RIBBON of GREEN

RECREATION ASSESSMENT

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Prepared for

City of Edmonton

Prepared by

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INTRODUCTION

The North Saskatchewan River Valley and Ravine System, otherwise known as the Ribbon of Green, is an integral component of the recreational, cultural, and ecological systems within the City of Edmonton and broader Edmonton Region. The river valley and ravines are a defining asset for the region and a key contributor to the quality of life of Edmontonians.

The Ribbon of Green Plan (2018) will provide high-level strategic guidance for the conservation, preservation, and use of the river valley and ravines, including conceptual plans for the Southwest and Northeast study areas.

Recreation: A Renewed Definition

Recreation is the experience that results from freely chosen participation in physical, social, intellectual, creative and spiritual pursuits that enhance individual and community wellbeing.

-A Framework for Recreation in Canada 2015: Pathways to Wellbeing

Residents and visitors interact with, and interpret the River Valley and Ravine System in many forms. The purpose of this recreation assessment is to identify which types of recreation activities are appropriate for the two study areas, and what is the demand for those activities. Currently, the central developed portions of the Ribbon of Green receive the highest levels of recreational activity. However, as the city grows and evolves, providing more recreation opportunities in the southwest (Study Area #1) and northeast (Study Area #2) portions of the Ribbon of Green will be necessary to meet resident needs, and where feasible, provide greater access to the River Valley and Ravine System.

Input for this assessment was gathered from the Ribbon of Green's first public engagement phase and from BREATHE - the City of Edmonton's Green Network Strategy (2017). These sources, along with other studies and previous planning work, helped identify how the river valley and ravines are currently used, highlight trends in recreational activities throughout the region and province, and present existing recreation gaps. The appropriateness of potential recreational activities and amenities for the two study areas have also been evaluated to determine demand. benefit, and impacts, along with siting and location considerations.

This recreation assessment should be used in conjunction with the Ribbon of Green's Cultural Assessment and Biophysical Analysis, along with public engagement, to develop comprehensive and appropriate plans for the future recreational use within the two study areas.

Recreation and Open Space

Open spaces function as recreation spaces that accommodate sport facilities, as well as outdoor recreation, such as running, cycling, field sports/ activities, walking, etc. High quality that are easily accessible and accommodate a range of different activities are crucial to promoting healthy living.

-BREATHE: Edmonton's Green Network Strategy

RIBBON OF GREEN STUDY AREAS

This assessment is intended to inform the recreation amenities and uses recommended for each of the two Ribbon of Green study areas. These areas are:

Study Area 1 - Southwest

2082 hectares

Includes the following areas:

- > Whitemud Creek Ravine
- > Blackmud Creek Ravine
- Oleskiw River Valley Park
- > Wedgewood Ravine
- > River Valley Cameron
- > River Valley Windermere
- > Big Island

Study Area 2 - Northeast

2044 hectares

Includes the following areas:

- > Fraser Ravine
- > Clover Bar
- > South Sturgeon Park
- › Quarry Ridge Park
- > Horsehills Creek Ravine



RECREATION THROUGHOUT THE RIBBON OF GREEN

Purpose of this section:

- > To understand the current recreation context of the Ribbon of Green's two study areas within the North Saskatchewan River Valley and Ravine System.
- > To show connections outside of the Ribbon of Green study area to the city's broader green network.
- To understand where existing amenities exist within the River Valley and Ravine System (and may not need to be duplicated), and where there are recreational gaps that the Ribbon of Green may have the opportunity to fill.

Section summary:

- > Edmonton's river valley and ravines are home to a variety of recreation places, spaces and activities.
- > Current river valley and ravine activities tend to be spontaneous and interpretive, such as trail, water and day use activities, opposed to active and structured activities such as team sports.
- Residents currently use the River Valley and Ravine System to connect with nature and relax.
- Trees, trails, and pathways are the most important features of open space, as per the public engagement findings.
- > Support amenities such as washrooms, sitting areas, shade structures, and lighting are highly valued by residents.
- > Connectivity between recreation areas within, and beyond the study areas is important.
- Additional recreation places, spaces and activities within study areas will be required as the adjacent population

Understanding existing recreational uses within Edmonton's River Valley and Ravine System is important in gaining a picture of how the system contributes to Edmonton's green network and the quality of life of residents. It is also beneficial to know what recreational uses are currently under provided, over provided or missing so that future recreational uses complement those that already exist in the River Valley and Ravine System.

This information will inform the management classifications and concept plans for the study areas. The following section includes an inventory and assessment of existing recreational assets within the Ribbon of Green and presents relevant public input from other recent City of Edmonton projects.

Edmonton's Green Network

BREATHE: Edmonton's Green Network Strategy, establishes a network approach to parks and open space planning. This approach acknowledges the interconnected nature of parks and open spaces across the city that contribute to a multifunctional green network. The River Valley and Ravine System form the core of the green network, and provide important habitat for plants and animals, regional connectivity throughout the City and beyond, as well as providing open spaces for recreation and leisure.

Planning for recreation in the River Valley and Ravine involves a delicate balance between preserving ecological integrity and providing for sustainable human use where appropriate.

TOP OF BANK PARKS

The recreational assessment examined nearby or planned recreational amenities in top-of-bank municipal parks adjacent to the Study Area boundaries. Top-of-bank parks often have better transit access and more connections with their surrounding neighbourhoods, so some amenities or recreational uses may be more appropriate in these locations than within the Ribbon of Green Study Areas. Conversely, the evaluation also considers whether there are any gaps in recreational programming within top-of-bank parks that can be complemented by the programs in the study areas.

The assessment considers existing parks within the analysis boundary (600 metres) of each study area, and both existing and planned major parks (e.g. future district parks and metropolitan parks) within approximately 2 kilometres. Parks may be located within the City of Edmonton or other jurisdictions. Because of variable data quality, some sports courts may be indicated as sports fields, and some data sets (e.g. view points, planned parks) may be incomplete. The amenities of planned parks should be treated as hypothetical, since detailed programs are typically determined at a later planning and neighbourhood development stage.

In comparison with existing River Valley and Ravine System parks and open spaces, top-of-bank parks are typically more oriented toward family and programmed recreational uses, e.g. playgrounds, skating rinks, sports fields. They also host the majority of the city's Green Shack/Flying Eagle education programs and major recreation centres. By contrast, top-of-bank parks have fewer reservable picnic amenities, washrooms and recreational pathways than River Valley and Ravine System parks. The emphasizes the role of the River Valley and Ravine System to complement these programmed opportunities in a parks setting at the top-of-bank with spontaneous activities and unique river valley experiences in a natural setting within the study areas.

In the Northeast, Study Area 2, access to neighbourhoodoriented recreational amenities is limited: both Clareview Park and the planned metropolitan park feature large, tournament-scale sports facilities, while the future of surrounding industrial lands and rural Strathcona County poses challenges for significant recreational development. For this reason, this study area would benefit from more opportunities for family and programmed activities in addition to spontaneous activities and unique river valley experiences.

An important consideration for both study areas is improving public access and connectivity between top-of-bank parks and the river valley and ravine system. This will not only improve regional connectivity throughout the city and beyond, but also improve neighbourhood connections to the river valley and ravine system.

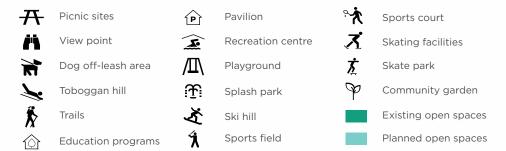
BREATHE — the City of Edmonton's Green Network

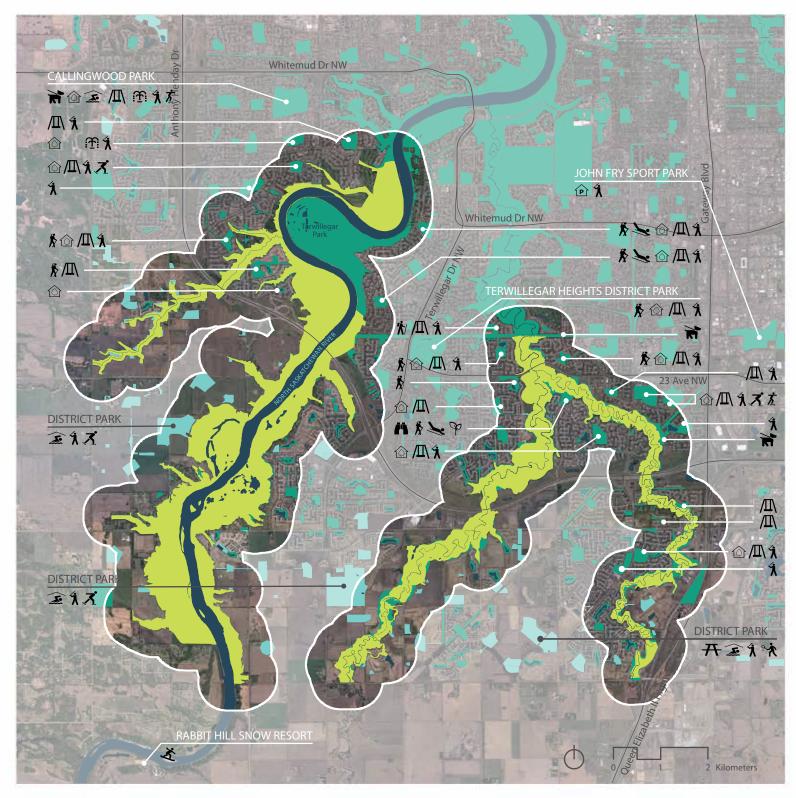
Strategy (2017), emphasizes the importance of creating a green network that is inclusive and equitably accessible for people of all ages, cultures, genders, abilities and income levels. Facilitating safe, legible, and easily navigate connections for people between top-of-bank areas to river valley and ravine systems parks and open spaces will positively contribute towards this goal.

Top of Bank

Top of bank is the first major change in the slope of the incline from the ordinary high water level of a water body. A major change is a change of ten degrees or more.

RECREATIONAL AMENITIES: STUDY AREA 1 (Southwest)





RECREATIONAL AMENITIES: STUDY AREA 2 (Northeast)

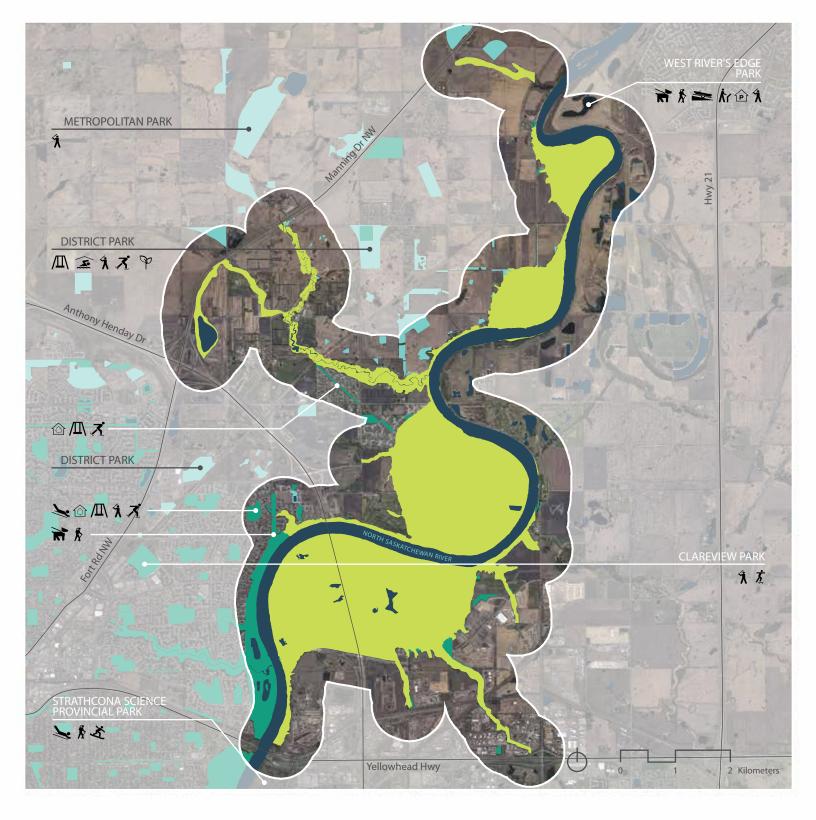
À6 /\ Picnic sites Pavilion P Sports court ズ View point Recreation centre Skating facilities /II\ 产 Dog off-leash area Playground Skate park Ŧ P Toboggan hill Community garden Splash park Š Trails Ski hill Existing open spaces

Education programs

Ski hill

Existing open spaces

Planned open spaces



CENTRAL RIVER VALLEY PARKS

The recreational assessment also examined the provision of recreational amenities in the Central River Valley and Ravine System in more detail to evaluate:

- > Proximity and connection between recreational amenities in the study areas and those in central river valley parks
- > Existing recreational amenities (with varying ownership and operations from amenity to amenity) in the central river valley that may not need to be duplicated in the study areas, including attractions and recreational facilities unique to Edmonton, such as Fort Edmonton Park and the Edmonton Valley Zoo.
- > Recreational gaps in the central river valley that study area planning should consider

The assessment considers those designated (named) parks within the boundary of the North Saskatchewan River Valley Area Redevelopment Plan. It should be noted, however, that because of variable data quality, some sports courts may be indicated as sports fields, and some data sets (e.g. view points) may be incomplete.

Currently, the central river valley offers a diversity of programmed and spontaneous recreational programming oriented to both casual and destination uses. Nineteen of the city's twenty-five major parks are located in the central river valley and ravines, including metropolitan parks that host facilities of citywide or regional appeal; attractions and recreational facilities unique within Edmonton; and an extensive system of trails, pathways and viewpoints that offer recreational opportunities to users of many ages and abilities throughout the year.

Among the designated parks in Edmonton, those in the River Valley and Ravine System have the highest availability of washrooms and other facilities, as well as a high proportion of reservable picnic sites. Several of the city's dog off-leash areas are located within, or connect to river valley parks. River valley parks have a greater focus on nature-based recreation than other parks in Edmonton, with the majority offering trails or pathways that connect one park with another and with the top of bank neighbourhoods. Although some parks have

neighbourhood-oriented recreational amenities (e.g. playgrounds, sports fields), they more typically offer amenities that are rare enough to function as a citywide or regional draw (e.g. equestrian facility, outdoor pool, boat launch, festival venue). Despite the concentration of recreational activity in the river valley, facilities offering food and beverage services and equipment rentals, as well as cultural or historic interpretive amenities, remain scarce.

This analysis of existing River Valley and Ravine System parks and open spaces highlights the system's role as a location to connect with nature as well as a location for unique city-wide attractions. Both of these directions provide a clear recreational purpose for both study areas. When considering unique city-wide attractions in the study areas it is important to ensure they have a strong relationship and connection to their site and not deter from the River Valley and Ravine System experience.

