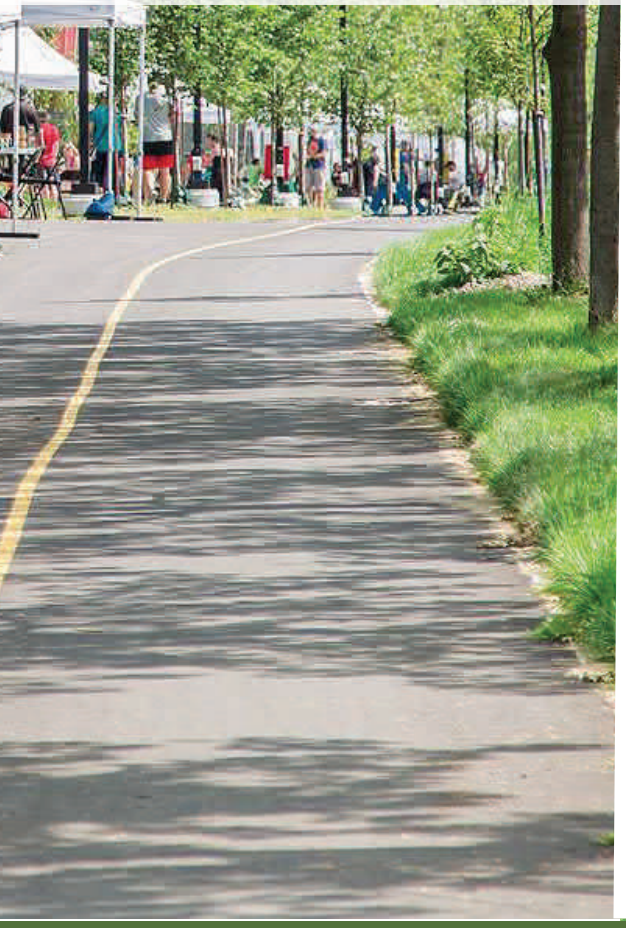




City of Waterloo Parkland Strategy

Draft Parkland Strategy Report

May 2021





DILLON CONSULTING

In association with:
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THE CITY OF Waterloo

Acknowledgements

We acknowledge that the land on which the City of Waterloo is situated is the land traditionally used by the Haudenosaunee, Anishnaabe and Neutral People. We also acknowledge the enduring presence and deep traditional knowledge and philosophies of the Indigenous People with whom we share this land today.

Table of Contents

EXECUTIVE SUMMARY i

1 FOUNDATION OF THE PARKLAND STRATEGY 1

1.1 Background to the Study 1

1.2 Alignment to the Strategic Plan 2

1.3 Community Profile & Growth Forecast 4

1.4 Benefits of Parks and Open Space 6

1.5 Community Interests and Ideas 9

2 PARKS STRATEGIC PLAN & POLICY FRAMEWORK 12

2.1 Accessibility, Equity and Inclusion 12

2.2 Acquisition and Expansion of Parkland 16

2.3 Effects of Bill 108, More Homes, More Choices Act, and Bill 197, COVID-19 Economic Recovery Act 32

2.4 Park Development / Redevelopment 34

2.5 Park Amenities 43

2.6 Trails, Pathways and Wayfinding 62

2.7 Climate Change Resiliency 64

2.8 Natural Areas 65

3 PARKS SERVICES PLAN 71

3.1 Organizational Structure and Staffing 71

3.2 Parks Service Standards and Systems 74

3.3 Urban Forest Management 82

3.4 Application of Rates & Fees for Selected Park Services 86

3.5 Cemeteries 88

3.6 Community Involvement / Partnerships 89

4 IMPLEMENTATION PLAN 93

List of Figures

Figure 1: Existing Parks and Open Space System 21

List of Tables

Table 1: Official Plan Table 10-1 – Municipal Parkland Classification System 18
Table 2: Example of Parks and Open Space Classification System for Waterloo 24
Table 3: Example of High Level Service Standard Template for General Parks Maintenance 76
Table 4: Recommendations for Implementation 94

Executive Summary

Why a Parkland Strategy?

The City of Waterloo parkland strategy is a comprehensive document that establishes the vision, goals and actions to guide decision making for city managed parks and open spaces for the next 10-15 years. With over 407 hectares in 134 parks including city, community and local serving parks, they are a significant part of the city's managed assets. Although highly valued by the community, a number of Waterloo's park amenities are aging and face significant and costly improvements. As well, there are new challenges in service delivery in response to intensification and redevelopment, leisure trends, forecasted population growth and changing demographics. The parkland strategy will help guide decision-making, policies related to parkland acquisition, development and use, and inform capital budget allocation.

Study Process

The Parkland Strategy was completed in three stages which are described in the sections below.



Public Engagement

Consultation with residents, volunteers, elected officials and city staff is critical to understanding the types of activities that are happening in Waterloo's parks and open spaces, levels of satisfaction with existing parks and services, and ideas and suggestions for future improvements and enhancements. The engagement process undertaken for the parkland strategy included staff and council interviews, an online survey and interactive map, pop-up displays, a park user intercept survey and public open houses. Detailed feedback can be found in the stage one Public & Stakeholder Engagement report. Input from the parkland strategy engagement process, as well as feedback obtained from the 2018 neighbourhood strategy contributed to the study direction and an initial vision for parks.

Research, Analysis & Visioning

In addition to the preliminary public and stakeholder engagement, the consultant team completed research and analysis activities, which assessed and summarized the existing state of parks services in Waterloo in relation to acquisition and development, community use patterns,

maintenance and operational procedures, and funding programs. Key findings have been summarized in this strategy and the stage one and stage two reports are important companion documents. The outcome was the preparation of a research, analysis and visioning report (June 2019) which included:

- parkland inventory compilation and mapping;
- review of parkland policies and other related reports;
- population forecasts and socio-demographic analysis;
- trends and benchmarking research;
- parkland and amenities needs assessment; and,
- Identifying key issues and opportunities in the planning and delivery of parks services.

Parkland Strategy

The parkland strategy was informed by the public engagement and the findings of the research, analysis and visioning report. The recommendations include provision standards for parks and outdoor amenities, parks operations and staffing needs, parkland acquisition, maintenance, park development. The Financial Plan is an adjunct document that supports the phasing of implementation and will be brought to Council separately for consideration.

Vision & Goals

The vision and goals for Waterloo's park system were prepared to support and inform the guiding principles and strategic goals and align with the objectives of the City of Waterloo strategic plan, and the insight obtained through the engagement process.

Goals

- Ensure equitable and inclusive access to parks, and their associated facilities, services, and experiences, for residents of all cultures, genders, incomes, ages and abilities.
- Ensure parks and their associated facilities feel welcoming to Indigenous communities and support the hosting of ceremonies, events and gatherings.
- Support residents' needs and interests through customer focused services.
- Connect people and nature through appropriate and sustainable use of natural areas.

- Provide a range of amenities, infrastructure and programs to allow organized and informal activities throughout the seasons.
- Provide visitor comfort amenities in parks to encourage use and extend length of stay.
- Ensure that all parks, trails and facilities are well maintained and sustainable.
- Ensure a safe environment for users.

Vision Statement

Waterloo's park system contributes to the city's overall sustainability and reputation as a green, diverse city and creates lasting and memorable experiences for both residents and visitors - making Waterloo a welcoming place to live, work, learn and play.

- Incorporate innovative and interactive multi-season activation elements in the design and programming of parks and urban spaces.
- Provide for future adaptation to change, including climate change resiliency.
- Ensure effective communication, engagement, and ease of access to information about natural systems, parks, recreation services and amenities.

How to Read this Document

The report is organized into four sections, the first presents the study foundations that have informed the strategy including alignment with the City of Waterloo strategic plan and other master plans, district plans, area specific strategies and policies. The 2019 strategic plan established six pillars that reflect the goals and priorities of the city. The parkland strategy responds by aligning with the overarching goals that serve the community.

Underpinning the parkland strategy is the change in the demographic profile and the forecasted growth in the city. These changes are not evenly distributed throughout the planning districts. The ION rapid transit system in the Central Transit Corridor (CTC) is expected to catalyse intensification along the corridor, with greenfield and infill development accounting for the balance.

The strategy identifies that although parklands will need to be expanded for new populations, there are currently inequities in the distribution of parks and delivery of services with some locations being underserviced. These neighbourhoods also need to be prioritized for future park development. The benefit of parkland is indisputable, the challenge is to ensure that parks are available, accessible and suitable for the well-being of the whole community.

The second section provides approaches to foster accessibility and inclusion in decision making and service delivery, to advance the goals for an equitable and inclusive city. This includes changes to policies, priorities and collaboration with other service providers to meet the needs

of underserved areas and to support the equity expectations in the strategic plan. This requires changes in how acquisition, development and redevelopment of parkland should be approached as well as setting functional targets for lands designated and managed as municipal parks and open space. The parkland strategy recommends updating the parks and open space classification system as well as updating the city-wide parkland provision target to 3 ha / 1000 population to align with affordability, community needs and targets in other municipalities of similar size in the region.

Making meaningful improvements in the distribution of parkland, particularly in existing neighbourhoods requires creative approaches that could include co-locating parks to share common infrastructure like parking. The use of area specific plans like the uptown public realm plan are tools that can guide the location, size and type of parkland in the CTC. Improving linkages between parks and ensuring that there are multi-modal connections to rapid transit will increase accessibility and benefit the broader community.

As the city becomes more diverse and complex, the role of parks has evolved to accommodate larger numbers of users and a wider variety of facilities and uses. In Waterloo there is a desire to not only provide recreational opportunities, but to encourage more social interactions in parks. The concept of parkland as a community hub emerged as theme to expand traditional park programming and to provide not only active and passive recreation, but spaces that support outdoor programming and special events. This model of expanding infrastructure, amenities and programming outdoors needs to be evaluated on a site by site basis and with consultation with the local community. A special events strategy study is recommended to identify which parks may be suitable, the programs that are appropriate, the extent of infrastructure that is required. Operational support to manage events and maintain the facilities will also need to be expanded to respond to new requirements.

Prioritizing how capital budgets are allocated for funding park development or park renewal is challenging without a formalized set of criteria to assist decision making. It is recommended that a ranking system be implemented to provide transparency around setting priorities and assist in aligning capital budgets to underserved areas. Also the renewal of parks needs to ensure that new active recreation facilities are balanced with flexible gathering spaces and amenities that support informal uses.

The parklands strategy provides a forecast of outdoor recreation facilities to 2031. This assessment compliments the 2012 outdoor sports field strategy. Notable trends support the continued updating and improvement for barrier free playgrounds, additional splash pads, tennis and basketball courts, provision of outdoor skating where feasible and an additional off – leash dog park. One of the most important findings in the initial phase of public engagement and subsequently addressed in the RAV report was that parkland lacks infrastructure and amenities to appeal to wider number of people, promote an increase in usage and contribute to

enjoyment of the space. Comfort amenities like shade shelters, wayfinding signs, benches, picnic tables, potable water, power supply, outdoor fitness equipment, washrooms, community gardens, public art and Wi-Fi are increasingly being provided by other municipalities and consequently the public is also looking for these features in Waterloo parks.

Waterloo's trails are well used and well loved. Making more accessible connections to the municipal trails system, multi-use paths, parking and transit is a worthwhile investment towards improving accessibility and inclusivity.

The response to the effects of climate change is a key issue for parkland in the future and the effort to mitigate the impacts will increase with time. Waterloo has actions and strategies in the corporate climate change adaptation plan. It is recommended that the response for parks is principally to support minimizing stormwater impact as well as working to maintain a healthy urban forest canopy to provide shade and reduce heat island effects. A key recommendations is the preparation of a comprehensive natural areas management plan to compliment the natural system inventory and strategy plan.

The third section identifies areas of improvement and recommendations pertaining to operational management, service standards, asset management, and performance measures in the environment and parks division. The recommendations support expanding staff resources commensurate with growth in parks and capital projects. The range of skills needed to manage operations mirror changes park development. As the facilities become more complex, there is a need to match staffing levels and skills to new maintenance standards and frequency requirements. Mentoring, training and fostering a workplace culture of continuous improvement is needed to keep pace with evolving maintenance standards. Documenting service level standards and preparing a policy and procedures manual will assist in streamlining day to day operations.

The fourth section is a compilation of the recommendations that are found throughout the report and a prioritization into three categories; those that are high priorities for short term action (within 1-3 years), those for medium term action (4-7 years) and long term for those that should be undertaken during the lifespan of the 10 year capital plan.

The Financial Plan is a separate adjunct document to support phasing and the allocation of capital resources.



Photo Credit: Tomasz Adamski

1 Foundation of the Parkland Strategy

1.1 Background to the Study

The City of Waterloo has completed a number of initiatives and policies, which were consulted in the preparation of the Waterloo parkland strategy. The following is a list of the most relevant studies.

- Recreation and leisure services master plan, 2008
- Outdoor sports field strategy, 2012
- Action sports strategy, 2013
- Culture plan, 2014
- Public art policy, 2015
- Neighbourhood strategy, 2018
- City of Waterloo 2019-2022 corporate strategic plan report
- Waterloo corporate climate change adaptation plan, 2019

District plans, area specific strategies, master plans, management plans, design standards, improvement projects, by-laws and policies were also reviewed in advance of developing the recommendations for this strategy.

1.2 Alignment to the Strategic Plan

The City of Waterloo strategic plan is revised every four years to guide the municipality in its operation and delivery of services. The City of Waterloo strategic plan (2019-2022) was completed through extensive consultation with residents, business and education leaders, city council, post-secondary students and city staff.

The 2019 strategic plan establishes six strategic pillars or areas of focus which reflect the goals and priorities of the community. The following sections outline the ways in which the parkland strategy aligns to the six pillars.

1.2.1 Equity, inclusion and sense of belonging

The City of Waterloo strategic plan identifies that "the aim of equity is to ensure that everyone has access to equal opportunity and benefits" and "an inclusive city is one that recognizes and values differences through planning, decision-making, and service delivery." The parkland strategy strives to improve the opportunities for Waterloo's diverse population by removing barriers and making parks more inclusive and inviting places, with equitable access for people of all ages, cultures, genders, physical abilities and incomes. Achieving equity in Waterloo's parks system means removing systemic barriers to ensure that all people have equal opportunity to the use and benefit from parks, public spaces and facilities. It is important to note that equity means not only access to opportunities, but also equitable benefit from the city's parks system. Parks are for everyone, and park spaces need to be inclusive for all.

The city's strategic plan also makes a specific commitment with regard to reconciliation with Indigenous peoples. While a broader understanding of equity can support this work, it is important to recognize the distinct nature of reconciliation and the implementation of initiatives that benefit Indigenous communities. The parkland strategy aims to incorporate approaches that will move the city forward on its journey toward reconciliation. The environment and parks services team, other city divisions and stakeholders need to work towards equitable outcomes when delivering the full range of parkland and recreational services. Through this cooperation, the barriers that include inequitable distribution, poor access, poor quality and inadequate investment in amenities and programming can be corrected.

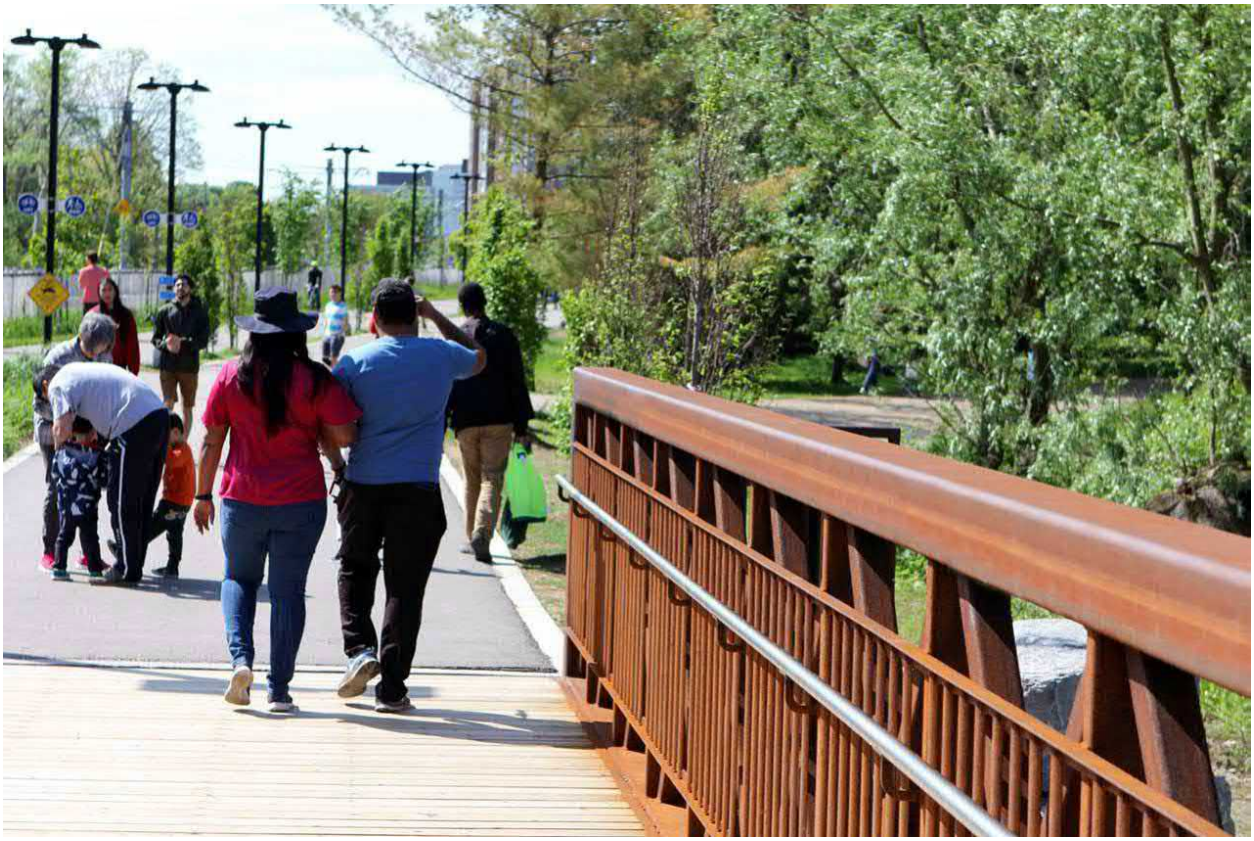
The parkland strategy has considered factors of equity across the parkland system including park supply, distribution and access for neighbourhoods that are underserved. Quality and quantity of facilities is a significant issue in areas of need, specifically where parkland may be available but of low quality and function. The identification of specific parkland needs for this strategy was outlined in the research analysis and visioning background report (Figure 8 and

Table 13) and demonstrates where more parkland is needed to align investment to support communities comprised of equity-seeking groups.

