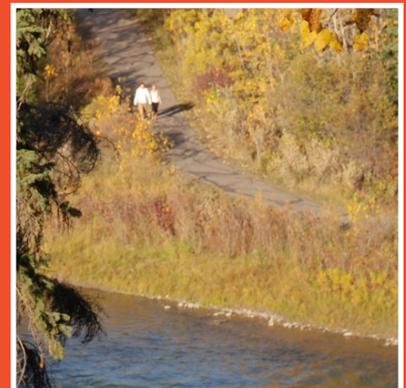


River Valley + Tributaries Park Concept Plan

Presented to:

City of Red Deer
and Red Deer County

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EXECUTIVE SUMMARY

The purpose of the River Valley & Tributaries Park Concept Plan (RVTPC Plan) is to identify lands best suited for potential trails and parks within the City of Red Deer Growth Area.

The vision for a linear open space system for the Red Deer River Valley began 30 years ago and led to the development of Waskasoo Park, a system that today includes 994 hectares of parkland, 95 kilometres of trails, sports fields, recreation facilities, cultural and nature centres.

The City of Red Deer and Red Deer County are working together to plan the next 30 to 50 years of urban development in the region. To encourage efficient expansion, the City of Red Deer and Red Deer County recently adopted an Intermunicipal Development Plan (IDP) that identified growth areas to accommodate new population and economic activity. One of the objectives of the IDP is:

“To establish, where possible, a linear park system focused on the Red Deer River, Blindman River, Piper Creek and Waskasoo Creek.”

Projections put the city’s population at 185,000 by 2031. Planners are anticipating the city’s population will reach 300,000 by mid-century. Unless the city expands its park system, the quality of life indicators related to parks will decline significantly.¹

- The percentage of the city’s total land area dedicated to Waskasoo Park will fall from 13.1% to 3.9%
- The hectares of Waskasoo Park per 1,000 residents will shrink from 11.3 to 5.4 (assuming 185,000 population)
- The hectares of Waskasoo Park per 1,000 residents will shrink from 11.3 to 3.3 (assuming 300,000 population)

Note: The above calculations do not include hectares of neighbourhood parks.

Just to maintain these indicators at their current level would require as much as 2,394 hectares of new parkland to be added to the Waskasoo Park system.

The process of identifying new parklands for the RVTPC Plan made natural resources a priority, especially water resources. Lands adjacent to the rivers; small, intermittent or ephemeral streams; wetlands and sloughs are included in the concept. As part of the public park system these sensitive or significant environmental lands and their associated ecological services can be protected, and fulfill the community’s desire for more natural parkland. The RVTPC Plan is based on the following principles:

¹ The indicators were calculated based on the City’s land area (prior to 2009 annexation), the land area of Waskasoo Park (does not include land dedicated for neighbourhood parks), and the City’s population projection for 2031.

Follow the River. The park concept must protect and celebrate the Red Deer River and its tributaries.

Connect with Trails. Trails are the major connective tissue, linking people to park destinations, nature, views and wildlife.

Respect Nature. Valuable ecological resources included in an expanded park system can be managed, protected and preserved for future generations.

Mix It Up. A balanced park system can satisfy desires for lively populated places as well as quiet, solitary respites from urban life.

Fair Play. A regional park can provide quantity and diversity of open spaces and recreational experiences to all residents.

Grow Smart. A forward thinking park plan can support the City/County's long-term growth strategy by providing amenities where and when growth should occur.

Learn Outside. A more extensive river park system expands opportunities to tell the stories of the city and the region through interpretation and hands-on experiences.

This RVTPC Plan is a proposal. It illustrates how Waskasoo Park could expand as the City annexes and develops lands within the Growth Area. Some aspects and recommendations may never be realized, but others will become reality. The Park Concept for the Study Area includes 3,655 hectares of land (2,889 hectares of Proposed Parkland plus 766 hectares of Special Study Area), 136 km of trails, and 13 park nodes.

Recommendations

The plan includes recommendations for implementation related to costs, funding, land acquisition and additional studies.

1. Develop More Detailed Plans and Costs for Phase 1 Annexation Lands, Which Were Annexed Effective September 1, 2009
2. Aggressively Pursue Provincial and Federal Funding
3. Identify Dedicated Municipal Funding
4. Explore Partnerships and Joint Development Projects
5. Expand the Role of the Friends of Waskasoo Park Fund to Leverage Private Funding
6. Maximize the Use of Environmental Reserve to Acquire Lands Adjacent to Rivers, Tributaries, Lakes, Sloughs, Escarpments and Other Environmentally Sensitive Lands
7. Use Municipal Reserve and/or Land Purchase to Establish Buffers Along Indefinite or Recurrent Streams

8. Develop a Tool to Evaluate Municipal Reserve Dedications
9. Reflect RVTPC Plan in Future Statutory Plans for the Growth Area
10. Make Elements of the RVTPC Plan a Condition of Subdivision Approval to the Greatest Extent Possible
11. Identify Parcels for Land Purchase and Begin Working with Landowners
12. Consider Alternatives to Fee Simple Land Purchases
13. Integrate the RVTPC Plan into Green Infrastructure Planning for the Study Area
14. Negotiate the Use of Non-Environmental Buffers and Setbacks for Parklands, Trails and Trail Connections
15. Update the Waskasoo Park Master Plan
16. Reflect Red Deer County's Environmentally Significant Areas Study in Future Planning
17. Undertake a Floodplain Study for the Study Area
18. Explore a Canadian Heritage River Designation for Red Deer River
19. Initiate Peer Exchange with the River Valley Alliance
20. Document the Economic Benefits of the RVTPC Plan
21. Explore Designating the Red Deer River a Municipal Park

INTRODUCTION

The vision of a linear open space system for the Red Deer River Valley was born 30 years ago. Much of that vision was realized in the 1980s through the development of Waskasoo Park, a system that today includes 994 hectares of parkland, and 95 kilometres of trails, sports fields, recreation facilities, cultural facilities and nature centres.

Red Deer is fortunate to have a system so well integrated with its waterways. Many cities, cut off from their rivers by industrial development or highways, are only now just starting to reconnect. Because of its past investment in proactive planning, the City of Red Deer has a park and open space system that provides excellent public access to the river while being sensitive to the natural environment.

The City has placed a high value on regional trails that link citizens to rivers, and neighbourhoods to parks. These values are consistently reflected, not only in plans for parks and trails, but in plans for roads, downtown redevelopment, new subdivisions and other community facilities.

It is a vision created with and supported by the community. Involvement in the planning process is ongoing. Resident surveys and other community input over the years, reflect strong values of conservation and stewardship. In many plans, passive use and preservation of sensitive environments are favoured over more active uses. Yet, there is a need and desire for active recreation that is sited to avoid or minimize impacts to natural features.

As plans for the next 30 to 50 years of urban development in the Red Deer region proceed, the original Waskasoo Park vision remains robust and relevant. This study begins a new phase of proactive park planning to extend this linear park system into new growth areas. It is one more tool that the City and the County can use to protect sensitive areas and offer public access to new reaches of the Red Deer River and its tributaries.

Purpose of the Study

The City of Red Deer is located in central Alberta, midway between the province's two largest cities, Calgary and Edmonton. The City is surrounded by Red Deer County, and lies just south of Lacombe County. The City serves as a regional centre for the residents of towns, villages and rural areas within Lacombe and Red Deer Counties. Therefore, a broader regional perspective is essential when considering future growth.

See Figure 1 - Regional Context

The City of Red Deer and Red Deer County adopted in 2007 an Intermunicipal Development Plan (IDP) that identified growth areas to accommodate new population and economic activity. One of the objectives of the IDP is:

"To establish, where possible, a linear park system focused on the Red Deer River, Blindman River, Piper Creek and Waskasoo Creek."

The IDP area identifies growth areas for the City of Red Deer and Red Deer County. The primary purpose of the River Valley & Tributaries



Park Concept Plan (RVTPC Plan) is to identify lands best suited for potential trails and parks within the City of Red Deer Growth Area. The concept will extend the existing Waskasoo Park system into the city's future growth area.

The IDP anticipates that the City will annex lands in the City Growth Area within 10 years of the date of adoption of the IDP, by July 2017. In general, the City does not intend to acquire parkland or develop parks until annexation occurs and an Area Structure Plan has been adopted. However, if opportunities arise earlier, the City will act proactively to acquire parkland before development pressures increase land values.

Phase I Annexation occurred in September 2009 when the City of Red Deer received provincial approval to expand its boundary by annexing 3,000 hectares from Red Deer County. The annexation encompasses roughly 100 hectares south of the Red Deer River and east of the Queen Elizabeth II highway; 1,300 hectares along the north side of Red Deer; and 1,600 hectares along the east side of the city. Therefore, RVTPC Plan will focus on lands that are part of this annexation and the remainder of the City's Growth Area as delineated in the IDP— referred to throughout this report as the "Study Area."

See Figure 2 – Study Area

Within the Study Area there are opportunities to link the City of Red Deer's parks and trail network with Red Deer County's future open spaces and trails. While the County endorses this project, it does not intend to implement the concepts contained in the RVTPC plan. Red Deer County's OSMP will guide all County park development within the City of Red Deer Growth area. This study includes a brief review of the 1982 *Waskasoo Park Master Plan* to ensure new parklands are successfully integrated into the existing Waskasoo Park system.

The planning process was guided by the RVTPC Plan Team composed of representatives from: City of Red Deer, Parkland Community Planning Services, Red Deer County, CARTS, Alberta TrailNet Society, Red Deer River Naturalist and Waskasoo Environmental Education Society. A Stakeholder Workshop was held in September 2008 to gather input from stakeholders to help shape and refine the Park Concept and other recommendations. The process of study and consultation extended over nine months, July 2008 through March 2009.

The City of Red Deer and Red Deer County are also working together on a Joint Planning Initiative (JPI) to plan the IDP area. The results of the JPI Background Report may guide future amendments to the IDP and other planning documents.

History of River Parks

The first river park concept for the Red Deer Valley was put forth in a 1975 report, *Red Deer River Corridor Park: An Integral Park of a Regional Recreation Plan* drafted by the City of Red Deer Regional Planning Commission. It was an ambitious, extensive plan that included lands along the Red Deer River, Blindman River, Sylvan Creek and Piper Creek in three municipalities—City of Red Deer, Red Deer County and Lacombe County. The most extensive land areas included in the concept were the highly meandering reaches of the Red Deer River.

In 1978, a second proposal was prepared, “*Red Deer River Valley Parks and Recreation: A Proposal for Cooperative Action.*” This proposal was prepared at the request of the Alberta Minister of Recreation and Parks in support of a new urban parks program. The 1978 concept focused on a 35-kilometre reach of the Red Deer River from Fort Normandeau downstream to the Joffre Bridge and incorporated short stretches of the Blindman River, Waskasoo Creek and Piper Creek.

As a result of this proposal, the new Provincial Urban Parks Program announced that \$22 million in capital and operating costs would be available to the City of Red Deer to create a river park system.

The City completed a detailed master plan in April 1982 for a 994-hectare park system encompassing the Red Deer River, Waskasoo Creek and Piper Creek. Recommended implementation included the acquisition of 191 hectares from the Province and 433 hectares from private landowners. The preliminary budget for the park totalled \$26 million (\$10.5 M land acquisition, \$1.5 M planning/design, \$14 M capital).