Another insight from this analysis for study area planning to incorporate, is the cultural and historical importance of the River Valley and Ravine System. It is recommended that further cultural and historic interpretive amenities be included to protect and share the rich history of the area.

Amenities

Key destinations in the River Valley and Ravine System that facilitate various activities from picnicking in a natural setting to more intensive amenities, pavilions, community gathering spaces, and road access.

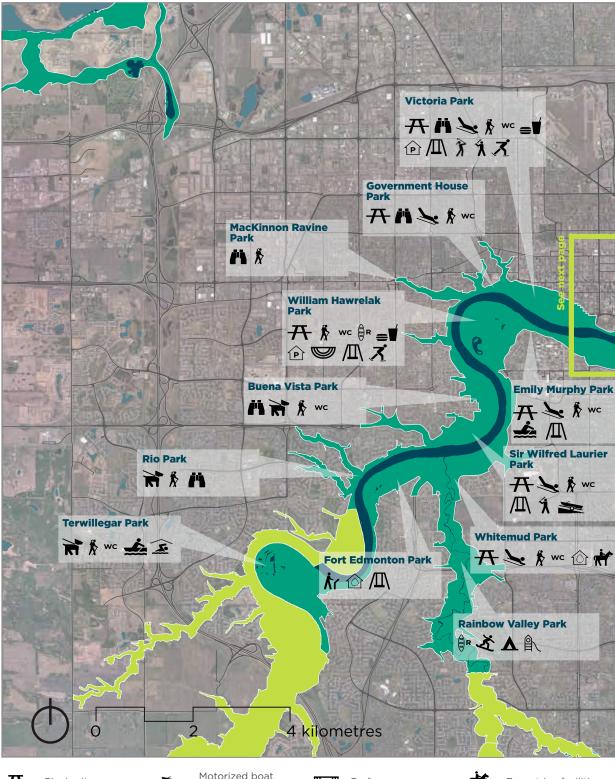
Facility

A space provided for a particular purpose such as washrooms or equipment rentals.

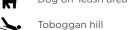
Staging Area

A place or assembly point in which people gather to preapare prior to engaging in activites in the River Valley. These areas often provide amenities and facilities to support the users.

RECREATIONAL AMENITIES: CENTRAL RIVER VALLEY







Trails

Washrooms Non-motorized boat



Motorized boat launch









Education programs



Pavilion Recreation centre



Performance space



Playground



Splash park



Ski hill



Outdoor pool



Golf



Equestrian facilities



Skating facilities

Sports court



Beach volleyball court

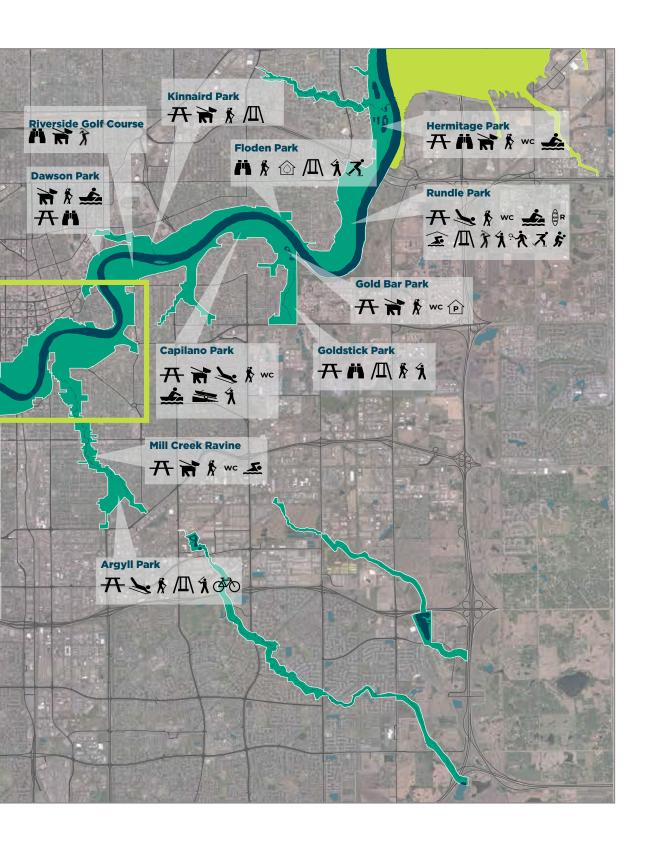


Velodrome Campground

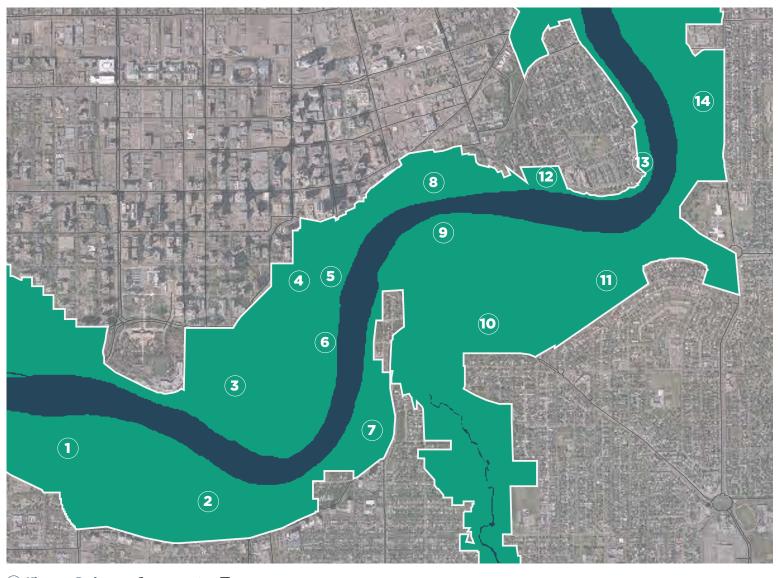


Obstacle course





RECREATIONAL AMENITIES: CENTRAL RIVER VALLEY (DETAIL)



- ① Kinsmen Park 开放 wc ৷ 全 /瓜
- 2 Queen Elizabeth Park + i v wc / wc
- 3 RE/MAX Field π
- (4) Diamond Park 🦄
- (5) Rossdale Park T
- 7 Nellie McClung Park
- 9 Henrietta Muir Edwards Park
- 10 Gallagher Park → 🔭 🥻 /□\ 🏗 🐧 🗷 🌱 🥻
- 11) Strathearn Park 📫 🛬 🏌
- 13 Allan Stein Park 🕂 🥻
- 14) Forest Heights Park 👫 🔭 🖟 wc 🦎 🔭

- Picnic sites
- View point
 - Dog off-leash area
- Toboggan hill
- Trails
- wc Washrooms
- Non-motorized boat launch
- Outdoor pool
- **G**Olf
- Sports field
- Sports court

- ₽R
- Equipment rentals
- Food services
 - Education programs
- (P)
- Pavilion
- Recreation centre
 - Playground
- 🖺 🏻 Splash park
- Skating facilities
- Skate park
- Community garden

RIVER VALLEY AND RAVINE PARKS OVERVIEW

Edmonton's North Saskatchewan River Valley and Ravine System currently includes several City parks, and two Provincial parks (Strathcona Science Provincial Park and Lois Hole Centennial Provincial Park), forming the longest connected urban parkland in Canada. Many of the parks contain both open space for spontaneous recreational use as well as dedicated, programmable recreation places, spaces and activities. The variety of amenities offered in each of these parks is outlined below.

1. Allan Stein Park

- General Description: Allen Stein Park in located in Riverdale along the North Saskatchewan River. It is connected via trails to Dawson Park in the north, and Louise McKinney Riverfront Park to the southwest.
- > Recreation Infrastructure: Picnic tables, trails.

2. Argyll Park

- > General Description: Argyll Park is located in Argyll at the southern end of Mill Creek Ravine. It is connected by trails to Mill Creek Ravine Park.
- > Recreation Infrastructure: Trails, playground, sports fields, baseball diamonds, velodrome.

3. Buena Vista Park

- General Description: Buena Vista Park is in a beautiful setting adjacent to Sir Wilfrid Laurier Park, in the west end of the City. Situated on the north bank of the North Saskatchewan River, there are a variety of activities that take place in the park, keeping the area alive and vibrant.
- > Recreation Infrastructure: Dog off-leash area, walking and cycling trails, park benches, portable toilet.

4. Capilano Park

> General Description: This park is on the south side of the North Saskatchewan River, at the end of 50th Street. It provides a starting point for cross-country skiers in the winter and trail users in the spring, fall,

- and summer. Capilano, Goldbar, and Riverside hiking trails run parallel to the river and are designated off-leash areas.
- > Recreation Infrastructure: Picnic site, boat launch, walking and cycling trails, dog off-leash trails, on-site washroom, cross-country ski trails.

5. Dawson Park

- > General Description: Dawson Park runs between 84th Street and 92nd Street on the north bank of the North Saskatchewan River, extending north to Jasper Ave. The park has a long history of industry and coal mining dating back to the turn of the 19th century. The park is connected in the northeast to Kinnard Park and Ravine system. The City is currently conducting a master plan process to establish a 25-year vision and management plan for Dawson Park and Kinnaird Ravine that will identify new and improved amenities and infrastructure.
- Recreation Infrastructure: Dog off-leash area, hand/ carry boat launch, walking and cycling trails, picnic sites.

6. Diamond Park

- > General Description: Diamond Park was once the site of 1,500 seat baseball stadium constructed in 1907. The park is located in the community of Rossdale south of Downtown, and adjacent to Rossdale Park. Today it contains a baseball diamond.
- Recreation Infrastructure: Baseball diamond.

7. Emily Murphy Park

- > General Description: Located adjacent to Groat Road, Emily Murphy Park is on the south bank of the North Saskatchewan River and commemorates a well-known women's rights activist.
- > Recreation Infrastructure: Picnic sites, small craft boat launch, playground, walking and cycling trails, toboggan hill, amenity building with washrooms.

8. Floden Park

- orth bank of the North Saskatchewan River and is adjacent to the communities of Beverly Heights and Rundle Heights. The park is named after Charles Floden, a former School Board Trustee, Town Councilor, and Mayor of Beverly. Floden Park has a walking path along the top of the bank with views of Gold Bar and Capilano Parks. The park contains the Beverly Heights Recreation Centre, community hall, and a playground. In the winter there are two outdoor ice rinks.
- Recreation Infrastructure: Viewpoint, trails, green shack, playground, sports fields, skating rink, recreation centre.

9. Forest Heights Park

- General Description: Located in Forest Heights, this large park overlooks the North Saskatchewan River as well as Downtown Edmonton. Just north of the park, the Roland Rd. Bridge provides access to Riverdale. The paved trail within the park is well used by people on foot or bikes.
- Recreation Infrastructure: Viewpoint, trails, tennis courts, sports field, baseball diamonds.

10. Gallagher Park

- General Description: Named after Mayor Cornelius
 Gallagher, Gallagher Park is located in the Cloverdale
 Community between the Edmonton Ski Hill and the
 Muttart Conservatory. Gallagher Park has been home
 to Edmonton's Folk Music Festival since 1981 and is a
 popular location to have a picnic, or go for a bike ride.
 It also offers a picturesque view of the Downtown
 skyline. A master plan for the park is currently being
 developed to establish a 20-year vision and
 development plan.
- Recreation Infrastructure: Playground, walking and cycling trails, toboggan hill, accessible washrooms, splash park, sports fields, skating rink.

11. Gold Bar Park

 General Description: Located on the south bank of the North Saskatchewan River, at the end of 50th Street.
 The park is adjacent to Goldstick Park and is

- connected to Rundle Park via a footbridge across the river.
- Recreation Infrastructure: Picnic sites, dog off-leash area, pavilion with washrooms, water fountain, and phone; cross- country ski trails, walking and cycling trails.

12. Goldstick Park

- General Description: The primary use of Goldstick park is baseball, as it contains some of the City's best ball diamonds, as well as accommodating soccer, and cross-country skiing.
- Recreation Infrastructure: Ball diamonds and soccer fields with on-site staff, cross-country ski trails.

13. Government House Park

- General Description: This park is on the north side of the North Saskatchewan River, adjacent to Groat Road, and offers a view of the river.
- Recreation Infrastructure: Picnic sites, public viewpoints, toboggan hill, walking and cycling trails, portable toilet.

14. Henrietta Muir Edwards/Rafters Landing

- › General Description: This park provides access to the North Saskatchewan River's south shore at Rafters Landing.
- Recreation Infrastructure: Non-motorized boat launch, walking and cycling trails.

15. Hermitage Park

- General Description: Hermitage Park is in the north end of the city, off Victoria Trail. This park is popular for fishing, picnicking, and hiking.
- Recreation Infrastructure: Picnic sites, non-motorized boat launch, walking and cycling trails, dog off-leash area, cross-country ski trails, portable toilets, washroom building.

16. Irene Parlby Park

› General Description: Irene Parlby Park is located on the eastern edge of the community of Rossdale along the North Saskatchewan River. The park is named after

Irene Parlby, an advocate for rural woman and children, who was elected to the Alberta Legislature in 1921. She was the first female Cabinet Minister in Alberta, and only the second in the British Empire. The park has river views and rest stops along a paved multi-purpose trail.

Recreation Infrastructure: Picnic tables, trails, playground, basketball court.

17. Kinnaird Park

- > General Description: Kinnaird Park within the Kinnaird Ravine is connected to Dawson Park to the west and Henry Martell Park to the east. Kinnaird Park and Dawson Park are currently undergoing a master planning process to create a 25-year vision and management plan for the parks. The resulting plan will guide the park through the next stage of its history and will be developed throughout 2017.
- Recreation Infrastructure: Picnic tables, trails, dog off-leash trails, playground.

18. Kinsmen Park

- > General Description: Kinsmen Park is off Walterdale Road on the south side of the North Saskatchewan River. It contains a variety of structured and unstructured recreation spaces and facilities.
- Recreation Infrastructure: Picnic sites, walking and cycling trails, playground, spray park, sports fields, tennis courts, ball diamond, Kinsmen Sports Centre, Queen Elizabeth outdoor pool, Pitch & Putt, washrooms in Kinsmen Sports Centre.

19. Louise McKinney Riverfront Park

General Description: Adjacent to downtown Edmonton and immediately south of the Shaw Conference Centre, this park is the front door to the river valley parks system and gateway to trails throughout the city. The park encompasses 12.9 hectares of land with a 500-metre unobstructed river view. The Riverfront Promenade and Plaza amenity buildings are also located within the park. Construction of a new barrier-free shared-use path, staircase and lookouts (linking the upper parking areas to the lower levels of the park) is approaching completion in 2017. The park will also be connected by

- pathways to the soon to be completed funicular which will connect 100 Street near the Hotel Macdonald and the river valley trail system near the Low Level Bridge. A restaurant is also being planned for Louise McKinney Riverfront Park.
- Recreation Infrastructure: Walking and cycling trails, segway and bike rentals, café, Chinese Garden Gazebo, washrooms, Millennium Plaza/Shumka Stage, public dock, Trans-Canada Trail Pavilion.