Moving forward, working with other departments and stakeholders, the city must prioritize these areas for future acquisition and for park improvements that upgrade the amenity standards to meet equity expectations that are aligned with the City of Waterloo strategic plan.

1.2.2 Sustainability & the environment

The strategic plan defines sustainability as the "concept of meeting present needs without compromising the ability of future generations to meet their own needs." The parkland strategy recognizes the three measures of sustainability - economic, environmental, and social. It directs strategies and actions toward current and future protection and enjoyment of parks assets. The parkland strategy also recognizes the value of natural systems in an urban context and the role that parks and open spaces play in supporting habitat for plants and wildlife, protecting the quality of waterways and in mitigating the impacts of climate change.



Leisure walkers in Waterloo Park.

1.2.3 Safe, sustainable transportation

Integral to Waterloo's parks and open spaces are its trails and cycling paths, which provide safe, sustainable transportation for off-road users. The parkland strategy supports the transportation

master plan and advocates advancement of an inter-connected system of park trails, bike lanes, multi-use paths, and transit systems.

1.2.4 Healthy community & resilient neighbourhoods

Parks are a key component of the spectrum of facilities and services that help to create healthy communities both socially and environmentally. In keeping with strategic plan objectives, the parkland strategy includes actions and initiatives that support safe, accessible and vibrant public spaces, support arts and culture, and encourage diverse use of parks.

1.2.5 Infrastructure renewal

The parkland strategy recommends strategies and actions for future investment in Waterloo's parks. It includes an implementation and financial plan that recommends a capital forecast and financing strategy to ensure park infrastructure needs are met and service levels are maintained while ensuring fiscal sustainability.

1.2.6 Economic growth and development

Parks and open spaces can encourage development, increase property values and are features that residents and employers consider when locating within a city. The parkland strategy includes actions to expand and enhance Waterloo's parks and open spaces, to contribute to future economic growth.

1.3 Community Profile & Growth Forecast

A demographic profile was prepared in 2018 as part of the study process to inform the parkland strategy. The outcomes of the profile are summarized in the following sections.

1.3.1 Current and Forecasted Population and Distribution

For the purposes of this strategy, a 2018 citywide population estimate of 129,070 and 2031 forecast of 158,770 were used to inform the analysis. These estimates and forecasts include off-campus post-secondary student populations as they have a direct impact on parks and open space usage and demands.

The city is expected to see some growth in almost every planning district; however some districts are expected to receive more intense growth than others as the diminishing supply of available greenfield lands is shifting new residential development to specific nodes and corridors as identified in the city's growth plans. The central planning district, which includes the uptown Waterloo urban growth centre is forecasted to account for 30 per cent of all future growth between 2016 and 2031, increasing by nearly 9,000 residents. Most major growth nodes are located along and close to the ION route. Other planning districts that are forecasted

to generate new residents include Rural East, Columbia Hills, Conservation, Willowdale, Columbia and Lincoln where vacant greenfield development and/or infill opportunities within well-established neighbourhoods exist.

1.3.2 Age Composition and Distribution

The City of Waterloo's 2016 census median age is 37.7 years making the population slightly younger than the Region of Waterloo and Ontario as a whole. Younger adults (ages 20 to 34) make up almost 25 per cent of the city's population. Census figures do not include students living in Waterloo on a temporary basis during the school year however the population forecast in the 2017 City of Waterloo development charge background study estimates that 17,534 post-secondary students were living off-campus in Waterloo in mid-2017.

A breakdown of age cohorts across the city shows a higher concentration of children and teens (ages 0 – 19 years) and mature adults (35 – 54 years) on the eastern and western edges of the city. Young adults (20 to 34 years) have greater representation in the city core and the northwest. There are higher concentrations of seniors (age 55+ years) living south of Erb Street as well as areas between the Erbsville Road and King Street corridors.

The demographic analysis indicates that younger adults are moving to Waterloo for a period of time, while baby boomers are aging in place. The city is also attractive to young families due to the variety of employment opportunities and quality of life-related factors.

1.3.3 Cultural Diversity, Income, and Education

The unique makeup of a municipality can influence participation in recreation activities and usage of the parkland system. The 2016 census data indicates that 89 per cent of Waterloo's residents speak English while nine per cent are bilingual in English and French. About 25 per cent of the population are immigrants to Canada, and 26 per cent of the population are identified in the census as visible minorities. Visible minority groups with the largest concentrations are Chinese (nine per cent) and South Asian (six per cent). Of note, 1.2 per cent of Waterloo's population identifies as Indigenous.

Median individual and household incomes are higher in Waterloo than in the region and the province, however the prevalence of lower income households is also higher in the city than in the region as a whole. As well, the recent Wellbeing Waterloo Region survey indicates that the proportion of disposable income spent on rent is higher in Waterloo than elsewhere in the region. Low-income households are not distributed evenly throughout Waterloo. The proportion of the population living below the low-income measure, after tax, is highest in the central areas of the city. Many residents in these areas may have difficulty affording recreation programs or transportation to parks outside of their neighbourhoods. Parks can be integral

parts of inclusion strategies aimed at providing residents of all income levels with meaningful outdoor opportunities.

1.3.4 What This Means for Parkland

Waterloo is changing. Population data helps to identify future needs for the City of Waterloo's parkland. Potential implications include:

- Adding sizeable new populations to established neighbourhoods will place demands on existing parks and outdoor recreation facilities, many of which are aging.
- More people using parks requires greater and more robust maintenance practices and may create challenges in accommodating larger events.
- As the city grows, there are fewer opportunities left for parkland acquisition. The built-up nature of the central planning district in particular will make it difficult for the city to expand existing parks or secure lands for new parks. New and enhanced approaches to parkland acquisitions, policies and services will be required.
- Notable residential growth is anticipated along the nodes and corridors as well as near ION station areas. This helps to provide some initial criteria for targeting locations for new and redeveloped parks.
- The presence of a large population of students is also important to consider. Although many students are not permanent residents of the city, they still use the parks and open space system, particularly those in proximity to post-secondary institutions.
- The dominance of particular age groups and their concentration in certain parts of the city help delineate a finer grain of detail for parks and open space in different geographic areas across the city.
- Cultural diversity also affects how parks are used by different groups. For example, some cultures place high value on having large open spaces for family social gatherings.
- There is typically a correlation between higher income and education and greater participation in leisure and recreation activities. Although Waterloo has higher median individual and household incomes than in the region, it also has a higher proportion of low income after tax households, with most located in the central area. Equitable access to parks and facilities for all residents should be a priority, particularly for lower income households where there may be few or very small outdoor areas.

1.4 Benefits of Parks and Open Space

Parks and open space have been essential elements of cities since the 19th century when they were first promoted as having public health benefits by early urban planners. There has been considerable research in recent years indicating that municipal parks and open spaces

contribute not only to the physical, psychological and social well-being of people but support a healthy natural environment, and encourage economic success. Density levels are on the rise in cities like Waterloo that are largely built-out and with provincially designated growth targets. This places increased emphasis on the value of and role that city parks and open spaces play in supporting a healthy and active community.



Waterloo Park Winter Festival

1.4.1 Health Benefits

Parks and open spaces provide communities with a number of overall health benefits. Natural vegetation produces oxygen and absorbs carbon dioxide while at the same time removing dust, ash, pollen and smoke from the air - resulting in improved air quality and better respiratory health. Natural vegetation surrounding waterways (creeks, ponds, lakes) helps to reduce soil erosion, filter stormwater and improve water quality. Parkland and open spaces also provide opportunities for increased physical activity, which helps improve wellbeing.

Exposure to nature has mental health benefits such as an overall calming effect, stress reduction and increased happiness. Indigenous peoples have long asserted that physical and mental health in their communities is greatly improved when individuals and families and have direct access to the land. It can also create a centering effect and symptom reduction for those with attention deficit disorder as well as Alzheimer's disease and other types of dementia.

Access to parkland and natural areas has been identified as contributing to the healthy cognitive development of children and the creation of stewardship and lasting attachments to nature and the environment.

1.4.2 Social Benefits

Parks and open spaces provide important greenspace for people in the city who live in high-density housing. Parks provide opportunities for spontaneous as well as planned interactions with friends, families and neighbours, which can contribute to healthier social relationships. These opportunities become even more important when residents vacation at home, and as our cities densify and diversify. As well, parks and their associated amenities play a key role in providing meaningful outdoor opportunities to all residents regardless of income or education.

1.4.3 Environmental Benefits

When properly designed and managed, parks and open spaces provide positive environmental benefits and contribute to mitigation of climate change effects. Vegetation provides shade, has the potential to slow stormwater and lower total runoff, reducing the risk of erosion and flooding. Natural landscapes, bio-swales and rain gardens can contribute to making traditional stormwater infrastructure more effective. Vegetation can also help to filter water and improve water quality before it enters the larger watershed system.

Through evapotranspiration and shade creation, natural surfaces and trees provide a cooling effect on surrounding urban areas, thereby reducing the 'heat island' effect. Parks and open spaces also capture and store greenhouse gas emissions through carbon sequestration of vegetation.

Preserving land for parks and open spaces also benefits and protects urban wildlife and their habitats. Parkland, natural areas and corridors provide alternative homes for species displaced by expanding urban developments.

1.4.4 Economic Benefits

While parks and open spaces are understood to provide health, social and environmental benefits to individuals and the community as a whole, they also provide economic benefits as festival and event venues. High quality parks contribute to the attractiveness of Waterloo as a place to live, work, learn and play. The parks system contributes to attracting talent to local businesses and high quality recreation combined with arts and cultural opportunities are catalysts for retaining quality talent.

Additionally, improving overall community health can reduce the need for medical services and help to alleviate the cost burden on the health care system. As well, passive and low impact development techniques for stormwater management allow municipalities to spend less money

constructing stormwater infrastructure, which can result in long-term cost savings. There are also economic benefits to urban forests such as energy savings from cooling, capturing and storing carbon, and removal of pollutants from the air.[1]

1.5 Community Interests and Ideas

Both online and in person engagement activities were conducted in 2018 and informed the parkland strategy. The engagement was summarized in the public engagement report and informed this strategy and recommendations. Information received during the formulation of Waterloo's neighbourhood strategy also contributed to the development of the parkland strategy.



Visitors to the Waterloo Parkland Strategy Pop-up Event at Waterloo Service Centre Open House

Amongst other questions, the online survey conducted for the parkland strategy queried respondents about outdoor recreation activities undertaken over the past 12 months. The 10 most reported activities were:

- walking for leisure;
- hiking a nature trail;

[1] https://sustainabletechnologies.ca

- swimming;
- attending an event/festival;
- cycling;
- playing at a playground;
- gardening;
- static activities (sunbathing, reading a book);
- playing at a splash pad; and,
- ice skating.

From a list of provided opportunities, participants in the online survey were asked to identify the top five that would encourage them to use Waterloo parks more. The top opportunities identified by respondents were:

- more passive amenities within existing parks (pathways, seating, shade, open space);
- increased opportunities for a variety of programs and events for community gatherings, necessitating more shade, seating, potable water, electricity;
- improve park maintenance (such as garbage pick-up and mowing);
- pathways and trails that are closer to home; and,
- information on what parks activities and facilities are available.

Drawing from a list of possible park improvements provided in the online survey, the 10 most requested improvements or enhancements for Waterloo parks identified by respondents were:

- shade (trees or structures);
- nature trails;
- drinking water / water bottle filling stations;
- washrooms;
- natural park area improvements / vegetation management;
- paved multi-use pathways;
- seating areas (benches, picnic tables);
- playgrounds;
- park pavilions and picnic areas; and,
- splash pads.

As well, facilities and improvements identified on-site through the park intercept surveys, included (in no particular order):

- more benches / picnic tables (in parks and along trails);
- improved maintenance/upkeep (weeds, trail surfacing, parking lot maintenance);
- upgrades to equipment (playgrounds, diamonds, bleachers);
- play equipment for different age groups (climbers/obstacles/sandbox, outdoor gym equipment, accessible playground equipment – specifically swings);
- drinking water / water bottle filling stations;
- splash pads (especially in the east end);
- lighting for safety;
- new/cleaner washrooms (near dog park);
- safety fence/screens on ball diamonds;
- more pathways;
- add informal basketball court;
- better signage; and
- more off leash dog parks – including those with separation for small and large dogs.



Photo Credit: Tomasz Adamski

2 Parks Strategic Plan & Policy Framework

This section identifies approaches to acquisition, expansion, enhancement, community use and functional targets for city lands designated and managed as parkland and open space. The Financial Plan is a separate adjunct document to support phasing and the allocation of capital resources.

2.1 Accessibility, Equity and Inclusion

2.1.1 Truth and Reconciliation and Indigenous Initiatives

The work of the Truth and Reconciliation Commission of Canada (TRC) has awakened non-Indigenous Canadians to the harm caused by the residential school system as well as other systemic barriers and inequities faced by Indigenous peoples. The summary of the final report[2] of the TRC notes that "reconciliation is about establishing and maintaining a mutually respectful relationship" (page six) between Indigenous and non-Indigenous peoples. The report states that we do not have this mutual respect yet, but there is hope that we can achieve it.

[2] http://publications.gc.ca/collections/collection_2015/trc/IR4-7-2015-eng.pdf

In order to provide tangible steps that Canadians can take to work toward reconciliation, the TRC included calls to action, which established that municipalities have a responsibility to support reconciliation work directly within their mandates. In 2019, Waterloo Council directed staff to proceed with the implementation of the truth and reconciliation calls to action specific to municipalities. While none of the TRC calls to action name parks specifically, it is clearly the intent of the TRC for municipalities to include reconciliation work in all that they do.

Municipalities can respond to the overarching TRC directive to establish and maintain mutually respectful relationships with Indigenous peoples by responding in meaningful ways to the needs of Indigenous residents. In Waterloo, local urban Indigenous communities have identified access to land for gathering and ceremonial purposes as a high priority. Natural spaces, including parkland, will be central to meeting these needs. Any steps taken to meet these needs must be developed in close collaboration with local Indigenous people in culturally appropriate ways.

In addition to decision-making about individual projects, it will be important to apply a reconciliation lens to all aspects of the parkland strategy. It is anticipated that the Indigenous initiatives, anti-racism, accessibility and equity staff team will play a key role in facilitating the application of this lens to decision-making frameworks outlined in this strategy

Recommendation # 1 Moving forward, parks staff will need to work closely with the Indigenous initiatives, anti-racism, accessibility and equity staff team, to implement projects that include meaningful engagement with local urban Indigenous communities in order to meet identified needs.

2.1.2 Anti-Racism

The year 2020 has seen the beginning of a global reckoning with racism, in particular anti-Black racism. Local community leaders are speaking boldly and clearly, demanding that racism be recognized and addressed in Waterloo Region. In particular, local governments are being called upon to act urgently to dismantle systemic racism.

The City of Waterloo has taken steps to begin the process of dismantling systemic racism. In December 2020, Council approved the formation of a new staff team with the required expertise and lived experience to tackle racism. Council also supported a motion that identifies ways in which Waterloo can contribute to reallocating police resources in community-led and culturally-informed upstreaming approaches. In particular, staff were directed to review policies and operational procedures using an anti-racist lens.

It is anticipated that parks and natural areas will play a key role in the city's upstreaming efforts, given the role that these spaces can play in communities and neighbourhoods. As a framework for decision-making, it will be imperative to review this strategy using an anti-racist

lens. Meaningful consultation with racialized communities will also play an important role, not only to determine specific park features and amenities, but also to ensure a sense of safety and inclusion when using city parks and natural areas.

Recommendation # 2 Moving forward parks staff will need to work closely with the Indigenous initiatives, anti-racism, accessibility and equity staff team, once hired, to review the parks strategy using an anti-racist lens and to consult with local racialized communities in order to meet identified needs..

2.1.3 Accessibility, Equity and Inclusion

One of the key pillars of the Waterloo strategic plan is to foster equity, inclusion and a sense of belonging by ensuring that everyone has access to equal opportunity and benefits and that differences and diversity are recognized and celebrated in planning, decision-making, and service delivery.

Parks are critical components of a city's social infrastructure and play an important role in creating an inclusive, equitable and welcoming environment for all. Surveys conducted for the parkland strategy indicate that the majority of the 300+ respondents are active users of Waterloo's parks and recreation activities. As well, a large majority of respondents to the Wellbeing Waterloo Region survey (2019) responded positively to questions pertaining to sense of community, which included perceptions around the range of services and opportunities, friendliness, social aspects and ability to connect in the city. Although the results of the Wellbeing Waterloo Region survey are not directly attributable to Waterloo's parks, some respondents also expressed feelings of exclusion.

