, form the important links that turn a hap-hazard layout of green spaces into a comprehensive network. They are an integral component of the Green Space System, providing links to and between green space, and recreation and leisure activities including bike riding, walking and roller blading. With their linear design, trails specifically target these types of activities, and contribute to the pedestrian transportation network; however, trails themselves do not provide green space to the City, and most trails are a component of green spaces (off-street), although some are along roadways (on-street). Trails are one of the many features that can exist in Green Spaces such as Natural Areas, Parks, School Yards, and Greenways (where they are integral).

Standards for Provision: Distribution and Size

As with parks, the size, length, distribution and service objectives of trails depend on the location and design of each. To ensure a broad distribution of trails in Camrose, the GSMP recommends that trails continue to be classified into three categories, and be provided based on the service levels below:

1. Paved Trails – Camrose's paved trails compose the primary off-street trail network for the City.

2. Shale Trails – a series of internal park trails that facilitate access and movement within parks.

3. Cross Country (Nature) Trails – Camrose's system of grass trails that are used for cross country skiing in the winter and walking, running, biking and as a dog off-leash area in the summer.

As highlighted in Section 3.4, new trail standards are proposed for Camrose, which are outlined here.

Table 10: New Trail Standards

Type	Subtype	Typical Width	Service Area
Trails	Paved	2.8 metres	800 metres (a 10 minute walk)
	Shale	N/A	
	Nature	N/A	

Objectives – Trails

- Provide safe, accessible, options for active transportation and provide access to all areas of the City including important recreational, cultural and institutional amenities.
- Establish a hierarchy of trails that will assist in planning, development, management and operation of trails.

Policies – Trails

- All new green spaces shall have trails incorporated in their design.
- Where possible, all new green spaces shall be connected to the overall trail system to ensure connectivity.
- In Natural Areas, trails shall not transect environmentally sensitive areas – they shall be constructed around such areas, with the exception of boardwalks and other construction methods that consider their sensitivity.
- The City should explore opportunities for improved bike trails (both on- and off-street) and single-track off-road paths for mountain biking.
- All new portions and upgrades to the Camrose Drive ring road shall incorporate trails to form a circular trail around the City.

Priority Actions – Trails

- The Future Green Space Concept identifies areas where future trails should be considered and constructed. The City should design and construct trails accordingly, including:
    - Additional paved trails, especially throughout new green spaces in the Stoney Creek Valley, and as part of the Camrose Drive Ring Road.
    - Additional shale trails, especially within new green spaces and where there are gaps
    - Conversion of existing high use shale trails into paved trails, as appropriate and necessary.
    - Paved trails on 48 Avenue and 39 Street.
    - Working with the Camrose Ski Club to develop a more extensive network of cross country trails.

4.3.1 Paved Trails

The surface shall be asphalt or concrete, with a width of approximately 2.5-4.0 metres to allow two-way traffic. Where possible, they should be located within the public right-of-way to allow separation from streets and sidewalks. Where possible, paved trails should be built within a 6-metre wide clearance zone - including the trail and shoulder on either side.

4.3.2 Shale Trails

Shale trails are much like paved trails in that they exist primarily to provide pedestrian and bicycle access to green spaces and other recreation opportunities. In many places they are designed the same, but are surfaced with a different material due to budget constraints or use levels.

4.3.3 Grass (Cross Country) Trails

As Camrose's cross country trails are constructed and managed by the Camrose Ski Club, the City will continue to work with and support the Ski Club to plan expansion of, and management of, the cross country trail system.

4.4 Natural Heritage & Urban Forest

As mentioned in Section 2.3, many areas of Camrose contain important natural features such as wetlands and stream corridors that have significant ecological value. These areas collectively make up Camrose's natural heritage, where interrelationships mean that the sum of the whole is larger than the sum of its parts. Collectively, the Natural Heritage System forms a significant interconnected network that provides a range of benefits to the natural developed fabric of the City.

The Urban Forest

As identified in Section 2, the City's urban forest (which includes street trees) is an important aspect of the City's Natural Heritage System, helping to provide a sense of community identity, aid in the reduction of air pollution and greenhouse gas emissions, provide wildlife habitat, mitigate climate change impacts, and reduce storm water runoff.

As a city's urban forest spans across both private and public property, the accessibility to this natural system will bear limitations within residential land uses. Camrosians will enjoy the benefits of a healthy urban forest in their daily activities as they walk or drive through public boulevards, engage in trails and public parks, observe the natural areas and enjoy the shade within their own front and backyards.

Large canopy trees provide the best benefits to an urban forest, given their large canopy width and leaf density. In order for street trees to grow to their mature state, the following factors play a key role: species selection, planting location, soil volume and depth, soil quality, soil compaction, sidewalk and utility placement, drainage, excessive paving and containerization.

Standards of Provision: Distribution & Size

The urban forest is accounted for across the City in both privately and publicly owned lands. The urban forest consists of trees and large shrubs in parks, public boulevards, river valleys, natural areas, private yards and school yards. Trees planted in both natural and urbanized parts of the City contribute to the City's overall urban forest system.

Apart from the preliminary inventory of trees over the past decade, neither the complete size of Camrose's urban forest or the urban forest canopy coverage have been analyzed. The urban forest canopy coverage presents the proportion of area occupied by tree canopies when viewed from above.

Objectives – Natural Heritage and Urban Forest

- Ensure that the City's natural heritage and urban forest is identified and valued within the Green Space System.
- Formalize the importance of the natural heritage system, including the urban forest, as a key element to the City's green infrastructure.
- Enhance the City's accountability as a steward, manager, regulator and promoter of the natural heritage system, including the urban forest.

- Ensure the City has the appropriate staffing levels and skills to best manage the City's natural heritage and urban forest.
- Provide direction to the policy development and management of the City's Natural Heritage System, including the urban forest.
- Increase public awareness of the benefits of the City's Natural Heritage System.

Policies – Natural Heritage and Urban Forest

- The City will manage its natural heritage and urban forest using high-level strategy and planning recommendations, which are developed as part of a Natural Heritage and Urban Forest Management Plan.
- The City will support local initiatives, such as a tree planting day, encourage and educate the public in the management of their own community's urban forest.
- The City will engage members of the public, local organizations, and schools to help steward the natural heritage system and urban forest.
- The City will help residents understand the value of natural heritage and urban forest on private property, and support preservation of those individual trees.
- The development of standards and guidelines are essential for a successful implementation and protection of the City's urban forest. The City shall establish municipal standards that address urban forest factors including:
    - Design guidelines for a sustainable streetscape,
    - Landscape standards, including revisions to planting details (see recommended guidelines in Section 4.8),
    - Green parking lot standards, and
    - Enhanced subdivision and site plan approval process.

Priority Actions – Natural Heritage and Urban Forest

- The City should conduct a review of staffing within the Community Services Department to ensure that the appropriate skill sets (arborist, horticulturalist and / or biologist) are available for the implementation of this Plan, particularly the management of the City's Natural Heritage System and the urban forest. The requirements for these skills within a municipality are not usually dependent on its size, but by the level of priority it puts on management and maintenance needs of its natural resources, and the number of challenges they face in doing so successfully. Over the coming decades, the City will likely face significant loss in tree quantity and quality as the risk for disease increases (see Section 3.2.1). As revealed through the community engagement program, residents and stakeholders strongly value the City's natural heritage, urban forest and green space system. Having staff resources (skill sets and capacity) available to the City and within the City will be necessary to help fulfill the objectives of this plan and implement and enforce some of its recommendations, such as the development of a Private Tree Bylaw, Tree Conservation Plan or Natural Heritage and Urban Forest Management Plan.

- The City should develop a Natural Heritage and Urban Forest Management Plan. The goal of the Plan would be to identify, assess and recommend how best to manage Camrose's natural heritage system, including the urban forest. The scope of such a Plan should include:
    - Identifying and mapping (via GIS) key natural features in Camrose, including aspects of the urban forest, wetlands, creek valley, etc.
    - Assessing their health and condition, and measuring their value to the City.
    - Providing recommendations for their management, including:
        - Wetlands, riparian areas, and other key natural features that: i) if located in future growth areas, should be acquired as Environmental Reserve, or ii) if located in existing neighbourhoods, how best to manage them.
        - The urban forest, on both public and private land.

  The Natural Heritage and Urban Forest Management Plan will be used as a guide to inform development planning to protect networks of key natural features, and help the City manage its key natural features. It will provide inputs to the Municipal Development Plan and other planning tools, policies and bylaws, and will help the Community Services Department manage aspects of the Natural Heritage on both public and private land, including the urban forest.
- Once a Natural Heritage and Urban Forest Management Plan is developed, the City should
    - Integrate urban forest strategic goals and targets into the City's Municipal Development Plan (MDP).
    - Update the *Municipal Tree Care Policy* to address current issues and future direction for the City's urban forest management.
    - Encourage and promote the retention and enhancement of the city's urban forest.
    - Use and implement a tree conservation plan for development proposals to ensure protection of existing mature and healthy trees during site development and construction.
    - Create a Private Tree Bylaw where trees of certain large diameter are protected from removal on private property.
    - Integrate the Alberta Heritage Tree Project (administered by the Heritage Tree Foundation of Canada) into the City's Natural Heritage Management practices.
    - Identify penalties for any associated tree protection Bylaw offenses.

4.5 Green Space Management & Operations

Section 4.5 looks at management and operations elements of the Green Space System that apply to more than one type of green space and provides objectives, policies and recommended actions for each. These other elements include:

1. Waterways and Shoreline Access,
2. Landscape Management,
3. Access and Parking,
4. Accessibility,
5. Safety and Security,
6. Weed, Pest and Invasive Species Management, and
7. Wildlife Management.

4.5.1 Waterways and Shoreline Access

Camrose's waterways, including Stoney Creek, form the backbone and the heart of the park system. Mirror Lake is often referred to as the crown Jewel of the park system, and is one of the main recreation and tourist destinations in Camrose. Mirror Lake is also the heart of the swan program, and so the importance of managing access and use of these components of the park system cannot be understated.