See Figure 3 – Waskasoo Park 1982 Master Plan

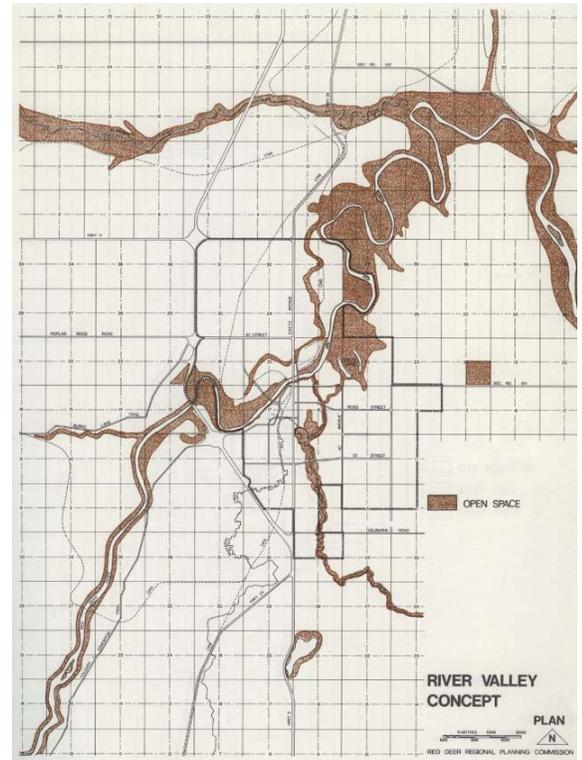
Since the approval of the Master Plan, much of the envisioned park system has been achieved.

Trends

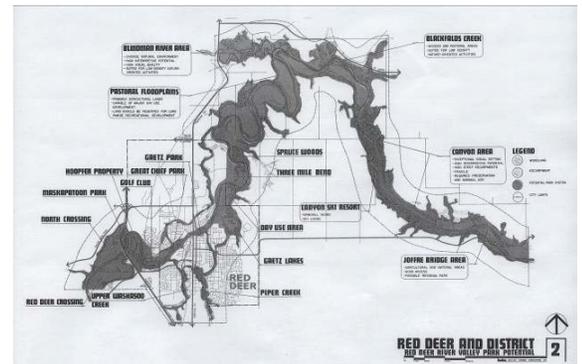
Population Change

The Waskasoo Park Master Plan was conceived when the population of Red Deer was approximately 45,000 and expected to grow to 91,000 over the next 20 years (*Waskasoo Park Master Plan*). The city’s population is expected to exceed 91,000 this year (2010) and may reach 185,000 by 2031 (Schollie, 2006).

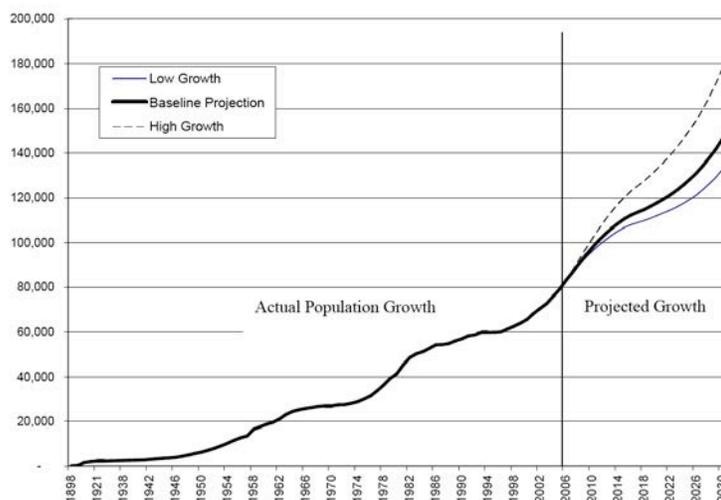
The City of Red Deer is strategically located in Central Alberta, midway between Calgary and Edmonton; the province’s two largest cities. The Calgary–Edmonton corridor is one of the fastest growing areas in Canada. Population growth in Alberta has out-paced Canada for the past decade. Population growth in the City of Red Deer has expanded three times faster than the nation.



1975



1978



Source: *City of Red Deer Population Projections 2007-2031 Final Report*. Schollie Research & Consulting. August 25, 2006.

In the future, the city will experience demographic changes that are playing out throughout North America. The population will be older as the last of the baby boomers reach 65 in 2026. Family size and household size will continue to decline due to an aging population, increasing age of marriage and growing percentage of unmarried adults. International immigration will increase as workers from around the globe come to augment the aging and shrinking workforce.

Park and Recreation Trends in Alberta

Demographic trends and other influences will affect future recreation needs and desires. How people live and play is already changing. The Alberta Recreation Survey conducted every three to four years since 1981, tracks recreation indicators such as: participation, favourite activities, barriers to participation and other preferences. The survey results shown below have implications for planning new parks and trails in Red Deer.

More interest in outdoor activities, especially walking. Activities with the highest household participation rates are walking (93%), gardening (72%), craft/hobby (64%), bicycling (56%), attending a sports event (60%), attending a fair/festival (57%), swimming in pools (54%), playing video/computer games (53%), attending live theatre (52%), and visiting a museum/gallery (51%). The number of outdoor activities in the top ten has increased since 1981. Outdoor activities on the rise since 1981 include walking and picnicking in the city, while baseball/softball, football, fishing and motor boating appear to be declining. The percentage of people identifying outdoor pursuits as a favourite activity increased from 46% in 2000 to 57% in 2004. The 10 most frequently mentioned favourite outdoor activities were walking, golfing, camping, bicycling, swimming, jogging/running, gardening, reading, fishing and ice hockey.

"In the new Waskasoo system, I can walk with my grandchildren along a running river tributary where we can toss small stones and hear the plunk or hear the water as it rushes over its course. Where the reality of urban life blends with nature instead of competing with it." - a vision from stakeholder workshop

Growing popularity of individualized activities that can be done frequently, on a flexible schedule and close to home.

Not surprisingly, people participate more frequently in outdoor pursuits that are close to home (walking, bicycling, gardening, jogging/running and swimming). Outdoor activities such as camping, fishing, hiking and boating require more travel, planning, and equipment, resulting in less frequency. Team sports are also experiencing declining levels of participation. Due to the stressful and busy nature of modern life, recreation that does not require a lot of planning seems to be more appealing.



Changing demographics and lifecycles influence recreation preferences.

Age and lifestyle influence the demand for different types of recreation. Walking is popular among all age groups. Older age groups tend to favour less strenuous activities such as gardening and fishing, while younger people choose more active pursuits such as running, skiing and team sports. Boomers are expected to be more active as seniors, but will drive demand for less energetic, but challenging recreation. Rising immigration will also affect demand. Flexible facilities will allow parks and recreation systems to adapt to a wide range of preferences and serve niche audiences, i.e., youth, women, seniors, and various ethnic groups.

There are additional park trends that should be acknowledged. Researchers are examining the connections between parks, human and ecosystem health. Parks can be positioned and valued differently— as key community infrastructure rather than recreational and visual amenities.

- **Active Living.** Increasingly inactive lifestyles are being blamed for alarming health impacts, including an obesity epidemic. There is a strong positive relationship between public health and the design of communities. Proximity to clean, safe, accessible, connected green space is likely to lead to higher levels of physical activity. Even passive exposure to green space improves mental health, levels of stress, and symptoms of attention deficit disorder and mood disorders. Walking remains one of the best ways to exercise, and living in a walkable community has health benefits.
- **No Child Left Indoors.** Statistics show that children spend too much time indoors. Even though the number of children involved in organized team sports is at an all-time high, they have little time to explore everyday nature. Research suggests that children who experience unstructured play in the outdoors thrive intellectually, spiritually and physically in ways that "shut-ins" do not. Engaging in outdoor activities, such as hiking with parents or other adults, helps to build a lifelong appreciation of nature. Without such direct experiences, future generations will lack an understanding of the natural world.
- **Value of Ecological Services.** Parklands are natural capital providing ecological services to clean air and water. Red Deer's expanding urban footprint will produce more stormwater runoff, air pollution and greenhouse gas emissions. Parks can be part of the overall stormwater management system helping to slow runoff, replenish ground water, buffer wetlands, sloughs and streams. Expanding or preserving areas of healthy vegetation that can absorb air pollution and greenhouse gas emissions will help the City meet future sustainability goals.

- **Limited Public Resources.** Public funds for parks and recreation are growing increasingly scarce. More and more park systems are relying on partnerships, user fees, and other non-tax revenues to fund capital projects and operations. The need to generate revenue and attract private resources may influence the kinds of parks that are built in the future.
- **Preference for Larger Parks, Multi Use and Joint Use Facilities.** Very small neighbourhood parks are becoming less well used while regional parks and trails are in higher demand. Multi-use recreation facilities that can serve a variety of ages and interests are preferred as people try to use limited leisure time more efficiently. Joint-use facilities pair recreation with other compatible communities uses—schools, community centres, libraries—that allow public funds to stretch further and allow a wider population to be served by new public investments.

Local Park and Recreation Trends

Both the City of Red Deer and Red Deer County have conducted needs assessments to gauge the changing local preferences in recreation and leisure. Both assessments concluded that trails are one of the most widely used and desired recreation resource for local residents.

The *Red Deer County 2004 Community Service Needs Assessment* reported:

- Outdoor activity preferences were similar to those in the Alberta survey, but participation rates were higher for some of the most popular activities: gardening (82%), bicycling (76%) and attending fairs/ festivals (70%). Participation, in trail and pathway-related activities like walking and cycling were particularly strong.
- Respondents also preferred recreation options that are less time-consuming, more flexible (more individual and drop-in activities), offer tranquillity (minimize the intrusion of development on the park space), provide more contact with nature and promote interpretive opportunities.
- An increase in the non-farm population has led to needs and preferences similar to the urban dwellers, a higher preference for outdoor recreation opportunities over indoor-based recreation programs and services, and the need to connect to adjacent communities to access regional recreation and culture facilities via pathways.
- The most important outdoor facilities included ball fields, playgrounds, outdoor grounds and outdoor arenas. Additional outdoor facilities/components include playgrounds, day use shelters/covered sitting and trails.

An intercept survey that was part of the *Red Deer Trails Master Plan* and the *City of Red Deer 2008 Community Assets Needs Assessment* provide insight into the needs and preferences of the City of Red Deer's residents. Major findings included:

- The intercept survey shows a high level of use, satisfaction and appreciation for the trail network. The survey indicates significant usage from residents outside the city—about 10% of the survey respondents identified the neighbourhood as out of town, Lacombe, Sylvan Lake, Blackfalds or Springbrook.
- The needs assessment found outdoor leisure activities were, by far, the most popular. Walking on trails and pathways was the most common of these activities, with a 66.6% household participation rate. Walking had the highest participation rate across all demographic categories.
- The development of parks, trails and pathways is assigned high importance. In particular, the development of trails linking new residential areas to the Waskasoo system is widely supported – more so than any other development option.

Authors of the *Community Assets Needs Assessment* concluded that, “The public reaffirms this principle and the research makes it clear that trails and pathways that link the rest of the city to this network are of critical importance to the community. Trails provide a no-cost (to users) alternative for recreation and fitness that is easily accessed for spontaneous, unscheduled activities, for a link to nature, and for health and fitness. This aligns with trends across the country.”

Economic & Cultural Trends

Beyond the realm of parks and recreation are broader societal trends that could influence future parks and trails.