A lack of participation in city-offered facilities and services can be attributed to a range of reasons including: affordability, physical limitations, lack of activities to match their interests, low quality and distribution of amenities, lack of awareness of programs or a sense of not feeling welcomed or safe. Changes to the socio-demographic make-up of a community can also bring requests for amenities that make parks usable and more welcoming to all. Municipalities have a responsibility to all segments of the population to facilitate participation in parks and recreation services through such measures as: investigating needs, promoting opportunities, and removing barriers to participation.

Subsequent sections of the parkland strategy identify ideas and opportunities for creating parks that are inclusive, support social interaction and build a sense of community, however there is a need for more focused efforts in the area of equity and inclusion, and to identify specific needs in neighbourhoods with low household incomes. The Regional Municipality of Waterloo and Region of Waterloo Public Health, and community organizations that are led by and serve Black

and Indigenous people as well as people of colour, are stakeholders and agencies that have a role in assisting with in this.

To advance goals for an equitable and inclusive city, Waterloo can advance tools and policies to address these tenets in parks and associated recreation programs. Building on current practices that include inter-departmental collaboration and engaging other service agencies, the city will better understand the gaps and needs of vulnerable populations with the goal of more equitably distributing parks, facilities and programming that meets their particular needs. Current programs such as facility rental discounts for affiliated sport and community groups, and fee assistance for low income participants, are important and helpful at supporting access. The expansion of these programs should be considered with additional sustained annual funding toward programs for neighbourhoods with low household incomes that support equity and inclusivity are needed. It is expected that these types of activities will be undertaken for all city services and that parks and recreation will be included in the investigation.

The City of Waterloo promotes a high level of physical accessibility and interaction in its public spaces and encourages developers to do the same. The City of Waterloo accessibility standards (2016) were prepared following the province's adoption of Ontario Regulation 191/11 (integrated accessibility standards) under the Accessibility for Ontarians with Disabilities Act 2005 (AODA). The province's integrated accessibility standards include the design of public spaces standards (DOPSS), which addresses elements of public spaces including trails and pathways, outdoor play areas, parking facilities, and outdoor eating areas. The city's accessibility standards include both written guidelines and details to promote barrier-free access and include provisions which may be outside or exceed the DOPSS. The city, developers and other organizations are obligated to follow these standards. In addition for public spaces, the Grand River Accessibility Advisory Committee (GRAAC) comments on projects to improve barrier-free access to facilities and activities within the community.

Development and redevelopment of existing parks and trails will need to consider these (or any revised) accessibility legislation as well as the required capital investment needed to implement it.

Recommendation # 3 In association with the implementation of actions and strategies in the City of Waterloo strategic plan, focus on tools and policies for addressing accessibility, equity and inclusivity in parks and associated recreation opportunities.

Recommendation # 4 Prioritize projects that improve barrier-free access to facilities and activities within parks, specifically actions that bring parkland into compliance with AODA legislation and associated standards, and in

consultation with the Grand River Accessibility Advisory Committee (GRAAC).

Recommendation # 5 Moving forward, working with equity seeking community members and leaders, service organizations and neighbourhood associations, the city must prioritize underserved areas for future acquisition and for park improvements that upgrade the amenity standards to meet equity expectations that are aligned with the City of Waterloo strategic plan.

2.2 Acquisition and Expansion of Parkland

2.2.1 Parks and Open Space Classifications

Parks standards, including park classifications have historically been used by municipalities across North America, including Waterloo, to plan for and locate parks in new neighbourhoods. They also facilitate the identification of a municipality's per capita provision standard for parks as a means of evaluating success in maintaining an appropriate level of supply city-wide.

The typical park hierarchy also includes a generic description of facilities, population based provision standards for each relevant class of park, along with minimum recommended park sizes to ensure that the required space is available to accommodate park and facility needs. Park standards have evolved over the years in response to recreational trends, community values and demographics. They continue to be an important tool to inform city planning, parks design and parks maintenance needs.

Moving forward, some of Waterloo's new parks will occur in areas of growth and intensification with smaller land areas and different functions and design needs than traditional parks. To reflect this trend the park classification system should address smaller urban parks and public spaces.

There are currently a range of different park classifications and park types in use at the City of Waterloo. Consistency of terminology in parks classifications between the official plan and other documents and data sources is important for information organization, transparency and ease of communication. The following sections discuss the different park classifications and standards currently in use in Waterloo, followed by a rationale for establishing consistency, and an example of a new park hierarchy that recognizes new trends and merges needs.

Park Classifications in the Official Plan

The municipal parkland classification system in the City of Waterloo official plan comprises three park types: city, community and local. These classifications are the mainstay of many Ontario municipal park classification systems. Supplementing the Waterloo municipal parkland

classification system are other forms of open space lands including stormwater management blocks, hydro corridors, conservation areas, environmental reserves, natural features and buffers, cemeteries and golf courses. These lands, which may not be managed as parkland or even city-owned, are included in the official plan as open space as they "provide important connections and green space which contribute to the connectivity of the comprehensive open space system."

Section 10 of the City of Waterloo official plan outlines a vision for a high-quality urban environment in which open space is an important component, with objectives to "protect ecologically significant natural features and to provide a comprehensive and connected open space system that balances the needs of the community in terms of recreation/leisure, culture, transportation, infrastructure and environmental management." Section 10 further contains policies to generally guide the acquisition and development of municipal parkland in the city. The official plan policies outline three main park types, as follows: [3]

City Parks: City parks are the city's largest parks and their size is dependent on land features, base facility and venue purpose. These parks project an image for the city, and are comprised of large recreation areas for both active and passive recreational opportunities. The location of city parks may be based on unique features and amenities rather than proximity to population.

Community Parks: Community parks are located, planned and designed to serve larger populations and should be distributed city wide to provide amenities that can support larger groups of visitors and have a diversity of features that make the park a destination for recreation.

Local Parks: Local parks are neighbourhood-oriented parks. Basic facilities could include informal active play fields, skating rinks, play facilities, seating, trails and landscaping.

Additional criteria with respect to size, location and provision targets can be found in Table 10-1 municipal parkland classification system, of the official plan, as follows.

[3]From "Section 10.5 – Open Space Land Use Policies" *City of Waterloo Official Plan*, pg. 218.
**Updated*

Table 1: Official Plan Table 10-1 – Municipal Parkland Classification System

Municipal Parkland Type	Size	Minimum Hectares per 1,000 pop.	Accessibility per Distance	Location*
City	Varies depending on land features, base facilities and venue purpose	3ha./1000	Serves the entire city and beyond	Extensive street frontage, preferably along arterial roads More than 3 public access points (multi-modal) Accessible to public transit
Community	Min. 4ha. in size	1ha./1000	1600 -2600m	Extensive street frontage on more than one public road Centrally located with multiple access points Accessible to public transit
Local	0.5-2ha	1ha./1000	600-800m, or 15 to 20 minute walk.	Street frontage of at least 50 m on a public road Multiple access points

Source: Table 10-1 Municipal Parkland Classification System, Waterloo Official Plan

With minor modifications, including the use of neighbourhood park instead of local park, the park classifications and design criteria currently in use in the official plan were adopted following the 2008 Waterloo recreation and leisure services master plan.

Park Classifications in Use by Environment and Parks Services

For inventory, mapping and operational purposes, the environment and parks services division uses different parks and open space terminology than the official plan. These include the use of the term major park instead of city park, community park, and neighbourhood park instead of local park, with added categories including environmental reserves, environmental links and corridors, culturally significant parks, pedestrian links and linear parks, special agreement parks (parks developed on private property through use agreements).

In an undated document environment and parks services staff provided the following 'working' definitions of its park classifications for the purpose of the parkland strategy analysis. The document notes that "the following open space classification system has been developed from and is a modified version of the classification systems proposed in the following City of Waterloo studies: City of Waterloo parks and recreation master plan, 1987; the municipal open space planning and design criteria, 1990; development charges, parks services - open space classification system, 1994."

Major Parks - Size 25+ acres or 11+ hectares. City parks that enhance the image of the city and its character.

Community Parks - Size 7 to 25 hectares. Parks that are located, planned and designed with a city-wide perspective to serve a large population. Location may be based on natural resource rather than proximity to population.

Culturally Significant Parks - Parks with cultural or historic significance and of city-wide importance.

N**eighbourhood Parks** - Neighbourhood size of one to seven hectares, sub-neighbourhood size up to 1 hectare. Neighbourhood, sub-neighbourhood parks and parkettes up to seven hectares in size which do not contain a significant environmental feature, but may contain linkage extensions out from main park components. Basic facilitation includes: dry ponds, informal play areas such as open turf field, sports fields, rink area, seating, pedestrian circulation, play structures, etc.

Pedestrian Links and Linear Parks - Pedestrian links provide pedestrian and bicycle oriented travel recreation from one destination to another, connecting parks and areas of the city. These trail systems will constitute trail systems included in the trails master plan. Linear parks may contain features of neighbourhood parks and trail systems and may or may not link areas of the city.

Environmental Links and Corridors - Any linear open or wooded space that connects to other open spaces by way of trails or corridors, but are not on included in the trails master plan. May contain features of neighbourhood parks and/or environmental features and/or creek buffer Areas.

Environmental Reserves - Parks incorporating important environmental resources such as ESA's, ESPA's, floodplains, meadows, woodlands, wetlands, hedgerows, etc., but not including links. As a guide, wooded areas 2 hectares or larger contained in a park parcel would be placed in this class.

SWM Ponds - Any park containing wet ponds or constructed wetlands (these generally have little to no value as a neighbourhood park).

Special Agreement Parks - Park facilities that have been developed, maintained and are programmed by the city on private properties through a use agreement with the property owner. Includes hydro corridors, school board property and private commercial/industrial lands.

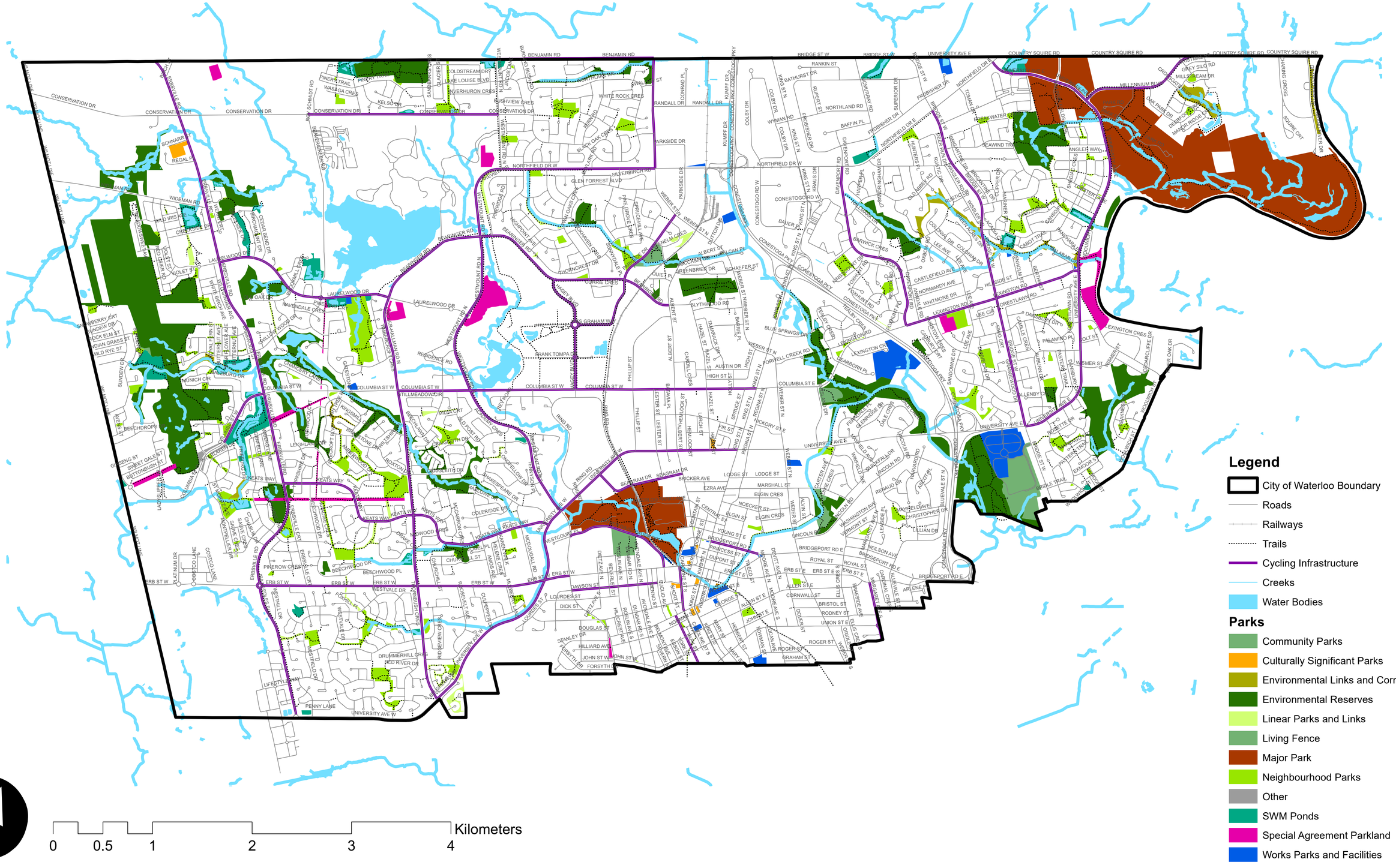
Works Parks - Public works as parkland, and facilities maintained by Parks

Figure 1 illustrates the existing Parks and Open Space System in Waterloo, organized by the aforementioned park types used by Environment and Parks Services and contained in the GIS map and database.

Figure 1: Existing Parks and Open Space System

City of Waterloo Parkland Strategy

Figure 1 - Existing Parks and Open Space



Parks in the Waterloo Cultural Heritage Landscape Inventory

A cultural heritage landscape (CHL) are distinct places that have been identified as areas of heritage significance that has been modified by human activities and are valued by a community. In 2018-2019 the city conducted a study of cultural heritage landscapes in Waterloo. The resultant CHL inventory describes 27 significant CHLs comprised of: residential neighbourhoods; industrial, commercial and retail landscapes; institutional landscapes; cemeteries; parks, natural areas and other public / private open space; and agricultural landscapes. The Mount Hope Cemetery, Brewmeister Green and Waterloo Park are identified as candidate CHL's in the inventory.

Conclusions

The Waterloo official plan uses city park, community Park and local park as its parks classifications. These park classifications are widely used across Ontario municipalities (and beyond) and together with the accompanying size and spatial criteria differentiate the hierarchical scale and functionality of parks in Waterloo. However, the official plan parkland classifications may be somewhat limiting for the city in describing the smaller parks that are anticipated in areas of intensification. These may include more hard surface areas and be developed to new higher design standards. These are increasingly being described in municipal park classifications as urban parks, parkettes, or public squares. Urban parks may be a standalone classification or incorporated as sub-sets to a local or neighbourhood park classification.

There are different park types, major vs. community and neighbourhood vs. local, in use by environment and parks services for parkland inventory and mapping purposes. The reason for these differences in terminology are not clear, however their usage appears to pre-date the recommendations of the 2008 recreation and leisure services master plan which are reflected in the official plan.

Both planning and parks operational staff are involved, or should be, in the planning for and design of new parks. Use of a consistent park hierarchy and design criteria will facilitate inter-departmental coordination. The maintenance of accurate parks mapping and inventory information is important to both planning and asset management. As well, the city's mapping and inventory database is available online through its open data portal. It may be used by the planning and development community, media, other agencies and interested members of the public.

There are additional 'park' categories listed in the city's parks and open space system inventory and mapping including culturally significant parks and linear parks and linkages. A preliminary review of the property listings indicates that not all fit the definition of a functional park. While it may be desirable to have an expanded hierarchy of parks and open spaces types to inform

operational needs, clarity is needed in defining park vs. other types of open space in order to provide an accurate assessment of the city's current parkland supply in relation to official plan per capita targets. Some assumptions had to be made in this regard during the analysis of provision standards undertaken for the parkland strategy (refer to Section 3.2.2 and the research, analysis and visioning report).

It is important to acknowledge and list culturally significant parks and other heritage landscapes in the city's heritage inventory for conservation and management purposes. However, the inclusion of a separate park classification for culturally significant parks in the parks and open space inventory complicates the ongoing assessment of the city-wide and local area parkland supply. For example, Waterloo Park is identified in the CHL study as a significant cultural landscape while noted as a major park in the inventory (city park in the OP classification) rather than a culturally significant park. Conversely, not all of the publicly owned culturally significant landscapes identified in the CHL study are acknowledged as such in the parks and open space inventory. One solution would be to include the CHL parks and open spaces under their overarching classification in the inventory, e.g. city, community park, neighbourhood / local park, urban park, environmental reserve, cemetery, etc. while noting their cultural heritage significance in an attributes table for operational purposes.

It is recommended that the city prepare and approve a consistent parks and open space classification system which reflects the current and anticipated range of park types and which is suitable for all purposes. **Table 1** provides an example of a refined parks and open space classification system, which merges and refines the official plan park classifications and other classifications currently in use at the city. The parks and open space classification system is also expanded to include a category for urban parks. It is understood in the classification of municipal parks that a higher order park may overlap in function with a lower order park, and facilities and amenities may vary within each park. Further refinement of the parks and open space classification system by city staff may be needed to suit both planning and operational purposes.

Once finalized, the classifications should be applied to the existing supply of parks and open spaces and the inventory updated to inform provision targets (see Section 3.2.2).