20. MacKinnon Ravine Park

- > General Description: MacKinnon Ravine Park on the west bank of the North Saskatchewan River is connected by trails to Ramsay Ravine and Government House Park. The ravine park contains the MacKinnon Food Forest, a community led project that planted berry-producing native shrubs, including saskatoons, highbush cranberries, and raspberries. The park also offers views of the River Valley and William Hawrelak Park.
- Recreation Infrastructure: Edible landscaping, trails, viewpoint.

21. Mill Creek Ravine

- > General Description: Mill Creek Ravine is a tributary ravine system of the North Saskatchewan River Valley that winds north-south from Connors Road to Argyll Road (63 Ave). This park is favoured by dog walkers, runners, and mountain bikers, as well as being an important cycling commuter route to and from south Edmonton. A winter festival, the Flying Canoë Volant, is held annually in Mill Creek Ravine that celebrates French Canadian, First Nations and Métis traditions through art, culture, and music. In March 2017, the City of Edmonton completed a Technical Feasibility Study that examined the technical opportunities and constraints associated with daylighting Mill Creek. The City plans to further evaluate the opportunities, constraints, and costs associated with daylighting Mill Creek.
- Recreation Infrastructure: Walking and cycling trails, picnic sites, dog off-leash area, portable toilets, Mill Creek Outdoor Pool.

22. Nellie McClung Park

- > General Description: Nellie McClung Park is a wooded park that connects Queen Elizabeth Park to Henrietta Louise Edwards park. The park is named after Nellie McClung, a member of the Alberta Legislature from 1921-1926. She was also one of the "Famous Five." a group of five Alberta women who fought for the legal rights of women. The park has trails for walking and bikina.
- Recreation Infrastructure: Trails.

23. Queen Elizabeth Park

- > General Description: Queen Elizabeth Park has served as a destination park for Edmontonians since 1909. The Park encompasses 31 hectares on the south bank of the North Saskatchewan River Valley, just east of Kinsmen Sports Centre. The Queen Elizabeth Park Master Plan, approved by Council in 2013, will guide the phased development of the park over ten years. Constructions occurring in 2017 will include an Indigenous Art Park, a new shade shelter, improvements to parking lot and picnic areas, improved lookouts and park entries, and trail improvements. Future improvements identified in the Master Plan include a bike skills park, steps to the river. an all-season washroom building, new trail connections, upgraded picnic and play areas, interpretive elements, a toboggan hill, an overpass over Queen Elizabeth Park Road and additional space for public art.
- Recreation Infrastructure: Picnic sites, washrooms, playground, walking and cycling trails.

24. Rio Park

- > General Description: Located in the Patricia Ravine, Rio Park is connected by trails to Oleskiw River Valley Park, and Fort Edmonton Park by a pedestrian bridge. The ravine park contains trails, viewpoints and a dog off-leash area.
- > Recreation Infrastructure: Trails, viewpoint, dog off-leash area.

25. Riverdale Park

- > General Description: This park is nestled in the historic community of Riverdale and provides a meeting place for a variety of activities.
- > Recreation Infrastructure: Community league hall, outdoor rink, playground.

26. Rundle Park

- > General Description: Located in the northeast area of the North Saskatchewan River Valley, this park features large open fields, man-made lakes, multi-use trails, a variety of amenities, and sports and recreation facilities.
- **Recreation Infrastructure:** Picnic sites, playground, paddling centre, disc golf, beach volleyball courts, mini golf, ice skating and shinny ponds, toboggan hill, cross-country ski trails, walking and cycling trails, ball diamonds, sports fields, tennis courts, washrooms, horseshoe pits, ACT Aquatic and Recreation Centre, Rundle Family Centre, Rundle Golf Course.

27. Sir Wilfred Laurier Park

- > General Description: Sir Wilfrid Laurier Park, or Laurier Park, sits on the north bank of the North Saskatchewan River and extends from Whitemud Drive (west) to Buena Vista Drive (northeast). The Buena Vista / Sir Wilfrid Laurier Park Master Plan, approved by Council in 2014 will guide the phased development of the park over ten years. Two new natural playgrounds are under construction, as well as improved connections to the Edmonton Valley Zoo, Other elements that will be implemented include improving riverside paths, signage, parking, and washrooms, as well as creating viewpoints.
- Recreation Infrastructure: Trailer boat launch, picnic sites, walking and cycling trails, washrooms, ball diamonds, horseshoe pits.

28. Strathcona Science Provincial Park

> General Description: Strathcona Science Provincial Park is a provincial park located between Edmonton and Sherwood Park, south of the Yellowhead Highway and west of Anthony Henday Drive. The park contains several decommissioned interpretive buildings opened and operated by the Alberta government in 1980s but

now closed. Remnants of the park's history as a public science centre include tiled triangular obelisks, a boardwalk through the archaeological area, and some interpretive plaques. Many areas of the park are overgrown. A ski hill in the park remains in operation. The park is connected to Edmonton's Rundle Park by a pedestrian bridge.

Recreation Infrastructure: Cross-country skiing, downhill skiing, mountain biking, tobogganing.

29. Terwillegar Park

- > General Description: This 186-hectare park in southwest Edmonton provides space for quiet spontaneous recreation opportunities. Terwillegar Park is popular for cycling, running, and cross-country skiing. The park also contains a very popular dog off-leash area.
- > Recreation Infrastructure: Dog off-leash area, footbridge, walking and cycling trails, mountain bike and hiking trails, cross-country ski trails, portable toilet, canoe hand launch.

30. Victoria Park

- > General Description: Victoria Park, named in honour of Queen Victoria, is on the north bank of the North Saskatchewan River. Victoria Park is popular for picnicking, baseball, cricket, and horseshoes. This park provides access to the pathways along River Valley Road, which accommodate walking, running, biking, or in-line skating.
- Recreation Infrastructure: Picnic sites, snowshoeing and cross-country ski trails, walking and cycling trails, Victoria Park Pavilion and Skating Oval, IceWay skate trail, playground, ball diamond, portable toilet and washrooms in pavilion, Victoria Golf Course and Driving Range, cricket pitch, Dogwood Café.

31. Whitemud Park

> General Description: Nestled at the start of the Whitemud Ravine, Whitemud Park is located in southwest Edmonton, off Fox Drive. To the south, the Whitemud Nature Reserve is an important natural habitat enabling opportunities for people to connect with nature. Biking is restricted here to protect the ecosystem. To the north, the mouth of Whitemud

Creek as it enters the North Saskatchewan River is a popular fishing spot. The Kihciy Askiy Development in Whitemud Park, currently being designed, will provide a natural setting for Indigenous communities to host spiritual ceremonies, sweat lodges, cultural camps and talking circles; grow medicinal herbs; practice traditional crafts; and facilitate intergenerational learning in an appropriately designed outdoor learning space. Kihciy Askiy is a joint initiative between the City of Edmonton and Native Counseling Services of Alberta (NCSA). Construction is slated to begin in 2018.

Recreation Infrastructure: Alfred H Savage Centre, washrooms, toboggan hill, walking trails, picnic sites, equine trails, Whitemud Equine Centre.

32. William Hawrelak Park

- > General Description: William Hawrelak Park (originally Mayfair Park) is a 68-hectare park in the North Saskatchewan River Valley featuring a 5-hectare lake and open grassy areas. The park hosts several major festivals and events throughout the year.
- Recreation Infrastructure: Pavilion with seasonal concession, picnic sites, paddleboat rentals, playground, walking and cycling trails, ice skating, cross-country ski trails, washrooms, Hermitage Amphitheatre.

As seen in the preceding inventory, there are a variety of established parks and recreation places, spaces and activities within the central area of the North Saskatchewan River Valley and Ravine System. Spontaneous activities such as walking, cycling, cross-country skiing, picnicking, and day use areas are prevalent throughout many of the existing parks. A trail network connects elements of the river valley parks system, and with top of bank and broader city networks. Many parks also act as staging areas for trail and water-based recreation activities. A few of the larger park spaces also accommodate competitive athletic events, social gatherings, and other large special events. These activities typically include large groups and require support amenities such as parking, washrooms facilities, and large open areas. The current programming of existing river valley parks demonstrates, in part, user expectations for the two Ribbon of Green study areas.

RECREATION INFRASTRUCTURE

The entire Ribbon of Green is home to a variety of recreation places, spaces and activities. These include bookable spaces such as ball diamonds and sports fields, spontaneous spaces such as dog-off leash parks and spray parks, and amenities such as parking lots, staging areas for trails, washrooms, and others. Most of these amenities and facilities are located within the central core of the Ribbon of Green, and are spontaneous in nature. The following table summarizes existing recreational assets throughout the entire Ribbon of Green.

	Study Area 1:	Central	Study Area 2:	Total
Ball diamonds	Southwest	39	Northeast	39
Beach volleyball courts		2	•	2
Boat launches		11	•	11
City washrooms (building)		24	•	24
City washrooms (portable toilet)		12	•	12
Cricket pitches		1	•	1
Disc golf courses		1	•	1
Dog-off leash areas		13	•	13
Downhill ski areas		2		2
Golf courses (municipal)		3	•	3
Golf courses (non-municipal)	2	3	2	7
Green shacks		3		3
Indoor recreation facilities		9	•	9
Non-paved trails (km)*	10.9	232.4	1.2	244.4
Outdoor skating areas		6	•	6
Outdoor swimming pools		2		2
Park space (ha)	895	2,375.3	286.1	3,556.4
Paved pathways (km)	4.4	86.1	0.1	90.6
Picnic sites		10	•	10
Playgrounds		24		24
Spray parks		3	•	3
Sports fields		33	•	33
Tennis courts		15		15
Toboggan hills		18	•	18
			•	

^{*} Does not include informal trails.

RECREATION ACTIVITIES

The City of Edmonton currently supports the provision of numerous recreation opportunities in the River Valley and Ravine System at several sites. While some of the activities are provided by partner organizations, the majority of the sites are maintained and programmed by the City. Programs offered directly by the City include day camps, school programs, birthday party packages, archery, biking, canoeing, long boarding, paddle boarding, and other outdoor pursuits.¹ Led by City staff, Green Shack programs dispersed through Edmonton's municipal parks offer games, sports, crafts, drama, and special events for children at no cost. The Flying Eagle summer drop-in program visits various Green Shack playground program sites to teach children and families about Indigenous peoples and Treaty 6 through storytelling, bead crafts, dream catches, double ball, lacrosse, bannock making, smudging and talking circles.

Several organizations also offer programmed activities in the river valley and ravines through partnerships with the City. They include the Edmonton Cricket Club, Edmonton Speed Skating Association, and Ceyana Canoe Club.

- area, or indoor recreation facilities)
- > Accessibility (e.g. parking, pathway connectivity, public transport, staging areas)
- > Recreation amenity spaces (e.g. dog off-leash areas, picnic sites)
- > Support amenities (e.g. washrooms, lighting)

The design of, and features within parks influence the extent of their use. Generally, parks with large parking lots, that are integrated into the surrounding communities, and have a variety of amenities attract more users than parks with fewer amenities and limited accessibility. The introduction of new amenities, such as trails, wayfinding signage, rest areas, and washrooms, attract new users to an existing park space.

There is a high level of use and visitation within developed and accessible areas in the central areas of the River Valley and Ravine System. However, as both Ribbon of Green study areas are largely undeveloped in terms of recreation infrastructure, amenities and facilities, there is opportunity to expand their current use. This will become increasingly important as the population surrounding the two study areas continues to rise.

USE

Most of the existing recreation spaces within the River Valley and Ravine System are used for unstructured or spontaneous recreation, meaning that bookings are not required. Without booking information, it is difficult to track the use of these recreation palces, spaces and activities. However, several factors would affect a parks' use. These are:

Location (e.g. proximity to high-density residential

Spontaneous Recreation Activities

Include activities that can be participated in with minimal organization, without time commitments, and are spontaneous with no registration process/fees. Examples including hiking, biking, pick-up sports, picnics, cross country skiing, skateboarding, tobogganing, outdoor ice skating, etc.

PUBLIC ENGAGEMENT FINDINGS

Public engagement from the Ribbon of Green Project as well as from BREATHE: Edmonton's Green Network Strategy provide high level input from the public that can inform recreation planning for the two study areas. Their recent public engagement periods, 2016 for BREATHE and early 2017 for Ribbon of Green, means that the information collected is relevant for this assessment.

Ribbon of Green Engagement

During the first stage of the Ribbon of Green Project, public input was gathered through an online survey, two public open houses, one City staff internal open house, and an external stakeholder workshop. Below is a summary of the key findings.

When asked what people would like to do or see in each study area, the most frequent responses were as follows:

Study Area 1 - Southwest

- The use of trails for activities such as walking, running, cycling, and immersion within nature.
- Other activities participants suggested for the area include concession facilities, outdoor recreation infrastructure (e.g. washrooms), photography, stargazing, and space for Indigenous traditional uses.

Study Area 2 - Northeast

- As with the southwest study area, the top activities people appreciate include passive enjoyment of nature and other low-impact recreational activities
- Outside of the popular recreational activities identified above, other suggestions included ice skating, local food production, berry picking, plant identification, orienteering, gardens, and quiet reflection.

When participants were asked to provide their vision for each study area, the top comment categories were:

Study Area 1 - Southwest

- > Nature areas, wilderness, and green space
- > Protection and preservation
- > Low impact recreation and use
- Walking and hiking
- Maintain connectivity, and continuous trails through the river valley
- > Public access and river access
- > Safety

Study Are 2 - Northeast

- > Nature areas, wilderness, and green space
- > Protection and preservation
- > Respect Indigenous groups
- Recreation and programmed use
- > Network or walking and cycling trails
- > Protect agricultural lands and soils
- > Remediate and naturalize

BREATHE Engagement

During the development of BREATHE: Edmonton's Green Network Strategy in 2016, an online questionnaire was fielded to identify current demands, opportunities and barriers to use in Edmonton's parks and open spaces. Participants were asked a series of questions about their use of Edmonton parks, and their opinions about environmental quality, accessibility, safety, and several other topics. In total, 2,247 people participated in the online questionnaire and 344 people completed the online spatial survey. Although the survey asked about all Edmonton parks and open spaces, key findings pertinent to the river valley and ravines are summarized as follows.²

Top 3 reasons for using open space:

- 1. To enjoy nature (90%)
- 2. To relax (81%)
- 3. To improve fitness (66%)

Satisfaction with recreational activities: How satisfied are you with your ability to enjoy these activities in

Edmonton's open spaces? (Respondents were asked if they were satisfied, neither satisfied not dissatisfied, dissatisfied, or unsure)

- Walking or running (88% satisfied)
- > Touring heritage sites (70% satisfied)
- > Birding or nature viewing (56% satisfied)
- Cycling or mountain biking (54% satisfied)
- Winter sports (53% satisfied)
- > Other active transportation (19% satisfied)
- Boating or water sports (17% satisfied)

Importance of open space amenities: Which features and amenities are most important to your use of open spaces?