- **An Economy in Crisis.** The rapidly weakening economy has created great uncertainty about the future. It is hard to say how this situation will affect parks. Build-out of the Study Area may be slower, and land values may be lower. Although public tax revenues are down at all levels of government, economic stimulus strategies are likely to increase public investment in public works—perhaps even in park infrastructure.
- **Higher Energy Costs.** Alternative transportation use has climbed in tandem with the price of gas. New York City reported a 38% increase in bicycle commuting in just one year. Bike sharing systems are increasing in North America—systems are operational in Washington DC and Montreal, and many other cities are gearing up. Demand for safe and convenient trails, especially alternative transportation commuter infrastructure, is likely to increase.
- **Green is Mainstream.** A 2008 Ekos poll found that nearly two-thirds of Canadians see global warming as the most important issue facing the country in the medium to long-term. A growing segment of the population has a profound sense of social and environmental responsibility. “Greenthusiasts” are driving demand for more green products and services—everything from energy-efficient products, recycled materials, ecotourism, organic foods and environmentally safe cleaning products. This green trend could translate to public support for growing the park system.

"The trail system along the riverbanks has an "urban quiet," but is rich in sounds of Mother Nature (birds, animals, the water). There are lots of trees and natural vegetation and people laughing and enjoying surroundings." - a vision from stakeholder workshop

- **Cities Becoming More Sustainable.** In Alberta, the Province is directing funds to local governments to develop sustainability initiatives. Local governments are responding and leading by example—investing in energy efficient fleets, green buildings, alternative energy sources and LED lighting. Governments are forming partnerships with citizens and community-based organizations to encourage more sustainable behaviours—transit use, recycling and water and energy conservation. Parks and environmental education centres are well positioned to expand their public education mission to include sustainability.
- **Growing concerns about environment and climate change.** There is heightened awareness of the unmitigated, accelerated effects of climate change—increased flooding, drought, heat waves and changing vegetation patterns. Making Red Deer less vulnerable and more adaptable to the effects of climate change may require setting aside more natural lands in anticipation of expanding flood zones.
- **Changing Travel Habits.** In 2004, the World Tourism Organization found that nature-based or eco tourism was growing three times faster than the whole tourism industry. These are travel experiences that focus on nature and/ or sustainable environments. Weekend travel is becoming more popular, while longer trips are declining. In the current economic climate, more people may choose to “vacation” at outdoor places close to home.

Implications for Planning

The City of Red Deer’s plans for the future Waskasoo Park could be shaped by the trends described above in the following ways:

- A continued emphasis on connected, linear park space that hosts an extensive network of trails for leisure and transportation.
- An increasing recognition of the environmental functions and services provided by a linear park system, and its role in protecting the watershed.
- An increasing importance of trails and greenways to connect local neighbourhoods with the larger region.

PLANS AND POLICIES

The RVTPC Plan builds on previous planning by the City of Red Deer to create a parks and open space system along its rivers. Statutory plans, non-statutory plans and other related studies from Red Deer and the greater Red Deer region were reviewed for context. Consideration was given to the specific recommendations about parks and open space within the Study Area. Because the Study Area includes areas planned by both the City of Red Deer and Red Deer County, this review included both municipalities. Selected plans from Lacombe County were also reviewed to identify possible open space linkages.



Many documents reviewed are policies related to growth and development: Intermunicipal Development Plan (IDP), Municipal Development Plans (MDP), Major Area Structure Plans (MASP), Area Structure Plans (ASP), Neighbourhood Area Structure Plans (NASP), Area Redevelopment Plans (ARP), and Urban Design Studies. A complete list of documents reviewed appears in Appendix A. Major findings that informed the development of RVTPC Plan are discussed below.

Intermunicipal Development Plan (IDP)

The IDP is a statutory plan jointly developed and adopted by Red Deer County and The City of Red Deer. The goals of the IDP are to improve communication, cooperation and orderly development between municipalities within a planning area; to provide for future growth areas; and to allow development without impeding the growth plans of another. The plan provides for land-use planning cooperation between municipalities, particularly with respect to a number of key planning issues, as well as policy direction, to deal with subdivision and development in the City's fringe area.

The previous Red Deer County and City of Red Deer IDP, adopted in 1999, set a long-term planning horizon of 15 to 20 years. Updating this document to the current IDP provided for a much longer-term planning horizon, 45 to 75 years, creating increased certainty, substance and direction for both municipalities as they grow. The IDP includes a specific policy regarding the development of a park system along the rivers. Although Policy 3.2.3 (3) (a) does not include a reference to the Sylvan River or small, intermittent or ephemeral streams, Policy 3.2.3 (3) (b) recognizes the need to include these resources as part of a linear park system.

Policy 3.2.3

(3) In planning and developing open space systems both municipalities shall:

- (a) Establish a continuous intermunicipal park system, where possible, focused on the floodways and flood fringes, and other natural areas of Waskasoo Creek, Piper Creek, Red Deer River and Blindman River.*

- (b) *Require the dedication of reserves or easements or, as may be mutually agreed between the City and the County, the use of other methods in order to protect and preserve natural areas, riparian habitat and flood fringes and associated slopes and establish a continuous linear park system connecting a series of larger open space units.*

City of Red Deer Municipal Development Plan (MDP)

The City of Red Deer MDP clearly supports extending its river focused Waskasoo Park system into the Growth Area.

Policy 14.4

As new areas are planned and developed, the City shall ensure the design of the parks and open space systems provides:

- *linkages to the major open space, including along the Red Deer River and its Tributaries;*
- *linear corridors and pedestrian connections within and between neighbourhoods; and*
- *consideration of continuous wildlife corridors and key wildlife habitat as identified in the Natural Area / EcoSpace Classification Prioritization System.*

Red Deer County Municipal Development Plans (MDP)

Although the Red Deer County MDP does not include a specific policy about a river park or trail system, it does contain strong policies to protect environmental lands. The following policies could be used by the County to preserve lands along the Red Deer River and its tributaries as open space.

Policy 3.1

Lands identified as being environmentally significant shall be protected with particular emphasis on protecting the environmental integrity of the County's rivers, streams and lakes.

Policy 3.2

A review and update of the Environmentally Significant Areas Study shall be undertaken.

Policy 3.3

The purchase of particularly unique or significant environmental features may be considered to protect these features from development for future generations.

Policy 3.6

A minimum 30-metre (100 feet) wide Environmental Reserve setback or Environmental Reserve easement from the top of the bank of a river or stream and/or the high water mark of a lake shall be applied, subject to the discretion of Council/Development Authority. Changes in the setback distance may result if recommended by a qualified professional. As well, lesser Environmental Reserve setbacks may be considered for minor water features such as unnamed creeks or sloughs.

Policy 3.7

Environmentally significant features and setbacks that link to municipal reserve parcels or are required to provide public access to the feature may be dedicated as Environmental Reserve at the time of subdivision, and subsequently managed by the municipality.

Policy 8.2

A Strategic Open Space Master Plan that considers the recommendations of the Red Deer County Community Services Needs Assessment Project shall be developed and implemented.

Community Assets Needs Assessment: A Directional Plan for the City of Red Deer

This plan, adopted by Council as a planning tool, details strategies for recreation, parks and culture assets for the next 25 years. It reaffirms the importance of the existing river park system. Citizens rate trails, access to natural areas, integration of park spaces and connections to the Waskasoo Park system as major priorities.

The majority of recommended initiatives are for immediate (within 2 years) or short-term (3 to 8 years) actions. However, the report did include strategies and actions specific to future park development that can be incorporated into the RVTPC Plan.

- Emphasize acquisition of large tracts of land to create larger and connected greenspaces.
- Maintain the current ratio of greenspace at 12.7 hectares per capita.
- Confirm the river valley as the backbone of the parks system, especially as the city grows into annexed areas.
- Create trails that link neighbourhoods to the larger park system, especially neighbourhoods located far from the Red Deer River.
- Accommodate alternative activities—mountain biking, BMX, dog parks, skateboarding.
- Develop a twin arena in the north central area in the vicinity of Hazlett Lake.



"My favourite place in the new Waskasoo Park is a place that allows me to get away from the hectic pace of the City and enjoy nature. I can walk or bike through natural areas and feel as if I am a world away from the City even though I am still in the middle of it." - a vision from stakeholder workshop

- Develop a major athletic park to replace the Edgar Industrial Athletic Park that includes alternative recreation activities.
- Plan for implementation of a multi-use regional recreation complex in north Red Deer in the Hazlett Lake area.
- Develop a multi-use recreation complex to serve future development east of the city and north of 67th St.
- Explore three options for a new festival site: new site within existing green space, The Westerner or Bower Ponds.

The plan includes a tool to set priorities by applying a standardized evaluation process to all projects under consideration. This process can be used by City staff to evaluate the future park nodes identified in the RVTPC Plan.

Red Deer County Open Space Master Plan (OSMP)

The OSMP, completed in June 2009, contains more explicit policies that demonstrate support for the river park concept. Policies directly relevant to the RVTPC Plan include:

A. Natural & Semi-Natural Green Space or Watercourses

Policy 1. Natural processes in Red Deer County shall be preserved to the greatest extent possible, and all natural systems (creeks, wetlands, woodlands) shall be integrated into new communities and/or parkland areas.

Policy 3. Red Deer County is encouraged to create Natural Area Management and Enhancement Plans for open spaces set aside as natural or semi-natural areas. Any new developments adjacent to such areas shall be required to mitigate cumulative effects or other potential development impacts prior to construction.

F. Linear Systems, Green Corridors, Paths and Streets

Policy 1. Red Deer County shall support, create, 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, equine, and persons with reduced mobility. Designs should also consider access, safety and adequate signage.

Policy 2. Community level pathways (including those in adjacent municipalities) should connect with Red Deer County's regional pathway, and/or other key destinations within the community, such as neighbourhood scale parks, schools, recreational facilities, and commercial areas.

Policy 3. Regional pathway connections should be routed along the edges of ESAs or into locations with less sensitivity to the natural ecology to minimize the impact on the natural space and to minimize desire lines.

Policy 4. The County should continue to collaborate with adjacent and internal municipalities to seek opportunities to connect Red Deer County's regional pathway with others in the area.

Open Space Concepts

Policy 5. An environmental corridor (buffer) shall be enforced along all watercourses, lakes and significant sloughs. Identifying this corridor as environmentally significant will aid in the protection of its ecological integrity while allowing evolution of part of a high quality path system.

Policy 10. Linkages between nodes are encouraged, to form vital ties between them and population centres. This includes a north-south corridor in west RDC linking together many of the lakes; two east-west corridors to tie together various nodes; and connection to the Waskasoo Trails in Red Deer and Gasoline Alley.

The County-Wide Open Space Concept (Figure 4 in the OSMP) shows green buffers along the Red Deer River, Blindman River, Waskasoo Creek and Piper Creek. Although Sylvan Creek is not illustrated with a buffer, its value is recognized and protected by the other policies to preserve natural capital.

The OSMP offered more detailed concepts for some selected "project zones" within the county that can be part of the RVTPC Plan. The following trail and park concepts are located within the RVTPC Plan Study Area:

- Link Waskasoo Park and Sylvan Lake following the abandoned Alberta Central Railway Right-Of-Way and crossing the Alberta Central Railway Bridge.
- Link Alberta Central Railway Right-Of-Way and the population node of Poplar Ridge.
- Link the population node of Springbrook with destinations to the east (Gasoline Alley), west (Red Deer River), south (Penhold) and north (Fort Normandeau).
- Link the population node of Balmoral with destinations to the east (Red Deer River / Joffre Bridge) and the west (Waskasoo Park).
- A day use area on county-owned land with riverfront access to the Red Deer River, located west of Springbrook.
- Neighbourhood parks on county-owned lands in Springbrook and Balmoral.
- Trail link across the Alberta Central Railroad Bridge.
- Trail link to Slack's Slough.