Moses Springer Community Park

Table 2: Example of Parks and Open Space Classification System for Waterloo

Municipal Parkland

City Parks
City parks serve the recreation and leisure interests of all residents and visitors with a range of active and passive recreation opportunities. They may include, but not be limited to: sports fields; playgrounds; community or public gardens; dog parks; water features; event space; public art; performance venues; food services; picnic areas; trails; passive use areas; and horticultural plantings. They may also include unique elements or destination features such as specialized recreation facilities (indoor or outdoor); unique historical or cultural features; or significant natural areas. City parks range in size according to their characteristics and functions.
Community Parks
Community parks serve a large geographic area of the city or a group of neighbourhoods. They provide a range of active and passive opportunities and may serve as a focal point or hub for the community in association with indoor community facilities. They need to be visible and accessible with active transportation, located with frontage (typically not less than 50 m) on arterial or collector roads, include parking and be readily accessible by transit. Facilities and amenities may include, but not be limited to: sports fields or sports courts; playgrounds; splash pads; outdoor ice rinks; open space for informal uses; community vegetable gardens; electrical service; potable water supply; cultural features; public art; picnic areas; natural spaces; and horticultural plantings. Community parks range in size according to their characteristics and functions (typically 4 -12 ha).

Neighbourhood / Local Parks
Neighbourhood / local parks are intended to accommodate recreation and leisure interests of one or more neighbourhoods with organized and unorganized activities. Facilities and amenities may include: sports fields or sports courts; playgrounds; open space for informal uses; community vegetable gardens; electrical service, outdoor ice rinks; seating areas; natural spaces; and horticultural plantings. Neighbourhood / local parks range in size according to their characteristics and functions (typically 1 ha up to 3 ha).
Urban Parks
Urban parks are smaller urban spaces including 'squares', 'greens', parkettes or 'plazas' and are designed to accommodate recreation and leisure interests for local areas through a range of programmed and un-programmed facilities and spaces. The parks may be soft surfaced and/or primarily hard surfaced and may include: sports courts; playgrounds, performance venues, seating, outdoor cafés, water features, cultural features; public art, and spaces designed for visual relief and aesthetic qualities. Urban parks range in size according to their characteristics and functions (typically <1 ha).

Other Open Space

Special Agreement Parks
Park facilities that have been developed, maintained and are programmed by the city on private properties through a use agreement with the property owner. They may include: hydro corridors, school board or other institutional property, privately owned parks and private commercial/industrial lands.
Links and Linear Parks
Links provide for pedestrian and bicycle oriented travel from one destination to another, as part of the overall city-wide trail system or to connect parks and open spaces with other areas of the city. Linear parks also form part of the trail system and may include features of neighbourhood / local parks.
Environmental Reserves
Parks incorporating important environmental features such as ESA's, ESPA's, floodplains, meadows, woodlands, wetlands, hedgerows, etc., but not including links. As a guide, wooded areas 2 ha or larger contained in a park parcel would be placed in this class.
Environmental Links and Corridors
Any linear open or wooded space that connects to other open spaces by way of trails or corridors. May contain features of neighbourhood parks and/or environmental features and/or creek buffer areas.
Stormwater Ponds
Open space containing stormwater management facilities. May contain walking trails and /or environmental features.
Cemeteries
Land in which the predominant use is a cemetery and buildings or structures required for the operation and maintenance of the cemetery use or services. May incorporate public access or passive uses.

Recommendation # 6 Prepare and approve a parks and open space classification system which provides more consistency, reflects the current and anticipated

range of park types and which is suitable for both planning and operational purposes.

Recommendation # 7 Include park classification(s) to better categorize the new type of urban park that is anticipated in areas of intensification and transit oriented development.

Recommendation # 8 Once finalized, apply the parks and open space classifications to the existing inventory to inform provision targets and maintenance standards and encourage consistency of terms across city departments.

2.2.2 Parkland Provision Targets

The current city-wide provision target for parkland in the official plan is 5 ha / 1000 population, based on the current park classifications of city, community and local park. In reviewing the city's inventory and provision levels, the current service level is approximately 3 ha / 1000 population (3.16 ha / 1000), with an increase to 4 ha / 1000 population when lands categorized as culturally significant parks, linear parks and special agreement parks are included. Historically other types of open space, as described in Section 3.2.1 have been included in the inventory. Typically, park provision levels relate to municipally-owned properties developed specifically for parks purposes. A comparison of other municipalities as part of the Research Analysis & Visioning (RAV) report revealed that other mid-size cities have provision targets that are closer to 3 ha / 1000 population. The current official plan city-wide parkland target is not considered a sustainable or achievable goal moving forward, particularly in light of limited available land and high land costs in areas of intensification.

Recommendation # 9 Review parkland provision targets and adopt a city-wide parkland provision target of 3 ha / 1000 population to better reflect community needs going forward. Other open space types should not be included in the inventory of parkland although they form part of the open space system and may contribute to recreation uses.

2.2.3 Distribution of Parkland

Ensuring that there is an equitable distribution of parks and amenities and making a meaningful effort to fill in the gaps using appropriate and achievable park provisions standards will be an important component of future parkland acquisition. Evaluation of parkland resources at a city-wide level is useful only as an assessment tool to benchmark city's population-based provision target with the quantity of available lands. Evaluation at a local level is a better determination of whether each area of the city will be equitably supplied with parkland and positioned to accommodate forecasted population growth. The continued use of area-specific plans such as

the uptown public realm strategy to guide the planning and design of parks and open space and other aspects of the public realm will be important for areas where significant development or population growth is anticipated.

Waterloo's official plan recommends that parkland be acquired based on locational criteria in addition to population based targets. This may be a more achievable and realistic target than per capita parkland provision standards in areas experiencing infill development and intensification where land availability and costs may limit new parks acquisition. For neighbourhood / local parks the recommendation is for the provision of a park within 600-800 m of residential areas which represents a maximum 10 minute walk. This is also consistent with the recommended service area for playgrounds in the parkland strategy. To meet this standard it will be necessary to identify locations in developing or intensifying areas where co-location with schools, religious or other institutions or mixed uses create opportunities to share common infrastructure such as parking or sports fields can improve accessibility.

Recommendation # 10 Continue to plan for new parks based on the provision of a park within 600-800 m of residential areas, unobstructed by major pedestrian barriers such as expressways, arterial roads, active railway lines and watercourses. Consider opportunities to co-locate parkland with schools, religious or other institutions or mixed uses to facilitate sharing of common infrastructure such as parking or sports fields.

Recommendation # 11 Continue to use area-specific plans such as the uptown public realm strategy to guide the planning and design of parks and open space and other aspects of the public realm in areas where significant development or population growth is anticipated.

2.2.4 Connectivity

In advancing the establishment of a city-wide parks and open space system it is important to improve connectivity between parks and throughout the system to provide a continuous network wherever possible. Specifically to improve linkages between parks, consider the inclusion of other types of open space, as noted in the park classifications, e.g. pedestrian links and linear parks, environmental reserves and environmental links in developing areas. These types of open spaces can supplement parkland needs by supporting the development of trails and diversifying experiences for residents. Where environmental features are present, these lands connect habitats for wildlife and promote biodiversity.

A key priority for the region is the implementation of the central transit corridor (CTC) and light rail transit. This new public infrastructure will improve multi-modal access to parkland if there are new local connections from the stations to parks and natural areas. New off road

pedestrian and cycling links to the CTC stations is an opportunity to increase accessibility to parks and trails.

Recommendation # 12 Identify lands and corridors for acquisition that will address gaps in the off road trail systems to improve access to the CTC. Work with partners to create trails to improve pedestrian linkages. Identify gaps in the natural system and identify lands for acquisition to support passive recreation and ecological objectives.

2.2.5 Parkland for Additional Sports Field Capacity

Due to their size and projected demand, the provision of sports fields will be an ongoing challenge as the city's population grows. The 2012 outdoor sports field strategy forecasts sports field provision over a twenty year horizon. It identifies that some growth will be offset by increasing existing field utilization through measures such as: redesigning, re-purposing or upgrading of existing fields including consideration of artificial turf or multi-purpose fields. Other improvements include changes to allocation and scheduling practices and agreements to use non city-owned lands.



Lexington Park Field

Notwithstanding efforts to optimize utilization of existing fields, the outdoor sports field strategy identifies that additional sports field development will be required in Waterloo in order to meet future needs. The strategy recommends a west side recreation facility comprised of an approximately 12 ha in size and preferably located in the city's west side. Such a site could also include trails, playground, washrooms and other amenities as described in a community park classification. However, with Waterloo's near build-out condition presenting significant land constraints, it is noted in the outdoor sports field strategy and confirmed with staff, that it may not be possible to secure a single parcel of land of that size. This may necessitate distributing new sports fields across multiple locations within the park system. This may be challenging in some existing parks that lack the needed infrastructure (parking, washrooms, storage) to support sports field use. As well, most new park parcels are anticipated to be of too small a size to support regulation sized sports fields.

In the event that a single parcel of land cannot be cost-effectively secured, or multiple sites are not sufficient, the city may wish to consider partnerships with other providers, and/or the acquisition and development of lands outside of the urban boundary. Additionally, there will be a need to replace fields in locations where lands in existing parks are converted to event and festival space.

Recommendation # 13 Continue efforts to secure a location, or locations, for the development of new sports fields based on existing (or updated) projections in the outdoor sports field strategy. In the event that a single parcel of land cannot be secured, or distribution across existing parkland is not feasible, the city may wish to consider partnerships with other providers, or the acquisition and development of lands outside of the urban boundary.

2.2.6 New Parkland in Intensifying Areas

New Parks

For areas undergoing redevelopment and intensification, particular attention needs to focus on residential areas that are under-serviced by existing parks, and new parkland should be secured with the purpose of achieving a more balanced distribution. A spatial analysis of parkland supply was completed in 2018/2019 that serves as the basis for delineating an 800 m radius around existing parks (city, community and local / neighbourhood) revealed that residential portions of the University and Columbia planning districts are currently not serviced by parks within an 800 m walking distance. Due to the density of the existing urban fabric and high land values new large park blocks are unlikely to be readily available in intensifying areas. Therefore it is anticipated that the focus of any new land acquisitions will be on the provision of neighbourhood / local parks (1 ha to 3 ha) or urban parks (typically <1 ha) as described in the

park classifications (refer to Table 1). These new parks should be of sufficient size to accommodate a range of activities, users and support access to several neighbourhoods. Whenever possible, the parks should be connected to natural features or environmental areas that balance active with passive recreation opportunities.

Recommendation # 14 To support parks and facilities needs in growth areas it is recommended that the city seek lands to acquire for new neighbourhood / local parks and urban parks in areas that that are underserviced.

Redeveloped Parks

For growth areas that are currently serviced by an existing park(s), there may be less reliance on the provision of new parks to serve new residents, providing that the existing park is, a) of a size and with a range of amenities that can accommodate an intensity of use, or b) can be revitalized to provide for outdoor recreation and the quality and diversity of experiences that are increasingly expected in urban settings. In adapting to the needs of future residents, the evolving needs of the existing neighbourhood should be considered.

In this regard, parks in intensification areas are likely to be designed to support unstructured activities with gathering spaces for socialization, multi-functional and flexible play spaces, shade structures, seating and cultural or artistic elements. For more on this, refer to Section 3.3.5. In intensifying areas currently serviced by existing parks, and where it is not feasible to acquire new parks, emphasis should be placed on the revitalization of existing parks through consultation with the community and a focus on enhanced amenities.

Park Expansions

Throughout the city, opportunities for land acquisitions should be considered where parks expansions can provide:

- Improved park access; particularly for parks within limited frontages or in near land locked conditions;
- Improved connectivity within the community or enhance active transportation linkages;
- Additional space needed for enhanced park amenity; particularly in intensification areas where space is limited; and
- Expanded and protected natural ecosystems and green infrastructure assets.

Recommendation # 15 Explore opportunities to expand parks by purchasing adjacent/adjoining properties and linkages to improve existing parkland assets for purposes such as: securing park frontages and key access points, improving connectivity and active transportation

linkages, providing space for enhanced park amenities and expanding and protecting the natural environment and key green infrastructure assets.

Other Public Open Space

In assessing parkland needs of intensifying areas, the city should also consider the contributions of other public open spaces toward supplementing parks and providing animation, diversity and interest to an urban area. These may include linear spaces adjacent to building frontages, pocket parks, courtyards or plazas. Where possible, it is desirable to link smaller urban spaces to maximize the range of experiences that are available to users.

The integration of a diversity of urban open space into the municipal park classification system will require careful consideration as to what would be defined as parkland and what would be considered privately owned public space (POPS). The city has recently developed guidelines for POPS. Agreements to direct long-term use and maintenance responsibilities of POPS should be put in-place and design guidelines should be established to ensure that city standards are met.

The concept of shared streets is an urban design philosophy, which seeks to reduce the dominance of cars, promote traffic calming and better integrate pedestrians and vehicles. While North American models tend toward the use of landscaping, paving design, and bollards to delineate between pedestrian and vehicle zones, the concept of shared streets is now being extended to the creation of multi-functional spaces with the flexibility to redefine zones, as required, to support events and activities. In these instances, roadways are being transformed into vibrant public spaces with seating areas, public art and moveable play spaces while still allowing minimal automobile, bus, bicycle and emergency vehicle access. This is of particular interest in dense urban areas where high land values or lack of space limit the potential for the acquisition of parks. The shared streets approach could be applied both to the retrofitting of existing streets and on a smaller scale to the design of service lanes and roads within new developments.

Recommendation # 16 Encourage a wide range of urban open spaces to supplement parkland in densifying urban areas. This includes privately owned public space (POPS), flexible and shared streets that support a 'linked system' of vibrant, multi-functional urban parks.

Recommendation # 17 Develop a policy, use and maintenance agreement template as well as design guidelines to address the provision of POPS.



Winter Pop-up – Photo Credit Tomasz Adamski

2.3 Effects of Bill 108, More Homes, More Choices Act and Bill 197, COVID-19 Economic Recovery Act

The City's Parkland Strategy process has coincided with Provincial legislative changes to the *Development Charges Act* as well as the *Planning Act* as it relates to parkland dedication. A set of proposed amendments was first brought forward in 2019 through Bill 108 – the More Homes, More Choices Act. Changes were later proposed through Bill 197 – the *COVID-19 Economic Recovery Act*, and came into force on September 18, 2020. These legislative charges aim to make fees and charges imposed on development more predictable, while maintaining municipalities' ability to fund growth-related capital infrastructure.

Several legislative changes were made that will impact the City's financial framework for the acquisition and development of parkland. These changes are summarized below.

1. Elimination of the *Development Charges Act* 10% statutory deduction for soft services

Previously, municipalities were required to apply a 10% "discount" to the development charges (DC) calculations for certain "soft" services, including parkland development. This statutory deduction has now been removed, and parks DCs can now be used to recover up to 100% of the growth-related municipal costs. Upon the City's next DC by-law update, it is therefore

anticipated that it will have a greater capacity to fund parkland development projects through DCs. It is noted that the amount to be funded will remain limited by historical service levels.

2. DC freeze and deferrals

Development charges are now calculated at the time a Site Plan or Zoning By-law Amendment application is received, and remain payable at the time of building permit issuance for most development projects. The DCs are "frozen" for up to a maximum of two years. For certain types of development (rental housing, institutional, non-profit housing), DCs are payable in a series of annual installments beginning at building permit issuance. Municipalities may charge interest between the time of DC calculation and payment; the City of Waterloo has enacted a DC Interest Policy to address these changes, which came into force on January 1, 2020.

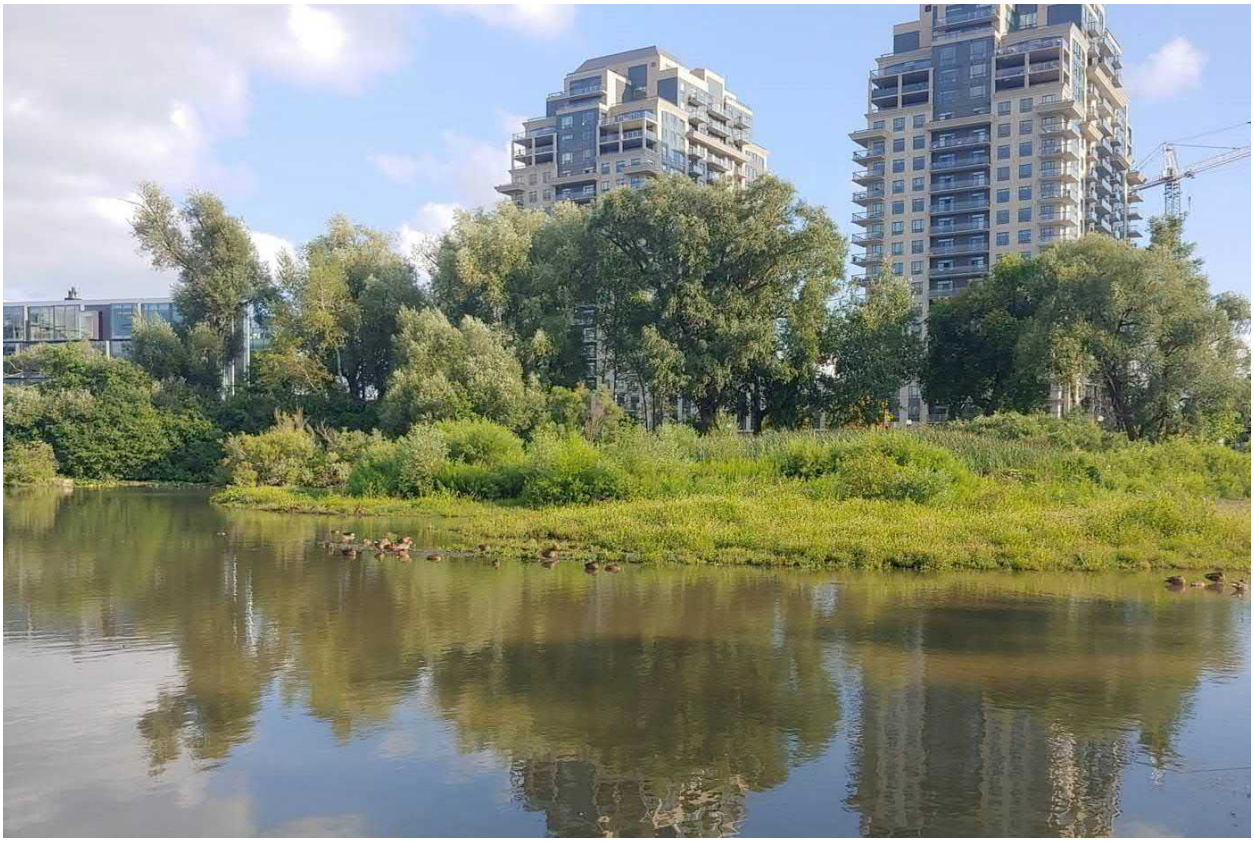
At the time of the City's next DC by-law update, this amendment could have implications should the calculated Parks and Major Indoor Recreation Facilities DC differ significantly from the current rate. Any development projects with active planning applications at that time would be subject to the previous rate, which may not be reflective of the goals and objectives of the Parkland Strategy. This amendment may also have some implications on the City's ability to forecast revenues.