Many of Camrose's waterways are used for recreational use, including Mirror Lake and various stormwater ponds and features; however, recreational use can have environmental impacts and can disturb wildlife such as birds, ducks and particularly the swans. Shoreline access also contributes to the enjoyment of green spaces and provides areas to view and feed ducks and swans; however, some shoreline areas have been converted into private green spaces, detracting from the public use of such areas. To counter this, the City should improve and strengthen public access to the waterfront at strategic locations, and ensure that new development does not impede public access to public waterways, including stormwater features/ponds.

Objectives – Waterways

- Ensure that waterways are managed to balance recreational use with protection of the natural environment.
- Ensure public access to all shorelines in Camrose.

Policies – Waterways

- All new developments near waterways shall:
    - Include public access to and around all waterways. Private access to waterways in Camrose is not permitted.
    - Provide viewpoints with sitting areas along major waterways.
- The City shall continue to work with community volunteers to promote the conservation and stewardship of waterfront areas.

Priority Actions – Waterways

In collaboration with the University of Alberta Augustana Campus and other potential waterway recreationists, review the demand of water-based recreation, including kayaking, canoeing, rowing, and scuba diving, and develop a management strategy for water-based recreation in the City. Such a management strategy would include recommendations for:

- Parking, storage and boat launching;
- Lessons, practices, commercial activity and special events; and
- Balancing opportunities for recreation with protection, preservation and enhancement of water- and land-based environmental resources.

4.5.2 Landscape Management

Urban Beautification and green space maintenance are no longer restricted to parkland, and can include ornamental streetscapes, median plantings, public plazas, and greenways. Considering landscape management in the overall management of the city's green spaces and other city-owned land will help ensure a beautiful City.

Historically, many municipalities created and operated nurseries to grow their own stock for restoration purposes as there was a lack of native plant material; however, as private sector garden supply centres and nurseries have grown in size and geography, in many larger centres there is an abundance of supply and these days, most municipalities do not grow their own nursery stock.

Generally speaking, the decision to continue owning and operating a municipal nursery is largely an issue of supply and demand, dependent on the size and type of restoration projects and whether the nursery industry is close by and can meet municipal needs in terms of species, quantity, quality and cost. Many jurisdictions continue to have at least a production size operation suitable to supply their internal project works, and sometimes they trade with other jurisdictions; however, these operations are built for convenience and not profit. Municipally-owned nurseries are great for native and healthy material that is usually locally-sourced from seed stock, but in situations where twelve identical trees are required, they usually fail the conformity test. Many municipalities, especially those that are more urban, rarely have the real estate that could be effective for growing sites for tree/shrub nurseries. Those that still own and operate nurseries include a strong educational and public side to these places. They are not a profit centre in the traditional sense, but are considered a valuable asset and allowed to run a deficit.

Objectives – Landscape Management

- Ensure that landscape management is incorporated in management of the Green Space System as a whole.
- Ensure that healthy, native plantings (trees and shrubs) are available for municipal use in restoration and other projects, while maintaining financial sustainability.

Policies – Landscape Management

- The City shall support and encourage landscape management within all green spaces, and not just parks. This will include Rights of ways, boulevards, plazas and other city-owned land.

Priority Actions – Landscape Management

- The City should create a landscaping program that:
    - Provides for aesthetic, environmental and educational value to the community;
    - Identifies the "key manicured landscapes" that should remain as manicured green space;
    - Continues to address water conservation in landscape management, including the use of modern, water efficient irrigation systems;
    - Explores the potential for using rain gardens, bio-swales and other innovative storm water management practices in City green spaces; and
    - Continues to advance sustainable approaches to maintenance practices (i.e. sustainable products, recycling leaf mulch and naturalization).
- The City should continue to manicure green spaces that are identified as "key manicured landscapes," while incorporating plants that can help reduce maintenance and increase drought tolerance.
- For all green spaces other than "key manicured landscapes," the City should review and implement opportunities to naturalize those green spaces.
- In the short-term, continue to propagate, grow, divide and store plants at the City nursery to maximize efficiencies and manage quality of plant materials, with minimal maintenance (other than mowing).
- In the long-term, discontinue operating the City nursery, and explore other park uses for the site, such as a community garden area (taking advantage of the current watering facility) or off-leash dog park.

4.5.3 Access and Parking

Special events, sporting tournaments and festivals can generate high volumes of traffic in and around City green spaces. During these times, congestion may cause delays and impede flow within the greater transportation system, and parking may overflow from designated green space parking lots onto neighbourhood streets. Access to and parking at green spaces have yet to be identified as issues, but there is potential for this to increase during the life of the GSMP. Should access and parking become issues at City green spaces, the City should develop strategies to address congested traffic and parking pressures in City green spaces.

Objectives – Access and Parking

- Ensure that access to and parking for the City's Green Space System are well-managed over the life of this GSMP.

Policies – Access and Parking

- The City shall work with the transportation department to manage access and parking and minimize impacts on surrounding neighbourhoods. Strategies to improve access and parking should include:

- Encouraging the use of nearby City or community parking lots (schools, libraries, community centres, etc.) for overflow parking, by providing public information and signage;
- Encouraging carpooling and alternative transportation options (cycling, walking and transit) for large special events;
- Requiring large event organizers to manage parking and traffic on-site through the use of volunteers, bylaw officers and police;
- Designating short-term parking (1-2 hours) in congested green spaces to encourage parking turn over;
- Consider implementing pay parking at congested green spaces; and
- Expanding existing parking lots to meet demand.

4.5.4 Accessibility

Users of Camrose's Green Space System have a wide variety of needs and abilities, especially as the population ages. Many residents live with mobility restrictions but would still like to use the Green Space System for active uses like outdoor recreation and walking, and passive uses like picnicking, sitting and reading. Beyond those currently experiencing limited mobility in Camrose, many more can expect to experience limited mobility at some point in their lives.

Objectives – Accessibility

- Improve the accessibility of the Green Space System as a whole, including parks and trails, for users of all abilities.

Policies – Accessibility

- All green spaces should be barrier free to access all major activity areas.
- The City shall consider universal accessibility in all aspects of green space design and programming.

Priority Actions – Accessibility

- The City should conduct a Green Space Accessibility Review to assess the accessibility of all green spaces, and particularly parks and trails, for users of limited mobility. This assessment will help the City establish a Minimum Accessibility Standard, and allow the City to identify gaps in accessibility.
- The City should also provide administration (staff), policy and decision-makers, and the public with training and awareness in disability issues.
- The City should provide park users with information (via pamphlets, maps, the City webpage, etc.) on accessible opportunities in parks and green spaces, as they are created.

4.5.5 Safety and Security

Safety and security are issues in a few of Camrose's green spaces from time to time, some of which are created through poor design and programming, but also human behavior. Overall, the City's green spaces should provide users with a sense of safety and security, which can be done through consideration of these issues during green space design and programming, which can help limit unwanted behavior. Ensuring attention to potential vandalism or graffiti during design will help keep Camrose's green spaces safe and secure.

Objectives – Safety and Security

- Improve safety and security and minimize opportunities for unwanted behavior such as vandalism in Camrose's green spaces.

Policies – Safety and Security

- The City shall consider safety and security in all aspects of green space design and programming, including using the principles of Crime Prevention through Environmental Design (CPTED).
- The City shall ensure proper maintenance and replacement of equipment and facilities in green spaces to prevent and correct any hazardous conditions.
- To maximize safety, sightlines to, and lighting of, paths and activity areas should be maximized, to the extent possible, based on available resources.

Priority Actions – Safety and Security

- The City should evaluate the safety of all Camrose green spaces, in cooperation with the Camrose Police Service and using available crime data and records, and develop a Safety Action Plan, or redesign dangerous spaces, if required.
- In the future, the City may want to
    - Increase surveillance and patrol of its green spaces to help regulate unwanted activity and increase safety,
    - Develop a graffiti prevention strategy in cooperation with the Police Service, bylaw services, schools, non-profit organizations, and community associations to prevent vandalism and graffiti in Camrose green spaces.

4.5.6 Weed, Pest and Invasive Species Management

Weeds, pests and other invasive species exist throughout Alberta, and are usually present in most Green Space Systems. Camrose is no different, and has seen its fair share of outbreaks and issues throughout the past decade. The City currently has a number of procedures in place for application of pesticides to help manage weeds and pests, which meet the strict standards established by Health Canada and Alberta Environmental Protection. Special care and attention is considered in all applications. The risks posed by weeds, pests and invasive species are significant, and require a stringent program to ensure safety and health of the public, wildlife and the environment.

Objectives – Weed, Pest and Invasive Species Management

- Ensure that weeds, pests and invasive species are managed appropriately in all City green spaces.
- Ensure that any weed, pest and invasive species management undertaken in Natural Areas and / or Environmentally Sensitive Areas (to be identified in the future by the ESA Management Plan), is done is a sensitive manner.

Policies – Weed, Pest and Invasive Species Management

- The City will strive to manage all weeds, pests and invasive species in an appropriate and timely fashion.

Priority Actions – Weed, Pest and Invasive Species Management

- In the short term, the City should continue to manage weeds, pests and invasive species carefully and while following all Health Canada and Alberta Environmental Protection regulations.
- In the medium term, the City should conduct a map inventory of invasive plants within City green spaces, and identify priority sites for removal and restoration. The City should also promote public education around weeds, pests and invasive species through workshops, invasive plant pulls, restoration planting, and annual funding.
- In the long term, the City may wish to develop an Invasive Species Management Program for invasive plant species that may threaten the viability of ecosystems and species of significant conservation value.

4.5.7 Wildlife Management

There are a number of wildlife species that call Camrose home, including mule deer, beavers, badgers, red fox, merlin, large flocks of Waxwings, bats, song birds, swans and the Purple Martin bird, to name a few. In Alberta, the provincial government is responsible for wildlife management; however, in Camrose the City provides advice and some management action related to wildlife from time to time. There are also other local stakeholders involved in wildlife management, including residents, non-governmental organizations, and a variety of community groups, such as the Camrose Wildlife and Stewardship Society (CWSS). This GSMP recognizes the role that the City plays in wildlife management directly through management of the Green Space System.

While wildlife in Camrose co-exist within the City, from time to time their activities cause complications to human use, such as when beaver dams cause flooding of parks and land. Some wildlife species in Camrose are endangered, and so the City must balance protecting habitat and encouraging wildlife activities, while ensuring human safety as well. The City currently has a number of procedures in place for dealing with wildlife issues, which meet standards established by Alberta Environmental Protection.