- 1. Trees (95%)
- 2. Trails and pathways (95%)
- 3. Washrooms (76%)
- 4. Sitting areas (benches and plaza) (74%)
- 5. Turf / grassed area (54%)
- 6. Shade structures (54%)
- 7. Night-time lighting (51%)
- 8. Drinking fountains (50%)
- 9. Picnic shelters / outdoor kitchens or BBQs (48%)
- 10. Winter warm-up shelters (45%)
- 11. Bike racks (40%)

² City of Edmonton. (2016). What We Heard Report Phase 2: Strategic Framework. City of Edmonton. Retrieved June 6, 2017, from https://www.edmonton.ca/city_government/documents/PDF/Breathe_WhatWeHeard-Phase2.pdf

- 12. Waterfront activities / access (35%)
- 13. Bus stops (32%)
- 14. Water features (32%)
- 15. Community gardens (31%)
- 16. Off-leash dog facilities (30%)
- 17. Wheelchair access (24%)
- 18. Availability of food / beverage for purchase (23%)
- 19. Wi-Fi (19%)
- 20. Manicured gardens (17%)

Satisfaction with environmental quality: "I find the water quality in the North Saskatchewan River to be good."

- > Strongly agree (9%)
- > Somewhat agree (27%)
- > Neither agree nor disagree (18%)
- > Somewhat disagree (20%)
- > Strongly disagree (8%)
- > Don't know (18%)

PUBLIC ENGAGEMENT SUMMARY

Several key lessons can be taken from both sets of public engagement and be used to influence future recreation planning in both Ribbon of Green study areas. These are:

A focus on spontaneous recreation spaces

- > Respondents use the River Valley and Ravine System to enjoy nature and relax
- > Trees, trails, pathways, and access to the water are the most important features of open space

Better access, connectivity, and signage

- > There is a desire for more access points to the river and connections between parks via pathways
- > A need was expressed for additional wayfinding and interpretive signage
- > There is low satisfaction with boating and water sports, relating to a lack of supporting infrastructure in Edmonton

Perception of safety at night can be improved

> Respondents feel much safer during the day than at night in Edmonton's open spaces

A focus on support amenities

> Support amenities such as washrooms, sitting areas, shade structures, and lighting are highly valued

A lack of awareness of all recreation opportunities

> Low satisfaction levels, in particular for winter sports and activities, are likely influenced by a lack of awareness by the public on recreation opportunities, as opposed to those opportunities not existing

RECREATION PLANNING **INFLUENCES**

Purpose of this section:

- > To understand other strategic influences that impact recreation planning in the Ribbon of Green study areas.
- > This section has been divided into two sub-sections, Recreation Preferences as determined through concurrent recreation projects, as well as provincial and national surveys and studies, and Planning Consideration for developing and programming future parks space.

Section summary:

- > As part of the Live Active strategy, the City of Edmonton envisions a "healthy, vibrant Edmonton in which people embrace active lifestyles that improve their individual well-being as well as that of their families, neighbourhoods and communities".
- > More Albertans participate in spontaneous/unstructured activities than structured group activities; reiterating the importance of providing spontaneous recreation amenities and infrastructure.
- > Physical activity levels among Canadians are low; enabling more people to be more active is vital.
- > Emerging recreation practices and pursuits are maximizing the benefit of natural and outdoor spaces.
- > Spontaneous recreation opportunities provided in the river valley and ravines have fewer barriers to participation than other recreational pursuits such as fee based programming.
- > Residents want more opportunities to connect with nature.
- > River valley and ravine trails form a key part of the city's current and future active transportation network.
- > River Valley Alliance plans and projects for recreation amenities and features should be considered when contemplating future recreation use in the Ribbon of Green.
- > New and diverse recreation activities are constantly emerging; programming recreation spaces to be multi-use and flexible is key to meeting current and future needs and demands.
- > Agricultural-based recreation is becoming more popular, including agricultural interpretive opportunities, food production, and animal-related pursuits.

RECREATION PREFERENCES

When contemplating future recreational activity within the Ribbon of Green area it is important to consider other planning influences such as participation trends, related stakeholder projects, as well as relevant regional and provincial recreation planning initiatives.

A review of existing River Valley and Ravine System planning and broader participation trends help inform the relevance of existing recreational activities as well as emerging or evolving recreation interests. These will be important to consider when planning the two study areas. The following sections provide an overview of relevant plans and trends for future River Valley and Ravine System planning and programming.

Existing Edmonton Recreation Planning

BREATHE: Edmonton's Green Network Strategy

BREATHE establishes strategic directions and policy actions to guide future open space development, management, and use in Edmonton. To capture a measure of open space quality, the performance of Edmonton's open space network was analyzed by three themes:

- > Ecology open spaces that support and enhance the environment by sustaining healthy and resilient ecosystems.
- Celebration open spaces that connect people to one another, building a sense of place by providing opportunities for communities to thrive, gather, and celebrate.
- Wellness open spaces that promote healthy living and foster wellbeing through an array of environmental, mobility, and recreational options. Open spaces promote wellness by supporting active transportation, mental health and wellbeing, and opportunities to learn, play and recreation.

To assess whether an open space or park supports wellness and recreation, amenities and infrastructure were analyzed based on their location and frequency. Examples of these 25 datasets include, toboggan hills, skate parks, cross-country and downhill skiing areas, boat launches, sports fields, playgrounds, benches, green shack programs, and splash pads.

Using different datasets, this analysis was also conducted for the ecology and celebration themes. The findings were then combined into a multifunctional score for each park and open space. Many of Edmonton's multifunctional parks are located within the River Valley and Ravine System, which encompasses large natural areas that contribute to high scores for the functions of ecology.

BREATHE also identified policy directions that may have future recreation implications within the River Valley and Ravine System. They include:

- > Increasing the delivery of wellness functions, recreation and active living by providing new multifunctional parks and pathways
- > Designing multifunctional open spaces that are flexible, visible, accessible and functional
- > Improve green network connections throughout Mature neighbourhoods, especially to and from the River Valley and Ravine System.
- > Creating high-quality open spaces that encourage more people to actively use existing amenities
- > Improving active living and child-friendly spaces
- Co-locating recreation facilities in some parks

- > Co-locating amenities (e.g. playgrounds and adult fitness equipment) to support intergenerational recreation and play where appropriate
- > Expanding and maintaining winter-oriented recreational and active transportation infrastructure
- > Optimizing usage of the North Saskatchewan River by enhancing opportunities for responsible water based recreation and water access,

Community and Recreation Facility Master Plan

The City is currently developing a 20-year Community and Recreation Facility Master Plan to direct development for both new and existing recreation facilities. Its main goal is to ensure that public recreation places, spaces and activities continue to be accessible, welcoming and respond to evolving community needs and resources. In addition to facilities, the Community and Recreation Facility Master Plan will address sport fields within the city. Policy direction within the Plan may inform the work of the Ribbon of Green Project, as well as future updates of the Ribbon of Green Plan (2018).

River Valley Alliance

Formed in 1996 by the seven municipalities bordering the Capital Region's North Saskatchewan River, the River Valley Alliance's vision is to create a continuous integrated river valley park system in the Capital Region, from Devon through Parkland County, Leduc County, Edmonton, Strathcona County and Sturgeon County to Fort Saskatchewan. The envisioned park would cover 18,000 acres and stretch over 88 kilometres through the North Saskatchewan River Valley. Protecting the natural spaces within the river valley while ensuring access for a variety of active and passive pursuits are the River Valley Alliance's primary goals.

In 2007, the River Valley Alliance developed its 25-year strategic plan titled, Plan of Action. Several environmental, social, and economic objectives are presented in the Plan of Action for the Ribbon of Green Project to align with. The objectives related to recreation include:

- > Use trailways and waterways to connect communities and attractions along the valley and from the park system to surrounding communities and attractions.
- > Create new destinations that enhance the quality of

life in the region.

- Improve access to the riverfront for shore and water based activities.
- Reflect the cultural and natural heritage of the river valley and expand education opportunities based on the park's natural and cultural history.
- Support an active and healthy lifestyle for people in the Capital Region.
- Enhance the urban experience in the Capital Region by creating connections to the park and providing venues for cultural, arts, athletic and entertainmentrelated activities.

The 2007 River Valley Alliance Plan and subsequent planning efforts outline river valley recreation features, amenities, and activity nodes. Some of these projects and initiatives are within the two Ribbon of Green study areas and require consideration in their future planning.

Local, Provincial, and National Recreation Trends

Live Active Survey 2015

The engagement process for Live Active: A Collaborative Strategy for Active Living, Active Recreation, and Sport in Edmonton 2016-2026, included a survey to identify the barriers and challenges that prevent Edmontonians from being active and how to motivate Edmontonians to increase their physical activity.

Barriers - Personal Factors:

- 1. Time
- 2. Family responsibilities
- 3. Health
- 4. Work-life balance
- 5. Motivation

Spontaneous outdoor recreation activities are prevalent and highly valued. The river valley system can accommodate many of these activities for little cost to the user and improve accessibility to outdoor recreation.

Barriers - External Factors:

- 1 Cost
- 2. Active transportation challenges
- 3. Facility location
- 4. Program scheduling
- 5. Facility availability

Ideas to Motivate Edmontonians:

- 1. Investment in infrastructure
- 2. Addressing cost concerns
- 3. Increase opportunities
- 4. More awareness/improve information
- 5. Improve public transportation

Current State of Sport and Active Recreation 2016

The City of Edmonton conducted an online survey in 2016 to ask residents about their participation in programmed recreation and sport.

Key Findings:

- > 75% of respondents participate in active recreation and/or competitive sport at least once in the previous twelve months
 - > 73% active recreation, 19% competitive sports
- The top active recreational activity is walking/running/ jogging/hiking (64%), followed by swimming (24%), and road cycling (19%)
- Top sports are soccer (23%), golf (15%), and ice hockey (11%).
- > Cricket and pickleball are growing in popularity
- 76% participate in active recreation during the summer compared to 40% in the winter

Alberta Recreation Survey (2013)3

The Alberta Recreation Survey, commissioned every four to five years by Alberta Tourism, Parks, and Recreation, outlines the activity preferences of Albertans. The recent 2013 survey found that Albertans enjoy an array of physical activity, recreation, and leisure pursuits.

Top five outdoor activities:

- 1. Gardening
- 2. Day hiking
- 3. Golf

³ http://www.culturetourism.alberta.ca/recreation/resources/research-analytics/recreation-survey/recreation-survey-results/pdf/2013/AB-RecSummaryInfographicF.pdf

- 4. Overnight camping
- 5. Fishing

Top five water based activities:

- 1. Motor boating
- 2. Canoeing
- 3. Kayaking
- 4. Water skiing
- 5. River rafting

Top five winter activities:

- 1. Downhill skiing
- 2. Tobogganing/sledding
- 3. Cross-country skiing
- 4. Snowshoeing
- 5. Snowmobiling

Top five physical activities

- 1. Walking for pleasure
- 2. Bicycling
- 3. Aerobics/fitness
- 4. Swimming/aquatic fitness (in pools)
- 5. Swimming (in lakes, rivers, ponds)

Although this information is reflective of the entire province, the findings from the BREATHE online survey are generally consistent with the Alberta Recreation Survey results.

2016 The ParticipACTION Report Card on Physical Activity for Children and Youth4

ParticipACTION is a national non-profit organization that strives to help Canadians sit less and move more. Their Report Card on Physical Activity for Children and Youth comprehensively assesses physical activity using data from multiple sources, including the best available peerreviewed research. This data allows ParticipACTION to assign grades for indicators such as overall physical activity, active play, sleep, and more. The most recent report card (2016) provides a "wake-up call" for children and youth activity levels.

> Only 9% of Canadian kids aged five to 17 get the 60 minutes of heart-pumping activity they need each day.

- > Only 24% of kids aged five to 17 meet the Canadian Sedentary Behaviour Guidelines recommendation of no more than two hours of recreational screen time per day.
- > In recent decades, children's nightly sleep duration has decreased by 30 to 60 minutes.
- > For every hour kids spend in sedentary activities delays their bedtime by three minutes. And the average Canadian kid aged five to 17 spends 8.5 hours being sedentary each day.
- 33% of Canadian children aged five to 13 and 45% of youth aged 14 to 17 have trouble falling asleep or staying asleep at least some of the time.
- > 36% of kids aged 14 to 17 find it difficult to stay awake during the day.
- > 31% of school-aged kids and 26% of adolescents in Canada are sleep deprived.

2017 Alberta Survey on Physical Activity⁵

The Alberta Centre for Active Living conducted a survey in 2017 to track physical activity behaviour among Albertans. The Canadian Physical Activity Guidelines recommend adults participate in at least 150 minutes of moderate to vigorous physical activity each week. The survey revealed that:

- > 57% of Albertans get enough physical activity to achieve health benefits.
- > 26% of Albertans achieve high levels of walking (12,500+ steps per day).
- > One third of Albertans are sedentary ≥ 10 hours per day.
- > Levels of physical activity increases as household incomes increase.
- Albertans with access to recreation facilities were 2.5 times more likely to be sufficiently physically active than those that did not have access.

Children and youth are spending too much time inactive, indoors. Providing areas within the Ribbon of Green for active and interpretive use will provide all residents (young and old alike) with greater active recreational opportunities.

RECREATION PRINCIPLES

National Recreation Framework

The Framework is a guiding document for public recreation providers in Canada that was developed by the Canadian Parks and Recreation Association (CPRA) and the Interprovincial Sport and Recreation Council (IRSC). The Framework presents a renewed definition and vision of recreation as well as confirms common values, principles, and goals. It acts a call to action, inviting leaders, practitioners, stakeholders, and all Canadians to come together in the pursuit of common priorities relating to recreation.

The Framework sets out a vision that calls for all Canadians to be engaged in meaningful, accessible recreation experiences that foster the wellbeing of individuals, communities, and our natural and built environments.

Recreation within the Framework is viewed as a public good, in the same way as education or health care is. The Framework calls for quality recreation to be available to everyone through lifelong participation.

The Framework sets out five goals:

- Active Living Fostering active living through physical recreation
- Inclusion and Access Increasing inclusion and access to recreation for populations that face constraints to participation
- Connecting People to Nature Helping people connect to nature through recreation
- Supportive Environments Ensuring the provision of supportive physical and social environments that encourage participation in recreation and build strong, caring communities
- Recreation Capacity Ensuring the continued growth and sustainability of the recreation field⁶

Ribbon of Green's recreation polices and recommendations should incorporate the goals and vision of the National Recreation Framework.