3. New Community Benefits Charges regime introduced through the *Planning Act*

The previous *Planning Act* Section 37, which included density bonusing provisions, has been replaced with a new Community Benefits Charges (CBC) regime. Through a CBC by-law, municipalities may levy a charge equivalent to up to 4% of the land value on buildings of at least 5 storeys and 10 residential units. CBCs may be used to fund a range of services, including those eligible for DC funding, and including both parkland acquisition and development projects. Only single- or lower-tier municipalities may levy CBCs.

4. Few changes to Parkland Dedication provisions under Section 42 of the *Planning Act*

While significant changes to Section 42 of the *Planning Act* were initially proposed through Bill 108, few amendments to the parkland dedication framework were ultimately enacted. Notably, the Section 42 amendments grant the right to appeal a parkland dedication rate by-law to the LPAT. Appeals are limited to the alternative parkland dedication rate.



Waterloo Park

2.4 Park Development / Redevelopment

2.4.1 Parks as Community Hubs

In the typical North American park hierarchy, the ‘community park’ class has been developed to describe parks that address the passive and active needs of a larger geographic area of a city, often in association with an indoor recreation facility. Community parks are designed to accommodate larger numbers of people and offer a wide variety of facilities, such as sport fields and courts, children's play areas, trails and pathway systems, together with picnic areas, open green space or natural areas.

As our cities become more diverse and complex, so do the roles of parks and open spaces. The concept of parks as community hubs has evolved to reinforce the role that parks play in not only providing recreational opportunities but in fostering social interactions. Recent events catalysed by the global pandemic have challenged our norms for public gathering and the degree of social distancing that is acceptable in outdoor public spaces. This will influence the design, operation and management of parkland into the future. The role of parkland as a contributor to human health and wellness is underscored by the demonstrated increase in the popularity of trails and recreation areas.

> *"Parks are social spaces where we can get to know our neighbours, build a sense of belonging and learn to understand each other better……Since they are free, open and accessible, parks offer potential as community hubs where people of different ages, backgrounds and abilities can come together."*
>
> Park People – 'The New Definition of the Community Park', Realty News, October 2017

Within Waterloo's parkland inventory there are few parks that fit a traditional description of a community park or neighbourhood parks. Many are serving double duty as recreational areas, quiet green space, and places for community gatherings. This is noted in particular in neighbourhoods with a strong social connection. However not all of Waterloo's local parks have the capacity or facilities to support the intensity of uses that growing demands are placing on them. As well, it is anticipated that with intensification there will be an increased need for parks that serve multiple functions.

Where feasible and with investment in redevelopment, neighbourhood parks could be converted to community parks to reduce the need to purchase additional parkland.

As Waterloo evolves and grows, parks of different sizes and with a different range of amenities will be needed to fulfill the leisure and recreation needs of the community. The city should update community parks across the city as 'community hubs', the goal of which would be to design / develop outdoor facilities, amenities and programs that animate the park, encourage social interaction, and which can (selectively) support special events (See Section 3.3.3 Gathering and Event Space). Priorities for community hubs will be neighbourhoods that are underserved by neighbourhood parks and with existing or emerging demand for community-led events; areas of high-rise dwellings where there is a lack of private outdoor space; neighbourhoods with high numbers of people living on lower incomes (which may include students, newcomers, families, seniors, and vulnerable populations) and areas that do not have access to brick and mortar recreation centres nearby.

In combination with traditional park amenities (as appropriate to the site) the following features would support a community hub concept. The mix of program elements should be determined on a site-by-site basis in consultation with the local community, and may include:

- flexible event spaces that can support and encourage outdoor programming, open-air craft or food markets, artisan displays, community or cultural events (with hydro, potable water);
- informal food-sharing spaces such as barbecues, fire pits or places to obtain food;
- shaded seating / gathering areas (gazebos, shade structures);
- small-scale musical event or performance space (e.g. amphitheatre, bandshell or pavilion);
- shared vegetable or horticultural gardens;
- checker / chess tables, outdoor table tennis;
- permanent or temporary public art installations;
- cultural heritage interpretation;
- lighting; and
- parking.

Recommendation # 18 Identify and develop existing and new community parks, distributed geographically across the city, as 'community hubs' with the objective of enhancing the outdoor amenities and programs to animate the park, encourage social interaction and support community events.



Mary Allen Neighbourhood Park

2.4.2 Programming and Activation

Programming and activation are important elements which make parks more attractive and better utilized by residents and which support the community hub concept. Although program development is not a mandate of the parkland strategy, the City of Waterloo culture plan provides direction on enlivening streets, neighbourhoods and public green spaces. That plan identifies opportunities to program parks either as city-run initiatives or in partnership with other program providers in the local community. The goal is to broaden regular outdoor programs in selected parks, comprising both indoor programming moved outdoors (yoga, qigong, tai chi, fitness classes, boot camps, sports clinics) as well as programs that are specific to outdoor settings (nature walks, nature play, birdwatching, nature focused daycamps, forest schools, etc.). In undertaking programming, informal uses of the parks needs to be considered and maintained. With new programs, there will be a need to create roles and fill them as needed either by reassigning existing staff or hiring new staff to facilitate the programming and activation.

As noted in the section on community hubs, the inclusion of other animating and activating features in parks and public spaces should also be examined. These include temporary elements (events and festivals, arts and craft displays / markets, music or movie nights, etc.) as

well as more permanent or physical elements that celebrate a place or cultural theme (community and collaborative art, public art, temporary installations, light installations, gardens, interpretive signage, themed playgrounds or park amenities, etc.). As well the provision of Wi-Fi and internet connections in parks can increase usage, prolong visitor stays, and facilitate access to information such as trail maps, transit schedules or as part of interpretive, cultural or educational components - all of which may contribute to increasing use and enjoyment of the space.

Other opportunities include creating pop-up parks in corners of underutilized parking lots, and re-purposing streets, either permanently or temporarily, as shared spaces for vehicles and people. These types of temporary parks could be used to supplement permanent parks at peak use times in existing under-serviced areas, as well as in neighbourhoods experiencing intensification where the acquisition of new parkland may be challenging.

Recommendation # 19 Develop strategies that support the City of Waterloo culture plan to apply best practices for animating parks. Coordinate with other program providers for communicating the opportunities and delivering the programming and events. Identify critieria to select sites for pop-up and temporary events.

Recommendation # 20 In the design of community hubs, provide the infrastructure and required staff resources to enable pop-up, temporary events and facilities.

2.4.3 Gathering and Event Space

Participants in the 2018 neighbourhood strategy and early consultation on the parkland strategy expressed interest in increasing capacity for neighbourhood parks to be used as gathering spaces and for community events (community hubs). This included identifying more opportunities for booking space in parks; adding additional park amenities such as potable water, electrical service, storage, picnic shelters, gazebos; and providing enhanced customer service.

Currently in Waterloo, the parks that can be booked for events are in larger, more active parks and are often used for larger events. Waterloo Park is the largest, with several picnic areas, gazebos, a hospitality area, gardens and a bandshell amongst its bookable outdoor facilities. Large event space is also available at Hillside Park, Bechtel Park and Waterloo Public Square.

There is increasing interest in Waterloo's neighbourhoods to create informal spaces in parks to allow for smaller informal gatherings as well as spaces for more formal, organized neighbourhood events. The city currently has a list of more passive neighbourhood parks with modest services that can be booked for events. Staff prepared a list of parks (both serviced and

un-serviced) that could support small-scale events. (refer to the research, analysis and visioning report).

Formalizing a list of suitable parks and an assessment of which parks can support or continue to support larger, more formalized events is an important step to ensuring that park capacities are not exceeded and other park functions like ecological areas are not impacted. It will also help create a better understanding of what the City of Waterloo's parks and open space network has to offer for both residents and staff.

Due to the varied requirements of events and their potential negative impacts on natural features, a special events strategy can provide clear direction on the location of outdoor festivals or events based the site's carrying capacity and facility requirements. The study needs to identify opportunities to increase the number of parks that can support events and address which parks within the city-wide hierarchy are suitable, e.g. major outdoor festivals/events; community outdoor festivals / events; and neighbourhood / local outdoor festivals / events.

The work needs to be coordinated with an evaluation of enhanced customer service needs for booking events and amenities and include the identification of maintenance service levels needed to operationally support different types of events in parks. The recommendations in the 2008 recreation and leisure services master plan and the neighbourhood strategy need to inform the special events strategy.

Recommendation # 21 Prepare a special events plan to identify which parks within the parkland inventory can support events of varying sizes and types. The plan should provide guidelines for facility requirements, maintenance and additional customer service to manage bookings, within the environment and parks services division.

2.4.4 Prioritizing Park Development / Redevelopment

The city is in the process of completing a comprehensive inventory and asset replacement plan for parkland and associated facility assets. The city annually budgets for park amenity upgrades, which include improving and/or establishing new amenities and equipment through its capital budget process.

It is important to note that routine park facility replacement, which may occur as part of life cycle replacement or as a result of safety concerns, is different than a park redevelopment project which typically addresses the park as a whole. The latter process is frequently directed by a park master plan and may result in changes to facility types as well as reconfiguration of the design and layout of the site. Triggers for park redevelopment include a need for the park and facilities to be more relevant in the context of contemporary leisure trends, or to address anticipated or known recreation needs and interests resulting from changing demographics.

These may be as a result of intensification, the life-cycle of a neighbourhood, or cultural shifts. Examples of park redevelopment in the city are Waterloo Park, which is undergoing phased redevelopment as part of implementing the Waterloo Park master plan, Mary Allen Park which was recently enlarged and updated to better meet the needs of the local community, and Alexandra Park which is under redevelopment right now.

There may be alignment of the park redevelopment and asset management processes when a park requires a major overhaul of several facilities or operational costs have increased as a result of aging infrastructure.

During consultation with city staff, it became apparent that decisions about park amenity upgrades and park redevelopment required criteria to direct the identification of priorities. The city may currently be using informal criteria, however confirmation and documentation of the processes can link park redevelopment projects to evidence-based demand, provide transparency to tax payers and provide confidence to budgetary decisions.

Criteria for park redevelopment and an associated system of ranking should be further refined through inter-departmental discussions, however, should include the following (not necessarily in order of priority). The term 'park' is used in its broadest sense and the criteria can be applied to all forms of parks and open space.

- The park is identified for redevelopment (either in its entirety or through phased implementation) through a standalone master plan process, e.g. the Waterloo Park master plan.
- Redevelopment of the park is warranted considering its age, changes to operations and maintenance demands, or the need to replace one or more major park facilities. The asset management plan will inform the process along with professional management by staff, which may be precipitated by damage from vandalism or a weather related event.
- Park utilization has significantly increased or decreased, or the nature of use has changed and is impacting the carrying capacity of the park or warrants rethinking of park facilities to support new activities, e.g. increasing demand/use for special events.
- There is available space in the park to accommodate new facilities or existing facilities are underutilized and could be repurposed to meet identified recreation needs (refer to Section 3.4 of this report and other analysis in the outdoor sports field strategy, action sport strategy or neighbourhood strategy).
- Population density and/or demographics in the neighbourhood have changed, or are forecasted to change significantly as a result of land use changes or intensification. This may be first identified through district planning studies, area specific studies and/or population forecasting.

- There have been significant changes in the socio-demographics of an older, stable neighbourhood which warrant rethinking of park facilities. Suburban areas are generally considered to turn-over to the next generation in approximately 25-30 years. *Note:* Age distribution mapping for the Waterloo census tracts drawn from the 2016 census is provided in the demographic profile prepared as background to the parkland strategy and can be compared to past or future census information.)
- Prioritize underserved neighbourhoods to upgrade the availability and quality of amenities to meet equity expectations that are aligned with the Waterloo strategic plan.
- Local urban Indigenous communities have identified access to land for gathering and ceremonial purposes as a high priority. It is anticipated that natural spaces, including parklands, will be key components of any plan developed to meet these needs. Collaboration between staff in parks and staff leading reconciliation work will be important.

Recommendation # 22 Apply the evaluation criteria (above) to establish priorities for the redevelopment and upgrading of older parks, to inform priority setting and the 10-year capital budget.

Consultation with residents is an important component of the development / redevelopment of parks in Waterloo. While resident-driven requests may not always be accommodated, having a list of requested improvements may assist in establishing annual priorities and budgets.

Where capacity issues have been noted or when evaluating community requests for park improvements it can be helpful to track and monitor the frequency of use in key parks for a period of time. This type of assessment could be achieved in its simplest form by drawing on observations by front-line staff. A user survey could also be employed that collects information on how frequently parks are being used and for what purpose, administered by park volunteers or summer students. Collectively, this information could help identify which parks are well used and valued, as well as identifying those that are potentially over-utilized beyond their carrying capacity or those that are not well used as they are no longer serving residents' needs. The latter two being potential indicators for redevelopment of a park.

Recommendation # 23 To assist in the process of prioritizing parks upgrading and redevelopment, monitor booking inquiries and park use. This type of assessment can be achieved by observations by front-line staff, and other suitable measurement techniques. Surveys of park and facility use and post use bookings conducted by volunteers or students can be executed on a site or area-specific basis.

Consultation during park development / redevelopment projects becomes a significant factor toward ensuring that the resultant design and mix of facilities and amenities reflect community

interests. The undertaking of park master plans for major park development / redevelopment projects also provides for design innovation, application of municipal standards and conformity to financial expectations.

Recommendation # 24 Consult with the local neighbourhood on planned park upgrades to confirm community interests. Prepare park master plans for major park redevelopment projects to allow for public and stakeholder consultation, innovative design, application of municipal standards and to confirm budgets.

2.4.5 Responding to Population Growth and Change

Waterloo's outdoor sports field strategy (2012) is the basis for decision-making pertaining to baseball, soccer, cricket and other sports fields, while the action sport strategy directs future plans for wheeled sports (skateboards, BMX, mountain bikes, scooters, etc.) To supplement these strategies, an assessment and gap analysis was completed for the parkland strategy of other park amenities which are present in Waterloo's parks (playgrounds, splash pads, outdoor skating rinks, tennis / pickleball courts, basketball courts, dog parks, community vegetable gardens and outdoor fitness equipment). The assessment is based upon the city's current and recommended future service levels, notable trends and planning inputs, and consideration of population and participation rates where applicable. It includes a forecast of need for park amenities to the year 2031.

The overall population and socio-demographic make-up is changing province-wide and most notably in areas that are currently targeted for growth, with Waterloo Region being one of those. The city's population is estimated at 129,070 persons for 2018 and forecasted to grow to 158,770 by the year 2031 (including off-campus student populations). The City of Waterloo has several considerations to make in this regard, including the aging population, young families (with and without children), students, and newcomers.

Current and anticipated demographic changes in the city will inform which facilities and amenities will need to be provided in the future. However, there needs to be flexibility to respond to all ages and interests. This includes the provision of multi-use spaces for informal opportunities for recreation, programming and events. These may include the use of 'pop-up' park spaces or temporary sport facilities, such as portable (boxed) mini-soccer fields or moveable skate parks that meet a specific need of a neighbourhood at a particular time.

Recommendation # 25 When designing new parks, and when updating older parks, ensure that provision of new facilities meets both active recreation (sports) needs (identified in the outdoor sports field strategy, the action sports strategy) with new community gathering / social spaces and amenities that have been identified in this parkland strategy.

Recommendation # 26 Ensure that the design of parkland is equitable, inclusive and flexible to enable access to all users, different ages, abilities, income levels, cultures and genders, as appropriate to the park's location and function. Specifically, increase the number of amenities for children and youth (playgrounds, splash pads), focus on trail connections and the provision of seating and shade.

The parkland strategy has a 10-year outlook, with short, medium and long-term priorities and is based on current population estimates to 2031. It is intended to be a dynamic document that is adaptable to changing needs. New population forecasts, changing demographics, new trends and community interests, public input, land acquisition, and availability of funding all have the potential to influence the implementation of the plan. The status of recommendations and actions outlined in this report should be monitored annually alongside those of other influencing reports such as the action sport strategy and the outdoor sports field strategy, and considered during the preparation of capital and operating budgets. The city has previously completed similar plans on a ten year cycle. On this basis, the parkland strategy should be updated again in 2030.