Objectives – Wildlife Management

- Ensure that wildlife habitat is protected and wildlife is left to co-exist in the City, while also ensuring human safety when issues arise.
- Ensure that the City plays an appropriate role in the area of wildlife management, along with other agencies and stakeholders.

Policies – Wildlife Management

- The City shall protect wildlife habitat through the Green Space System.
- The City shall continue to support the Wildlife and Greenspace Stewardship Project, as resources permit.

Priority Actions – Wildlife Management

- Working with community organizations, the City should develop a wildlife management plan for the major species that are present in Camrose's green spaces, including beavers, deer, coyotes, skunks, bear and fox.

4.6 Green Space Acquisition

For Camrose to grow sustainably, the quality and quantity of green spaces must be maintained and improved. Future growth areas must include new green spaces, in addition to the provision of residential, industrial and/or commercial growth. The Green Space Master Plan helps conserve and create new green spaces that will support ecosystem functions, create liveable communities, and promote a sense of community.

Various tools can be used to acquire new green space as appropriate and identified in the Future Green Space Concept, all of which have various requirements for funding and involve various stakeholders. Any potential future acquisition should include a review of these tools to ensure the appropriate tool is used for acquisition. These tools can include:

- Conservation Easement – A voluntary legal agreement between a land owner and a government or land trust agency with permanent limiting uses of the land for conservation interests. Land can be sold, however rights to the land are given up.
- Dedication – This includes the 10% Municipal Reserve dedication requirement in all new developments, and any Environmental Reserve dedication as outlined in the MGA.
- Development Agreement – Agreement with a developer to provide amenities on or outside of the development area in exchange for guaranteed zoning for an established period.
- Donation – A land owner gives their land to a Government or Land Trust agency, thereby releasing any of their management responsibilities and potentially providing tax benefits to the donor.
- Environmental Reserve Easement – A caveat registered with Land Titles in favour of the municipality for lands that would be normally taken as environmental reserve.
- Land Swap – An exchange of land where surplus City land that may be suitable for development is swapped with private land that may be identified for green space interest.
- Land Trust – These non-profit organizations work with land owners to protect green space in its natural state. Land trusts can include donations of land, funds and development rights.
- Public Access Easement – These allow public right of access through private land and are typical for walkways, trails and park or waterfront access.
- Purchase – The City may wish to purchase land, usually at fair market value, for use in the Green Space System. Land sold at a reduced price may qualify for a charitable donation.
- Restrictive Covenant – This includes a voluntary restriction by a land owner (normally a developer) on a portion of land for an amenity space and use in the Green Space System.

Objectives – Green Space Acquisition

- Maintain the ratio of Green Space in the City, which is currently 55 acres (23 hectares) per 1,000 residents.
- Maintain the ratio of Parkland in the City, which is currently 39 acres (16 hectares) per 1,000 residents.

Policies – Green Space Acquisition

- New Green Space should be created on:
    - Land that is acquired by any means specified in this GSMP, including dedication as Environmental Reserve and Municipal Reserve during the subdivision process, purchase, donation to the City, or land swap.
    - Private land through Development Agreements, Conservation Easements, Land Trusts, Public Access Easements, and Restrictive Covenants.

4.6.1 Environmental Reserve

Environmental Reserve is one method of acquiring green space through the subdivision process. Many cities have restrictions for how close development can occur in proximity to rivers, waterways, valley tops, tree stands, wetlands, and other natural areas. In most cases, Environmental Reserve standards (that act as development setbacks) have been created to protect houses and other development from the risks associated with steep slopes, flooding and other natural hazards, while also serving to protect the city's natural areas and create urban green space.

Currently, the City of Camrose does not have any Environmental Reserve standards. For this GMSP, a review of best practices revealed a wide range of Environmental Reserve standards and development setbacks for green spaces including valleys and waterways, which have been used to develop recommendations for Camrose.

What is Environmental Reserve?

Environmental Reserve (ER) can be defined as an area of land that due to its natural sensitivity and risk, it should not be developed upon. Such an area of land can be requested from landowners wishing to subdivide a parcel of land and designated by a municipal as Environmental Reserve, which must be left in its natural state and may be developed as a public park. With regards to Environmental Reserve, the Alberta Municipal Government Act specifies that:

> *664 (1) Subject to section 633, a subdivision authority may require the owner of a parcel of land that is the subject of a proposed subdivision to provide part of that parcel of land as environmental reserve if it consists of:*
> *(a) a swamp, gully, ravine, coulee or natural drainage course,*
> *(b) land that is subject to flooding or is, in the opinion of the subdivision authority, unstable, or*
> *(c) a strip of land, not less than 6 metres in width, abutting the bed and shore of any lake, river, stream or other body of water for the purpose of:*

(i) preventing pollution, or
(ii) providing public access to and beside the bed and shore.

(2) If the owner of a parcel of land that is the subject of a proposed subdivision and the municipality agree that any or all of the land that is to be taken as environmental reserve is instead to be the subject of an environmental reserve easement for the protection and enhancement of the environment, an easement may be registered against the land in favour of the municipality at a land titles office.

Most municipalities in Alberta use this clause in the MGA to acquire environmental reserve that is added to the Green Space System. While the clause permits environmental reserve (and thus development setbacks) around waterbodies to be no less than 6 metres, some municipalities have setback standards that require more than 6 metres, occasionally up to 30 metres.

The Stoney Creek Valley is an integral part of the City of Camrose culture. Establishing developmental setbacks would ensure its use for recreation in the future and help maintain environmental health. A top-of-bank measurement would also help protect the river valley and any new development at the top of valley / valley edge. As all adjacent land to Mirror Lake has either been built-out or acquired by the City and is already included in the Green Space System, specific setbacks for Mirror Lake are not necessary at this time.

Objectives – Environmental Reserve

- Protect houses and other development from the risks associated with steep slopes, flooding and other natural hazards.
- Protect the city's natural areas and create urban green space.
- Ensure that the Stoney Creek Valley is protected from development (including all flood-plains and flood risk areas, up to the valley top-of-slope) through City acquisition and designated as a green space.

Policy – Environmental Reserve

- Areas of the City that shall be considered for Environmental Reserve are hereby identified as follows (at a minimum):
    - Land within 6 metres (19.6 ft.) of the shore of a water feature;
    - Land including the Stoney Creek Valley and within 6 metres of the top of the Stoney Creek Valley; and
    - Land within 30 metres of an identified wetland. Stormwater wetlands (wetlands engineered to serve as stormwater management facilities) may have a setback width less than 30 metres, but no less than 6 metres.
    - Other environmentally significant areas that have been identified as part of the future Green Space System on the Future Green Space Concept (Map 6).
- A slope modifier will apply where land is adjacent to a water body. Minimum setback distances will increase by a factor of 1.5 metres for every percentage of slope increase above 15%.

- Where lands adjacent to a water body are disturbed or have a non-native riparian zone and are determined to have low ability to prevent pollutants from entering the water body, the setback will be doubled or the base setback zone should be restored to a condition that will allow it to effectively buffer the water body pollutants.
- All Environmental Reserve acquired by the City shall be included in the City's Green Space System and designated as either a Natural Area or Parkland.
- Land that qualifies as Environmental Reserve under the MGA shall be identified at the Area Structure Plan or Concept Plan Stage (by the developer) and should be dedicated at the discretion of the City, at the time of subdivision approval, and in accordance with Section 664 of the MGA.

Priority Actions – Environmental Reserve

- The City should conduct a further analysis of Environmental Reserve setbacks during the current and future reviews of the Municipal Development Plan (MDP) and Land Use Bylaw (LUB).

4.6.2 Municipal Reserve

Municipal Reserves are another way for a City to acquire land to be used for the Green Space System.

What is Municipal Reserve?

Municipal Reserve (MR) can be defined as areas of a new community (an approved subdivision) that are dedicated to the City for use for school or municipal uses, such as parks and green space.

With regards to Municipal Reserve, the Alberta Municipal Government Act specifies that:

> *666 (1) Subject to section 663 of the MGA, the subdivision authority may require the owner of a parcel of land that is the subject of a proposed subdivision to:*
>
> *a) provide part of that parcel of land as municipal reserve, school reserve or municipal and school reserve;*
> *b) provide money in place of municipal reserve, school reserve or municipal and school reserve; or*
> *c) provide any combination of land or money referred to in clauses (a) and (b).*
>
> *(2) The aggregate amount of land that may be required under subsection (1) may not exceed the percentage set out in the municipal development plan, which may not exceed 10% of the parcel of land less the land required to be provided as environmental reserve and the land made subject to an environmental reserve easement.*
>
> *(3) The total amount of money that may be required to be provided under subsection (1) may not exceed 10% of the appraised market value, determined in accordance with section 667, of the parcel of land less the land required to be provided as environmental reserve and the land subject to an environmental reserve easement.*

Future Municipal Reserve dedication should be directed to the development of recreation facilities and paths / linkages between these facilities. Future MR should be taken as land, cash in lieu of land, or a combination of the two; as required.

Objectives – Municipal Reserve

- Create new urban green space.
- Ensure new communities include a dedication of municipal reserve, which can be partially added to the Green Space System (along with school and other municipal uses).
- Ensure that land that is dedicated to the City is of use in the Green Space System (and not added as non-contributing green space), as per the Future Green Space Concept (Map 6).
- Assist the City determine locations where cash-in-lieu is more appropriate than MR dedication, according to the Future Green Space Concept (Map 6).

Policy – Municipal Reserve

- If land that has been identified for acquisition according to the Future Green Space Concept does not qualify to be acquired via dedication as Environmental Reserve, it should be requested by the City to be dedicated as Municipal Reserve.
- Municipal Reserve shall be requested by the City at 10% of the net developable land (the parcel minus any ER or ERE), if the land contributes to the Green Space System as envisioned by the Future Green Space Concept (Map 6).
- Cash-in-lieu shall be requested if a Municipal Reserve dedication suggested by a subdivision proponent does not contribute to the Green Space System as envisioned by the Future Green Space Concept (Map 6).
- The City shall not defer any Municipal Reserve dedications; it shall require a full 10% land dedication, cash-in-lieu, or a combination of the two.
- Municipal Reserve can be dedicated as parkland or any of the green space types.