Major Area / Area / Neighbourhood Area Structure Plans

More detailed and specific land use plans for areas adjacent to or within the Study Area were also reviewed. Open space concepts that can inform the RVTPC Plan are listed in the table below. The review also provided an understanding of how trail and park opportunities have been treated in previous plans, especially those plans that might contribute to a regional open space system.

CITY OF RED DEER PLANS	Regional Open Space Linkages
Garden Heights NASP	Links to Waskasoo Trail network
East Hill Major ASP	Natural area along unnamed tributary could link new town centre to Growth Area Natural area along Piper Creek Proposed natural area on east bank of Red Deer River
Northwest ASP	Links along collector road trails
West QE2 Major ASP	Municipal reserve and environmental reserve on north side of Cameo Lake
Timberlands Neighbourhood ASP	No regional links
Clearview North Development Concept	Municipal reserve and environmental reserve along escarpment
Timberstone Park Development Concept	Links along collector roads linking neighbourhoods
Sunnybrook South Neighbourhood ASP	Environmental reserve along Piper Creek
Queens Business Park Industrial ASP	Linear green buffer, potential trail
Riverlands ARP	Improved public space along Red Deer River in downtown

RED DEER COUNTY PLANS	Regional Open Space Linkages
Blindman ASP	Natural areas, fairly continuous, along the Red Deer River and escarpment Limited natural areas along the Blindman River
Burnt Lake ASP	Natural area along the Red Deer river across QE2 Hwy from Maskapatoon Park Natural areas along Sylvan Creek, around

	Cameo Lake, around wetland near Hwy 11A
Calgary Edmonton Trail ASP	“River Valley” land use along Red Deer River and Waskasoo Creek
Central Park ASP	No trail or public open space along Blindman River or around Hazlett Lake
Gasoline Alley - Springbrook MASP	Trail to Red Deer River, Waskasoo Creek and Slack’s Slough
Gasoline Alley West Urban Design Plan	Open space and trail along Waskasoo Creek
Gasoline Alley East Urban Design Plan	Trail from Slack’s Slough to Piper Creek
Hidden Springs	No regional links
Piper Creek Business Park	Environmental and municipal reserve along Piper Creek
Wolf Creek Area Concept Plan	Environmental reserve along the Blindman River

LACOMBE COUNTY	Regional Open Space Linkages
Lacombe/ Blackfalds Rural Fringe ASP	Continuous trail and open space along the Blindman River Regional trail connection (Trans Canada Trail)
Blackfalds/ Lacombe County IDP	Open space along the Blindman River Regional Park west of Highway 2 and Blindman River

PLANS BY OTHERS	
Westerner Redevelopment Plan	Additional open space and trails along Piper Creek

EXISTING CONDITIONS

Land Use

The Study Area, including the 2009 annexed lands and the remainder of the City's Growth Area, is lightly populated and the primary land use is agriculture. Population centres in the remainder of the IDP area include the hamlet of Springbrook with over 900 people and four rural residential subdivisions: Balmoral (pop. 167), Central Park (pop. 85), Linn Valley (pop. 235) and Poplar Ridge (pop. 693). Adjacent to the Study Area is Gasoline Alley, a cluster of existing and future commercial and residential activity along Highway 2.

Parks and Trails



The City of Red Deer's regional park system, Waskasoo Park, includes 994 hectares. See Appendix B for a detailed list of areas included in Waskasoo Park. In addition to Waskasoo Park, the City manages additional facilities—neighbourhood parks, recreation centres and facilities.

See Figure 4 - Existing Trails, Parks + Open Space

As a rural municipality with a smaller dispersed population, Red Deer County has a more limited need for parks and recreation facilities. To best serve its citizens, the County has intermunicipal recreation and culture agreements with adjacent municipalities, including the City of Red Deer. These agreements give county residents access to numerous indoor recreational and cultural facilities and programs in surrounding cities and towns.



An inventory for the entire County was performed as part of the OSMP. It found various types and amounts of County-owned lands: environmental reserves, municipal reserves, deferred reserves or other publicly owned lands. The study concluded that most of the current county owned open spaces were too small for parks or recreational facilities.

Natural Features



The Study Area is located in the Aspen Parkland, a natural region in Alberta that sits between the Boreal Forests to the north, the Foothills to the west and the Grasslands to the south. It is considered a transition zone between grasslands and forests and characterized by a mix of woodlands, wetlands, and grasslands. The Aspen Parkland provides valuable habitats for a wide variety of species. The majority of the Aspen Parkland region has been disturbed by agricultural use, so only remnants of native vegetation patches remain in uplands. Continuous areas of native vegetation are more likely to survive in river valleys where more moisture is available and agricultural use is more limited.

The Plan presents an opportunity to incorporate remaining natural features into the expanded park system. Natural features, especially those associated with the river and its tributaries, were identified early in the planning process. The natural features analysis relied on existing data from the City, the County and Alberta Environment.

See Figure 5 – Natural Features

Surface waters are the most prominent natural feature of the Study Area. There are five major permanent streams: Red Deer River, Blindman River, Waskasoo Creek, Piper Creek and Sylvan Creek. Permanent streams are those that have some base flow all year.

Extensive networks of recurrent and indefinite streams flow into the Red Deer River and its tributaries. The network is most dense in the eastern part of the Study Area. Recurrent streams are characterized by a defined bed and banks and have flows at least some of the time each year. Indefinite streams have no defined bed and banks and are easily lost if the land is disturbed. Some limited field checking by Red Deer Parks staff was used to update the stream data received and eliminate some indefinite streams that no longer exist.

The value of these smaller, non-permanent streams is often overlooked. Yet, they provide essential functions in the watershed—maintaining both the quantity and the quality of the water supply. Small creeks and streams collect surface water over very large areas and feed it to larger streams and rivers that are often sources of drinking water.

The Red Deer River becomes highly sinuous and meandering as it flows downstream just north of the city boundary. Natural processes associated with erosion and sediment deposition in this reach of the river likely will result in undercut banks and lateral migration of the river channel over time. Evidence of the formations of oxbows upstream, what is now Gaetz Lakes, supports this interpretation.

Three lakes or ponds are located within the Study Area: Hazlett Lake, Cameo Lake and an unnamed pond west of Hazlett Lake.

Land cover information (trees, wetlands) for the Study Area was drawn from the City of Red Deer’s EcoSpace data. For the remainder of the Study Area land cover information (grassland, trees/shrubs) from Alberta Environment was used. One of the largest remaining patches of trees and shrubs is along the lower Red Deer River near the Canyon Ski Area.

A 1990 study for Red Deer County identified three environmentally significant areas (ESA) of regional significance within the Study Area (see list below). The County’s environmentally significant study is currently underway and scheduled to be completed in the Spring 2011.

- Blindman River – Significant for its vegetation and habitat: dense coniferous, deciduous woodland, riparian willow, tamarack swamp birch wetland, deer habitat and great blue heron colony.



Indefinite or recurrent stream



Red Deer River



Hazlett Lake



Fort Normandeau



Red Deer River from Burbank Park



Red Deer Canyon

- North Red Deer Wetlands (includes Hazlett Lake) - Significant for its important waterfowl and marsh bird habitat.
- Red Deer Canyon – Significant for its steep and canyon-like valley, its vegetation and diverse bird breeding habitat and deer habitat.

Visual Analysis

The visual analysis measures the places in a landscape that may be seen from one or more viewpoints. To begin, points are marked within a 10-metre buffer along the Red Deer River corridor. A computer model then measures the total number of times a pixel (a small geographic subarea) would be visible from each individual point. Based on the total number of times each pixel is visible, an aggregate value for observation frequency is established.

This frequency is used to designate three visibility classes: Low Visibility, Medium Visibility and High Visibility. Areas of High Visibility are shown in the deepest colour, meaning the pixel is visible from a high number of points. Areas that are uncoloured are not visible from any of the points along the river.

Views affect the quality of the park experience for users. Generally, trail users consider views of nature areas enhancing to the park experience, while views of urban development detracts from the experience of those walking, bicycling or boating along the river trail.

Potential views were interpreted using topographic information provided by the City and the County. Members of the Plan Team identified additional views.

See Figure 6- Visual Analysis

Constraints

The major constraints to park-related development within the Study Area include hazard lands such as floodplains and steep slopes as well as physical barriers that hinder access to parks and trails.

See Figure 7- Constraints

Floodplain

Alberta Environment provides information on the extent of the floodplain and flood fringe, but only within areas already developed. The Provincial Land Use Framework recognizes the need to manage flood risk to protect human life, manage natural resources, and limit disaster damage faced by communities. The Province will address this policy gap by developing policy to minimize exposure of developments and settlements to flood risk.

Floodplain and flood fringe information is especially crucial for the undeveloped lands adjacent to the Red Deer River immediately to the northeast of the City of Red Deer. This reach of the river is highly sinuous and meandering. Because it is undeveloped, the provincial flood hazard information does not cover this area. The Red Deer County's 1990 study, *Environmentally Significant Areas of Red Deer County*, appears to identify part of this area as floodplain (area with dot pattern).

Other gross estimating methods could result in a much larger delineation of the floodplain. Topographic information and an estimated 100-year flood elevation could be used to delineate the floodplain (area outlined in red).

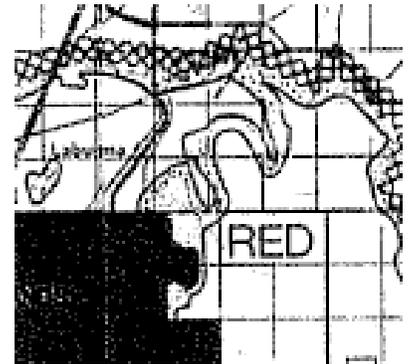
Alberta Sustainable Resource Development (ASRD) method for estimating the meander belt could be applied to this area:

"The width of meander belt for watercourses that tends to meander or entire floodplain if it is highly constrained within a confined valley. The width of the meander belt is determined by multiplying the bankfull width by 20 for each reach, and is split equally on either side of the creek along axis of meander belt."(area outlined in purple)

Ultimately, delineating accurate floodplain boundaries along this highly dynamic and shifting reach of the Red Deer River requires a study by a fluvial geomorphologist, who can use information on soil texture and hydraulics to model where the river is likely to migrate in the near future.

Steep Slopes

The steep slopes interpreted from topographic information occur along the Red Deer River just north and south of the city. Steep slopes are also found at the confluence of the Red Deer River and Sylvan Creek. Red Deer County's 1990 Environmentally Sensitive Area study identified much of the escarpment in the downstream area of the Red Deer River as unstable.



Floodplains as shown in Red Deer County 1990 ESA Study



Illustration of a floodplain based on topography and estimated flood elevation.

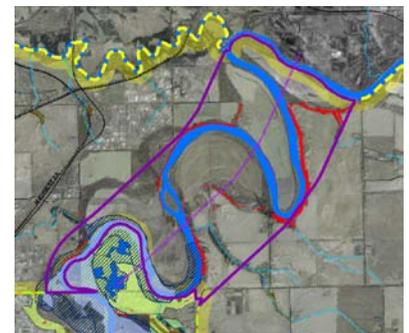


Illustration of a floodplain based on SRD delineation of a meander belt.

Wetlands

Wetlands have an intricate connection between surface and subsurface waters that is easily disturbed. There is a large cluster of wetlands within the Study Area near Hazlett Lake. Smaller scattered wetlands are located south/southeast of the city near Waskasoo Creek and Piper Creek.

Barriers to Access

The Red Deer River is a barrier for developing a connected trail system. There are few crossings beyond the city. Bridging the river is very expensive, and would occur only when traffic congestion would warrant such an investment.