Balancing Structured and Spontaneous Uses

While many structured or organized activities remain relevant and important, there is increasing demand for spontaneous and flexible activities. Increasingly, people seek individual and small group recreational activities near home that do not require set time commitments or registration fees. This trend suggests that planning for unstructured spaces is as important as planning for traditional structured-use environments. Parks and open spaces provide opportunities for spontaneous recreational activities as they can accommodate numerous activities (multipurpose), are predominantly free to access, and are geographically dispersed throughout the city.

Flexibility and Adaptability

There are more recreation options today than ever before. As a result, service providers need to ensure a fluid and adaptable service delivery model to meet community demand. Municipalities must also decide what activities to offer or support, versus those which are more appropriate for the private sector to provide.

Ensuring programming staff and management monitor and keep abreast of recreation trends is important in maintaining a relevant and adaptable recreation program. Service providers typically identify popular and in-demand programs through regular interaction and data collection (e.g. customer surveys). The development of multi-use spaces can also ensure that municipalities have the flexibility to adapt to changing interests and activity preferences.

Providing areas for nature interpretation throughout the Ribbon of Green will help educate the public on ecological integrity while also enabling them to connect with nature.

⁶Canadian Parks and Recreation Association, and the Interprovincial Sport and Recreation Council. (2015). A Framework for Recreation in Canada 2015, Pathways to Wellbeing.

⁷TD Friends of the Environment Foundation survey. Conducted by Ipsos Reid (2013).

⁸ Harris Interactive (2011). Playgrounds Increase Sense Of Family Well-Being. Washington, District of Columbia. Foresters.

⁹ Grahn, P., Martensson, F., Llindblad, B., Nilsson, P., & Ekman, A., (1997). UTE

Barriers to Participation

Research and available data reveals that many Canadians face barriers that impact their ability to take advantage of the physical, social, and mental benefits that come from participation in recreation pursuits. Understanding these barriers can help service providers identify strategies to mitigate issues and encourage participation.

The 2013 Alberta Recreation Survey identified barriers that prevent Albertans from participating in recreation and leisure pursuits. The top three barriers identified by respondents were:

- > Too busy with other activities
- > Too busy with family
- > Too busy with work

Similarly, the top three barriers to participation in new activities were:

- > Being too busy with work, family and other activities
- > Various costs such as admission and registration fees as well as equipment and supply costs
- > Overcrowding of facilities and recreation areas

The 2014 CIBC - KidSport Report outlines barriers to participation in sport for three to 17-year-olds in Canada. The cost of enrollment, the cost of equipment, and a lack of interest were identified as the top three barriers. Though cost is not often a barrier to recreation in the River Valley and Ravine System, there are other barriers to consider. Perceived safety within the system has been addressed in some river valley and ravine areas with blue phones, signage, patrols, and lighting. These tactics should be considered if safety is a concern within either of the two study areas. Physical accessibility is another barrier that requires consideration in and out of the River Valley and Ravine System. Efforts to make the central core of the river valley more accessible to all physical abilities with projects such as the Funicular are underway. These efforts may set expectations to provide greater levels of accessibility more frequently throughout the river valley and ravines, especially adjacent to recently developed communities.

Providing Quality Parks and Open Spaces

Research indicates that individuals place a high value on the availability and quality of parks, trails, and outdoor spaces. The quality of open spaces is based on the functionality of the space considering the condition of its infrastructure, amenities and the value of the functions it provides. A 2013 Canadian study commissioned by the TD Friends of the Environment Foundation found that nearly two-thirds of respondents (64%) indicated that local parks were "very important" to them and their family. Additionally, 68% of Canadians are concerned about the loss of green space in their communities.7

Another 2011 study of over 1,100 parents of two to 12-yearolds in the United States, Canada, and the United Kingdom found that the more time a family spends together at a playground, the greater their overall sense of family wellbeing. Three-quarters also wished that their family had time to visit a playground more often. 8

Parks and open spaces play a key role in helping to combat "nature deficit disorder" amongst children and youth. This phrase, first coined by Richard Louv in his book "Last Child in the Woods," suggests that children are becoming estranged from nature and natural play, which results in cognitive, physical, and developmental issues. While all residents benefit from the availability of quality park spaces, a significant amount of research and attention has been given to the myriad of benefits to children and youth that result from access to outdoor settings. Findings include:

- > Children who play regularly in natural environments show more advanced motor fitness, including coordination, balance, and agility, while having fewer illnesses9
- > Exposure to the natural environment improves children's cognitive development by improving their awareness, reasoning, and observational skills¹⁰
- > Children who play in nature have better relationships with other children¹¹
- Outdoor environments are important to a child's development of independence and autonomy¹²
- > Children with views of, and contact with nature score higher on concentration and self-discipline assessments13

¹⁰ Pyle, Robert (1993). The thunder trees: Lessons from an urban wildland. Boston: Houghton Mifflin.

¹¹ Moore, Robin (1996). Compact Nature: The Role of Playing and Learning Gardens on Children's Lives, Journal of Therapeutic Horticulture, 8, 72-82.

¹² Bartlett, Sheridan (1996). Access to Outdoor Play and Its Implications for Healthy Attachments. Unpublished article, Putney, VT

¹³ Taylor, A.F., Kuo, F.E. & Sullivan, W.C. (2002). Views of Nature and Self-Discipline: Evidence from Inner City Children, Journal of Environmental Psychology, 22, 49-63

Active Transportation

Active transportation refers to any form of human-powered transportation, such as walking, cycling, using a wheelchair, in-line skating, longboarding or skateboarding. In 2011, 5.7% of Canadians walked to work regularly, while 1.3% cycled, accounting for over one million Canadians. In Edmonton, 4.6% of commuters walk and 1.4% cycle to work. In Edmonton, 4.6% of commuters walk and 1.4% cycle to work.

A notable trend is the increased use of active modes of transportation by younger professionals. Several factors contribute to this, including a rise in environmental consciousness, financial limitations (active transportation is generally less expensive), and more people moving into urban neighbourhoods to be closer to employment and amenities.

Urban parks encourage active transportation if they are adjacent to a pedestrian-friendly roadway or provide a convenient shortcut. Pathway systems are becoming increasingly important to accommodate alternative methods of transportation. These multi-use pathway systems are often seen as mandatory when developing parks as they facilitate both recreational use and active transportation.

Sections of Edmonton's River Valley and Ravine System are widely used for active transportation purposes. A connected and integrated river valley and ravine trail system would create a regional active transportation corridor, and make it easier and more convenient to travel by bike, on foot, or other human-powered means.

The City of Edmonton is implementing bike routes for downtown, Strathcona, and along 43rd Avenue. As the northeast and southwest areas of the city continue to grow, active transportation routes to other neighbourhoods and the River Valley and Ravine system will increase in importance.

Active-transportation routes and pathways should be continually monitored to evaluate their performance and to determine network improvements. This may include amenities on pathways based on user numbers, lighting and its effects on night usage, and whether the surface

material is appropriate for its intended use (e.g. bicycling, walking). An analysis of popular pathways can provide lessons for future network development or improvements. Collecting usage data with trail trackers is a practice that municipalities are beginning to implement on a regular basis.

Trail Types

Best practices for trails within a park and open space setting typically fall into three trail types: Type 1 shared, multi-use pathway, Type 2 granular trail and Type 3 nature trail. Each trail serves a different purpose and, as a result, creates a distinct trail experience for users.

Type 1 (Shared, Multi-Use Pathway)

Type 1 shared, multi-use pathways are flat, wide, paved corridors which cater to leisure users and regional commuters alike. While commuters and runners are able to traverse long distances without stopping or dismounting, leisure users can walk, run or cycle in a safe and carefree outdoor experience.

Type 1 pathways are wide and suitable for all users and activities. As a result, Type I pathways are inherently social experiences. They create a community experience between a variety of pathways users. The wide cross-section allows users to walk or run side-by-side, yet accommodates safe passing by faster-moving users.

These types of pathways also integrate program, infrastructure and key attractions to enhance the trail experience, while ensuring users are comfortable and safe throughout their journey. Lookouts, sitting areas, and interpretive signage related to the environment, iconic natural landscapes and heritage and culture enhance the trail experience while public washrooms, water fountains and waste receptacles ensure trail users are comfortable and safe.

Type 1 pathways are located in three distinct environments in the river valley: along the top of bank, along the riverside and strategically located across the escarpment. Each location facilitates a distinct relationship between pathways users and the natural landscape.

¹⁴ Public Health Agency of Canada. http://www.phac-aspc.gc.ca/hp-ps/hl-mvs/pa-ap/at-ta-eng.php

 $^{{}^{15}}Statistics Canada. 2011. Commuting to Work. https://www12.statcan.gc.ca/nhs-enm/2011/as-sa/99-012-x/99-012-x2011003_1-eng.cfm$

As the name suggests, Type 1 top of bank pathways are located at the top of the river valley's escarpment. Top of bank pathways offer views into the river valley. Lookouts at these key locations offer users the opportunity to rest, reflect and appreciate the scenery. Top of bank pathways are also the interface between communities and the river valley. Adequate signage and wayfinding at trailheads provide the necessary information to pathway users and ensure they are comfortable with their planned journey.

Type 1 riverside pathways are located close to the edge of the Saskatchewan River without encroaching in the riparian buffer area. Riverside trails offer an accessible, yet intimate experience with the water. Additionally, Type 1 pathways offer a unique juxtaposition between viewing the valley bottom from top of bank trails and inhabiting the valley bottom. Type I pathway users can stay on a single path, yet experience the full beauty of the river valley.

Type 1 escarpment pathways connect Type 1 riverside pathways and Type 1 top of bank pathways in a safe and accessible manner. Escarpment pathways have gentle slopes and allow all users to access the river bottom without hiking or traversing stairs.

Type 2 (Granular Trail)

Type 2 granular trails are distinguishable trails which fit into the environment by utilizing a naturally-occurring surface material, such as crushed limestone.

To inhibit erosion, Type 2 trails are built on relatively flat landscapes outside of frequent flood areas. As a result, they are highly accessible for most trail users; however, cyclist and wheelchairs may have trouble traversing loose gravel or stones. Regardless, Type 2 trails offer a distinct trail right-of-way without heavily damaging existing vegetation, allowing users a more natural trail experience when compared to Type 1 pathways. Additionally, material inconsistencies in the surface enhance the natural feeling of the experience and can foster a sense of adventure for users.



EXAMPLE OF A SHARED, MULTI-USE PATHWAY¹⁶



EXAMPLE OF A GRANULAR TRAIL¹⁷



EXAMPLE OF A NATURE TRAIL¹⁸

¹⁶ City of Edmonton

¹⁷ City of Edmonton

¹⁸ Schneider, Katie. "River Valley." Digital image. MEC, Accessed September 25, 2017. https:// www.mec.ca/en/article/5-day-hiking-trips-near-edmonton

Type 2 trails offer an environmentally-considerate alternative to Type 1 pathways. They create a maintained, vet rustic trail experience in natural environments, facilitate social interaction through side-by-side walking and fit into the existing landscape.

Type 3 (Nature Trail)

Type 3 nature trails weave through existing vegetation and offer an intimate experience with the natural environment. Each trail offers a unique experience, focusing in on local natural environments or curating interpretive loops.

Type 3 trails follow the existing topography, whether it is flat along the valley bottom or steep down the escarpment. Additionally, to minimize impact on the natural environment, Type 3 trails are narrow. As a result, tree roots, rocks and many other obstacles may be present along the pathway causing it to be difficult to traverse in some instances. However, with added difficulty comes a sense of accomplishment upon finishing a particular hike or trail loop. Type 3 trails foster a sense of adventure by being surrounded by the natural environment and discovering new landscapes and wildlife in the river valley.

These trails offer access to unique experiences. For instance, in highly environmentally sensitive landscapes where access is required for research or education, Type 3 trails can thoughtfully weave through the existing landscape, without negatively affecting sensitive features. Similarly, in historically significant sites, interpretive Type 3 trail loops can educate users about the significance of the site without adversely affecting its surroundings.

Overall, Type 3 trails are an environmentally sensitive trail type which offer respite from the urban realm for users. They provide a sense of adventure and discovery into the unknown.

Preserving Heritage and Culture

Preserving and enhancing the historical or cultural aspects within a parks system emphasizes the importance of these spaces within the community and increases resident interest and use. There is a general desire from both the public and Indigenous communities, as heard through initial Ribbon of Green public and Indigenous engagement, for heritage and culture interpretation as a recreational activity for the study areas.

Municipalities can showcase the historical and cultural heritage of a community through interpretative information, art installations, and place names. Festival venues, art displays, amphitheatres, and garden features are examples of cultural infrastructure within parks that can create unique focal points by providing memorable features and iconic places.

Embedded in the City of Edmonton are existing public art policies to ensure that public art is acquired and displayed in public facilities and outdoor spaces. There are currently several public art installations within the river valley park system including murals, sculptures, paintings, and place markers. Anticipated to open to the public in 2018, Edmonton's Indigenous Art park, ∆òro (ÎNÎW) River Lot 11∞, will feature artistic concepts from six selected artists. The park is located within Queen Elizabeth Park in the North Saskatchewan River Valley. The Indigenous Art Park, and other public art installations can enhance landscapes with relevant and exciting art that invites people to meaningfully connect with their surrounding while enriching their park experiences.

It is important for Indigenous heritage and culture to be included in the design and management of both study areas. There are number of ways on how to incorporate Indigenous culture and heritage into the Ribbon of Green, including:

- > Toponymy (place names) within the Ribbon of Green should reflect local Indigenous communities
- > Cultural representation can be incorporated in the physical design of park amenities (for example, through public art, medicine gardens, fire pits, etc.)
- > Visual reflections of Indigenous culture and history should be integrated into built infrastructure such as buildings and bridges,

- Programming delivered through local Indigenous communities to share with the public aspects of Indigenous culture and heritage as it relates to the lands that are now Edmonton and the Ribbon of Green
- Creating spaces for traditional use, such as medicine gardens or for community gatherings such as powwows
- Resticting broader public access and protecting cherished features, such as natural occurrences of traditional medicine.

Further engagement with Indigenous communities should be carried out as detailed planning is completed to appropriately incorporate Indigenous culture and heritage in the implementation of the Ribbon of Green Plan.

The planning of heritage and cultural amenities must consider the support amenities currently in place. A large amphitheatre, for example, might not be appropriate for the undeveloped portions of the Ribbon of Green until other amenities such as parking, washrooms, and adjacent recreation spaces are provided. These spaces should also not detract from natural character of the river valley and ravines

Recreational Use of Natural Water Bodies

Lakes, rivers, and streams are popular recreation attractions. Fishing, canoeing, rowing, kayaking, swimming, paddle boarding, and other water-based activities are often complemented by access to adjacent trails and recreation areas.