4.7 Green Space Disbursement

As identified in Section 2, there are some City-owned parcels of land that, although they may help support environmental functions within the City, they do not play a significant role in the comprehensive Green Space System, and have been designated as non-contributing green space. Many of these parcels were acquired through environmental reserve or municipal reserve dedication process, but were never developed as parks. The City should perform an evaluation of green spaces which may not meet green space requirements or objectives. This evaluation would review their role, function, and ability to meet green space standards. Disbursement of such land may be required to help fund the acquisition or development of new green space as required.

Objectives – Disbursement

- Disburse any components of the Green Space System that do not contribute to it, to create funding opportunities for new green space creation in more appropriate locations, and development of existing green spaces.

Policies – Disbursement

- The City shall continuously evaluate all aspects of the Green Space System, and any components that are deemed unnecessary from time to time shall be disbursed, with funds going towards a Green Space Creation Fund, administered by the Community Services Department, to be used solely for green space creation (purchase) or development.

Priority Actions – Disbursement

The City should:

- Conduct a further analysis of green spaces to identify those that do not help fulfill the Future Green Space Concept and/or meet the green space provisional standards.
- Develop and adopt a Green Space Disbursement Policy to ensure that monies generated from the sale of green spaces are held in a Green Space Creation Fund and used only for acquisition or development of key priority green spaces.
- Develop a Green Space Disbursement Process that includes community engagement, formal land use re-designation (including a public hearing), land sale and funding allocation as per the above-mentioned Parkland Disbursement Policy.
- Develop evaluation criteria for projects that may use the Green Space Creation Fund.
- Further pursue disbursement (thorough sale, land swap or otherwise) of green spaces identified, following further public consultation.

4.8 Green Space Design

This GSMP includes various general design guidelines and recommendations for the various aspects of the Green Space System, including Parks, Playgrounds, Trails, Landscaping, Signage and aspects of the non-contributing Green Space System such as Public Utility Lots and Utility Corridors.

4.8.1 Parks

- All new parks should be designed to include any facilities and structures that are appropriate for the benefit and enjoyment of residents, based on the parks classification (including the size, type, purpose and programming of the park). At a minimum, this should include:
    - Lighting, which is designed to be pedestrian-oriented (at a pedestrian scale),
    - Seating, including seating that allows child minders to view play areas,
    - Shade for seating areas,
    - Bike parking for as many bikes as determined appropriate for the use of the space,
    - Trash and recycling receptacles,
    - Landscaping and other improvements to clearly delineate different spaces,
    - Walkways connecting the different spaces within the park, and
    - Both hard surface and landscaped areas.
- Seating should be designed to provide options for social and quiet seating areas.
- The perimeter of parks should be clearly delineated and defined through a combination of:
    - Shade trees planted with 15 m spacing or tree groupings,
    - Landscaped planter beds,
    - Hedges,
    - Decorative brick, stone or metal fencing,
    - Park buildings, or
    - Public art.
- Parks should be visible and physically accessible (from the street), and have pedestrian connections to all sides of a block where they are located.
- Parks should include pedestrian routes (trails) that link the major elements and entrances, and reflect desire lines, particularly those that originate at street intersection locations.
- Landscaping in parks should have vegetation and plantings which reflect the changing seasons and provide a tree canopy.
- Park entrances should be designed with the size and expected use in mind, incorporate a variety of elements to highlight their importance to the park's function, and may be required to include visitor drop-off and wayfinding signage.
- Park event spaces should be delineated with features and landscaping so that the main event area remains unbroken.
- Park design elements, features and landscaping should guide users into the main space(s) while generally maintaining views of the primary space from the primary entry.

4.8.2 Playgrounds

Playgrounds are a unique aspect of many parks, as their design has significant implications for child safety; however, there are no no federal laws or regulations governing playground design and standards in Canada. Nationally, the Canadian Standards Association (CSA,) with input from the Canadian Parks and Recreation Association (CPRA) developed the nationally recognized CAN/Casa z614 Children's Playspaces and Equipment Standards, which are voluntary.[6] In the absence of standards, the responsibility for playground safety rests with the operator.

While playgrounds are rarely within the scope of a Green Space Master Plan, the purpose of this section is to outline some basic design considerations and present a few places for further reference and discussion. There are a number of organizations in Canada that research and develop playground safety and design, including Safe Kids Canada[7], the Ontario Parks Association[8]and in Alberta, the Alberta Parks and Recreation Association.[9]

While safety standards are not clear, there are a number of general design considerations for playgrounds. The design of playground structures should benefit both the physical well-being of kids (running around, playing, exercise), and social well-being (working together, being creative).

All playgrounds and play spaces should incorporate the following elements in their design:

- Natural features and landscaping to provide play opportunities,
- All-season play with particular attention to plant materials that highlight seasonal changes,
- A variety of play opportunities, including quiet activity,
- Seating scaled for children and youth,
- Seating for adults that allows for passive surveillance,
- Surface treatments necessary to provide accessibility for both playground users and those accompanying or watching over users,
- Low-level pedestrian-oriented security lighting for playground use in early evening hours,
- Equipment spaced to provide safe and comfortable traffic flow around it,
- Shade plantings and/or structures,
- clear visibility to streets and neighbouring residences to provide passive surveillance,

Playgrounds should avoid:

- Inadequate surfaces,
- Structures that are too high for age group of children,
- Choking or head and neck injury potentials.

[6] www.csa.ca/cm/ca/en/home
[7] www.safekidscanada.ca
[8] www.ontarioparksassociation.memberlodge.com
[9] www.arpaonline.ca

Playground equipment should be designed to include:

- Features that can be used by children with attendant adults (i.e., double-width slides).

Natural play spaces should be designed to include:

- Landscape features, landforms, natural materials, and plantings to achieve the intended uses,
- Topographic changes in the form of berms, rockeries, and other similar features;
- Interpretive signage describing the natural features of the play space, and information relating to the unique characteristics of the natural play space, and
- Opportunities for:
    - Play that utilizes upper body and lower body gross motor skills;
    - Play utilizing fine motor skills;
    - Social and creative play;
    - Solitary as well as group play;
    - Direct interaction with natural materials and the environment;
    - All season play with particular attention to plant materials that highlight seasonal changes; and
    - Play opportunities with loose materials.

Additional reference materials include:

- Alberta Parks and Recreation Association (ARPA). Play: It's Serious Business. http://s3.arpaonline.ca/docs/PLAY-discussion-paper-2011.pdf
- Ontario Parks Association (OPA). The Playability Tool Kit: Building Accessible Playspaces. Price varies by format. Order the kit by contacting: Ontario Parks Association (OPA)
- Evergreen. Small Wonders: Designing Vibrant, Natural Landscapes for Early Childhood. http://www.evergreen.ca/docs/res/Small-Wonders.pdf
- Alberta Infrastructure and Transportation. Guidelines for School and Playground Zones and Areas. www.transportation.alberta.ca/Content/docType233/Production/schlpgnd.pdf
- Calgary Board of Education. Guidelines and Procedures for Construction of School Landscape Projects. www.cbe.ab.ca/community/ecostewardship/pdfs/School_Landscape.pdf
- Susan Herrington, et.al. The 7 Cs: An Informational Guide to Young Children's Outdoor Play Spaces. http://www.childcareoptions.ca/pdfs/7Cs.pdf
- National Program for Playground Safety (US). http://www.playgroundsafety.org/about

4.8.3 Trails

General

- Where possible, pathways should join at right angles. Where trails join, a widening of pathways should be provided.
- Trails should be aligned around significant areas and sites while avoiding damage to natural and cultural features, vegetation, and wildlife habitat.
- Safety railings should be provided along trails where there is an adjacent steep slope.
- Standard identification signs with the pathway name should be provided along the path and at entrances. Standard hazard warning signs should also be provided where appropriate.
- Benches and trash receptacles should be provided each 500 metres along trails and pathways.
- All trails should have a clear shoulder of 50 centimeters (1/2 a meter) on either side.
- All trails should have 2.5 metres of vertical clearance.
- Safety and directional signage, as well as trail maps, should be installed at important trail junctions.
- Amenities along trails such as seating areas, signage, and garbage receptacles should be spaced at 60 m to 400 m intervals.

Pedestrian Trails

- Grades less than 5% are ideal, but between 5% and 10% are acceptable. For trails designed for wheelchair accessibility, grades should be less than 3%. Grades that are greater than 15% are acceptable only for recreational trails. Where grades exceed 10%, switchbacks or stairs should be provided.
- Bare ground can be used as a surface for informal trails. Wood chips, red shale, or crushed gravel should be used for formal trails.
- Informal trails should have widths of 0.3 to 0.5 metres. Formal trials should have widths of 0.5 to 1.5 metres. Hiking trails should have widths between 1.2 and 2.0 metres. The minimum width for a local pathway is 2.0 metres.
- A minimum of 0.5 metres clearance of obstacles should be provided on both sides of the trail. A minimum of 3 metres clearance of all obstacles overhead (i.e. tree branches, bridges, etc.) should be provided.

Bike Paths

- Grades less than 3% are ideal, but between 3% and 5% are acceptable for sections less than 200 metres. Sections with grades between 5% and 8% should not exceed 50 metres. Grades over 8% should be re-routed, otherwise stairway should be provided. Stairs should include a bicycle ramp on one side.
- Bike paths should have widths of 2.0 to 3.5 metres.
- All bike paths should be of asphalt pavement to accommodate multiple users.

- A minimum of 1-metre clearance from obstacles should be provided on both sides of the path. A minimum of 3-metre clearance of all obstacles overhead (i.e. tree branches, bridges, etc.) should be provided.
- The curve radius of bike paths should be a minimum of 5 metres.
- Centerline pavement marking should be provided on major bike paths using 75mm wide yellow paint. Double centerline pavement marking should be provided at hazardous locations, using a double-striped yellow centerline paint.