The major highways, Highway 2A and the QE2 Highway, are also barriers to trail connectivity.

PARK CONCEPT

Indicators

Indicators help evaluate if the supply of parkland is adequate given the land area and population of a city. Two widely used indicators are:

- Park area as a percent of total land area
- Park area per 1,000 people

These gross indicators have limits. They cannot compare the quality of one park system to another, or determine which system has a more equitable distribution of parkland. When using comparisons, it is best to compare cities of similar size and density. Higher density cities with smaller land areas and static borders tend to have a higher percentage of their total land area in parkland, but a lower amount of parkland per capita. Lower density cities with large land areas and expanding borders tend to have higher parkland per capita, but a lower percentage of land area as parks.

Calculations can vary depending on what greenspace or open space is included or excluded in the overall total—parks, regional parks, open space, cemeteries, reserves, forests, etc.

Without additional parkland, park and open space indicators in the City of Red Deer will decline significantly.

Parks as a percentage of Total Land Area (assumes no additional parkland)

	Park/ Open Space (ha)	City Land Area (ha)	%
Current	994 ¹	7,585 ²	13.1%
Future	994 ¹	25,730 ³	3.9%
Other Cities in Alberta			
Calgary	7,500	72,650	10.3%
Edmonton	7,400	68,437	10.8%
Lethbridge	2,434	12,719	19.1%
Medicine Hat	1,458	11,201	13.0%

¹ Does not include neighbourhood parks

² Does not include Phase 1 annexation

³ Assumes entire Growth Area is annexed

**Hectares Park/ Open Space per 1,000 Residents
(assumes no additional parkland)**

	Park/ Open Space (ha)	Pop. (000)	Ha/ 1,000 Pop
Current (2008)	994 ¹	87.8	11.3
Future (projected to 2035)	994 ¹	185.0	5.4
Future (projected to 2050)	994 ¹	300.0	3.3
Red Deer Current & Goal (Rec Parks & Culture Needs Assessment)			12.7
Waskasoo Park 1982 Master Plan (Projected population for 2001)	994	91.0	10.9
Other Cities in Alberta			
Calgary	7,500	1,042.9	7.2
Edmonton	7,400	752.4	9.8
Lethbridge	2,434	84.0	28.9
Medicine Hat	1,458	60.4	24.1
Average of 24 Canadian Cities (Common Grounds, Evergreen)			9.2 average 6.1 median
National Average (Rec Parks & Culture Needs Assessment)			8.0

¹ Does not include neighbourhood parks

Applying the current indicators to future land area and population projects the City of Red Deer will need between 1,488 to 4,100 hectares of additional parks/ open space. The Park Concept presented in the RVTCP Plan identifies 3,655 hectares of additional parks / open space within the Study Area.

Projected Need for Additional Parkland

Future Land Area	25,730 ha
Desired % of Land for Parks / Open Space (Waskasoo Park only)	13.1% (current)
Projected Parks / Open Space	3,370
Additional Parks / Open Space Needed	2,374
Future Population 2050	300,000
Desired Hectares Park / Open Space per 1,000 Pop	11.3

(Waskasoo Park only)	(current)
Projected Parks / Open Space (ha)	3,390
Additional Parks / Open Space Needed (ha)	2,394
Future Population 2035	185,000
Desired Hectares Park / Open Space per 1,000 Pop (Waskasoo Park only)	11.3 (current)
Projected Parks / Open Space (ha)	2,090
Additional Parks/ Open Space Needed (ha)	1,094

Existing Park Classifications and Standards

Park classifications and standards are used to plan and manage large park systems. For Waskasoo Park, the City considers a major park node as 40 or more hectares and minor park node as less than 40 hectares. The *Recreation, Parks and Culture Community Assets Needs Assessment* proposed the following park classification standards. The RVTPC Plan would focus on park nodes of regional or citywide scale. However, some park nodes may ultimately be classed as a city or multi-neighbourhood park. There may be opportunities to create smaller neighbourhood parks in places where fingers of the regional Waskasoo Park extend along minor streams deep into future neighbourhoods.

Park Classifications

Class	Size (ha)	Definition
Regional Park	> 85	City of Red Deer or Red Deer County
City Park	25 to 85	Located entirely within the City of Red Deer boundaries
Multi-Neighbourhood Parks	6 to 25	Too large for current classification of Neighbourhood Parks and smaller than City Parks (25+ hectares)
Neighbourhood Park	2.5 to 6	Designed to serve a single neighbourhood
Linear Park/ Parkette	maximum size 2.5	Green spaces that are larger than current Parkette definitions but smaller than Neighbourhood Park definitions
Parkette	0.2 to 0.8	Designed for a tot lot, active and/or passive recreational

	hectares	components and trail systems
Downtown Vest Pocket Park		Small green spaces specifically developed within the downtown

Source: Recreation, Parks and Culture Community Assets Needs Assessment

New trail standards were adopted for Waskasoo Park and along public roads as the result of the Trail Master Plan. These standards were used in developing the RVTPC Plan for new Waskasoo Trail segments and suggestions of where additional trail connections (neighbourhood, arterial or connector) are possible. Nature trails are delineated in finer scale concepts for individual park nodes.

Trail Standards



Class	Width	Definition
Waskasoo Trail	5 m	3m asphalt + 1m clearance on each side; rest node every 1-1.5 km
Nature Trail	2 m	Wood chip or compacted gravel; rest node every 500 m
Arterial Trail	3 m	Asphalt paved
Collector Trail	2.5 m	Concrete sidewalk
Bikeway		Within vehicular travel lane
Neighbourhood Trail	4.5 m	2.5m Asphalt + 1m clearance on each side

Source: Red Deer Trails Master Plan

Principles

The mandate statement of the City of Red Deer Department of Recreation Parks and Culture is:

“Support a quality of life for all citizens of Red Deer by ensuring people have access to recreation, parks, and cultural resources”

An expanded park system will allow the department to meet this challenge. As the city grows in size, it must grow its park system to sustain the quality of life that citizens expect. The Park Concept relies on broad principles to guide the next phase of development for rivers and tributaries in the Red Deer Valley.

Follow the River. The Red Deer River Valley inspired a compelling vision for a regional park system. The river and its tributaries continue to be the defining natural and cultural feature of the region. It remains the backbone of the existing, and any future, park system. First and foremost, the park concept must take advantage of opportunities to include, protect and celebrate the Red Deer River and its tributaries.

Connect with Trails. Red Deer loves trails. Whatever the survey, poll, meeting or project, the love of the Waskasoo trail system comes through. Trails are the major connective tissue of the RVTPC Plan. Physically, elements within the park system are connected with trails. On another level, the trails connect people with nature, taking them to less accessible parts of the river, revealing inspiring views and hidden wildlife. New and old are joined—parks, neighbours and larger communities.

Respect Nature. The natural environment is highly valued by the citizens of the region, especially the rivers, wetlands, escarpments and forested areas. By including valuable ecological resources in an expanded park system, these resources can be managed, protected and preserved for future generations.

Mix It Up. A desire for urban amenity and active recreation need not conflict with the yearning for peaceful natural areas. A balanced park system can satisfy desires for lively peopled places as well as quiet, solitary respites from urban life. An expanded park can create different experiences and include areas for newer or growing activities that have been missing.

Fair Play. As the city expands in population and area, new neighbourhoods throughout the Growth Area deserve easy access to parks, trails and rivers. A regional park should provide a sufficient quantity and diversity of open spaces and recreational experiences to all residents of the expanded urban area.

Grow Smart. The City will need to house 60,000 to 100,000 more people. A forward thinking plan can support the City’s long-term growth strategy, specifically to increase residential opportunities in the north, west and east and expand job opportunities to the south.

Learn Outside. Much of the region’s cultural and natural history is tied to its rivers. A more extensive river park system expands opportunities to tell the stories of the city and the region through interpretation and hands-on experiences.



The RVTPC Plan is built around rivers and tributaries, but recognizes that each is unique, varying in physical character, environmental sensitivity and visual quality. The RVTPC Plan reflects this hierarchy of rivers and tributaries within the future park system.

Red Deer River will continue to be the main open space spine, the most important element of the park system. The Park Concept seeks to reinforce the river's importance with generous setbacks, numerous nodes and a continuous Waskasoo Trail on each sides of the river.

Tributaries (Blindman River, Waskasoo Creek, Sylvan Creek and Piper Creeks) are the second tier of the linear park system. Physically, these valleys are smaller, narrower and more intimate. A single continuous Waskasoo Trail will parallel the tributaries, crisscrossing to allow trail access from each side. Nodes are fewer in number and more natural in character.

Small Waterways are linear open spaces along the indefinite streams. The Waskasoo Trail is proposed for select segments of small waterways where the trail creates loops or links to nodes. The parkland along small waterways extends far into new residential areas, often far from the river and tributaries. Their long narrow configuration maximizes green edges and connections to the larger regional trail system.

See Figure 8 – Park Concept

Note that this Park Concept for the City of Red Deer Growth Area may include trail and park concepts that are NOT part of the Red Deer County Open Space Master Plan. Red Deer County does not intend to implement any park or trail projects that are not part of the adopted Red Deer County Open Space Master Plan. For more information about the Open Space Master Plan, visit the Red Deer County website (www.reddeercounty.ab.ca).

Land

The Park Concept includes two categories of land:

1. Proposed Parkland

Lands within the Study Area that are recommended as part of an expanded Waskasoo Park (2,889 hectares).

2. Special Study Area

Lands within the Study Area that need further study to determine how much of this area should be recommended as part of an expanded Waskasoo Park (766 hectares).

Available imagery and natural features data were interpreted to delineate a boundary for potential parklands. As a starting point, minimum buffer widths were established for riparian areas, lakes, sloughs and wetland areas.

- 100-metre buffer on each side of the Red Deer River
- 60-metre buffer on each side of other named streams (Waskasoo, Piper, Blindman, Sylvan) and unnamed streams

- 60-metre buffer from the edge of lakes, sloughs and wetlands
- 30-metre buffer on each side of indefinite or recurrent streams

The City is in the process of creating a setback policy for rivers, streams, lakes, sloughs and wetlands that may differ from the above buffer assumptions. However, for the purpose of this study, these buffers were applied. See Appendix D for a full discussion of ecological functions associated with buffers of varying widths.

Potential park boundaries were refined to include adjacent natural areas, vegetation, escarpments and the confluence of streams. Other information was used to refine this analysis— a narrated video of a flyover of the Red Deer River, additional imagery interpretation by UMA (consultants for the Joint Planning Initiative) and limited field work by O2 Planning + Design Inc. and the City of Red Deer Department of Recreation, Parks and Culture. The analysis did not use or consider parcel boundaries to define boundaries for potential parkland.

In some locations, boundaries were narrowed to respect existing rural residential acreages. Generally, it was assumed that existing rural residential developments along a river or creek would have an Environmental Reserve setback sufficiently wide to have a trail.

See Figure 8– Park Concept

Because of the emphasis on the river and its tributaries, the process of identifying potential parklands / natural areas relied heavily on natural features. In the future, the City may wish to consider additional criteria to guide future parkland acquisition opportunities. The tool could incorporate weighted criteria to reflect priorities of the City.

Note that implementation assumptions, including land acquisition, are discussed in a later section of this report.