Typically, water-based recreational activities are categorized as spontaneous activities as participation takes place whenever the participant chooses and registration is not required. As described earlier, recreation trends suggest that there is a stronger desire towards these types of activities versus organized, structured team activities. However, clubs and other groups, including the Edmonton Rowing Club and the Edmonton Dragon Boat Racing Club, fulfill a demand for structured water-based recreation opportunities within Edmonton.

Some river activities are reliant on the water's flow rate and depth. Although adjusting a river's depth and flow rate is not within the scope of a municipality's recreation and/ or parks department, it is beneficial to be aware of these recreation preferences. Ideal flow rates are subjective, depending on activity and level of skill. Expert kayak and canoe participants generally prefer flow rates over 45 cubic metre per second (m3/s). For leisure participants, swimming lessons, and children, a flow rate of 30 m3/s is considered ideal.

On average the North Saskatchewan River's flow rate in Edmonton varies from 175-300 m3/s in May to 160-250 m3/s at the beginning of September. Peak flow, on average varying between 250-550 m3/s, occurs between June and August. While these flow rates may too swift for swimming and other leisure activities, they are optimal for canoeing, kayaking and rafting.

EMERGING RECREATION PRACTICES AND PURSUITS

Information gathered during the first phase of public engagement indicates that traditional activities such as walking, hiking, and cycling are a priority for the undeveloped Ribbon of Green study areas. However, emerging and innovative recreation activities are often overlooked in the engagement process. While not all activities may be well-suited for both study areas, it is beneficial to consider them when developing conceptual park plans. Some of these ideas related to parks and open space are shared below.

Nature Playgrounds

Also referred to as discovery play gardens, outdoor play spaces, naturescapes, and playscapes, nature playgrounds are outdoor play areas with nature-based features. They are intended to connect people to nature while providing creative play options. Examples of nature playground features include boulders, sloped grassy areas, bushes, water features, logs, and tree forts.



WESTMORELAND NATURE-BASED PLAY AREA, PORTLAND OREGON¹⁹

Adventure Parks

Similar to nature parks, adventure parks, also known as aerial parks, combine natural elements with enhanced play structures to create a fun and adventure-packed environment. Typical features include ziplines and obstacle courses. The features can vary in difficulty, enticing youth and adults to play as well. To ensure safety, adventure playgrounds are often staffed, resulting in admission fees. These parks can be in flat and slope-based areas and typically use natural topography to create unique recreation experiences. An adventure park recently opened in the Whitemud Creek Ravine, north of Study Area 1, in Rainbow Valley Park.

Mountain Bike Parks

Participation in mountain biking is growing, and modern mountain bike parks are designed to appeal to every skill level with enough variety to offer something for every rider. More municipalities are recognizing that bike parks and trails not only provide local recreation opportunities



TREETOP ADVENTURE PARK, MOUNTAIN VIEW ARKANSAS²⁰

1º Green Works PC. "Westemoreland Nature-Based Play Area." Digital image. Green Works PC.
 2017. Accessed May 10, 2017. http://greenworkspc.com/
 2º Edmonds, Michelle. "Loco Rope." Digital image. Flickr. April 29, 2011. Accessed May 10, 2017. https://www.flickr.com/photos/locoropes/5686573987

and the added health benefits, but also bring significant tourism opportunities as the sport continues to draw new participants. When properly planned for enjoyment, access, maintenance, and regular improvements, bike parks provide attractive long term recreation opportunities.¹⁸ A mountain bike skills park has been proposed in the Queen Elizabeth Park Master Plan (2012).

Other Emerging Activities

New activities are constantly emerging and are being facilitated through a combination of multi-use and dedicated spaces. Whether it is entirely new activities (e.g. footgolf), activities introduced through immigration and new Canadians (e.g. cricket), or adapted traditional recreational activities (e.g. crokicurl), these activities require consideration. In some cases, accommodating an emerging sport or activity requires little effort, for example, grooming fat bike trails alongside cross-country ski trails. Other times, the development of a new, dedicated space is required.

Examples of emerging activities in Canada include:



MOUNTAIN BIKE PARKS²¹



KAYAK TOURS²²



CRICKET²³



KAYAK FISHING²⁴



SINGLE RAIL ROLLER COASTERS²⁷



NORDIC WALKING²⁵



CYCLOCROSS²⁸



FAT BIKING²⁶



GEOCACHING²⁹



PADDLE BOARDING³⁰



CROKICURL³³



VIA FERRATA³¹



FOOTGOLF³²

²⁰ International Mountain Bicycling Association Canada. (n.d.). IMBA Canada. Retrieved June 7, 2017, from Bike Parks and Flow Trails: http://www.imbacanada.com/resources/ freeridina

²¹ Avantidrome. "Gallagher Bike Skills Park." Digital image. National Cycling Centre of Excellence. 2017. Accessed June 7, 2017. http://avantidrome.co.nz/facilities/skills-park ²² Cricket Australia. "A young boy and young girl in action during a T20 Blast program." Digital image. Cricket ACT. 2016. Accessed May 10, 2017. http://www.cricketact.com.au/ news/cricket-act-endorses-revised-junior-formats-to-attract-australian-kids-to-cricket/ ²³Silenteye. "Guided Paddle." Digital image. The Haw River Canoe & Kayak Co. 2012. Accessed May 10, 2017. http://hawrivercanoe.com/guided-trips/

²⁴Gord Pyzer. Digital image. Outdoor Canada, Blue Ant Media Canada Network. 2012. Accessed May 10, 2017. http://www.outdoorcanada.ca/fishing-kayaks-for-seniors ²⁵Urban Poling. Digital image. Urban Poling. 2016. Accessed May 10, 2017. https:// urbanpoling.com/new-tool-for-active-rehab/

²⁶Winthrop Washington. Digital image. Winthrop Washington. Accessed May 10, 2017. http://winthropwashington.com/things-do/winter-recreation/fat/

²⁷Intrawest. "Ridge Runner Mountain Coaster." Digital image. Intrawest. 2017. Accessed May10,2017.https://www.bluemountain.ca/things-to-do/activities/ridge-runner-coaster ²⁸Cipullo, Anna. "BUYER'S GUIDE: 12 OF THE BEST 2015 CYCLOCROSS RACE BIKES." Digitalimage.BikesoupMagazine.Sept.23,2014.AccessedMay10,2017.https://magazine. bikesoup.com/buyers-guide-review-12-best-2015-cyclocross-race-bikes/ ²⁹Sault Ste. Marie. "Geocaching." Digital image. Sault Ste. Marie. 2017. Accessed May 10, 2017. http://www.saulttourism.com/what-to-do/attractions/listing.aspx?listing=171 ³⁰Sundance Paddlesport Adventures. "The Rogue is a Wonderful Place for Stand Up Paddleboarding!"Digitalimage.SundancePaddlesportAdventures.AccessedMay10,2017.

³¹Mountain Skills Academy & Adventures. "Squamish Via Ferrata Tour." Digital image. Mountain Skills Academy & Adventures. 2017. Accessed May 10, 2017. https://www. mountainskillsacademy.com/trips/squamish-via-ferrata-tour/

http://www.sundancekayak.com/stand-up-paddleboarding

³³Top Things 2 Do. "Junior Footee Footgold." Digital image. Top Things 2 Do. Accessed May 10, 2017. http://www.topthings2do.com/dublin/junior-footee-footgolf 33 Empson, Jaison. "Crokicurl combines crokinole and curling." Digital image. CBC News Manitoba.Jan28,2017.AccessedMay10,2017.http://www.cbc.ca/news/canada/manitoba/ crokicurl-winnipeg-kick-off-1.3956876

AGRICULTURAL-BASED RECREATION

Both Fresh - Edmonton's Food and Urban Agriculture Strategy and Edmonton's Municipal Development Plan identify the importance of a resilient food and agricultural system that contributes to the local economy and the overall cultural, financial, social and environmental sustainability of the city. Urban agriculture is an opportunity to increase the sustainability and quality of life of communities. When considering urban agriculture and food security for future Ribbon of Green study areas, it is important to look to these two documents for direction.

Productive farmland, with soil that has high organic matter content surrounds Edmonton. The Edmonton region, though, is at risk of losing top farmland to urban development at a rate three times as fast as the Calgary Region.³⁴

The Northeast Study Area contains, and is surrounded by active agriculture lands. Riverbend Gardens, within the study area, is a family run market garden and Native Healing Centre that is committed to ecological and socially responsible farm practices.

Considering the agriculture heritage and potential of the Northeast Study Area, there are opportunities to include agriculture-based recreation within the Ribbon of Green. This could be hosted through commercial small-scale farms that have a public education component, or partnerships with institutions or non-profit groups. An example of a successful agriculture partnership in Edmonton is the Green & Gold Community Garden at the University of Alberta. The organic garden is run by volunteers and is open to the public during twice-weekly markets, when the freshly picked produce is available for a donation based on fair market prices. All of the proceeds go towards supporting the Tubahumurize Association, a charity that empowers female victims of violence and marginalization in Rwanda.



GREEN & GOLD COMMUNITY GARDEN35

Another potential direction for the Northeast Study Area is the development of an Agricultural Park. Agricultural Parks, or AgParks, are becoming increasingly more common to protect viable farmland while enhancing publicly accessible open spaces. This type of park may be an appropriate approach to recreation planning in Study Area 2, which has a rich agricultural history and active agricultural uses. AgParks incorporate multiple uses that can accommodate small farms, public areas, and natural habitat. The parks have multiple benefits including providing small farmers access to farmland and local markets, fresh food, and educational, environmental, and aesthetic amenities for nearby communities.



RIVERBEND GARDENS³⁶

com/2013/08/11/river bend-gardens-has-opened-up-land-to-inner-city-agencies-to-provide-fresh-vegetables-work-together and the composition of the

³⁵Green & Gold Garden. Digital image. Green & Gold Community Garden. Accessed May 15, 2017. http://www.greengoldgarden.com/ ³⁶Riverbend Gardens. Digital image. Amber Bracken/Edmonton Sun/QMI Agency. 2013. Accessed May 15, 2017. http://www.edmontonsun.

Small-scale agriculture is the focus of AgParks, but they also play an important role in the provision of open spaces. SAGE, Sustainable Agriculture Education, based in California, has created an Urban Edge Agriculture Parks Toolkit (2005). It identifies components of an AgPark that should be in place to fulfill its role as a public amenity and to help maximize the integration of interpretive park elements with agricultural components for public education and enjoyment. They are:

- > Natural and landscaped areas for spontaneous recreation and quiet relaxation
- > Trails for walking, running, biking, and equestrian use
- > Connectivity with regional trail systems and wildlife corridors
- Agricultural components that are integrated in a park setting, enabling spontaneous public enjoyment of the farmscape

SAGE outlines park amenities that could be included in an AgPark, they include trails, picnic areas, seating and rest areas, interpretive programs, community gardens, demonstration areas, job training areas, and research or botanical gardens.

For the agricultural components of an AgPark, SAGE suggests involving the public through tours, classes, summer camps, community celebrations, apprenticeships/



AGRICULTURAL HISTORY FARM PARK -MONTGOMERY COUNTY MD37

internships, and an AgPark Café and community kitchen. Viable farms make for a successful AgPark. Agriculture supporting services may take the form of farmer incubator programs, continuing farmer training and technical support, business planning, and capitalization.

The success of an AgPark often depends on partnerships between the municipality, landowners, farmers, and institutions or organizations involved in educational, horticultural, nutritional, environmental, agricultural and cultural programs. Community partners can offer classes or outreach programs, participate as a tenant, or coordinate an entire component of an AgPark.

The following are examples of parks and open spaces that have significant agriculture components. They offer best practices and lessons for planning and implementing destination amenity nodes within the Ribbon of Green study areas.

Agricultural History Farm Park -**Montgomery County Maryland**

This 455-acre public park features rolling hills, open fields, an apple orchard, and a variety of farm animals. The public can learn about the county's farming heritage while visiting barns, historic buildings, and a contemporary farming activity centre. Friends of the Agricultural History Farm Park, a non-profit organization, offers programs and provide demonstrations on historical farm life and agriculture. The University of Maryland offers a variety of plant-related programs and maintains a demonstration garden.

Other park features include:

- > Seven and a half kilometres of natural surface hiking and horseback trails
- > Drinking water and restrooms for trail users at the Activity Centre
- Vehicle and horse trailer parking
- Educational programs
- Historic barn
- Farmhouse tours
- Apple orchard

Programs and events:

- > Little Farmers' Story Time
- > Music on the Farm
- > Gas & Steam Engine Show
- > Montgomery County Heritage Days
- > Bluegrass on the Farm
- Harvest Festival
- > Blacksmiths & Friends Traditional Arts Show

Rouge National Urban Park - Ontario

Once fully realized, Rouge National Urban Park will a 79.1 sq. km national park on the eastern edge of Toronto. The area has a tradition of farming that dates beyond the first European settlers to First Nations settlements. This agricultural heritage is a key part of the vision for the park. Rouge's Draft Management Plan calls for:

- A long-term future for the park's farming community that will result in agriculturally-based experiences for visitors, as well as more economic opportunities and locally-based food production
- The creation of a "learn to" park to introduce new, urban, and young Canadians to nature, culture, and agriculture in a classroom without walls, that includes activities such as guided hikes, camping, farm visits, workshops, seminars, and conservation camps
- Facilitating diversified farming and agritourism opportunities through community-based agricultural models, including incubator programs, communityshared agriculture, and community gardens

Exmoor National Park - U.K.

Designated a National Park in 1954, Exmoor covers an area of 693 sq. km. and has a population of 10,650 in small villages and hamlets. Agriculture and related services cover 83% of the park. Park management seeks to support the continuation of traditional farming practices through a system of management agreements and financial grants. Planning policies will guide appropriate development within the park, in the right locations, that enhance the character and appearance of the National Park. Public activities within the park include:

- > Hiking
- Road cycling
- > Horse riding
- > Fishing
- Mountain biking
- > Canoeing and kayaking
- Stargazing
- Game shooting



ROUGE NATIONAL URBAN PARK - ONTARIO38



EXMOOR NATIONAL PARK - U.K.39

³⁷Agri Food hub. Digital image. Agri Food hub. Accessed May 10, 2017. https://agrifoodhub.org/ ³⁸Exmoor National Park. "Farmland Porlock Vale." Digital image. Exmoor National Park. Accessed May 10, 2017. http://www.exmoor-nationalpark.gov.uk/Whats-Special/landscape

NATURE EDUCATION AND **ECOLOGY RECREATION**

People can connect with nature through nature-based educational programs and interpretive features. Interpretive features along a hiking trail, for example, provide an enhanced experience to trail users.