4.8.4 Landscaping Requirements

The City of Camrose has basic landscaping requirements in Section 7.11 of its Development Package. Based on a review of this Policy and best practices in the province, this GSMP recommends the following additions and/or changes to the current Landscaping Policy:

General

- Landscaping should be completed within 12 months of occupancy of the development (rather than the current 6 months).
- The City encourages:
    - The use of native plant species into landscaping design,
    - The use of raised flower beds and planters in areas that cannot be landscaped in a conventional manner, and
    - Contrast and variety in landscaping design.

Landscaping Plans

- All new development requires submittal and approval of a Landscaping Plan prior to development approval.
- Landscaping plans should indicate materials, colors, and patterns of hardscaping features for building entrances, porches, decks, steps, walkways, and other hard surfacing features, parking areas, curbs, lighting, fences, walls, screens, recreational facilities and garbage collection areas.
- Any area undergoing landscaping or topographic reconstruction should be landscaped and or reconstructed so that the finished surfaced contours do not direct surface drainage onto the adjoining property.
- Developed sites should be at finished grade upon development completion.
- Seeding and transplanting not under irrigation should follow best horticultural practice, for the specific species.
- Input from a designated professional (horticulturalist) is required when there are difficult sites. These could include wet areas, places that have heavy clay soils, aspect, slopes, and other special circumstances.

Landscaping Requirements

- Any portion of a site located in a Residential or Commercial Land Use District that is not occupied by buildings, parking, vehicular circulation, or loading areas should be landscaped or maintained in its natural state (if the natural portion of the site consists of a water body, swamp, gully, ravine, coulee, natural drainage course, or other environmentally sensitive area).

- The City should revise the landscaping requirements as follows:

Type	Current	Recommended
Residential - General	1 tree per unit	1 tree per 35 square metres 1 shrub per 10 square metres
Residential – Multi-family	1 tree or 4 shrubs per 150 square metres 3 trees in front yard setback	
Residential – Parking	N/A	1 tree per 20 square metres. In no case should there be less than one tree per required parking area island.
Non-Residential	1 tree per 50 square metres	1 tree per 25 square metres
Non-Residential – Parking	N/A	1 tree per 20 square metres. In no case should there be less than one tree per required parking area island.

Alternative Landscaping and Hardscaping

- Alternate forms of landscaping such as hard decorative pavers, washed gravel, shale or similar treatments, flower beds or cultivated gardens may be substituted for seeding or sodding provided that all areas of exposed earth are designed as either flower beds or cultivated gardens.
- Perennials are permitted to substitute for shrubs at a rate of two perennials per shrub.

Maintenance

- All landscaping should be maintained to a minimal standard for the lifetime of the development.
- All trees and shrubs should be maintained for two growing seasons. Trees and shrubs that do not survive must be replanted the next planting season by the property owner.

Security requirements, inspections, and issuance of completion certificate

- Inspection of landscaped areas will occur between June 1 and September 30, which may be extended based on weather conditions. It will be subject to the submission of a letter from the applicant / landowner indicating that the landscaping has been installed in accordance with the development permit requirements.
- Before a completion certificate can be issued there must be installation of missing or damaged landscaping, replacement of landscaping that does not meet size specification; and replacement of unhealthy plantings.
- The landscaping security will be fully released after the required landscaping has been well maintained and is in healthy condition after two growing seasons.
- The quality and extent of landscaping established on a site shall be the minimum standard to be maintained on the site for the life of development.
- The City may consider conducting additional landscaping inspections each five years, for the lifetime of the development, to act as an audit and to help identify possible problems such as diseases, preventing outbreaks through entire developments or possibly the entire city. Any deficiencies will be addressed by the property owner.

Priority Actions – Landscaping

Landscaping Plans

- The City should provide examples of landscape designs in the development package, which could be used as a template to guide uniform landscaping.

Alternative Landscaping and Hardscaping

- The City should further explore permitting the use of hardscaping. It should be well-defined in the policy, including specific examples. Hardscaping should exceed 50% of the total surface of the site, unless permitted by the Development Officer.

Heights

- The City should explore maximum tree heights to reduce the number of trees that can cause damage to property. This could include outlining the maximum height for deciduous trees, although that would be difficult to enforce. Recommended maximum heights would be 2 metres for small deciduous and 3 metres for large deciduous.

Maintenance

- The City should review its minimum standards for landscaping and grass maintenance, and outline this standard clearly in the Landscaping Policy. The grass standard should be flexible dependent on the weather, and permitting drought induced dormancy should be considered appropriate in an effort to conserve water.
- The City should explore providing incentives for landscaping that is not water intensive.

4.8.5 Signage

A strong park signage program helps to transmit information and ensure the safety of visitors, and will help to ensure that residents and visitors recognize, at-a-glance, the work the City has put into protecting, presenting, and fostering enjoyment of the City's green space system. A good park signage system performs multiple functions:

- Wayfinding – it provides effective information and direction for visitors as they find a park and navigate through it safely;
- Education – it provides educational information and encourages learning experiences;
- Brand and Image – it helps establish and maintain the image of a park or the green space system as a whole;
- Rules – it communicates park rules;
- Reducing Human Impact – it can help manage the human impact on sensitive natural environments within parks;
- Sense of Place – It can provide a sense of place and local pride by incorporating the history of a specific site in its design.

Signs often function in the context of their environment and inform visitors about important elements within a park. A successful signage system must take into consideration a multitude of factors relating to human behaviour, information processing, and the environment in which the signs are situated. The

location of park signage is another important consideration. Maps, kiosks, and other elements also function as signs. Placing signage in conjunction with other park amenities such as benches, cafes, restrooms, and places where paths cross can create destinations in a park. This is called "triangulation" as the elements together have a bigger impact than they would separately. In parks where there are large sections of natural areas or where there are no specific place destinations, small nodes or places can be created with a sign, a picnic table, and telephone or other amenity as a way to provide a location, for meeting or emergency purposes.

There are many components of a park signage program, each which play a particular role, including:

- Entrance signs – primary identification sign at the entrance to a park.
- Park Maps – park maps can help to increase and enhance park user's knowledge, curiosity and interest about the park, and can help visitors guide and direct themselves through the park, and highlight places of interest. These can be placed at park entrances, and for larger parks, at various places through the park and at set distances along trails.
- Wayfinding signs – wayfinding and directional signs can help people keep their bearing, and feel located and secure.
- Information/Bulletin Boards – Information/ bulletin boards are an outreach tool that can be used to better inform visitors about the park. They can help visitors familiarize themselves with the full breadth of a park and its facilities, and can publicize tournaments, park events and activities, and particular management plans.
- Educational Signs – Educational signs such as those that highlight or point out specific trees, paths, flowers, or other elements of the natural environment can also be conceived as a fun way to engage people in interacting with the natural environment.

Objectives - Signage

- Outline standards and guidelines for signage in City parks to:
    - Strengthen the identity of Camrose's green space system;
    - Improve the user experience of all parks; and
    - Ensure that visitors and park users can find, and navigate safely and easily within, City parks.

Policies - Signage

- The City will develop a park signage program for both City developed and industry developed parks.
- Directional and interpretive signage shall be used as required on all green spaces.

Priority Actions - Signage

- The City should develop a park signage program that includes:
    - Surveying existing signage conditions in parks, to build on what already exists, what works well, and the unique aspects of the history of the park which could contribute to a sense of place, nurture local pride and stimulate learning about the place;
    - Public engagement (interviews of park users) to understand current signage issues and problem areas;
    - Goals and purposes for the signage program, such as what the signage should do, who it is to serve, and the kind of information it should communicate;

- Standards and guidelines for all types of signage in City Parks (directional, informational and identifying signs), including things such as layout, typeface, graphic symbols, colours;
- Brief testing for legibility, comprehensibility and safety; and
- The potential for park signage as public art – inviting contributions from members of the community and local artists.

4.8.6 Public Utility Lots

- T-bollards shall be installed to prevent unauthorized vehicular access to public utility lots.
- Where possible, landscape improvements and plant materials should have increased setbacks from underground utilities.
- Vegetation should be planted no closer than the following dimensions from these services, unless otherwise approved by Public Works:
  - 1 metres from power lines;
  - 3.5 metres from all power lines;
  - 1.8 metres from water mains, water services and water valves;
  - 2 metres from sewer mains, manholes and services; and
  - 1.5 metres from gas and all other services.

4.8.7 Utility Corridors

- Corridors must be graded, topsoiled, seeded, fenced and planted in accordance with approved landscape plans.
- All pipeline-crossing agreements must be in place prior to construction.
- Utility corridor landscape improvements can range from low maintenance naturalization to a more formal landscape design, depending on the existing landscape character already established, or to new design intent.
- Utility corridors that may be landscaped are to be planted with a minimum of 75 trees per hectare. Shrub groupings may be substituted at the rate of five shrubs for one tree. Calculations are based on available space for planting.
- Existing trees within or abutting the utility corridor shall be conserved wherever possible.

5.0 GSMP IMPLEMENTATION

This GSMP will be implemented over the next 30 years, with amendments as required. The success of any Plan depends on the efforts that are directed towards integrating its policies into decision-making and implementing its recommended actions.

5.1 Action Plan

This Action Plan provides direction for taking the recommendations contained in the GSMP forward. The table on this and following pages lists each of the priority actions included in the GSMP, some of which are abbreviated to fit the table, and identifies a timeline, responsibilities, and approximate cost for each. The recommendations are listed as outlined in *Section 4.0 – The Future Green Space System* and *Section 5.0 – GSMP Implementation*, and outline:

- Timeline: Short (S) – within 5 years, Medium (M) – 5 to 10 years, or Long (L)-term – more than 10 years, or on-going;
- Responsibility: Community Services (CS), or other departments as listed; and
- Relative Cost: Low (L), Medium (M) or High (H). Sources of funds for each recommendation have not been determined at this time.

Based on this plan, the following actions will be required, based on the timelines laid out.