Recommendation # 27 Establish a protocol for regular, annual monitoring of implementing the actions and recommendations of the parkland strategy. Undertake an update of the strategy in ten years.

2.5 Park Amenities

To supplement the strategies contained in the Outdoor Sports Field Strategy and Action Sports Strategy, an assessment and gap analysis was completed for the parkland strategy of un-programmed outdoor facilities typically found in other municipalities and examples that are present in Waterloo including the proposed festival heart in Waterloo Park. Festival and event spaces need to be purpose built due to the specific needs of hosting larger gatherings. Proximity to hydro for lighting and audio visual equipment, seating and hard surfaces are assets for event spaces.

The parkland strategy presents a forecast of outdoor recreation facility needs to the year 2031. The assessments are based upon the city's current and recommended future service levels, notable trends and planning inputs, and consideration of population and participation rates where applicable. The outdoor park amenity assessments recommend the following by 2031:

- continued development of new playgrounds within 800 metres (10 minute walk) to serve future residential areas, and renewal of existing playgrounds based on established criteria for prioritization;

- One additional splash pad in Waterloo Park and two additional splash pads distributed across the east and west;
- new tennis courts at a minimum of two parks with future courts being grouped in pairs to result in a total of four additional courts;
- eight new pickleball courts for organized and drop-in forms of play provided through a combination of new construction and applying multi-use lines to existing hard surface courts;
- new basketball courts at a minimum of two parks;
- additional outdoor rinks or skating paths, provided that there is staff capacity to support them and their need can be supported through: a) business planning, economic development studies, and/or urban design/revitalization processes in the case of artificial refrigerated ice surfaces; and b) expressions of volunteer interest under municipal neighbourhood rink processes for natural ice rinks; and,
- at least one new managed off-leash area on the west side to enhance the distribution across the city.



Waterloo Park Splash Pad

The following sections provide more insight to these recommendations. For additional information on the background assessment and gap analysis, refer to the Waterloo parkland strategy research, analysis and visioning report.

2.5.1 Playgrounds

The encouragement of physical activity for a variety of ages is an important role of parks and their associated facilities. For younger children and adolescents, playgrounds can provide opportunities for both active and creative play, particularly when natural play elements or innovative features are included. Shade is an essential feature of playgrounds and needs to be provided for users and caregivers.

Playgrounds are typically provided within a 5-10-minute walk (500 to 800 m) of residential areas, which is consistent with the geographic targets for the provision of a neighbourhood / local park. Waterloo's 85 playground locations provide fair geographic coverage across most of the city with gaps noted in the Columbia, Lincoln, Willowdale, Beechwood and Clair Hills planning districts. Some of these gaps are related to future development areas that will presumably be serviced with neighbourhood-level parks containing play areas.

Moving forward, future residential areas should be served by a playground located within 800 metres, unobstructed by major pedestrian barriers such as expressways, arterial roads, railway lines and watercourses. There is also a need to fill the gaps that exist in neighbourhoods across the city to ensure that the provision standards meet the 5-10 minute walking distance target. Future investments in playgrounds should thus be directed to parks located within residential growth areas in addition to areas with gaps.

Playgrounds should be scaled according to the classification of park that they are ultimately situated within. City and community parks are destinations and warrant features that stand out as attractions and have more play elements that appeal to the widest range of users. Neighbourhood / local parks may have more modest features that are focused towards children 18 months to 12 years of age, however all of the playgrounds should have accessible play elements.

In order for both new and established residential areas to benefit from quality playgrounds, the city should build upon recent efforts to renew a set number of play sites every year and to identify priority candidates for reinvestment in the short, medium and long-term. This will help the city position its playground infrastructure to provide a safe and enjoyable play experience, and do so in a fiscally proactive manner through use of capital planning and/or setting aside reserves.

New and redeveloped playgrounds should continue to integrate the city's best practice of incorporating diverse elements such as barrier-free design and natural play features to promote

inclusivity and adventure. Natural play structures are currently provided at Mary Allen Park, Rock Elm Park, Waterloo Park, and Westmount Sports Park. Fully accessible / barrier-free playgrounds are provided at RIM Park and Waterloo Park. Barrier free playgrounds in Waterloo have typically been provided with relatively inexpensive play elements that may be of limited interest compared to components that have a higher design quality/appeal. It is recommended that the city's budgets be aligned with higher standards to provide inclusivity and barrier free design elements and have innovative features that offer more play opportunities for children of varying ages and abilities.

In determining candidate sites for playground renewal, the city should consider such factors as: asset replacement needs (as identified through the asset management plan); future updates to CSA standards; CPTED (crime prevention through environmental design) considerations; population growth forecasts; and, planned park redevelopment. Additionally, socio-demographics changes and population diversity of the city's existing neighbourhoods should be examined and opportunities identified to implement innovative playgrounds that would cater to a more diverse group of users.

Recommendation # 28 Develop a playground strategy to guide future playground renewal and development and to define playground levels of service, design standards and development priorities in the short, medium and long-term.

Recommendation # 29 It is recommended that playgrounds be a priority for local parks and be located within 800 m walking distance, unobstructed by major pedestrian barriers such as expressways, arterial roads, railway lines and watercourses.

Recommendation # 30 Update playground development and renewal budgets to reflect a suitable allowance for barrier-free design elements, shade for users and caregivers, and innovative features that offer more creative play and cater to a wider range of children and youth.

2.5.2 Splash Pads

Splash pads are highly sought public amenities, and were represented in the top 10 most noted improvements for Waterloo parks. The former Lion's Lagoon at Waterloo Park was the sole splash pad serving residents across Waterloo. Consistent with the Waterloo Park master plan, the aging Lions Lagoon splash pad and its associated infrastructure is being replaced with two smaller splash pads in the park. One of the two splash pads has been already constructed in 2020. Providing splash pads on a district-basis (where they serve communities or multiple neighbourhoods) offers fun and interactive park-based experiences during the summer months without having to drive to a centralized destination facility (such as Waterloo Park). The city's

capital budget identifies three additional splash pads in the north, east and west of the city, and has allocated funding for the years 2020 through 2022. In doing so, both city-wide and area-specific opportunities for outdoor water play and cooling down will be addressed.

It is assumed that all or a portion of the new splash pads will be located in existing parks in order to ensure satisfactory geographic distribution. Potential locations should meet a set of criteria including but not limited to:

- Proximity to existing splash pads;
- Adequate area within the park to accommodate the footprint and facilities;
- Adequate parking;
- Existing amenities within the park, preferably washrooms and access to park servicing (water and wastewater, etc.);
- Connectivity into the adjacent neighbourhoods;
- Accessibility requirements (AODA);
- Crime prevention through environmental design (CPTED);
- Access for emergency and service vehicles; and
- Minimal impact to the natural heritage features.

Recommendation # 31 Continue efforts to advance splash pads located elsewhere within Waterloo Park, consistent with the Waterloo Park master plan.

Recommendation # 32 Continue with plans to construct three new splash pads city-wide. Select locations based on a set of criteria that includes the ability to balance geographic distribution and underserviced communities.

2.5.3 Outdoor Skating Rinks

The city operates a refrigerated outdoor skating rink at Waterloo Public Square while volunteer-maintained rinks are distributed across parks located throughout various neighbourhoods and may vary from year to year. A neighbourhood rink program is in place whereby volunteer convenors are identified to train other volunteers to operate a neighbourhood rink and coordinate a volunteer schedule. Rink volunteers maintain the rinks by flooding and shovelling snow, caring for equipment and monitoring the rink. Given the uncertainty in volunteer participation in any given year, the number of neighbourhood rinks varies each season as rinks would not be set up in the absence of volunteers. There is also no set municipal standard based on geographic distribution. Whether volunteer or municipally run, climate change is creating temperature fluctuations which is making outdoor ice rinks more challenging to operate and maintain.

Although the Waterloo parkland strategy does not specifically recommend new outdoor refrigerated rinks or skating paths to be constructed, future rinks may be pursued if their need can be rationalized through:

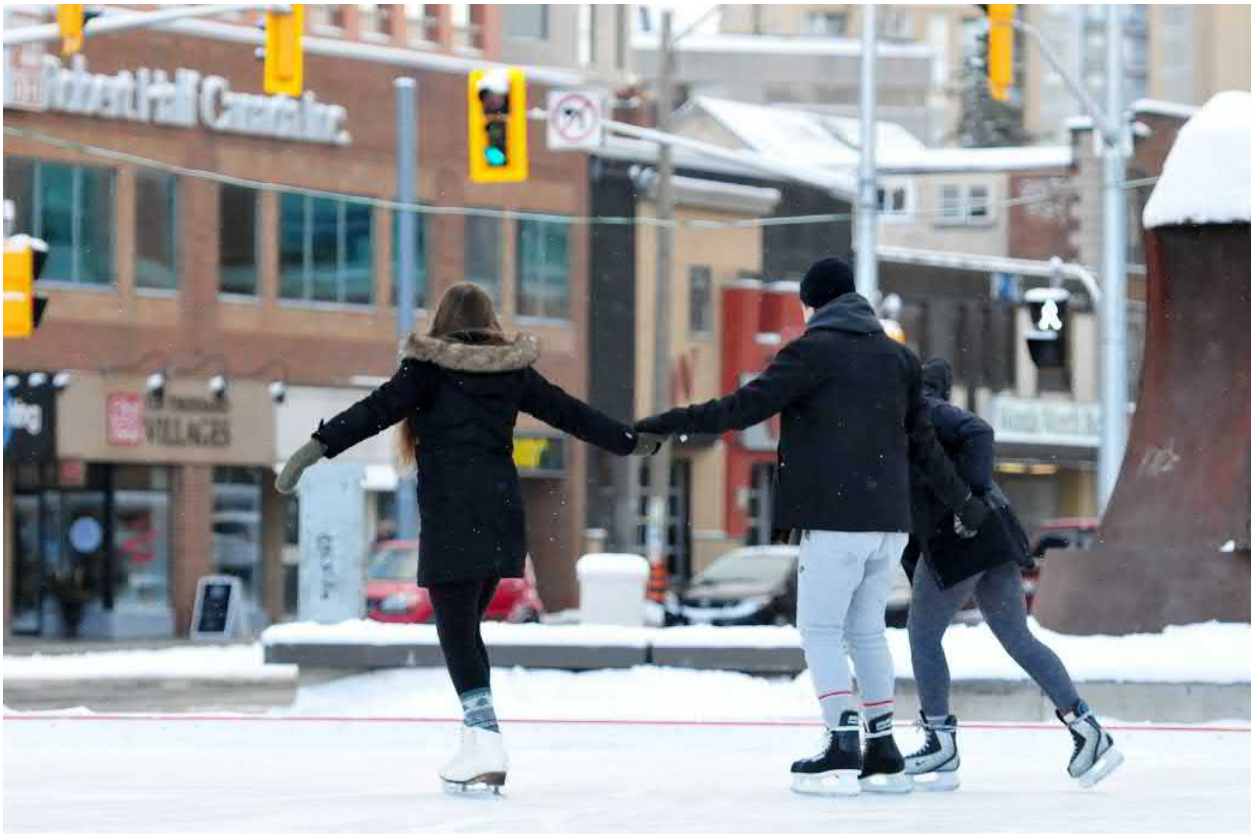
- Business planning, economic development studies, and/or urban design / revitalization processes in the case of artificial ice surfaces;
- Expressions of volunteer interest, including neighbourhood support through the municipal neighbourhood rink program for natural ice rinks; and
- Capacity of parks staff to support maintenance and operations.

Hard surface courts or park paths to be constructed in the future may give consideration to designs that could potentially allow skating opportunities in the winter to reflect their multi-use nature as well as create a year-round recreational experience. The designs will need to adequately consider more durable materials to withstand freeze-thaw conditions.

If the city pursues the development of additional outdoor artificial ice rinks or paths, it would optimally be provided through an opportunity-based approach to create a distinctive recreational experience that cannot be offered within an arena or existing outdoor rinks, and contribute to broader civic and/or economic development objectives. Additional outdoor artificial rinks should only be considered with the above criteria given the sizeable costs to construct and operate refrigerated rinks. Care should be taken to ensure that the construction methods or infrastructure do not negatively impact spring/summer uses.

Recommendation # 33 Consider refrigerated ice rinks or paths when planned in conjunction with other major civic or urban planning initiatives. Due to the high costs, appropriate economic and financial analysis needs to be prepared to evaluate the ability of the city to operate and maintain refrigerated facilities.

Recommendation # 34 Natural rinks should continue to be supported through the city's existing volunteer rink program, as well as be located in parks that have access to suitable space and are appropriately serviced.



Waterloo Public Square

2.5.4 Tennis Courts

Tennis is experiencing a resurgence in Canada, partially associated with the aging population but also among other age groups due in part of the success of Canadians on the professional tours and cultural diversity. There are ten multi-use tennis courts in city parks along with eight courts that are shared with schools. Excluded from the municipal supply are private tennis courts owned by neighbourhood homeowners' associations as these are typically available only to members / those that live in the neighbourhood, although it is recognized that this supply alleviates a degree of pressure on the city to build courts in certain areas. Also excluded from the municipal supply are the twelve 12 club tennis courts at Waterloo Park of which six of these courts are covered with a dome during the winter months for indoor use, which are owned and maintained by the Waterloo Tennis Club (land lease agreement).

Tennis courts are typically provided on the basis of distribution and provision targets in the range of one court per 4,000 to 6,000 population. Geographic distribution analysis using a one-kilometre radius shows gaps across the northwest and northeast areas of Waterloo though some of these are serviced by homeowners' association courts.

Targeting provision at one tennis court per 6,000 population in recognition of the contributions from the homeowner's associations, Waterloo Tennis club and school courts would result in a

total supply requirement of 26 tennis courts by the year 2031. New development areas will need to be considered for new courts to ensure appropriate geographic distribution and supply.

Accordingly, tennis courts are recommended at a minimum of two parks to address aforementioned gap areas in the north as well as future development areas. Best practices in design combine a minimum of two courts per park to allow the potential for neighbourhood-based programs as well as reducing the possibility of players having to wait between games. Although the 2008 recreation and leisure services recommends tennis courts be assigned only to community park classifications, limited community park acquisition / development potential resulting from land scarcity warrants the city's consideration of developing future tennis courts in neighbourhood / local parks as well.

Recommendation # 35 Construct tennis courts at a minimum of two park locations (existing or future), in a manner that strengthens geographic distribution. Tennis courts may be designed to allow multiple uses, consistent with the Waterloo recreation and leisure services master plan direction for play courts.

2.5.5 Pickleball Courts

Pickleball is steadily growing in popularity provincially in both indoor and outdoor settings. Since 2014, pickleball attendance in city programs has grown from the low hundreds to over 1500 attendees. Waterloo has the largest operating indoor pickleball club in Ontario. It includes all ages and abilities, and is regarded in the tri-cities and across Ontario as a centre of pickleball excellence.

The popularity of indoor pickleball is resulting in greater requests for outdoor courts. Outdoor pickleball courts have the potential to attract more users into a park during the daytime as well as creating opportunities for players to organize into formal clubs, though the ability to find space within parkland could become challenging given the pressure for parkland to accommodate many interests within their finite boundaries.

Waterloo historically provided basic pickleball line markings on two tennis courts at Bechtel Park and more recently has marked all its outdoor tennis courts to include pickleball line markings in order to meet the growing demand for the sport. The popularity of the outdoor pickleball is still being evaluated in Waterloo, and thus the city presently does not have a level of service standard in place for the provision of outdoor pickleball courts.

The preferred implementation strategy involves reinforcing the city's reputation as a centre of excellence for pickleball while providing opportunities for casual play in strategic locations across Waterloo. To this end, the city's future model would embody two components:

- A city-wide destination(s) capable of centralizing organized pickleball programs such as league and drop-in play, lessons/clinics, tournaments, and round-robins. To support the ability of the city and/or community pickleball providers to deliver organized programs effectively, a minimum of four dedicated pickleball courts consolidated at one park would enable effective programming/structured play. This type of model would be optimal at city or community park typologies, ideally integrated within the west side recreation facility recommended by the outdoor sports field strategy.
- A number of local destinations integrated within neighbourhood and community-serving parks to provide geographic distribution across the city. Chosen parks should contain at least two courts to allow unstructured, neighbourhood-based play (similar to the city's neighbourhood tennis court model). A minimum of four pickleball courts distributed across at least two parks would be appropriate for the short to medium term.

Future pickleball courts would ideally be situated in areas characterized by a sizeable population of older adults, access to parking, within parks containing washrooms and shade, and areas having strong connectivity to the city's public transit and/or trail system. With respect to a city-wide destination for play, Waterloo Park embodies all of these noted elements although it is recognized that a heavy intensity of use at this park is likely if implementing the full extent of the Waterloo Park master plan. That being said, users of the city's future senior's centre, which is currently being constructed as part of the Waterloo Memorial Recreation Centre expansion, may strongly benefit from the courts and complement its active/healthy aging programs. Alternative park locations including the proposed west side recreation facility should therefore be evaluated using similar criteria noted above.

With respect to localized destinations, Bechtel Park pickleball courts are serving much of the city's south-east and thus expanding the number of outdoor pickleball courts west of King Street and/or north of Columbia Street / Lexington Road will help balance geographic distribution for residents, particularly for older adults and persons that have a reduced ability/willingness to travel.

Depending upon the sites ultimately chosen for community or neighbourhood-level pickleball courts, the city's development options include (but are not limited to):

- Constructing dedicated pickleball courts as part of a park development or redevelopment project;
- Making use of asphalt multi-sport courts that are largely located in neighbourhood-serving parks; and / or
- Continuing to employ the multi-line marking approach where pickleball is accommodated on new or existing tennis courts.