Examples of nature education and interpretive features include:

- > Interpretative signage
- Bird watching
- > Facilitated nature walks
- Geocaching/scavenger hunts
- Nature centres
- School field trips
- Workshops
- Amphitheatre performances/lectures

The following are examples of parks and open spaces that have significant nature education and ecology components. They offer best practices and lessons for planning and implementing destination amenity nodes within the Ribbon of Green study areas.

Fort Whyte Alive - Winnipeg MB

Fort Whyte Alive is an environmental, education and recreation centre situated on a reclaimed clay mine and cement factory. Managed and operated by a non-profit charitable organization, Fort Whyte Alive contains 640 acres of lakes, prairies, forests, wetlands, and a 70-acre bison paddock. Public programs are designed to inspire visitors of all ages to appreciate nature through workshops and recreational activities offered throughout the year. As well, the Fort Whyte Farms initiative provides disadvantaged youth with urban agriculture-based, social and vocation skills training.

Features of Fort Whyte Alive include:

- > Nine kilometres of interpretive nature trails, a family treehouse, and floating boardwalks
- Year-round fishing
- Canoeing and hiking



⁴⁰Jarvis, Dennis. "ONTARIO-00344 - Evergreen Brick Works." Digital image. Flickr. July 14, 2014. Accessed May 10, 2017. https://www.flickr.com/photos/archer10/14840800154



FORT WHYTE ALIVE - WINNIPEG MB39

- › Bird watching
- Bison safaris
- An interpretive centre with a nature shop, café, aquarium, and exhibits
- Curriculum-based educational programs
- Winter, summer, and spring break day camps

Evergreen Brickworks - Toronto ON

Built on a former quarry and industrial site adjacent to the Don River in Toronto, Evergreen Brickworks transformed a series of rehabilitated heritage buildings and a remediated quarry park into a showcase for green design and urban sustainability. Operated by the Evergreen non-profit charity organization, Brickworks engages visitors through workshops, community festivals, and education programs.

Managed by Toronto Parks, Forestry, and Recreation, the Don Valley Brickworks Park is a 40-acre remediated park with ponds and trails in what was a clay and shale quarry.



EVERGREEN BRICKWORKS - TORONTO ON⁴⁰

A series of filtration ponds were constructed within the former brick quarry to create natural ponds that control and remediate urban storm water flowing towards the Don River, while generating a naturalized landscape in the process. Slopes were re-vegetated with native species.

Features of Evergreen Brickworks include:

- > Children's, native plants, and edible plants garden
- > Café, garden centre and market
- Bike Works a community bike space that offers DIY bike repair services, workshops, and events
- > Farmers market
- > Street food market and other pop-up markets
- > Climbing tower and lookout points

Helen Schuler Nature Centre - Lethbridge AB

The Helen Schuler Nature Centre is an environmental education centre operated by the City of Lethbridge and located in the Lethbridge Nature Reserve. The Centre receives more than 30,000 visitors each year who interact with exhibits, participate in programs, or walk the trails in the Nature Reserve. Opened in 1982, the Nature Centre was expanded in 2014 to include additional meeting space, enlarged galleries, a fully accessible green roof, and sustainable building features. Outdoor classroom programs and tours are offered during the school year, and are complimented by kids camps and programming during the summer.

The Lethbridge Nature Reserve is a nature preservation area where bikes and dogs are not permitted (unless passing through on paved paths). Self-guided walking trails highlight the unique natural features of the park.

Features of the Helen Schuler Nature Centre include

- > Exhibits
- › Kid's programs
- > School programs
- Interpretative trails through the Lethbridge Nature Reserve
- > Community facility rentals



EVERGREEN BRICKWORKS - TORONTO ON⁴¹



HELEN SCHULER NATURE CENTRE - LETHBRIDGE AB42



HELEN SCHULER NATURE CENTRE — LETHBRIDGE AB43

⁴¹Rac, Michael. Digital image. O2 Planning + Design

⁴² Digital image. O2 Planning + Design

⁴³Helen Schuler Nature Centre. Digital image. Group2 Architecture and Interior Design. Accessed June 15, 2017. http://www.group2.ca/projects/municipal/helen-schuler-nature-centre/

CULTURE AND HERITAGE RECREATION

The following are examples of parks and open spaces that have significant cultural and heritage components. These spaces offer lessons for planning and implementing destination amenity nodes within the two Ribbon of Green study areas.

Wanuskewin Heritage Park — Saskatoon SK

This major First Nations culture heritage park, immediately north of Saskatoon, is of national significance. Care has been devoted to ensuring that its development presents an appropriate cultural and environmental image, in conjunction with a strong visitor experience. The park offers an excellent example of combining First Nations culture and heritage, with tourism, public education and recreation.

Officially opened in 1993, the Wanuskewin Heritage Park is managed by the Wanuskewin Heritage Park Authority, a non-for-profit organization governed by a Board of Directors consisting of both Aboriginal and non-Aboriginal members. The 136-hectare park includes a thematic

entrance, an amphitheatre, an activity area, an extensive trail network including creek crossings, various interpretive stations, site exhibits including a Medicine Wheel, and a major interpretive/administration centre. The Heritage Park shares the stories and lifestyles of the First Nations people who have gathered at this meeting place for over 6,000 years, through hands-on demonstrations, traditional cuisine, art galleries, indoor and outdoor activities and overnight Tipi wilderness camps.

Features include:

- > Interpretive/administration centre with exhibitions, galleries, and a restaurant
- > Amphitheatre
- Trail network with interpretive elements
- Medicine Wheel
- Summer day camps
- > School programs



WANUSKEWIN HERITAGE PARK - SASKATOON SK44

⁴⁴Wanuskewin Heritage Park. Digital image. Aboriginal Canada. Accessed June 15, 2017. https://aboriginalcanada.ca/en/things-to-do/wanuskewin-heritage-park/

Upper Fort Gary Provincial Park — Winnipeg MB

Reopened to the public in 2015 after an extensive renovation, this National Historic Site is situated in the central Winnipeg on the site of the former Hudson's Bay Company trading post, Upper Fort Gary. This small Provincial park defines a new model for the interpretation of historic landscapes in urban settings. Building off an existing stone wall and gate (1853), the new park overlays actual and estimated building locations from historic records to create a pattern of landscaping and park amenities. Limestone slabs are located at former building locations and the surrounding gardens to represent the building functions.

The park also includes a dramatic 400-foot steel wall inscribed with graphics, speakers and digital lights that will showcase community-based programming and content. A smart phone app uses geo-location allowing visitors to pinpoint their location within the park and identify nearby points of interest. A future interpretive centre will provide space for visitors to learn about the National Historic Site.

Features include:

- > Interpretive garden with seating and event space
- > Stone wall and gate constructed in 1853
- Heritage wall with lighting, sound and programmable features



UPPER FORT GARY PROVINCIAL PARK - WINNIPEG MB⁴⁵

⁴⁵Upper Fort Gary Provincial Park. Digital image. Friends of Upper Fort Gary. Accessed June 15, 2017.

RIBBON OF GREEN RECREATION SWOC ASSESSMENT

Purpose of this section:

> To present the strengths, weaknesses, opportunities, and challenges for recreational use in the Ribbon of Green study areas.

Section Summary:

- > Six key amenity/activity recommendations have been provided for future amenity nodes in the southwest and northeast study areas. These include trails, support amenities, water-based activities, day-use sites and natural areas, and programmed areas.
- > The southwest study area has potential for maximizing its natural features through a variety of spontaneous recreational activities and interpretive opportunities.
- > The northeast study area contains current and former industrial uses, as well as undeveloped, large, flat, and fertile land, making it more appropriate for agricultural-based recreational activities as well as family and programmable uses.

The research information outlined within this document has been considered in the development of a recreation Strengths, Weaknesses, Opportunities, and Challenges (SWOC) assessment for the Ribbon of Green. This SWOC assessment provides a recreation context for the entire Ribbon of Green, while also providing more detail in terms of recommended recreational pursuits and amenities for the two study areas.

Strengths, weaknesses, challenges, and opportunities for the entire Ribbon of Green

Strengths

- > Contiguous natural area and/or parkland
- > Large natural area within an urban environment
- > Regional asset
- > High number of users and activities in the central core
- > High levels of resident satisfaction with and pride in the river valley and ravines

Weaknesses

- > Intermittent access to the water and water-based activities
- > Ongoing deterioration of existing infrastructure
- > Lack of support amenities in some areas
- > Intermittent access to the top-of-bank
- > Intermittent trail connectivity

Opportunities

- > Improve access to water and water-based activities
- > Improve trail/pathway connectivity
- > Diversification of recreational activities (introduction of emerging activities)
- > Increase programming based on natural features
- > Explore regional and third-party partnership opportunities

Challenges

- > Land ownership
- Maintaining ecological integrity
- > Potential recreation user conflicts
- > Operating costs and resource commitments

Strengths, weaknesses, challenges, and opportunities for the Study Area 1: Southwest

Strengths

- > Existing recreational use in some areas, such as Oleskiw River Valley Park
- > Several natural areas that are largely unaltered by development, and include riparian wetlands, river back channels, natural springs, and wooded ravines that are important habitat for terrestrial and aquatic species

Weaknesses

- > Lack of large, flat areas
- > Limited support amenities
- > Lack of vehicle access points and parking

Opportunities

- > Improved access to natural/interpretive areas
- > Adjacent population growth
- > Introduction of slope, water and nature-based activities
- > Regional partnerships

Challenges

- > Land ownership
- > River crossing
- > Protection of environmentally sensitive areas
- > Long-term population build-out (timing of development)
- > Alignment of concept planning with area structure planning and neighbourhood planning (e.g. top of bank access, staging areas)

Strengths, weaknesses, challenges, and opportunities for the Study Area 2: Northeast

Strengths

- > Existence of large, flat areas
- > Productive agricultural lands within or adjacent to the
- > Adjacent trail connectivity within the city and region

Weaknesses

- > Limited recreation access
- > Lack of natural areas (lands are primarily semi-natural cover)
- > Lack of support amenities

Opportunities

- > Adjacent population growth
- > Agriculture-based recreational activities
- Regional and third-party partnership opportunities
- Reclaim industrial sites as part of closure plans

Challenges

- > Land ownership
- > River crossing
- > Protection of farmland

STUDY AREA RECREATION CONSIDERATIONS

The introduction of the following six recreation infrastructure amenity themes are suggested based on a recreation assessment of the Southwest and Northeast Study Areas. They are informed through both Ribbon of Green and BREATHE public engagement, as well as from best practices.

It is important to note that the River valley Alliance Plan of Action (2017-2022) outlines several recreation-related projects and initiatives throughout the entire North Saskatchewan River Valley. The following activities and supporting spatial considerations are generally consistent with the intentions of the River Valley Alliance.

- Enhancements and expansion to the pathway and trails system
- Supplementing existing and new recreation spaces with support amenities
- Increasing the number of river access points and unstructured shore sites
- Developing spontaneous recreation areas including day-use sites and designated natural areas
- 5. Developing active-use sites

PATHWAYS AND TRAILS

Consideration #1: Enhance and expand the pathway and trails system

Areas of Focus

- Develop new trails and pathways
- Connect the river valley and ravines with other parks and residential neighbourhoods
- Increase wayfinding signage at trailheads and trail intersections, and create an online portal
- > Increase interpretive signage
- Work with community groups and organizations to plan, develop, and maintain specialized trails (e.g. cross-country ski and mountain bike trails)
- > Whenever feasible pathways should be constructed

- using universal design principles
- Trails and pathways should be constructed using sustainable trail design to increase longevity, reduce required maintenance, and mitigate negative impacts on surrounding natural areas

Potential Activities Supported

- Walking
- Running
- → Hiking
- > Bicycling
- Skateboarding and long boarding
- Mountain biking
- Fat biking
- > Cross-country skiing
- Snowshoeing
- > Nordic walking

Potential Location Considerations

- > Important for inclusion in both new study areas
- Create pedestrian and cyclist river crossings at existing and future bridges
- Connections between parks, recreation infrastructure, and support amenities are important
- > Locate nature trails in natural or re-naturalized areas

SUPPORT AMENITIES

Consideration #2: Supplement existing and new recreation spaces with support amenities

Areas of Focus

- Identify and develop support amenities in locations of high utilization and future growth areas
- High-priority support amenities could include public washrooms, staging areas (e.g. parking, trailheads), seating areas, garbage and recycling receptacles, lighting, winter pavilions/warming huts, and safety features (e.g. Blue Emergency Phones) utilizing universal design principles where possible.

 Consider non-traditional amenities that would encourage new or previously marginalized user groups

Potential Activities Supported

- > Spontaneous activities
- > Stru
- > ctured activities
- > Programmable areas

Potential Location Considerations

- > Important for inclusion in both new study areas
- Ideally located on flat top-of-bank areas or near amenity nodes
- Ideally located in previously disturbed areas and avoid environmentally-sensitive areas
- > Intermittently located along trails and pathways
- > Can be co-located with river or creek crossing points
- > Adjacency to expected population growth areas

RIVER ACCESS

Consideration #3: Increase the number of river access points and unstructured shore sites

Areas of Focus

- Future Ribbon of Green policies should adhere to Edmonton's River Access Guiding Principles
 Policy C586
- Whenever feasible, ensure public access to the river and riverside infrastructure remains as public domain
- Develop recreation spaces near the shore for spontaneous use
- > Develop additional non-motorized watercraft launches
- Educate and engage Edmontonians to build lifelong skills, as well as awareness and appreciation of the river and its natural surroundings in order to nurture stewardship of a valued resource
- Foster collaboration and partnerships so that infrastructure and facilities are shared and programming is coordinated
- Provide and support a range of river recreation opportunities to enhance Edmonton's unique quality of life
- > Celebrate the cultural, historical and social role of the

- river in our city to build awareness and appreciation of the river
- River access amenity nodes should include washrooms as well as parking that can accommodate boat trailers
- Signage at launches should inform the public of river routes, distance to other access points, and safety concerns
- > The City is currently developing a 10-year River Access Strategy that will inform future programming, operations and infrastructure improvements related to access and activities associated with the river by defining locations, regulations and user guidelines for development of river-based amenities

Potential Activities Supported

- Rowing
- Kayaking
- Canoeing
- > Paddleboarding
- > Rafting
- > Spontaneous activities
- Motorized boating

Potential Location Considerations

- Placement of future watercraft launches should consider maximizing seasonal use and minimizing potential environmental impacts
- Bank stability, river current, and sedimentation should also be considered when siting watercraft launches
- > Important for inclusion in both new study areas
- Adjacency to expected population growth areas
- Adjacency to staging areas and other support amenities (including trailer parking)
- Docks should be kept as low to the water as possible to assist with launching and docking, be constructed of non-slip materials, and float so that they can adjust to changing water levels
- When access to the river requires traversing a steep slope, a ramp is preferred over stairs, while a handrail should be installed to lend extra support
- Docks should be present at amenity nodes, but can also be placed along trails and pathways
- Accessible canoe and kayak docks should be installed at existing and future launches, which use ramps, handrails, grab bars, and rollers to assist those with mobility challenges