Suggested Land Evaluation Criteria

Area of Consideration	Criteria	+ / -
Location	Within Growth Area	+
	Within IDP area	+
Proximity	Population	+
	School	+
	Transit	+
Connectivity	To existing park or trail	+
	To town centre	+
	To underserved neighbourhoods	+
	Helps connect over Red Deer River	+
	Helps connect over major highway	+
Natural Features	Waterways (rivers, creeks, streams)	+
	Floodway or flood fringe	+
	Wetlands	+
	Forests	+
	Steep slope (> 15 %)	+
	Unstable slopes	+

Area of Consideration	Criteria	+ / -
	Environmentally Significant Areas	+
	Geological outcroppings	+
	Unique or rare vegetation	+
Ecological Functions	Water quality buffer	+
	Restoration potential	+
	Wildlife habitat and corridors	+
Cultural Features	Heritage buildings	+
	Archaeological sites	+
	Palaeontology sites	+
	High visual quality of site	+
	Good views from site	+
Recreational Potential	Boat access	+
	Potential for alternative recreation	+
Educational Potential	Environmental or historical interpretation and education	+
Existing Land Use	Presence of oil / gas resources	-
	Industrial development	-
	Potential hazardous conditions	-
	Rural residential	-
	Agriculture	+
Ease of Acquisition	Current public ownership	+
	Willing seller or donor	+
	Potential Environmental Reserve	+
	Possible wetland mitigation site	+
Costs	Low maintenance requirements	+
	Low cost of acquisition/ maintenance	+
	Potential to provide eco services	+
	Potential for multiple, shared or joint use	+

Trails

Park trails are envisioned for year round use—walking, running bicycling and cross-country skiing (assuming winter maintenance). The Park Concept includes 136 km of proposed trails and trails located in the former rail line right-of-way. The trails are divided in three categories:

1. Proposed Trail

The Park Concept extends the Waskasoo Trail within the Study Area to new reaches of the Red Deer River and its tributaries. It also proposes to incorporate some existing utility rights-of-way as part of the overall trail systems.

Proposed trails along the rivers and tributaries would adhere to the existing Waskasoo Park trail standard— a 3 metre wide paved trail (5 metre right-of-way)—and would include the new signage system. The Proposed Trail is suggested as follows:

- To ensure equitable access to new river trails, continuous trails are proposed for both sides of the Red Deer River. The only new bridge crossing proposed is Northland Drive, within the existing city limits. No new river bridges are proposed for the study area as part of this Park Concept. If the concept limited trails to just one side of the river, access from new residential areas on one side of the river would be limited.
- A single continuous trail is proposed for the following tributaries: Piper Creek, Waskasoo Creek and Sylvan Creek. The trail will crisscross the tributary to provide access from each side.
- A single continuous trail is proposed for the south side of Blindman River.
- Single continuous trails are proposed for select segments of small waterways to link to nodes, create east/west connections and trail loops.

Additional trails are proposed within the ALTA Link right-of-way. These trails provide important linkages east of Red Deer where there are no major tributaries.

2. Potential Trail Connection

Potential Trails Connections show places where a trail should extend beyond the proposed parkland boundary. Potential Trail Connections could be built as part of new neighbourhoods or transportation projects. The trail connection would be constructed according to City of Red Deer trail standards for arterial trail, collector trail and bikeway or neighbourhood trail.

3. Former Rail Line Right-of-way

Trails could be located within abandoned or unused rail right-of-way. The Canadian Pacific Rail right-of-way links three river corridors and Sylvan Lake, a major destination located outside the Study Area.



CP Rail right-of-way

Other Trails

1. Trans Canada Trail

The proposed route for the Trans Canada Trail is part of the proposed trails shown on the Park Concept. The trail winds its way through the region linking to the Waskasoo Trail, Slack's Slough, Piper Creek, Waskasoo Creek, Hazlett Lake, and Blindman River. Within the Study Area, the trail continues north from Hazlett Lake along the C&E Trail over the Blindman River via Lacombe County's pedestrian bridge. Lacombe County and Blackfalds have plans to extend the trail north.

2. Nature Trails

Nature Trails are not shown on the Park Concept, but would be reflected on finer scale concepts for park nodes. In general, the plan assumes that natural areas within the Waskasoo Park will have nature trails that are designed to take walkers away from more active,

developed areas to quieter settings where nature can be enjoyed and appreciated. Bicycles and other vehicles are not permitted. Nature Trails will adhere to the standard recommended in the Trail Master Plan—2 metres wide with a woodchip or gravel surface. Nature Trails will traverse sensitive areas where wildlife and native vegetation can be viewed and interpreted- sloughs, lakes, wetlands, tamarack forests, floodplains and escarpments.

3. Water Trail

The Red Deer River itself acts as a trail for boaters. The Park Concept has identified over a dozen locations, both existing and new, for boat access to Red Deer River. Each boat launch is recommended to include parking, while a boat stop is envisioned as a mid-trip stop without parking, ramps or other facilities.

See Figure 8 – Park Concept

Nodes & Features

The Park Concept identifies a total of 13 potential nodes within the Study Area. High priority areas for node development include natural features, locations identified by stakeholders and Plan Team members, the confluence of rivers and streams, major trail intersections, proximity to pedestrian river crossings, publicly-owned lands with river access and viewpoints. Because the Red Deer River is the most important natural feature in the Park Concept over 38% of the nodes (five nodes) are suggested along this corridor.

Two types of nodes are part of the Park Concept:

1. Major Node

Major nodes are located within the Study Area and are larger than 100 acres (40 hectares). Eight major nodes are recommended including four along the Red Deer River. These nodes are part of Waskasoo Park. Two Major Nodes, Hazlett Lake and Northeast Park, include a mix of active and passive uses. The six remaining major nodes feature natural areas, passive recreation and offer a high level of visitor amenity: parking, signage, trailhead for Waskasoo Trail and more specialized park and recreation facilities.

Node	Type	Rationale
Blindman Tamarack Natural Area	Major	Protect and interpret natural features - tamarack forest; pedestrian river crossing
Maskapatoon Park Extension	Major	Extend and complement natural areas of Maskapatoon Park
Cameo Lake	Major	Protect and interpret natural feature
Northeast Park/ Special Study Area	Major	Encourage appropriate use of flood prone lands
Hazlett Lake	Major	Protect and interpret natural feature

Piper Creek Wetlands Complex	Major	Protect and interpret natural feature
Red Deer River Natural Area- East	Major	Encourage appropriate use of flood prone lands
Red Deer River Natural Area – West	Major	Protect and interpret natural feature; pedestrian river crossing

2. Minor Node

Minor nodes are located within the Study Area and are less than 100 acres (40 hectares). Five minor nodes are recommended including two along the Red Deer River. Two minor nodes feature a mix of active and passive uses. The remaining three are natural areas. These nodes are part of Waskasoo Park. Minor nodes would offer basic visitor amenities: parking, signage and trailhead for Waskasoo Trail.

Node	Type	Rationale
Balmoral	Minor	From County OSMP; serve Balmoral population centre
Burbank-Blindman River Park	Minor	Confluence of Red Deer and Blindman Rivers
East Hill Park	Minor	Serves future population centre; connection to existing Waskasoo Park
North Red Deer Wetlands	Minor	Protect and interpret natural feature
Waskasoo Creek Meanders	Minor	Protect and interpret riparian area; intersection of regional trails

See Figure 8 – Park Concept

IMPLEMENTATION

Funding

The implementation of the plan will require tapping a broad range of funding sources for both land acquisition and capital development. Park agencies are particularly challenged to provide and maintain high quality parks with limited resources. The City will need to gather resources across agencies to bring the RVTPC Plan vision to reality.



Recommendation 1 – Develop More Detailed Plans and Costs for Phase 1 Annexation Lands

More detailed plans for Phase I Annexation Lands, annexed as of September 1, 2009, are critical. Phase I Annexation adds lands to the north and east of the city. The park must be ready to grow before development occurs. Early land acquisition planning and thorough site analysis prior to drafting a Major Area Structure Plan (MASP) may help minimize land acquisition costs and maximize environmental reserve dedication.

This early (pre-MASP) planning should delineate the extent of the floodplain associated with the Red Deer River, as discussed previously. This analysis will influence land acquisition costs and provide clarity on environmental reserve dedication. Land documented to be located within the floodplain will have significantly lower value. If a parcel containing flood prone lands is subdivided, those lands could be acquired at no cost by the City as environmental reserve.

RVTPC Plan Park nodes within the Phase 1 annexation area include Hazlett Lake, Red Deer River Natural Area and East Hill Park. Conceptual design of these nodes would inform MASP and more detailed neighbourhood plans.

Recommendation 2 – Aggressively Pursue Provincial and Federal Funding

Provincial funding was a key component of the development of the original Waskasoo Park—the Province provided \$22 million of the \$26 million estimated cost. The involvement and support of provincial and federal governments will be critical for the next generation of Waskasoo Park's growth. Federal funds were not mentioned as a factor in original plan's implementation, but should be pursued for this project. The City should consider programs beyond traditional parks funding and seek funding opportunities with Transportation, Environment, Tourism, etc. Government programs that could potentially support the RVTPC Plan include:

- Alberta Lottery Fund
- Alberta Urban Parks Program
- Alberta Transportation (trails)

- Community Facilities Enhancement Program
- Infrastructure (economic stimulus initiatives)
- Canadian Wildlife Service

Spotlight

River Valley Alliance, Action Plan for the Capital Region North Saskatchewan River Valley

The initial concept of creating an integrated park along the river valley began 20 years ago. The River Valley Alliance (RVA) was formed in 1996 as a group of volunteers representing five Capital Region municipalities. They shared a vision of transforming an 88 km stretch of river valley into a world-class metropolitan river front integrated park.

Other municipalities joined and RVA was formally incorporated in March 2003. Its founding shareholders include the seven municipalities holding lands in the Capital Region North Saskatchewan River Valley – the Town of Devon, Parkland County, Leduc County, City of Edmonton, Strathcona County, Sturgeon County and City of Fort Saskatchewan. The RVA partners share a common goal - to protect, preserve and enhance the Capital Region's river valley park system for year-round accessibility, and enjoyment of its citizens and visitors. Each of the seven municipal shareholders appoint members of their respective Council and public members to serve on The RVA Board of Directors.

The RVA attracted \$1.5 million in Provincial funding to develop a Draft Action Plan for the river valley that was adopted in 2007. In 2008, the Province awarded \$50 million to support implementation of the plan. The RVA has also prepared and submitted a nomination to have this reach of North Saskatchewan River be designated as a Canadian Heritage River.

Recommendation 3 – Identify Dedicated Municipal Funding

The City of Red Deer will need to commit substantial municipal resources. Dedicated long-term funding is required. Leveraging outside public or private funding may require City matching funds. Even if a match is not required, funders will want the City to demonstrate a commitment with dedicated funds. Some of the municipal funds or funding mechanisms that should be considered include:

- General fund revenue
- Capital program funds
- Water revenues / fees (to fund stormwater management services of new parks)
- Dedicated tax (% of property or sales tax)
- Developer contributions
- Funds received in-lieu of municipal reserve lands
- User fees
- Voluntary fees (many users willing to pay a suggested donation)
- Special purpose bonds (user fees create revenues stream to repay part or all of bonds)
- Transportation program funds (for trails and trail connections)
- Mitigation funds (to mitigate the effects of major infrastructure projects)
- Revenues from “strategic marketing initiatives” (naming rights, vendors contracts, advertising)
- Revenue generating uses (cafes, restaurants, rentals, events, concessions)

Recommendation 4 – Explore Partnerships and Joint Development Projects

The City has previously cooperated with school boards and adjacent municipalities in developing park and recreation facilities as well as joint developments (sites that house multiple, but complimentary facilities such as a school, library and recreation centre).