Theme	Priority Action	Timeline	Responsibility	Relative Cost
4.2.1 Natural Areas	Develop a Natural Heritage and Urban Forest Management Plan	S	CS	M
4.2.2 Parkland	Explore the creation of a central green space within the 'downtown', either on current City-owned land, or through acquisition.	M	CS & other Depts.	M – H
Off-Leash Areas	Develop a Dog Management Program	S	CS	L – M
Playgrounds	Replace and upgrade playgrounds with new equipment, as required, to meet or exceed CSA playground standards.	On-going	CS	M
	Explore developing one fully accessible playground.	S	CS	M
	Continue to evaluate the need for additional playgrounds, ensuring they fit the demographics of the neighbourhood and incorporate age appropriate equipment.	On-going	CS	L
	Where appropriate, consider integrating playgrounds with adult and senior fitness components.	On-going	CS	L
Park Facilities and Buildings	Conduct periodic reviews of the Leisure Services Master Plan.	S	CS	L
	Undertake a Parks Building Condition Assessment Study.	M	CS	L - M

Theme	Priority Action	Timeline	Responsibility	Relative Cost
Public Art	Continue to collaborate with the public and other City departments to integrate art pieces into green space design and elements, where appropriate.	S	CS & Others	L
	Develop a Public Art Policy.	S	CS & Others	L
The Skate Park	Conduct an assessment of the skate park to determine if improvements are needed.	S-M	CS	L
Community Gardens	Consider opportunities to incorporate community gardens and other forms of urban agriculture in parkland and other City green spaces, including utilities and non-contributing green space.	On-going	CS	L
	Create a pilot project community garden to generate excitement and enthusiasm.	S	CS & Community Group	L
4.2.4 Greenways	Explore opportunities to incorporate Greenways into major capital projects (improvements, enhancements) that involve the transportation system.	On-going	Transportation, CS	Ongoing
4.2.6 Other City-Owned Land	Monitor the need for new cemetery space and ensure the Cemetery Bylaw remains current.	On-going	CS	Low
	Review all non-contributing green space to make a shortlist of parcels suitable for other community purposes (i.e. urban agriculture, off-leash areas) or to possibly divest/disburse.	S	CS	Low
4.3 Trails	Design and construct trails according to the Future Trails map, including: • Additional paved trails, especially throughout new green spaces in the Stoney Creek Valley, and as part of the Camrose Drive Ring Road. • Additional shale trails, especially within new green spaces and where there are gaps. • Conversion of existing high use shale trails into paved trails, as appropriate and necessary. • Paved trails on 48 Avenue and 39 Street. • Working with the Camrose Ski Club to develop a more extensive network of cross country trails.	On-going	CS	M
4.4 Natural Heritage & Urban Forest	Conduct a review of staffing within the Community Services Department.	S	CS	L
	Develop a Natural Heritage and Urban Forest Management Plan (as above).	S	CS	M
	Once a Natural Heritage and Urban Forest Management Plan is developed: • Integrate goals and targets into the MDP. • Update the *Municipal Tree Care Policy*. • Encourage and promote the retention and enhancement of the city's urban forest. • Use and implement a tree conservation plan for development proposals. • Create a Private Tree Bylaw. • Integrate the Alberta Heritage Tree Project into the Natural Heritage Management practices. • Identify penalties for any associated tree protection Bylaw offenses.	M – L	CS	M

Theme	Priority Action	Timeline	Responsibility	Relative Cost
4.5.1 Waterways	Review the demand of water-based recreation, and develop water-based recreation management strategy	S	CS, working with U of A	L - M
4.5.2 Landscape Management	Create a landscaping program	S	CS	M
	Continue to manicure green spaces that are identified as "key manicured landscapes."	On-going	CS	M
	Review and implement opportunities to naturalize all green spaces other than "key manicured landscapes".	On-going	CS	L
	Continue to propagate, grow, divide and store plants at the City nursery.	S	CS	L
	Discontinue operating the City nursery.	L	CS	L
4.5.4 Accessibility	Conduct a Green Space Accessibility Review.	S	CS	M
	Provide administration (staff), policy and decision-makers, and the public with training and awareness in disability issues.	S	CS	L
	Provide park users with information (via pamphlets, maps, the City webpage, etc.) on accessible opportunities in parks and green spaces, as they are created.	S	CS	L
4.5.5 Safety and Security	Evaluate the safety of all Camrose green spaces, and develop a Safety Action Plan, or redesign dangerous spaces, if required.	S	CS & Police	L
	Increase surveillance and patrol of its green spaces.	S	CS & Police	L
	Develop a graffiti prevention strategy.	S	CS & Police	L
4.5.6 Weed, Pest and Invasive Species Management	Continue to manage weeds, pests and invasive species carefully and while following all applicable regulations.	On-going	CS	On-going
	Inventory invasive plants within City green spaces, and identify priority sites for removal and restoration.	M	CS	L
	Develop an Invasive Species Management Program.	L	CS	M
4.5.7 Wildlife Management	Develop a wildlife management plan.	S-M	CS & other organizations	L
4.6.1 Environmental Reserve	Conduct a further analysis of Environmental Reserve setbacks during the current and future reviews of Municipal Development Plan (MDP) and Land Use Bylaw (LUB).	S	Planning	L
4.7 Green Space Disbursement	Identify Green Spaces that do not help fulfill the Future Green Space Concept and/or meet the green space provisional standards.	S	CS	L
	Develop and adopt a Green Space Disbursement Policy.	M	CS	L
	Develop a Green Space Disbursement Process.	M	CS & planning	L
	Develop evaluation criteria for projects that may use the Green Space Creation Fund.	M	CS	L
	Further pursue disbursement (thorough sale, land swap or otherwise) of green spaces identified, following further public consultation.	M	CS	L
4.8.4 Landscaping Requirements	Provide examples of landscape designs in the development package, which could be used as a template to guide uniform landscaping.	S	CS & Planning	L
	Further explore permitting the use of hardscaping.	S - M	CS & Planning	L
	Explore maximum tree heights.	M	CS & Planning	L

Theme	Priority Action	Timeline	Responsibility	Relative Cost
	Review the minimum standards for landscaping and grass maintenance, and outline this standard clearly in the Landscaping Policy.	S	CS & Planning	L
	Explore providing incentives for landscaping that is not water intensive.	S	CS & Planning	L
4.8.5 Signage	Develop a park signage program.	M	CS	L
5.2.5 Review & Amendment	Review the GSMP priority actions and the City's quantity of green space measurements, prior to the City budgeting process each fall.	Each year	CS	L
	Complete a comprehensive review of the GSMP and its recommendations.	Each 5 years	CS	L
	Complete a revision of the GSMP, including a comprehensive community engagement process.	Each 10 years	CS	L
5.2.3 Bylaw Amendments	Update the Landscaping Policy to include recommendations in section 4.8.4 of the GSMP	S	CS	L
	Update the MDP to include the new policies on Environmental and Municipal Reserve	S	CS & Planning	L
5.3.2 Public Education	Develop a Public Education program.	On-going	CS & Others	L
	Explore the opportunity, community interest, and partnership opportunities for creating a Camrose Environmental Education Centre in the City.	M	CS	M - H
5.3.3 Partnerships	Evaluate the existing partnerships at least every 3 years to ensure that the arrangements are providing mutual benefits and are fulfilling their identified outcomes.	M	CS	L

5.2 Implementation Tools

Several measures beyond those specified in this document may also be used by Council to implement the GSMP. In addition to amending bylaws and pursuing new strategic directions, Council may adopt administrative procedures that will improve the efficiency of implementing policies in this Plan. Moreover, implementation of this Plan will require the input, support and cooperation of residents and stakeholders from the private and public sectors. This section outlines policies and procedures to ensure the effective implementation of this Plan.

5.2.1 Roles and Responsibilities

City Council exercises its authority within the mandate of municipal governments prescribed by the Municipal Government Act. Council has the responsibility and authority to approve new development that will contain new green space, and to approve City activities (and related budgets) that will help develop and manage the Green Space System.

City Administration operates under the direction of City Council and has responsibility for preparing the subsidiary plans and policies and undertaking the programs and activities that support implementation.

Developers include landowners that help to create new communities and by extension, will provide land as part of the subdivision process that will be used to complement the City's Green Space System. Developers have the responsibility to follow City policies and procedures, and meet City requirements for green space dedication in their proposals.

The Public encompasses a wide range of stakeholders, including residents, advocacy groups, non-profit agencies, businesses and landowners. Active public engagement in City decision-making for green spaces is critical for understanding what residents value, exploring the importance of these values relative to each other, and achieving a the future green space vision for Camrose. The City has outlined a number of objectives, policies and actions in this GSMP that will engage the public. It is the public's responsibility to use those opportunities to actively participate in the decision-making process for Camrose's green spaces.

5.2.2 Funding and Financial Planning

A document such as this GSMP requires careful consideration about costs associated with implementation. Costs may be borne by the City, Developers, Residents or a combination of the three, and is dependent on the nature of the recommendations. Given the future vision for the City of Camrose Green Space System, it is important to ensure that the GSMP does not put a financial burden on any one party.

While there are many tools to acquire green space lands, there are similarly many different mechanisms to raise funds for green space creation, development and management. The main mechanism is via City Capital budgets, but there are a number of other funding mechanisms, which include:

- Advertising - Advertising space can be sold, including in Parks and Recreation program guides, and other Parks and Recreation venues. Among other municipalities who follow this practice, The City of Camrose has also sold naming rights to community facilities, including arenas.
- Cash-in-Lieu – As previously mentioned, in-lieu of the 10% municipal reserve dedication at the time of subdivision, the City can request cash-in-lieu, which can help fund green space development.
- Community Fundraising – Some cities have community groups that help raise funds for green space development.
- Development Levies – Many cities charge developers for improving infrastructure, and costs to supplement the Green Space System can sometimes be included in levies.
- Foundation Donations / Gifts – Some municipalities establish charitable foundations that can accept gifts (such as private donations, endowments and bequests) on behalf of the City for green space development.
- Grants – many times grants from the provincial or federal government are used for the Green Space System, particularly for specific purposes like trail development or enhancing tourism.
- Leasing – City-owned land can be leased for amenity services and the funding can go towards the Green Space System.
- Retail Sales and Rental – Many Parks and recreation facilities also have locations where goods and services are sold (such as concessions) or equipment is rented.
- Sponsorship – service clubs and groups often sponsor park and recreation events or facilities.
- Volunteerism – Volunteer programs like Adopt-A-Park allow user or citizen groups to assist in green space development and management.

Objectives – Financial Planning

- To ensure fiscally appropriate direction is provided by the GSMP for future development and management of the Green Space System.