UNSTRUCTURED AREAS

Consideration #4: Provide spontaneous recreation opportunities such as day-use sites and designated natural areas

Areas of Focus

- > Develop new picnic and seating areas
- > Enhance staging areas near unstructured green/ open spaces
- > Consider creation of new parking areas where appropriate
- > Determine which natural areas are suitable for lowimpact recreational uses such as hiking
- > Facilitate educational and interpretive recreation opportunities through signage and programming
- > Depending on anticipated or actual level of use, support amenities such as washrooms and picnic shelters are required

Potential Activities Supported

- Walking and jogging
- > Hiking and nature walks
- Wildlife viewing and bird watching
- > Painting
- > Photography
- > Cross country skiing and snowshoeing
- > Rustic picnic areas
- > Fishing
- > Canoeing, kayaking and other non-motorized boating
- > Horseback riding (conditionally permissible)
- Bicycling (conditionally permissible)

Potential Location Considerations

- > Important for inclusion in both new study areas
- > Adjacency to expected population growth areas
- > Characteristics in the southwest study area are particularly appropriate for nature interpretation
- > Should be near, or connected to, staging areas and other amenity nodes
- > River or creek access is important but not necessary

PROGRAMMABLE AREAS

Consideration #5: Develop programmable areas

Areas of Focus

- > Identify large, flat areas
- Support future programming (e.g. amphitheatres)
- Support unique experiences (e.g. mountain bike parks)
- Develop nature playgrounds
- Develop a framework for creating AgParks
- Washrooms, changerooms and drinking fountains should be provided

Potential Activities Supported

- Multi-purpose fields
- > Playgrounds and play areas
- Golf courses
- Marinas
- Skating rinks
- Outdoor event space
- > Bicycling, and mountain bike parks
- Horseback riding
- Traditional ceremonial use

Potential Location Considerations

- > Ideally located on flat areas near staging areas or located in previously disturbed areas
- > Characteristics of the northeast study area are more appropriate for agricultural-based activities
- > Adjacency to river or creek access is important, but not necessary
- > The creation of a culture and nature focused camping area in the Southwest Study Area (for Indigenous use). Potential locations should be in natural areas, with clean undisturbed soil, minimal tree clearing and withe emergency access. Further engagement with Indigenous communities to identify specific locations is required.
- > Apply Gender Based Analysis Plus and Intercultural perspectives as plans are developed.

SOUTHWEST STUDY AREA

Although this area already has some established recreation spaces, additional recreation opportunities will be needed to accommodate population growth in the adjacent neighbourhoods over the next few decades. Compared to the northeast study area, the southwest study area has a greater variety of land cover, steeper slopes, and both the Whitemud Creek and Blackmud Creek Ravines. This study area has potential for maximizing its natural features for both environmentally-sensitive recreation and interpretive use.

Spontaneous recreation and play activities are ideal for the southwest study area, especially when introduced in the existing natural areas. Infrastructure to encourage spontaneous play includes the possibility of nature playgrounds, adventure parks, trails and pathways, interpretive natural areas, and interpretive trails. Ideally, greater access to the North Saskatchewan River would allow for kayaking, canoeing, and rowing, although available land and slope constraints will limit the size and scope of staging area and potential locations.

The following map outlines potential areas for each of the six recreation amenity considerations: pathways and trails, support amenities, river access, unstructured areas, and programmable areas.

Areas shown on the map that have clusters of active day use areas, day use areas, support amenities, and nature interpretive trails areas are appropriate for destination amenity nodes. The development of high-level concept design and programming plans for these nodes should be addressed though further public and stakeholder engagement.



OLESKIW RIVER VALLEY PARK⁴⁶



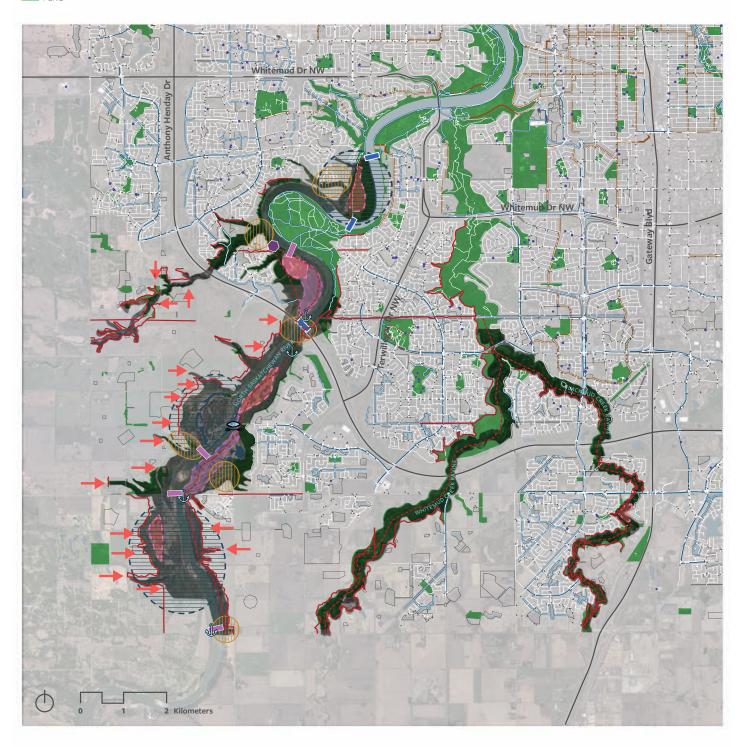
WHITEMUD RAVINE47

SOUTHWEST: STUDY AREA 1

- Active Use Areas
- Day Use Areas
- Support Amenities
- Nature Interpretive Trails Area
- Existing Bridge / River Crossing
- Proprosed River Valley Alliance Bridge / River Crossing
- Parks

- --- Planned Trails
- ---- Potential Trail Linkages
- --- Pedestrian Pathways
- Bike Routes (Off Street)
- Bike Routes (On Street)
- Major Roads

- Top of Bank Access
- ← Potential Access (Identified through ASPs/NSPs)
- Bus Stops
- Recreational Facilities
- River Access Locations
- Proprosed River Valley Alliance Hand Launch



NORTHEAST STUDY AREA

The northeast study area is primarily undeveloped in terms of public spaces, which provides multiple recreation opportunities. The population near the west bank of the North Saskatchewan River is projected to grow rapidly over the next few decades and additional recreation spaces will be needed. To make best use of the land, active use and agriculture-related recreational activities should be the primary focus. The large, flat areas can be used for active-use development, while the agricultural heritage of the area can be capitalized on through the development of an AgPark.

Active-use activities that could be introduced in the northeast study area include multi-use fields, a campground, festival sites, and an ecology park. These active use areas have the potential to become large park sites with staging areas that may also accommodate access to the river.

Trails and pathway activities (e.g. walking, running, bicycling, cross-country skiing) could be developed and connected to future residential neighbourhoods as well as other regional municipalities. There is a limited amount of sloped space, but still enough to consider hiking and dedicated mountain bike trails in certain areas.

A recreation and ecology park with constructed wetlands, trails, and an interpretive centre could be developed in former industrial areas as way to catalyze restoration projects.

The following map outlines potential areas for each of the six recreation amenity considerations: pathways and trails, support amenities, river access, unstructured areas, and programmable areas.

Areas shown on the map that have clusters of active day use areas, day use areas, support amenities, and nature interpretive trails areas are appropriate for destination amenity nodes. The development of high-level concept design and programming plans for these nodes should be addressed though further public and stakeholder engagement.



SOUTH STURGEON PARK⁴⁸



RIVERBEND GARDENS⁴⁹

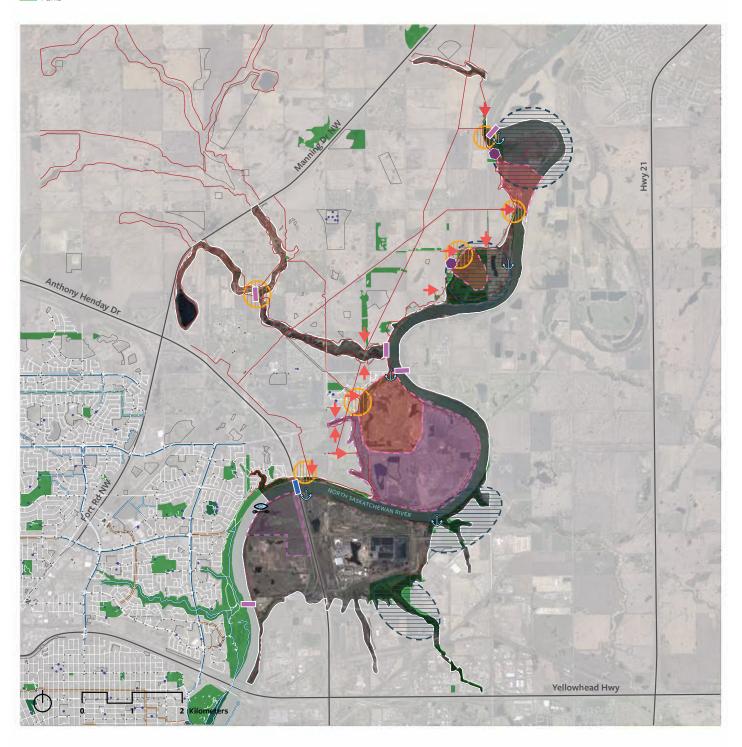
⁴⁸Rac, Michael. "South Sturgeon." Digital image. O2 Planning + Design. ⁴⁹Male, Mack. "Riverbend Gardens." Digital image. Flickr. Accessed May 10, 2017. https://www.flickr.com/search/?l=commderiv&g=riverbend%20gardens

NORTHEAST: STUDY AREA 2

- Active Use Areas
- Day Use Areas
- Support Amenities
- Nature Interpretive Trails Area
- Existing Bridge / River Crossing
- Proprosed River Valley Alliance Bridge / River Crossing
- Parks

- --- Planned Trails
- ---- Potential Trail Linkages
- --- Pedestrian Pathways
- Bike Routes (Off Street)
- Bike Routes (On Street)
- Major Roads

- Top of Bank Access
- ← Potential Access (Identified through ASPs/NSPs)
- Bus Stops
- Recreational Facilities
- River Access Locations
- Proprosed River Valley Alliance Boat Launch



SUMMARY

Edmonton's Ribbon of Green, in its current and future form, will remain a key recreation amenity for residents and visitors and a defining asset for the City and Edmonton Region. When contemplating the future of the southwest and northeast study areas, the appropriate recreational use in each area will be defined by the sites natural features, topography, cultural and historical elements, as well as the wishes and needs of residents. The following points summarize key findings related to the exploration of these considerations.

Recreation throughout the Ribbon of Green

- Edmonton's North Saskatchewan River and Ravine
 System is home to a variety of recreation places, spaces
 and activities
- Current river valley and ravine activities tend to be spontaneous and interpretive, such as trail-based, water-based, and day-use activities, as opposed to active, structured activities such as team sports
- Residents currently use the River Valley and Ravine
 System to connect with nature and to relax
- Trees, trails, and pathways are the most important features of open space as per public engagement findings
- Support amenities such as washrooms, seating areas, shade structures, and lighting are highly valued by residents
- > Connectivity between recreation areas within, and beyond the study areas is important
- There will be a need for additional recreation spaces within the study areas as the population increases in adjacent neighbourhoods

Recreation Planning Influences

- More Albertans participate in spontaneous activities than structured group activities; reiterating the importance of providing unstructured recreation amenities and infrastructure
- Physical activity levels among Canadians are low; providing areas for residents to be active is important
- Emerging recreation practices and pursuits seek to maximize the benefit of natural and outdoor spaces
- > Spontaneous recreation opportunities provided in the

- river valley and ravines have fewer barriers to participation than other recreational pursuits, such as fee-based programming
- There is a need to provide enhanced opportunities for residents to connect with nature
- River valley and ravine trails form part of the city's current and future active transportation network
- The River Valley Alliance's plans and projects for recreation amenities and features must be considered when contemplating future recreational use of the Ribbon of Green
- New and diverse recreational activities are constantly emerging; programming recreational spaces to be multi-use and flexible is key to meeting current and future needs and demands
- Agricultural-based recreation is becoming more popular, including agricultural interpretive opportunities, food production, and animal-related pursuits

Considerations for Recreation in the Northeast and Southwest Ribbon of Green Study Areas

- > Five key amenity/activity recommendations have been provided for the southwest and northeast study areas. These include trails, support amenities, water-based activities, day-use sites and natural areas, and active-use areas
- The southwest study area has the potential for maximizing natural features through a variety of spontaneous recreational activities and nature interpretive opportunities
- The northeast study area is primarily undeveloped but has a long industrial and agricultural history. The large, flat, and productive agricultural lands make it more appropriate for active-use sites and agricultural parks

Addressing Barriers throughout the Ribbon of Green

Edmonton's Ribbon of Green will address several internal and external barriers that will contribute to improving the quality of life for residents. Internally, individuals on a daily basis cope with sustaining a work-life balance, physical and mental health issues, finding motivation and managing time. By offering a variety of activities that appeal to a cross-section of Edmontonians, the Ribbon of Green will promote its use throughout the River Valley, and inform individuals on how to incorporate them into their schedule. The nature of the activity opportunities have several mental and physical

health benefits to individuals. Additionally, by addressing accessibility, the River Valley will ensure that it is welcoming to a variety of physical abilities. The presence of natural wilderness within and through the city is convenient and motivating for people to access the nature within minutes of their homes.

Externally, Edmonton's Ribbon of Green addresses barriers such as cost, active transportation and available facilities. Except for potential city-wide activities and programs, the River Valley is a free of cost recreation area that allows people of all backgrounds to enjoy. It's designs are such that the River Valley is well connected to the active transportation network throughout the city. Through policies and concept plans, the location and availability of facilities will be strategically placed on and in close proximity to the Ribbon of Green. Additionally, programs will be schedule throughout the day, weeks and months to ensure use of the River Valley throughout the year. The Ribbon of Green's working and active landscapes will therefore contribute to reducing and managing the identified barriers to participation, use and ease of access both internally and externally.

Contributions to the Ribbon of Green Plan

The research presented within this assessment outlines a course of action related to recreation programming in the two Ribbon of Green study areas, and is meant to be used in conjunction with the Ribbon of Green's Historic Resources Overview (Cultural Assessment) and Ecological Resources Overview (Ecological Assessment). The recommendations build on the success of the developed Ribbon of Green core and are influenced by public engagement and best practices. These ideas and concepts will be tested and refined through further engagement processes. This feedback will be used to develop high-level concept plans for the Ribbon of Green Plan.