Potential partnership ideas contained within the RVTPC Plan that could be pursued by the City of Red Deer include:

- Trail development with ALTA Link

- Trails along Waskasoo Creek and Piper Creek in partnership with Red Deer County and Gasoline Alley business community
- Park and trail development along the Blindman River with Lacombe and Red Deer Counties
- Development of Maskapatoon Park Extension with Aboriginal and Métis communities

The City has prior experience with joint developments—libraries/recreation centres developments and shared parking. The development of the future park system is an opportunity to advance local partnerships that can jointly fund or manage sites or facilities. Potential partners include:

- School Boards
- Red Deer County and Lacombe County
- Red Deer College (expansion to serve larger population, educational opportunities in environment)
- Non-profits
- Businesses

Recommendation 5 – Expand the Role of the Friends of Waskasoo Park Fund to Leverage Private Funding

The Friends of Waskasoo Park Fund is administered the Red Deer & District Community Foundation. A private donor established this “designated fund” specifically to benefit the Waskasoo Park with an endowment. Each year the interest generated by the endowment is used to support the operations of Waskasoo Park. In 2008, the endowment generated about \$900. The fund could accept contributions from the community to increase the fund endowment or support current programs. However, the Red Deer & District Community Foundation does not solicit such donations.

However, park funds elsewhere proactively leverage funds for capital projects, manage capital campaigns and promote individual giving. An expanded role for Friends of Waskasoo Park Fund could help to support and promote the RVTPC Plan. The City will be celebrating its centennial in 2013—an attractive theme for a multi-year fundraising effort. Some of the charitable or corporate funding sources include:

- Charitable foundations (TD Friends of Environmental Foundation)
- Alberta Fish and Game Association
- Corporate sponsorships
- Individuals contributions

- Ecogifts (donations of ecologically sensitive land in exchange for tax benefits)
- Donation of conservation easements
- Park Trust (non-profit partner to raise funds, run a capital campaign, hold easements, etc.)
- Partnerships with charitable organizations (Ducks Unlimited, Nature Conservancy)

Land Acquisition Strategies

Lands for the initial Waskasoo Park system were assembled over a relatively short period of time—within years of the 1979 “River Valley Concept.” About 42% of the land included in the 1982 Waskasoo Park Master Plan was already in public ownership—City, Public School Board or the Province.

Land acquisition and capital improvements to make the RVTPC Plan a reality are likely to occur incrementally over a 30-50 year time frame as the Study Area is planned and developed. A broader range of implementation strategies will be required for both land acquisition and capital improvements.

Recommendation 6 – Maximize the use of Environmental Reserve to acquire lands adjacent to rivers, tributaries, lakes, sloughs, escarpments and other environmentally sensitive lands.

The Municipal Government Act describes requirements for environmental reserve during subdivision. Environmental Reserve is dedicated primarily to avoid environmental hazards, including “a swamp, gully, ravine, coulee or natural drainage course” and “land that is subject to flooding or is unstable.” Environmental Reserve can also be dedicated to provide buffer zones around water bodies to protect them from pollution and/or provide public access. Although the Municipal Government Act refers to a minimum setback of six metres for these purposes, a municipality is free to specify larger setback distances as required. An alternative to Environmental Reserve is environmental reserve easements, where the land title remains private but a caveat is registered against the lands subject to the easement.

The Park Concept aims for a minimum 100-metre buffer on each side of the Red Deer River, a 60-metre buffer surrounding permanent streams, lakes, sloughs and wetlands; and a 30-metre buffer on each side of indefinite or recurrent streams. See Appendix D for a full discussion of ecological functions associated with buffers and why 60 to 100-metres buffers are recommended. Because so much of the proposed park lies within areas that may be subject to dedication as Environmental Reserve, the City’s new policy regarding setbacks and buffers will be critical. The use of Environmental Reserve is the most powerful tool the City can use to acquire parklands designated in the RVTPC Plan. By justifying more than the minimum setback of six metres, the City can more effectively protect environmental resources from pollution and degradation, and ensure public access. Note that

undeveloped parcels that are not subdivided would not be subject to Environmental Reserve.

Currently, the City of Red Deer's Subdivision Authority establishes the width of the required Environmental Reserve dedication along streams and other features. The City is in the process of creating a new setback policy for rivers, streams, lakes, sloughs and wetlands that may differ from the buffer assumptions used in the Park Concept. However, for the purpose of this study, the buffers previously noted were applied.

Red Deer County's land Use Bylaw states that a minimum building setback of 30-metres is required from the high water mark of a water body or from the highest valley break of any named watercourse. This setback is subject to the sole discretion of Council/Development Authority. Sustainable Resource Development guidelines for Environmental Reserve suggest more generous environmental reserve setbacks could be justified.

Once the City has adopted its new setback policy, environmental inventories should be updated to ensure maximum lands along rivers, lakes, wetlands and escarpments can be acquired as Environmental Reserves. Such a policy would consider the important ecological services provided by riparian areas— stormwater management, water quality improvement, wildlife and fish habitat and flood protection.

Recommendation 7 – Use Municipal Reserve and/or Land Purchase to Establish Buffers Along Indefinite or Recurrent Streams.

The Park Concept includes a 30-metre buffer along each side of recurrent and indefinite streams. In practice, many recurrent streams and most indefinite streams are not protected as Environmental Reserve and their ecological value is often overlooked.

Dedication of Municipal Reserve and/or School Reserve is also required during subdivision development. According to Section 666(2) of the Municipal Government Act, the amount of land dedicated as Municipal Reserve may not exceed 10% of the parcel of land less the land required to be provided as Environmental Reserve and land made subject to an Environmental Reserve easement.

These small streams provide important water management functions— they slow and retain runoff, reduce peak flow during flood events and maintain baseflow in receiving streams. Retaining this “green infrastructure” for stormwater management lessens the needs for pipes and storm sewers that send high velocity storm flows to receiving streams causing undercutting and erosion.

These small streams and swales extend deep into neighbourhoods, and can help retain direct stormwater to the larger streams, and provide linear open space for local trails that connect to the regional park and trail system. These areas are likely to be part of future residential subdivision schemes. As more detailed Concept Plans are developed, the City should give priority to these linear connected greenspaces over other forms of passive neighbourhood open space.

Recommendation 8 – Develop a Tool to Evaluate Municipal Reserve Dedications

The City should establish criteria for Municipal Reserve dedications and develop a tool to evaluate parcels offered by developers. If the offered parcels “score” poorly, and better parcels cannot be negotiated, the City should choose cash-in-lieu funds and use those funds to acquire lands that are part of the RVTPC Plan.

The tool would reduce the number of Municipal Reserve parcels that are simply “left-over” land. This system would direct resources to acquire more valuable connected open spaces that are part of the regional open space system. This approach echoes the finding of the Needs Assessment that encourages the City to assemble “larger parcels of contiguous park space, rather than smaller disconnected spaces.”

Recommendation 9 – Reflect RVTPC Plan in Future Statutory Plans for the Growth Area

As the City develops statutory plans for the Growth Area, parkland, trail, and node concepts contained in the RVTPC Plan should be reflected.

Recommendation 10 – Make Elements of the RVTPC Plan a Condition of Subdivision Approval to the Greatest Extent Possible

Section 655 of the Municipal Government Act allows municipalities to impose conditions on a subdivision approval, such as the construction of pathways that serve a subdivision or connect adjacent subdivisions. The City should use this strategy where capital improvements associated with the RVTPC Plan are within a proposed subdivision.

Recommendation 11 – Identify Parcels for Land Purchase and Begin Working with Landowners

Some major and minor nodes identified in the plan may require the purchase of entire parcels. Municipal and Environmental Reserve will not apply in areas where the realization of the RVTPC Plan negates subdivision. The City is encouraged to begin a dialogue with landowners of these parcels as early as possible.

This recommendation is consistent with Strategy 2.3.2 of the Needs Assessment to focus on “the development of larger parks with a mix of leisure amenities.”

Recommendation 12 – Consider Alternatives to Fee Simple Land Purchases

In some cases, there may be a lower cost alternative to a fee simple purchase of land. Depending on the site, the motivations of the seller or other factors, some parcels might be acquired through alternative means.

The Alberta Land Stewardship Act (ALSA) describes several conservation tools that will be used in Alberta to conserve land.

Conservation Easements – Conservation easements are legally binding agreements that limit certain types of uses and development from taking place in order to protect the environment, natural scenic or aesthetic values and agricultural land. Conservation easement legislation was introduced in Alberta in 1996. In 2009, agricultural lands was added as an easement purpose. ALSA specifies the acceptable uses for properties with conservation easements (i.e. recreation, open space, environment education and research and scientific studies of natural ecosystems). Easements are voluntarily donated or sold by the landowner to a non-government organization or a government agency. Easements are typically in place for perpetuity and run with the land (i.e. apply to future land owners). When sold, the value of an easement is the difference between a property's estimated current fair market value and the estimated value of the property subject to the restrictions of the easement. If donated, property owners may receive tax benefits.

Conservation Offsets – Conservation offsets are a new tool in Alberta designed to counterbalance the impacts of an activity on public and private lands. For example, a company could offset heavy industrial activity in one area by restoring an environmentally significant area elsewhere. In effect, the offsets work as an exchange. ALSA specifies that offsets can be used for restoration, mitigation or conservation.

Conservation Directives – (ALSA tool) Conservation directives are a new tool in Alberta that can be used to permanently protect, conserve, manage, and enhance environmental, natural scenic, aesthetic, or agricultural values expressly declared in a regional plan. The Alberta Government will compensate property owners for any decrease in market value brought about by the directive.

Transfer of Development Credits – (ALSA tool) Transfer of development credits (TDC) programs are typically set up to compensate landowners for the protection of ecologically sensitive areas, agricultural land, scenic and historical areas. These programs are commonly administered by creating zoning overlay districts where specific districts are designated as 'sending' or 'receiving' areas. Sending areas are those where development credits will be transferred away from because they are slated for protection. Receiving areas are those areas identified for accommodating growth. Regional, sub-regional or municipal land-use plans may allow the use of TDCs and may designate the areas to be conserved and the areas to be developed.

Notably, the ALSA states that conservation easements and transfer of development credits programs must provide for any or all of the following uses; recreation, open space, environmental education, research and scientific study as long as land use is consistent with environmental, scenic, aesthetic and agricultural protection.

In addition to these tools, the Province may adopt additional programs and tools. ALSA includes provisions for research and development of:

- Market-based instruments;
- Programs and measures to support regional plans; and
- Funding to support conservation, environmental and agricultural values.

In addition to conservation tools described in ALSA, the City may use other strategies to acquire land for parks and trails.

Land Swaps – A City-owned parcel (surplus lands, less valuable municipal reserve, etc.) is swapped for desired parklands.

Ecological Gifts Program - A program of the Canadian Wildlife Service that enables owners of property with sensitive natural features to donate their land (fee simple or easement) and receive tax benefits – no capital gains on disposition, tax credit or deduction for value of land.

Trail Easements – A trail easement may be possible in some locations.

Recommendation 13 – Integrate the RVTPC Plan into a Green Infrastructure Plan for the Study Area

The City’s MDP calls for the use of “Green Infrastructure” whereby the City “should incorporate significant natural features as part of the overall infrastructure systems. This should include using existing wetlands as storm water management facilities and planting and preserving shrubs and trees to improve air quality.”

The RVTPC Plan is a perfect opportunity to demonstrate how this can be achieved in the Study Area. As the future land use pattern becomes clearer, the City should evaluate how the parklands identified in the RVTPC Plan can become part of this infrastructure, and how public or private infrastructure funding can support the implementation of the plan.