Policies – Financial Planning

- The City shall ensure that new green spaces are created in new communities through ER or MR dedication, at no cost to the City.
- The City shall ensure that if cash-in-lieu is taken in place of land dedication at the time of subdivision, those monies are held in a fund to be used only for further development and management of the Green Space System.

5.2.3 Recommended Amendments to Other Bylaws

As a result of the community engagement completed during its development, and the policies included in this GSMP, various City bylaws are recommended to be amended to fulfill the vision for the Green Space System. These recommendations include:

1.	*Landscaping Policy*	The City consider amending the Landscaping Policy to include recommendations in section 4.8.4 of the GSMP
2.	*Municipal Development Plan*	The City consider amending the Municipal Development Plan (MDP) to include the new policies on Environmental and Municipal Reserve

5.2.4 Monitoring and Evaluation

A framework for monitoring the "success" of the GSMP is important for the City to continually evaluate the effectiveness of the policy directions and recommended actions that are provided here. Success of the plan will be evident if equal resident opportunity and access to green space increases; however, as identified in the gap analysis, measuring this will never be an exact science. Indicators can play an important role by measuring how successful the GSMP is at meeting this objective; for the purposes of this GSMP, three measures will provide a reasonable assessment:

1. Quantity of green space – As expressed in Section 4.6, the GSMP has set as a target of 39 acres (15 hectares) of parkland, and 55 acres (22 hectares) of green space per 1000 people. This should be measured and reviewed annually.

2. Distance to green space – As expressed in Section 4, the GSMP has set targets for the maximum distance of green space from each resident. These average distances should be measured and reviewed every five years. See Map 7 – Future Gap Analysis: Green Space and Map 8: Future Gap Analysis: Trails for an example of this measurement, but completed with the GSMP's Future Green Space Concept.

3. Quality of green space – Lastly, the quality of green space and green space experiences is very difficult to measure quantitatively, but it can be gauged through public engagement and informally through the number of complaints the Community Services Department receives. Other indicators for this area can include the inventory of programs and activities that occur in City green spaces. To measure this, a green space survey should be completed each five years, to ensure resident satisfaction with the City's Green Space System.

It should also be noted that reviewing green space targets (both population and distance-based) is part of the development review process, and will likely be done more frequently than annually, as development applications for new communities are evaluated by the City.

Objectives – Monitoring and Evaluation

- Create a monitoring framework which completes a brief measurement of the "State of the Green Space System" each year, and a comprehensive measurement every five years.

Policies

- The City shall develop a monitoring and performance measure system, which will include (at a minimum):
    - Annual – The City will review the priority actions recommended in the GSMP, as well as the City's quantity of green space measurements (see above), prior to the City budgeting process each fall. It should identify where recommended actions have been initiated or achieved, any new recommendations that the City is pursuing, and any recommendations that have not yet begun.
    - Five Year –Every five years the City will complete a comprehensive review of the GSMP and its recommendations to ensure it remains consistent with current Council and Community Services priorities, practices and procedures.
    - Ten Year – Every ten years the City should complete a revision of the GSMP, including a comprehensive community engagement process.

5.2.5 GSMP Review and Amendment

As a plan approved by Council, this GSMP establishes long term policies and contains recommended actions for the City. However, changes in the economy, social fabric, and environmental conditions may alter the sequence or relevance of the policies set forth in the GSMP. It is prudent to review this document every five (5) years or as deemed necessary by Council, to ensure it fulfills current City and Council objectives and directions. Although notifications to the public and public hearings are not mandatory when amending a statutory plan, the City will provide an opportunity for consultation. The City has also established a process to enable the public, community groups, adjacent municipalities, boards, commissions, other government agencies, and others to propose changes to this GSMP.

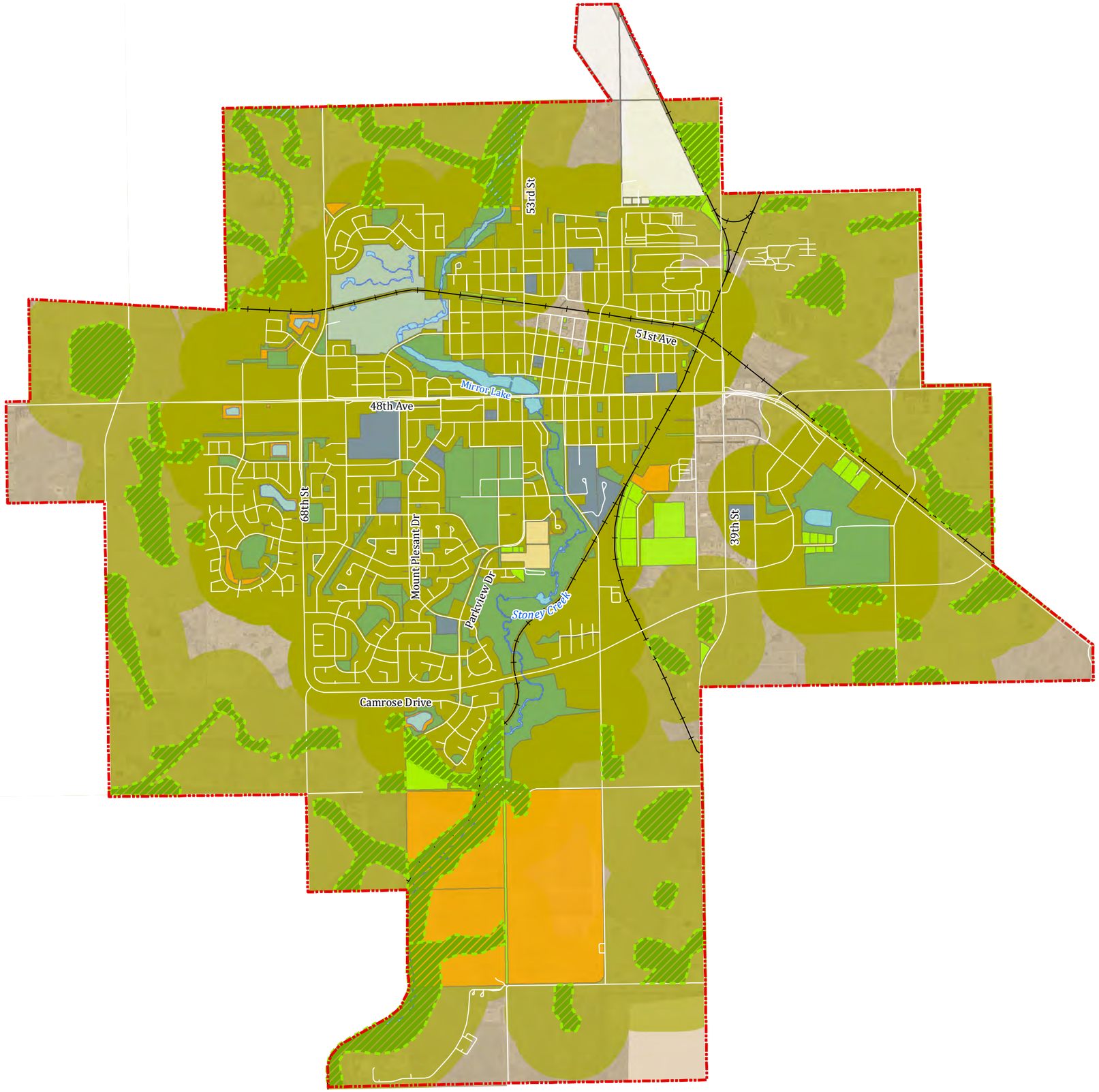
Objectives - GSMP Review & Amendment

- Implement the GSMP via the acquisition and development of new green space, and management of existing green space.
- Provide guidance on interpreting and applying the GSMP policies.
- Provide for periodic review and amendment of the GSMP.

Policies - GSMP Review & Amendment

- The Camrose Green Space Master Plan has been accepted as a guiding document for the City.
- When considering development and subdivision proposals and applications the City will ensure their compliance with the GSMP.
- The City, in consultation with the community, should undertake a review of the GSMP every five years to verify that its objectives and policies are current, effective, and consistent with other City policies that may be adopted from time to time.

- There are many other documents and policies that have been approved by the City of Camrose, and in some cases the Government of Alberta, that apply to green space development in the City. While this GSMP has been developed to be consistent with these, it does not supersede provincial policies, legislation or regulations, nor higher-order Municipal legislation and policy such as the MDP and LUB.