Recommendation # 36 Develop a minimum of four dedicated pickleball courts to create a centralized facility capable of delivering organized programming. A city-wide or community park typology would be preferred to ensure the availability of supporting infrastructure along with access to major transportation corridors. Ideally, this amenity would be integrated within the west side recreation facility recommended by the outdoor sports field strategy.

Recommendation # 37 Construct a minimum of four outdoor pickleball courts at community or neighbourhood parks located west of King Street through construction of dedicated courts, multi-use lining of existing hard surface courts, or a combination thereof. Additional neighbourhood-based courts may be considered if warranted by future demands and participation levels at existing pickleball courts.

2.5.6 Basketball Courts

Outdoor basketball courts are important facilities for local children and youth, and can be readily distributed throughout the parks system (specifically the smaller half court templates). The steadily increasing popularity of basketball in Kitchener-Waterloo and across the Greater Golden Horseshoe is fueled by factors such as access to free outdoor courts, growth in immigrant populations, interest generated by the Toronto Raptors NBA championship, a strengthened national men's and women's program, and success of area athletes at the varsity and professional levels.

The primary users of outdoor courts are youth between the ages of 10 and 19, thus it is important that courts are available in reasonable walking distance of residential areas. Basketball courts are sometimes designed as multi-use to also allow activities such as ball hockey to be played. Many schools also provide hoops, however, access and condition varies widely and community access can be limited. Noise can be an issue with basketball courts but is commonly mitigated by ensuring appropriate setbacks from adjacent residences as well as developing courts at the outset of new park development so that new residents are aware of a court's existence before moving in.

Municipal master planning provision targets in the range of 1 per 800 youth between the ages of 10 and 19 are commonly applied in tandem with distributional analyses. Based on census data, Waterloo's six existing courts result in a service level of 1 per 1,900 youth ages 10 to 19. Distribution of basketball courts in six parks leaves a number of geographic gaps that heavily rely upon non-municipal courts. Geographic gaps based on a one kilometre service radius are most prominent in the northwest (with no city-owned courts located northwest of the Columbia Street/Westmount Road intersection) and northeast of Lexington Road and the

Conestoga Parkway. As opportunities arise, basketball courts should be considered for parks located in developing greenfield areas such as the Beaver Creek Meadows/Erbsville planning district and the Country Squire/Rural East planning district. The city has also identified need in the Albert McCormick neighbourhood and a new Bankshot basketball court is currently under development there.

Three half basketball courts were proposed within a youth play area as part of implementing the Waterloo Park master plan design brief,[4] replacing the existing court (contingent upon the sports field implementation strategy for the park). A new park scheduled to open in Vista Hills may also add a half court to the supply.

Recommendation # 38 Develop outdoor basketball courts at a minimum of two parks, focusing upon future designated residential greenfield areas in the city's northwest and/or northeast, as well as in established neighbourhoods that do not have access to a city-owned court within reasonable walking distance. Basketball courts may be designed to allow multiple uses, consistent with the city's recreation and Leisure services master plan.



Basketball court in Mary Allen Park

[4] City of Waterloo. 2009. Waterloo Park Master Plan, Final Report. p.54

2.5.7 Dog Parks / Off Leash Areas

Studies have shown that dog ownership is on the increase, not just in the suburban areas of cities, but also in the urban core. This includes people living in high-rise buildings. Limitations in private space, especially those with no or small balconies result in dog owners using public parks as places for pet exercise and socialization. When intensification results in high densities with reduced public space, opportunities for creating dog facilities within the footprint of these developments need to be explored as a solution to accommodate pet owners on their own sites.

Many municipalities, including Waterloo, frequently receive requests for new or expanded dog parks or off leash areas along with supporting amenities. For the purpose of discussion, the term dog park is often used to describe a purpose-built area with specific facilities for dogs, which may include obstacles courses, hydration stations, and dog-waste receptacles as well as shade trees, benches or picnic tables for the comfort of dog owners. An off-leash area for exercise may be as simple as a fenced lawn area.

There is currently one city-run off-leash area in Waterloo, located at Bechtel Park in the east end. The area is two hectares in size and fenced. During consultation, improvements were requested to the existing facility including increased maintenance, access to water, a separate small dog area that is more accessible to seniors and improved accessibility overall.

Unlike other facilities, there are typically no provision levels for dog parks and off-leash areas as application of a population-based standard does not account for dog ownership rates in the city (it includes residents that do not own a pet). Dog parks or off-leash areas are most frequently provided based on interest by the community and often in partnership with community organizations to assist with site selection, fundraising and maintenance of the facility. Their provision, however, is somewhat controversial as both types of facilities can be space intensive and if located in existing parks can be at the expense of other facilities or general open space. This has led municipalities to develop dog parks or off-leash areas in underutilized park areas, or in other open space lands such as hydro corridors rather than on the basis of equitable geographic distribution.

With only one off-leash facility in the city and with the forecasted population growth and increasing popularity of dog parks and off-leash facilities in general, at least one additional space in Waterloo could be justified, ideally in the west end. This would increase access and geographically distribute of off-leash dog parks across the city. The benefit of additional purpose built parks is that it assists in reducing the burden on existing parks where dogs on-leash rules are violated.

The site selection exercise should consider (at a minimum) such factors as:

- location(s) that best serves user demand;
- sufficient land area (minimum one ha. of dedicated space) considering safety, adequate setbacks from adjacent land uses and other park facilities;
- compatibility with other park facilities;
- safety and security (off-leash users and other park users);
- potential impacts to wildlife habitat, environmentally sensitive areas and adjacent landowners;
- ease of access via road, pathways, trails;
- onsite parking; and,
- cost of site development and maintenance.

As the population grows and if demand for off-leash areas continues, the city should develop policies and design standards to direct the location and establishment of additional off-leash areas. For larger sites, this may include: perimeter fencing, double service gates for maintenance, waste containers outside of the fenced area, groundcovers (grass, woodchips, and accessible hard surface material) and picnic tables. A model for small off-leash areas should also be developed that can be incorporated into urban parks. These types of facilities on private lands might also be requested from the development community. Opportunities for the establishment of a community stewardship organization to assist with development and maintenance could also be considered.

Recommendation # 39 Undertake a site search for the development of at least one off-leash area, ideally in the west end, to increase the distribution across the city.

Recommendation # 40 Develop policies and standards for dog parks in high density neighbourhoods, to direct their location and establishment, including a model for small urban parks. In locations that are intensifying with reduced public space, opportunities for creating dog facilities within the footprint of these developments need to be explored as a solution to accommodate pet owners on their own sites.

2.5.8 Community Vegetable Gardens

Community vegetable gardens have seen a recent resurgence in popularity particularly in higher density areas, where they replace backyard gardening activities. They are low cost, create opportunities for neighbours to meet and work together, provide for both physical activity and quiet contemplation, provide easy access to affordable food, encourage food skill development, and can be enjoyed by many age groups and cultures.

The city currently has four community vegetable garden sites on city lands. It does not currently inventory community vegetable gardens that are not on city land though the Community Garden Council of Waterloo Region website indicates that there are a total of 17 community gardens operating in Waterloo.

Unlike sports facilities, there are typically no standards of provision for community gardens in most municipalities and many evolve as a result of expressed interest from residents. Experience from other municipalities indicates that community vegetable gardens are likely to be most successful when undertaken as a community-led initiative with support from the city.

Community garden practices on city lands are outlined in the community vegetable toolkit[5]. The neighbourhood strategy recommendations resulted in funding allocations to support the new community vegetable gardens and outdoor rink infrastructure.

The development of community vegetable gardens requires consideration of the suitability of the location (e.g. proximity to a residential area, ease of access) and the physical parameters of the site itself (e.g. soil conditions, openness and terrain) and typically require some infrastructure to be sustainable (e.g. water supply, storage boxes or shed). The city should consider rebranding the existing program to better meet the needs of the community and local neighbourhoods.

[5] https://www.waterloo.ca/en/living/environment.aspx#Community-vegetable-garden



Haida Park Community Garden

In examining opportunities for collaboration, partners could include the Region's Community Garden Council, school boards, Waterloo North Hydro and Grand River Conservation Authority. Coordination efforts could include: information sharing; program development; identifying under-served areas of the city (where resident interest exists); determining potential new sites (on both city-owned and partner owned property); promotion and advertising (on respective web-sites and through site signage).

Recommendation # 41 Explore collaboration opportunities for expanding community vegetable gardens through partnerships with other government, agency and community-based organizations, together with advancing rebranding to better support local neighbourhoods.

2.5.9 Outdoor Fitness Equipment

Outdoor fitness equipment provides a cost effective replacement for traditional gym equipment while also experiencing the outdoors and nature, as well as a space efficient solution to enhance physical fitness opportunities of trails and small park sites. Outdoor fitness equipment can be utilized on a personal level or as part of a group outdoor fitness program and appeals to a range of ages, older adults in particular. The equipment can be selected to support a number of fitness goals including warm up, cardiovascular, core strength, balance, and

flexibility, and can be located within 'outdoor gym' spaces (similar to playgrounds) that promote social interaction, or as fitness station points along a trail. Outdoor fitness equipment is not typically provided on a provision-level basis however it is increasingly being installed in Ontario municipalities to encourage physical activity and park usage. The city successfully partnered with Bluevale Collegiate Institute to provide outdoor fitness equipment that is available to the community. A desire for outdoor fitness equipment in Waterloo was noted during the parkland strategy consultation, in both the online survey and park intercept surveys.

Through other investigative efforts recommended in this plan for outdoor programming and park redevelopment, outdoor fitness equipment can activate parks and encourage a wider range of users to engage in fitness activities. Outdoor fitness equipment elements can be included along trails in local / neighbourhood parks and included as destination attractions in community parks. Design considerations include selecting locations where outdoor fitness equipment can benefit a broad range of users.

Recommendation # 42 To expand outdoor programming in parks and park redevelopment plans, introduce outdoor fitness equipment elements along trails in local / neighbourhood parks and as destination fitness circuits in community parks. Ensure that the selected locations and designs will benefit a broad range of users and that maintenance cost are reflected in operating budgets.

2.5.10 Shade and Shelter

The effects of climate change are becoming more evident through higher temperatures in the summer and stronger UV radiation from the sun. As a result, the importance of providing shade in parks is becoming increasingly apparent.

Trees are an excellent and sustainable preferred source of shade and natural cooling in parks. Tree planting is a priority and every opportunity should be taken to provide as many trees as possible. While Waterloo has an active program of tree planting in its parks and open spaces there is an opportunity to target these efforts to heat vulnerable areas. Heat vulnerability in parks can be conducted through a simple air photo analysis of tree canopy gaps or field level analysis, or heat vulnerability mapping to see which parks would benefit from the provision of shade. The City of Waterloo corporate climate change adaptation plan, 2019 has a commitment to map areas of the city vulnerable to heat extremes and use mapping. When completed, this can inform parks initiatives.

There are also ways to gain instant shade until tree canopies mature through the construction of shade structures in areas where users may seek shade (spectator areas of sports fields, play sites, seating areas and picnic areas). Shade structures can take the form of gazebos or permanent pavilions (of varying sizes) or sailcloth type shelters that are installed seasonally.

The latter are designed for use at sports facilities, picnic areas and playgrounds where shade and relief from rain is lacking.

As part of adaptation to climate change it will be a priority for the city to provide shade, particularly in heat vulnerable locations and to make it a basic requirement in the development of new parks moving forward.

Recommendation # 43 Develop criteria, range of options and a funding strategy for the provision of shade in parks as both a requirement of new park development and upgrading of existing parks.



Old Oak Environmental Reserve Shade Shelter

2.5.11 Comfort Amenities

Park amenities that are currently in-demand across Ontario are those, which add to the comfort of park users, and allow for extended visits. These include washrooms, seating such as benches or picnic tables and hydration stations (water fountains, bottle-refilling stations). These elements are important to all demographics and to older adults in particular.

Seating is an easy and inexpensive option for parks, and locating benches near sports fields, playgrounds and other amenities to facilitate viewing by parents and other park users is important.

Washrooms (either permanent or portable) help to extend the length of stay in parks and are important in parks with facilities that involve longer duration visits such as sports fields, splash pads, and picnic areas. Parks which currently have washrooms include Bechtel Park, Hillside Park, Lexington Park, RIM Park, Westmount Sports Park and Waterloo Park. Portable washrooms may be placed as needed on a seasonal or single event basis. The City of Waterloo currently does not have criteria for washrooms in parks, which may be helpful moving forward.

Due to increasing temperatures during the summertime, hydration is also important in parks. Locating elements such as water fountains, water bottle filling stations or even having more involved misting zones. Locating these elements may need development criteria as well as a plan for prioritization.

Recommendation # 44 Develop criteria for the provision and location of comfort amenities in parks including the provision of washrooms and hydration stations. Implementation could be tested through pilot projects prior to introducing as policy.

2.5.12 Public Art

Public art enhances parkland by bringing awareness to a feature or a place that has special historic or cultural meaning. There are many different types of public art opportunities including: community and collaborative art; wayfinding elements; site specific sculptures; video projections, landscape/architectural designs and community improvement projects such murals. Parks and trails are visible and enabling connectors that play a role in communicating a sense of community and a sense of pride in local culture. Incorporating art as part of the design of trail and park amenities can tell the story of an area's unique culture and help transform a space into a place. Public art in parks can act as signifiers, an expression of community's identity and local assets.

The City of Waterloo Culture Plan also supports and encourages the inclusion of art in public parks. The plan addresses how collaboration with other city departments, that have resources and knowledge for curating the design and authenticity of the artistic expressions, can work collaboratively to enable the process for procurement and execution.

Recommendation # 45 Include integrated public art as elements of new and redeveloped parkland. Collaborate with city staff whose mandates include the delivery of the municipal public art program.

2.5.13 Wi-Fi and Other Technology in Parks

With rapid technology advancement, expectations of access to the internet and social media have become the social norm. Consequently, there is an increasing trend globally toward the

provision of Wi-Fi in public buildings and spaces, including in parks. This allows for increased time to be spent in parks and for people to remain connected throughout their stay, as well as providing ready access to information about a place that can enhance enjoyment of the site. The provision of Wi-Fi is particularly attractive for youth who may choose to use a space based on the availability of an internet connection.

Waterloo offers free Wi-Fi at most of its municipal and community facilities, including Waterloo Park, Waterloo Public Square and RIM Park. The city also provides indoor electronic messaging boards at Waterloo City Centre, RIM Park and WMRC facilities and has outdoor electronic signage in two locations: RIM Park and WMRC (on the corner of Erb Street and Father David Bauer Drive).

The inclusion of personal device charging stations in community facilities is also of growing interest. These are most commonly being provided in indoor locations although some examples exist of solar powered outdoor stations in well-used urban public spaces.

Other uses of technology in parks include: the incorporation of QR codes or location based apps into information signage such as trail and transit maps or as part of interpretive and educational components; and location-based games. These elements may serve to attract park usage, contribute to programming and activation objectives, and contribute to use and enjoyment of the space by technology seekers. The presence of technology should never detract from user's ability to disconnect and enjoy quiet reflection, appreciating nature, being physical active and interacting with other people.

If increasing the provision of Wi-Fi or other technology in Waterloo parks is a desirable objective for the city, a strategy or policy will need to be developed to direct the location, type of park and the nature of technology to be provided. Locating Wi-Fi and associated technology such as charging stations in urban parks, public spaces near ION stops, urban public spaces or areas that have many programmed events may be an initial strategy. Wi-Fi can either be free or paid. Opportunities for partnerships with service providers or through sponsorship by corporations who gain from advertising could be considered to offset costs.

Recommendation # 46 Investigate the desirability of expanding technology in parkland and identify appropriate locations for the provision of Wi-Fi in selected urban spaces and city-serving parks. Opportunities for partnerships with service providers or through sponsorship by corporations could be considered to offset costs.

Recommendation # 47 In association with investigations into programming and activation of parks (see Recommendation #21) consider how technology may contribute to enhancing park usage by informing the public about

events, activities and the location of amenities (i.e. closest splash pad).

2.5.14 Response to New Interests / Demands

New recreational trends or changing community interests may result in unplanned outdoor recreation facility or park amenity requests across the system. Where these demands are widespread, additional analysis and policies may be needed to direct the geographic location of new amenities or to support partnerships or requests for funding. These types of facility specific assessments are regularly undertaken for major indoor / outdoor facilities but are also increasingly being undertaken by municipalities to address the provision of park amenities, which may fall outside of a basic level of municipal service, such as washrooms, shade structures, dog parks and community vegetable gardens. Such studies include examination of needs, provision levels, public support, locational criteria, and funding mechanisms, and are frequently implemented through a Council approved By-law or Policy.

Recommendation # 48 If and when community interests result in widespread demands for unforeseen park amenities that are beyond current programs, additional studies will need to be undertaken to determine appropriateness and to direct their provision and location.

2.6 Trails, Pathways and Wayfinding

The network of trails and pathways in Waterloo is quite extensive and from comments received during engagement for this study and the transportation master plan study, trails are well loved and well used. Also, in surveys related to park improvements, expansion, enhancement and winter use of the existing trail system were frequently mentioned. Many respondents requested that existing trails be paved, while some noted that in some areas trails need to be reconstructed to mitigate the effects of flooding. The desire to have some trails cleared of snow to facilitate all season use was also noted.

It is important to clarify that the scope of this Waterloo parkland strategy does not pertain to the greater network of on-road cycling facilities and off-road trails and pathways. These are addressed in the 2011 transportation master plan, which is undergoing an update. Making accessible connections to external trails, bike lanes, multi-use paths, transit, internal park amenities and parking areas are all important to improving the internal circulation of the parks.