Recommendation 14 – Negotiate the Use of Non-Environmental Buffers and Setbacks for Parklands, Trails, and Trail Connections

The City requires setbacks and/or buffers for industrial uses, landfills, solid waste disposal sites, abandoned wells, transportation, railways and other utilities. In some cases these setbacks and/or buffers could be used for trails. The Alta Link Trail and the CP Rail are examples. The City should look for additional opportunities as they plan infrastructure and utilities to support future growth.

Additional Studies

To move forward with planning and implementation of the RVTPC Plan, the following additional studies are recommended.

Recommendation 15 - Update the Waskasoo Park Master Plan

Many changes have occurred since the 1982 Master Plan was completed. Since that time, the City has completed complementary studies such as *Waskasoo Park Special Gathering Place Study*, *Red Deer Trails Master Plan*, and *Recreation, Parks and Culture Community Assets Needs Assessment*. The City has adopted many statutory plans that include park and trail elements. Major landowners adjacent to Waskasoo Park, such as The Westerner and Red Deer College are developing plans that may impact the park. An update of the master plan can reflect changing needs, redevelopment, new development, and to tie together the recommendations of related studies. The updated Master Plan could also address in finer detail the potential interface between the existing park and the RVTPC Plan.

Recommendation 16 – Reflect Red Deer County’s Environmentally Significant Areas Study in Future Planning

Red Deer County is currently undertaking a study of Environmentally Significant Areas. Much growth has occurred since their last study was conducted in 1990. A new study will provide important information that will help the City of Red Deer to identify and preserve natural areas throughout the Growth Area. The study is expected to be completed in spring 2010.

Recommendation 17 – Undertake a Floodplain Study for the Study Area

The Park Concept includes a Special Study Area for the extreme meandering reach of the Red Deer River. Bends in the river have formed over time as moving river water has eroded the outer banks and deposited sediment on the inner banks. This natural process affects the extent of the floodplain and makes floodplain delineation more challenging. Alberta Environment performs Flood Hazard studies for urban areas— those already developed. Yet, the best time to undertake a floodplain study is before development occurs. Keeping development out of floodplains is the most cost effective way to reduce or avoid property damage. Property values of flood prone areas are significantly lower than other lands. Having the best information about the extent of the floodplain will allow the City to justify Environmental Reserve dedications and minimize land costs. The study would also provide information about the extent of the floodplain in the “Special Study Area.”

This is also an area of provincial interest. The Land Use Framework identifies “managing flood risk” as a policy gap and commits to developing policy to “minimize exposure of developments and settlements to flood risk.”

Recommendation 18 – Explore a Canadian Heritage River Designation for Red Deer River

The Canadian Heritage Rivers System (CHRS) is Canada's national river conservation program. It promotes, protects and enhances Canada's river heritage, and ensures that Canada's leading rivers are managed in a sustainable manner.

The implications of such a designation should be investigated to determine the costs and benefits associated with such designation. Typically, the local community benefits from the partnerships formed through the heightened awareness of the river heritage, and the enhanced management and monitoring of the river by cooperating governments. Designation can translate into economic benefits—residents and businesses can be attracted to a region with a heritage river. Government programs may give priority to heritage rivers because of their special status.

Currently there are three Canadian Heritage Rivers in Alberta and several applications pending. Although two of the designated river reaches in Alberta are within National Parks, there are many river reaches in urbanized areas of other provinces that have been designated. One pending nomination is for the Capital Region North Saskatchewan River Valley, a reach that passes through many urban communities.

There is currently a moratorium on accepting new nominations while a nationwide system assessment of the program is underway. It is likely the criteria for designation may change to encourage nominations to “fill gaps” in the system. However, CHRS staff believes the collaborative work evidenced by the RVTPC Plan is the type of partnership that CHRP will continue to encourage and support.

Alberta Environment and the Red Deer River Watershed Alliance completed a “State of the Watershed” in 2009. The Alliance is now working on the Integrated Watershed Management Plan for the Red Deer River. These activities lay important groundwork for a future application.

Recommendation 19 – Initiate Peer Exchange with the River Valley Alliance

Peer exchange is a method of sharing information and best practices among professionals. The vision created by the River Valley Alliance for the North Saskatchewan River Valley is very similar to the RVTPC Plan. Because their planning process is more advanced, the City of Red Deer, Red Deer County and other members of the Plan Team have an opportunity to learn from their experience— formalize a partnership, secure funding for planning and implementation, etc. (Contact Billie Mulholland, RVA 780-496-5577)

Recommendation 20 – Document the Benefits of the RVTPC Plan

The high price tag of an expanded park system can be off-putting for elected officials, especially in uncertain economic times. A study that documents the multiple benefits of the new parks system can be an effective tool to attract resources, justify funding requests and move the vision forward. Some of the benefits that can be measured using current research methods include increased property values, lower stormwater management costs, pollution removal (including greenhouse gases), recreation expenditures and lower health costs through more active living.

Spotlight

There are several existing studies that document the benefits of municipal parks in Canadian cities.

Green Among the Concrete: The Benefits of Urban Natural Capital.
Canada West Foundation, April 2004

Healthy Parks, Healthy People, Healthy Communities: Assessing the Proximate Value of Parks and Open Space to Residential Properties in Alberta. Alberta Real Estate Foundation, June 2007.

Recommendation 21 – Explore Designating the Red Deer River a Municipal Park

In addition to the Canadian Heritage River designation, another way to recognize and protect the Red Deer River may be to designate the river itself a park. Suggested designations include naming the Red Deer River a Water Trail, Water Park, Wildlife Corridor. Creating this park would not require any land acquisition. Because the Province has ownership and management responsibility over the natural resources within their territory, a legal opinion regarding this type of designation is required.

REVIEW OF WASKASOO PARK MASTER PLAN

"The new Waskasoo Park has an urban square on the riverbank overlooking the Bower Ponds. I imagine sitting drinking espresso by an outdoor cafe and watching the crowds drift by – watching kids play in a large fountain." - a vision from stakeholder

As part of the RVTPC Plan process, O2 Planning + Design Inc. was asked to include a brief overview of the 1982 Waskasoo Master Plan (see Figure 2). This review includes:

- comparison of the 1982 plan to the existing park
- identify development gaps (areas not yet developed or preserved) and recommend actions to encourage development or preservation

Comparison of Master Plan to Existing Park

As is expected, there are a number of differences between the 1982 Master Plan and what Waskasoo Park is today. The table below summarizes these changes and what should be reflected in an updated Master Plan. Only changes within the 994-hectare Master Plan area are listed.

✓	Keep in Plan (Not yet developed, but still planned)
✗	Delete from Plan (Not developed, not planned)
+	Add to Plan (not in original plan, but is developed or planned)
	Railway Realignment / Park Development in SE 19 ✗
	Bower Ponds - playground +
	Great Chief Park - Pitch & Putt Golf Course +
	Gaetz Park - Parking ✗
	Gaetz Park - Warming Hut & Picnic Facilities +
	Gaetz Park - Playground ✗
	Pines Escarpment - Parking ✓
	Trail- from Three Mile Bend to 77 th St ✗
	Trail - along Riverside Drive to Northlands Drive ✓
	Riverside Athletic Park ✗
	Three Mile Bend - Model Airplane Strip, Shotgun Range, Archery Range ✗

Three Mile Bend - Washroom/Warming Hut, Off Leash Dog Area, Radio Car Track, Ski Jump (redevelopment)	+
River Escarpment/McKenzie Ponds - Canoe Launch	+
Spruce Woods (name from original Master Plan; is superceded by the East Hill MASP)	✓
River Bend - Bike Trail, Fishing Pond, Skating Pond (redevelopment)	×
Barrett Park – Skateboard Park, Community Garden	+
Kin Canyon - Partcipark	×
Waskasoo Creek Park – Parking, Picnic, Washroom	×
Fort Normandeau – Trail to Heritage Ranch	✓
Fort Normandeau - Playground, Equestrian trail	×
Fort Normandeau – Interpretive Centre	+

Development Gaps & Recommendations

Spruce Woods

The 1982 Master Plan included an area called Spruce Woods that was envisioned as a conservation area. The plan proposed a hiking trail (nature trail) in the interior and a bicycle/ pedestrian trail (Waskasoo Trail) along the ridge of that connected to River Bend and River Escarpment (what is now McKenzie Ponds). This area was never developed and is now shown as a “proposed natural area” as part of the East Hill Major Area Structure Plan and is in the vicinity of the Northland Drive bypass project.

Recommendation

The conservation use is still appropriate for parts of the site. The site has large stands of mature, mostly spruce forest and is within the floodplain of the Red Deer River. Since 1982, gravel operations have disturbed a portion of the site. Large ponds remain and the site is revegetating. Additional restoration would be needed to return it to a conservation area. The Waskasoo Park Master Plan Update (Recommendation 15) should evaluate how the disturbed area of the site might best enhance the overall park system and the new East Hill community.

Plan Team and Stakeholder Suggestions

Plan Team and Stakeholders offered a number of suggestions about the existing Waskasoo Park during the RVTPC Plan process. While some ideas are unlikely to go forward, planning for other improvements are underway. The responses of the City administration to these suggestions are summarized in the table below.

Suggested Action	Response/ Recommendation
Improvements to existing parks & amenities	Gathering Places Study recommendations to redevelop River Bend and Three Mile Bend moving forward Plan & Studies underway for Barrett Park, Bower Ponds, Recreation Park, and Heritage Ranch
Address missing trail links	Trails Master Plan will be updated 2010
Improved access to river	New parking lot at Fort Normandeau New river access in Spruce Woods/ East Hill Park
Expand interpretation	Waskasoo Park Interpretation Master Plan is slated for 2010
Dog Park near Piper Creek, 40th Ave & 19th Street	Will be developed in summer 2010
Protect Natural Areas from parking and quad vehicles	Effort to address is ongoing, especially in Maskapatoon Park
Confluence of Piper and Waskasoo Creek in downtown area	Greater Downtown Action Plan provides recommendations
Pedestrian link from Heritage Range to Fort Normandeau	Still in plans, but requires land acquisition
River Shuttle and Tram access	Potential idea for future planning

Recommendations from Other Plans

In addition to the statutory plans and park-related plans, a number of other plans include suggestions for changes or improvements to Waskasoo Park. Recommendations contained in the following plans should be considered as part of the Waskasoo Park Master Plan Update (Recommendation 15).

<p>Greater Downtown Action Plan</p>	<p>Prepare a park / open space plan for the river's edge pathway system and City land holdings in the area</p> <p>Construct a pedestrian bridge connecting the Downtown to Bower Ponds as an extension to the 48 Street Promenade</p> <p>Urban open spaces as part of the Riverlands redevelopment—a hard-edged riverfront plaza development with access to the river's edge, a pedestrian bridge to Bower Ponds, a major all-season public market and water features</p>
<p>Westerner Park Strategic Development Plan</p>	<p>Improved pedestrian connections to Piper Creek walking trails</p>
<p>Riverlands Area Redevelopment Plan</p>	<p>A new major riverside park and trail system</p>
<p>Recreation, Parks and Culture Community Assets Needs Assessment</p>	<p>Improved interface between the parks and the downtown</p> <p>Develop a major (50 to 60 acre) athletic park that includes alternative recreation: camping, skate park, a BMX track and mountain bikes</p> <p>Explore options for new festival site—within existing park system, as part of the Westerner redevelopment or part of the redevelopment of Bower Ponds and Great Chief Park</p>
<p>Heritage Management Plan</p>	<p>Expand Municipal Heritage Inventory to include cultural landscapes and natural features</p>