City of Camrose
Green Space Master Plan

Map 7

Future Gap Analysis: Green Space

- Future Green Spaces

Walking Distance Radius

- 400 Metre

Green Space

- Parkland
- School Yards
- Golf Course

Other City Owned Green Space

- Cemetary
- Airport
- Utilities
- Non-contributing Green Space

0 250 500 1,000 Meters

SCALE 1:33,000

N W E S

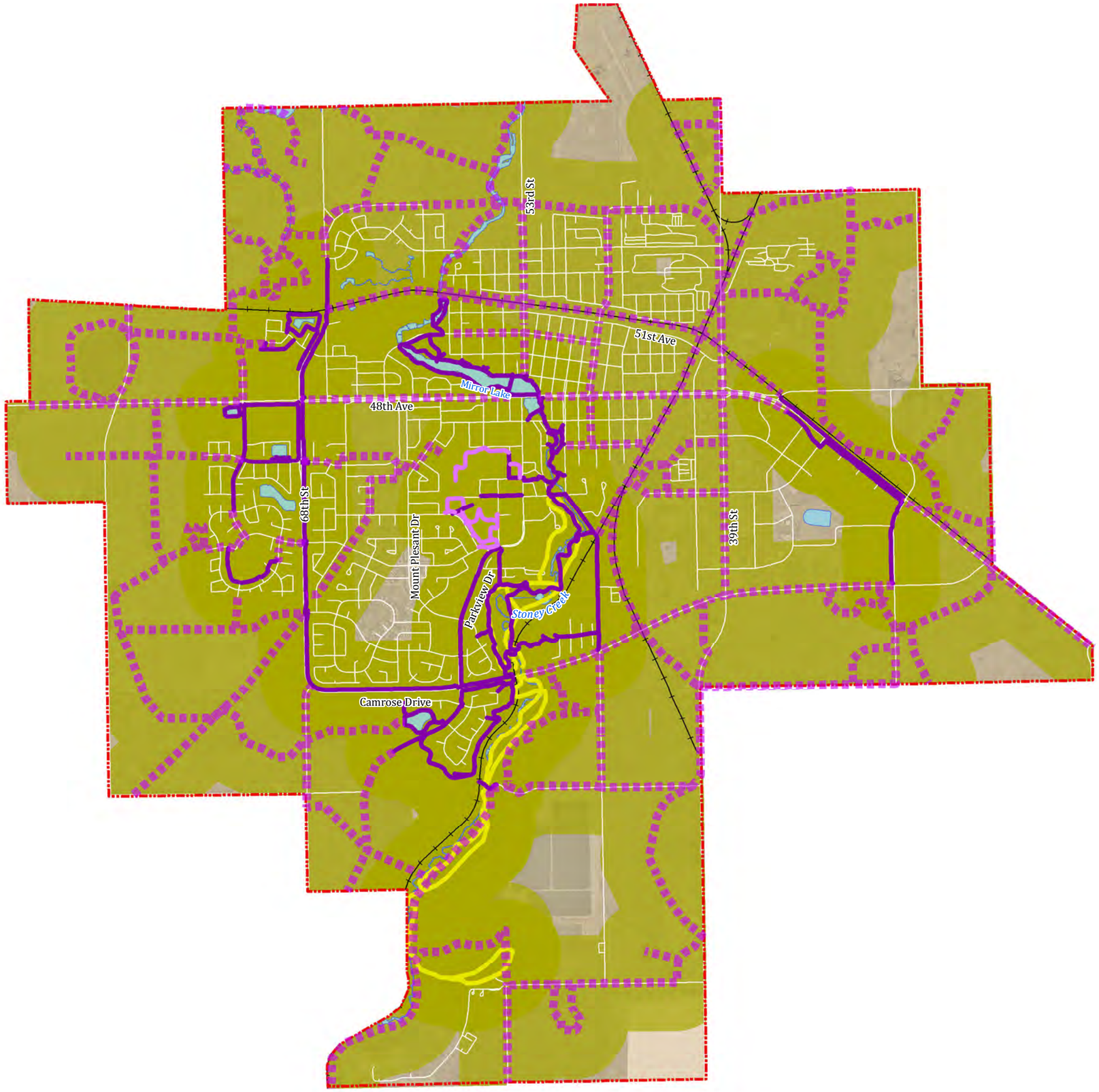
MAP DRAWING INFORMATION:
Data from Camrose. Converted from CAD.

MAP CREATED BY: Eric Hertzman, GIS Specialist
MAP CHECKED BY: Alex Taylor, Planner
MAP PROJECTION: NAD 1983 UTM

FILE LOCATION: G:\GIS\11XXXX Camrose GSMP\
Mapping by Eric Hertzman\Figure 2a - Green Space.mxd

DILLON CONSULTING

PROJECT: 11-5528
STATUS: DRAFT
DATE: (4/17/2012)



City of Camrose
Green Space Master Plan

Map 8

Future Gap Analysis: Trails

Future Links (Trails)

Walking Distance Radius

400 Metre

Trails

Paved

Shale

Nature

0 250 500 1,000 Meters

SCALE 1:33,000

N W E S

MAP DRAWING INFORMATION:
Data from Camrose. Converted from CAD.

MAP CREATED BY: Eric Hertzman, GIS Specialist
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FILE LOCATION: G:\GIS\11XXXX Camrose GSMP\
Mapping by Eric Hertzman\Figure 2a - Green Space.mxd

DILLON CONSULTING

PROJECT: 11-5528

STATUS: DRAFT

DATE: (11/29/2012)

5.3 Community Engagement

City residents and stakeholders need to be confident in its governance and management, and should feel that they can actively participate in its future direction, including the development and management of the Green Space System. The aim of this GSMP is to engage residents and all stakeholders in an inclusive and accessible process through education, promotion and public debate on green space issues. Effective communication among Council, Administration, residents, businesses, public agencies and other levels of government is key to achieving the future green space vision for Camrose.

5.3.1 Public Engagement

Opportunities for public input in municipal decision-making include making submissions to City Council or Staff, commenting at public hearings and meetings, participating in workshops, and volunteering for Council committees. The City will also provide opportunities for participation in large scale decisions about existing parks and changes to existing green spaces and programming.

To be successful, engagement programs must:

- Be transparent, inclusive, and collaborative,
- Offer meaningful opportunities for the public to become involved,
- Respect the time and effort made by the public to provide comments,
- Demonstrate that input will be seriously considered,
- Provide timely notification of upcoming events,
- Clearly present background information and credible analysis, and
- Provide the opportunity to consider and comment on information as it becomes available.

This means determining the steps in the decision-making process where people want to be consulted and where their engagement can best contribute. Many decisions are constrained by already-established priorities, financial constraints or existing development rights. These constraints need to be clearly articulated at the outset of a project.

Objectives – Public Engagement

- Ensure that residents and stakeholders have the appropriate means of participating in the City decision-making process regarding the Green Space System.

Policies – Public Engagement

- The City shall establish public engagement programs for major amendments to the GSMP, and other City decisions that will affect the Green Space System, that describe opportunities for public input based upon the scope and intent of the amendment / decision.
- The City shall continue providing all public information relating to green space management matters to all residents, either at City Hall or online on the City website.

- The City shall continue to improve opportunities for on-going involvement by the public in City decision-making, recognizing the best practices of the International Association of Public Participation (IAP2) including but not limited to City Committees, Advisory Committees and public engagement programs.
- The City shall facilitate public input on matters of green space management, wherever possible. The City shall consider, but not be bound by, the input received from the public, and shall balance the input received with other considerations relating to the long-term interests of the entire community.
- Public input may be obtained through a variety of methods, including open houses, public meetings, community newsletters, information bulletins, focus groups, citizen advisory groups, workshops, and surveys. Public engagement may be facilitated at any level of the decision-making process, including green space concept development, detailed green space design or construction. Public engagement should be commenced as early as possible in the process.

5.3.2 Public Education

City employees, and particularly Community Services staff, are involved in many different aspects of the Green Space System, including weed, pest and invasive species management, green space programming, plant and pruning tips, among other topics. Having an educated public can contribute significantly to increasing the level of public engagement.

Objectives – Public Education

- Increase the level of knowledge about green spaces and green space issues in Camrose, among all residents and stakeholders.

Policies – Public Education

- The City shall initiate and support public education programs relating to the Green Space System.

Priority Actions – Public Education

- The City should develop a Public Education program, in cooperation with other City departments, that will educate residents and visitors about:
    - Green space programming and use;
    - The value of green spaces; and
    - Health and safety issues in Camrose green spaces, such as Dutch Elm Disease and West Nile Virus.
- The City should explore the opportunity, community interest, and partnership opportunities for creating a Camrose Environmental Education Centre in the City. This may include the development of a feasibility study for such a project.

5.3.3 Partnerships

While most responsibility for implementing the GSMP rests with the City, it will be the contributions of the Camrose community at large that will make it a success. Community Participation in the green space vision will also include a number of partnerships, many existing and some to be created in the future, which will contribute to the Green Space System in some way, including funding and acquisition strategies, advocacy, protection and maintenance. Community Partnerships have the added benefit of fostering community spirit and ownership in the future green space vision.

Current partnerships between the City and organizations include:

- Camrose Ski Club – Founded in 1911 by Scandinavian settlers with the name of Fram Ski Club, Camrose Ski Club is one of the oldest in Canada. In the early days, jumping was the event that drew the crowds as Stoney Creek Valley filled with up to 3,000 people coming to see the "daring Norwegian flyers." Today a large number of competitive athletes as well as recreational skiers of all ages enjoy the Camrose ski trails. Camrose Ski Club's trail system has been progressively expanded and improved over the years thanks to contributions from local volunteers, the City of Camrose, the Government of Alberta, the Government of Canada and the Camrose Rotary Club.[10]
- Camrose Businesses – There are many businesses that participate in management of green spaces in Camrose, and there are more opportunities to invite the business community to contribute via sponsorships, etc.
- The Camrose School Districts – the Camrose School districts have been partners of the City for development of school sites for a number of decades.
- Augustana Campus, U of A – As the University of Alberta, Augustana Campus, is identified as semi-public land and is classified under the School Yard green space type, the City has helped support campus planning efforts by the University, and is currently working with the University on a redevelopment plan for the area.
- Camrose County – the City has worked with Camrose County on a number of issues over the years.
- Camrose Wildlife and Greenspace Stewardship Project – The Camrose Wildlife and Greenspace Stewardship Project (CWGSP) is a partnership developed to provide educational, recreational, historical, and tourism opportunities focused on wildlife and greenspace in the City of Camrose. It also provides citizens with knowledge on wildlife and their habitats and how these add to the quality of life for residents.

Partnerships can include both formal and informal agreements with organizations.

Objectives – Partnerships

- Foster communication and partnerships between Government agencies, non-profit organizations, community groups and private organizations to acquire, protect, maintain and advocate for Camrose's green spaces.

[10] www.camroseskiclub.com

Policies – Partnerships

- The City shall continue to:
    - Invite existing and new partners to participate in green space acquisition, development and programming.
    - Support Community Associations and ensure their participation in local green space development where appropriate.
    - Foster the Joint Use Agreement with the School Districts and develop policies, strategies and processes to enhance community accessibility to publicly funded school sites.
    - Work with Camrose County on green space planning issues, including their Source Water Protection Plan (SWPP).
    - Work with non-profit organizations on education opportunities.
    - Support the Ski Club and any plans to expand the cross country trails, improve summer accessibility (including for mountain bikes), and improve signage.
- The City shall:
    - Explore opportunities to enhance connectivity between City Parks and School Yards as part of the comprehensive Green Space System.
    - Explore opportunities to increase connectivity between the County and City trail system.

Priority Actions – Partnerships

- The City should evaluate the existing partnerships at least every 3 years to determine if the arrangements are providing mutual benefits and are fulfilling their identified outcomes.

6.0 APPENDIX

6.1 Community Engagement Results

6.2 GSMP Backgrounder