Directing and guiding people to and from the wider active transportation network to parks and trails will influence how effective and successful new parkland becomes in the future. A comprehensive and consistent wayfinding system will help to safely navigate users to parks and key destinations around the city via alternate modes of transport such as walking, cycling and transit. Parks and trails systems benefit from consistent visual communication that is AODA

compliant, easy to read and conveys critical information on user safety and accessibility. When conveying regulatory messages, the tone should be neutral and avoid long lists of restricted behaviours.

The signs needs to be well designed and easily adaptable to maintenance and replacement to respond to updates in the parks and trails system. Year round use is growing, the wayfinding system needs to respond to seasonal programming and be inclusive of casual users as well as pursuits including running and cycling for fitness.

The city's transportation services team prepared a citywide wayfinding system that will be fully implemented over the next few years. This will ensure the location of parks and trails are well signed from local neighbourhoods, adjacent streets and the wider active transportation network.

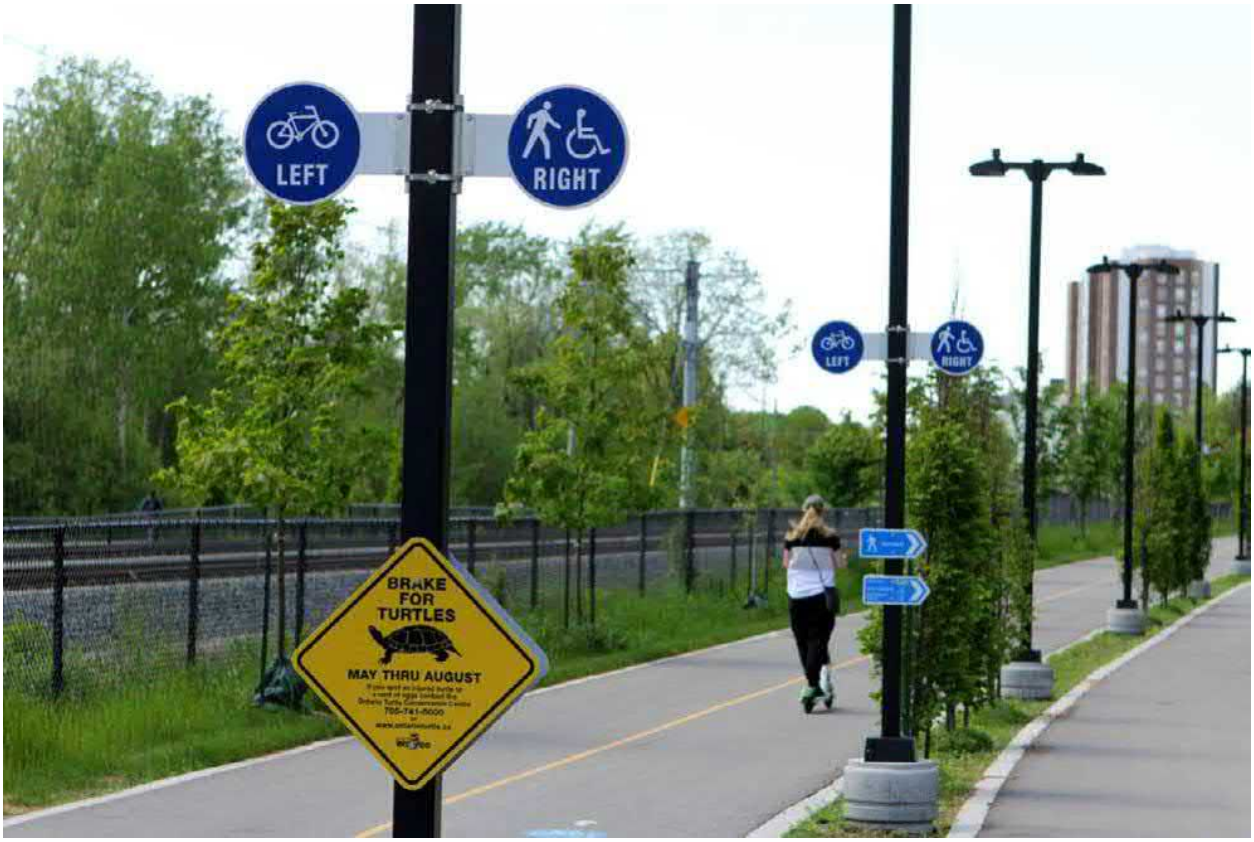
Collaboration and inter-departmental coordination can ensure that trail planning priorities for the city are optimized and that the trails system links parks with transit and on and off road cycling facilities. The inter-departmental coordination extends to ensuring that branding is consistent with broader corporate communication.

The fulfilment of requests for improvements to existing trails in parks will require prioritizing resources and budget. Future consideration of these facilities need to be coordinated in concert with the transportation master plan update and will be based on criteria such as user demand, proximity to transit, entrances to amenities, school routes and parking.

Improvement of locally serving trails and trail facilities in parks cannot be neglected. Parkland trails provide very high value benefits for modest costs, particularly when integrated with other recreation amenities like outdoor fitness equipment, sports fields and nature based walks.

Recommendation # 49 Design and implement a comprehensive, consistent, accessible wayfinding and signage system to facilitate multi-modal uses that facilitate ease of access, user safety and support diverse users and activities.

Recommendation # 50 Future consideration of improvements and expansion of trails and pathways in parks are a priority. The community wide multi-use trail and bikeway system needs to be coordinated through the transportation master plan update. Local park trails are well used and there is additional demand for expanding all season use and associated maintenance.



Multi-use trail in Waterloo Park.

2.7 Climate Change Resiliency

Climate change effects are becoming more and more apparent throughout Ontario, which has an impact on parks and open spaces. The intensity of storm events are increasing, as is their frequency for all seasons. Damage to canopy trees and other stands of vegetation from high winds, rainfall and ice damage have been seen across the province along with damage to roads, trails, sports facilities and other vulnerable infrastructure from increasing flood events. Extended periods of heat and drought are also increasing the threat to native vegetation from pests and invasive plant species.

Parks and open space, if appropriately designed and managed, can serve as resilient spaces that assist in the mitigation and amelioration of the effects of climate change. The City of Waterloo corporate climate change adaptation plan, 2019 focuses on climate adaptation measures across all departments. As part of this commitment the environment and parks services division is involved in or leading the following initiatives:

- mapping areas vulnerable to heat extremes and use mapping to inform planning and programming initiatives;

- reviewing winter control practices to ensure climate change impacts are considered and to identify opportunities for improvement;
- developing an urban forest strategy including: a tree canopy target, identifying tree species for planting that are resilient to invasive species and changing climatic conditions; and a re-planting program for trees lost during ice and wind storms;
- reviewing the canopy cover mapping protocol and identify tree deficit areas;
- updating the emergency forestry plan; and,
- continuing to incorporate city-owned green infrastructure into the asset management plan.

Other opportunities for climate change mitigation and adaptation in parks include:

- community planting initiatives to enhance the urban forest with focus on protecting sensitive areas (woodland edges and waterways);
- community stewardship activities to inventory and remove invasive plant species and re-plant with native species;
- selection of infrastructure and hardscape materials (paving, concrete, etc.) to withstand a range of weather related elements (heat, cold, rain, ice, snow, wind, flooding, etc.);
- implementing low impact development mesures to slow down and collect stormwater in designated areas (bioswales, rain gardens, permeable paving); and using new planting technologies to bolster the health of and to increase the long-term sustainability of urban trees.

Recommendation # 51 In addition to actions and strategies identified in the corporate climate change adaptation plan, the ongoing development / redevelopment of parks needs to incorporate design standards and measures that include slowing storm runoff, controlling invasive species and selecting native plant materials to support a healthy urban forest canopy.

2.8 Natural Areas

Natural areas in an urban context are locations in the city that have a physical and cultural individuality developed through natural growth rather than design or planning. These areas encompass woodlands, wetlands and naturally occurring features that have ecological functions. As part of Waterloo's parkland they contribute to a healthier and sustainable urban ecological system in the city. Natural areas in parks are part of a larger municipal and regional natural system that is comprised of environmental lands in public and private ownership.

These natural areas contribute to the overall urban forest canopy and provide habitat for wildlife, as well as decreasing soil erosion, filtering out pollutants and providing cleansing and cooling effects for watercourses. The contribution of these areas to water quality is particularly important to Waterloo as the region uses both groundwater and water from the Grand River as its drinking water supply. There are also social and human health benefits that enable people to connect with nature that is proven to reduce stress and improve wellbeing.

The challenge with natural areas is that management requires skills that are different from traditional park maintenance that is primarily mowing and exceeds normal day to day operations. Consequently, where these skills and resources are lacking, natural areas face the appearance of long grass and weeds, invasive plant species and encroachments such as informal trails and litter. In addition, public engagement revealed that some users characterized the appearance parks where mowing has ceased and that are allowed to naturalize as neglected. This is a negative perception that undermines the value of an otherwise valued and appreciated resource.

A natural areas management plan that builds on the natural areas inventory and strategy can improve public perception. There is also room to increase environmental awareness through education, improving regular maintenance activities, grooming the edges of natural areas, removing litter more frequently and using plantings that include native wildflowers, shrubs and trees that support pollinators to improve the aesthetic quality, particularly along the sides of walkways and around picnic areas. Although the city undertakes education and awareness building, these efforts can be supported with additional on-site interpretation, community planting efforts and invasive species (weeding) control.



Clair Lake

Encroachments of residential back yards onto parks, particularly into natural areas is more than a nuisance, it is detrimental to the health of a woodland or wetland. Actions such as mowing natural areas, disposing of grass cuttings and yard waste, clearing out living fence buffers that were established by the city between homes and adjacent forests, expanding ornamental or vegetable gardens into natural areas, and placing structures (fences, play structures, sheds, composters) on park property is unacceptable. Additional resources are needed to manage these incursions and can include education, fencing, and signage and enacting a by-law to enable enforcement with fines to recover the cost of protecting the natural areas. In new developments, fencing without access gates should be mandatory along the property line abutting natural areas.

Natural features within parks having public trail systems require regular maintenance of both vegetation and trail surfaces to provide safe public access. Specific actions related to trails include improving drainage in low lying wet areas, closing trails that are damaging the natural feature, trimming overhanging branches, felling hazardous trees, maintaining trail surfaces.

Invasive species management requires a number of actions to ensure that aggressive non-native species are controlled. This requires appropriately skilled staff resources and budget to manage existing and new natural areas in locations where there is public use. Although volunteer effort and stewardship programs provide positive contributions, they are not a

replacement for active urban forest management and actions to restore degraded natural lands.

As indicated through the public engagement process, park users are interested in more natural areas in general. Like most municipalities, Waterloo has faced increasing maintenance budget pressures, which have resulted in less funding to re-naturalize and improve these areas. This is particularly notable with the loss of herbaceous plantings which are now rarely included in new parks or redeveloped parks, primarily because of maintenance resources. These landscapes are important habitats for pollinators and other wildlife, but few are being established and many have disappeared.

Additional operating resources are needed to maintain the city's current inventory of natural areas and new creative ways to preserve and augment these areas must be considered. New naturalized plantings have unique maintenance requirements following installation that include the removal of invasive weeds and regular watering until the plantings are established. This is different than general landscape maintenance which involves mowing, occasional watering and litter removal. Establishment periods need to be addressed as part of capital budget planning until the areas are ready for routine parks maintenance practices.

The reluctance to include woody and herbaceous plantings in new park design is inconsistent with best practices to improve the ecological function of parkland and is disappointing for the public who expect to have attractive and appealing public greenspaces.

Municipal maintenance departments struggle to meet the horticultural needs of parks which all generally require maintenance at the same time. To assist staff, training and mentoring programs need to be developed with additional staff resources during peak times to ensure proper weeding, pruning and watering is completed at the most opportune time.

Strategic partnerships with the Grand River Conservation Authority should be explored to address the management of natural areas. Within the city, several departments have planning and operational roles. It is important to clarify the responsibilities and identify how collaboration occurs to achieve mutual goals of protecting the natural environment. Community based organizations, neighbourhood groups, schools and the city's environmental working groups also play a role in stewardship. There is a need to also clarify those roles.

Opportunities to increase support requires public awareness of the natural system, the science that underpins its significance and what is needed in the future to manage a healthy functioning ecosystem. Comprehensive natural areas planning requires a thorough inventory of the resources, identification of those that are vulnerable and setting priorities for the protection, restoration and expansion of the features that are key to a sustainable ecosystem. The role of the urban forest canopy and its health should be included in the reporting.

Roles and management actions for city departments need to be established, with appropriate long term funding.

Specific environmental education and community stewardship activities need to be undertaken including expanding opportunities for on-site education, self-interpretive signage and hikes, tree identification plaques and trail markings. Using new digital technology can help to engage younger users and offering community programming such as Forest Schools or group hands-on activities in natural areas would help to expand environmental awareness and the need to protect natural area.



Bechtel Park Signage

Recommendation # 52 Create a comprehensive natural areas management plan to compliment the upcoming natural system inventory and strategy. The management plan should also address invasive species management and community stewardship actions including providing appropriate resources to fund this initiative.

Recommendation # 53 Improve the perception that re-naturalizing areas are not maintained, by increasing environmental education efforts, regularly grooming the edges of natural areas, removing litter and using plantings that include native wildflowers to improve the aesthetic quality,

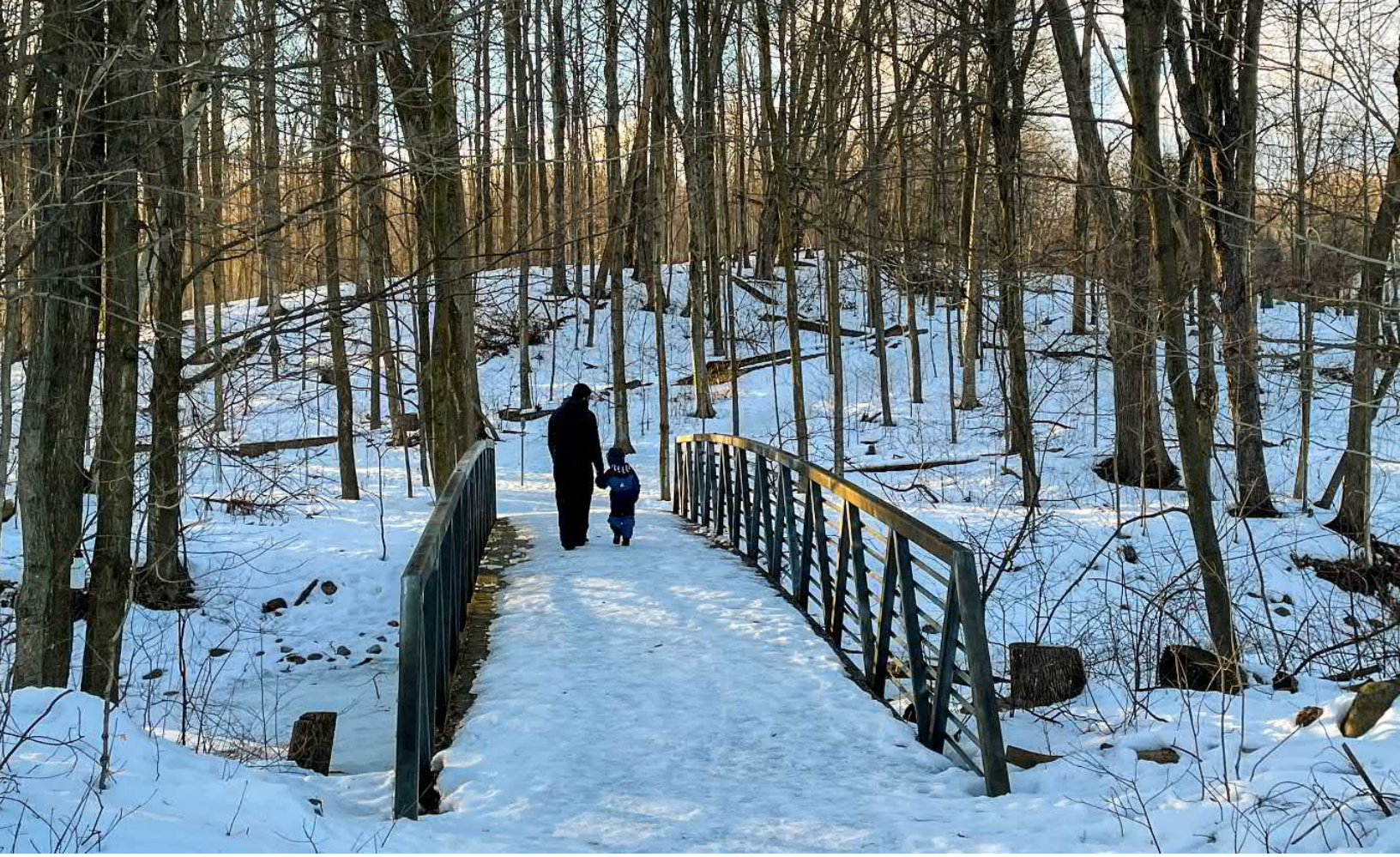
particularly along the sides of walkways, in the areas close to park amenities and where there is low plant diversity.

Recommendation # 54 Apply additional resources to managing boundary encroachment into public parkland including boundary fencing without gates, signage, enacting a by-law to enable enforcement with fines to recover the cost of protecting the natural areas.

Recommendation # 55 Clarify the roles and responsibilities of strategic partners to address the management of natural areas including actively seeking collaborations to deliver services to achieve mutual goals of protecting natural heritage resources.

Recommendation # 56 Update and establish maintenance procedures for new park plantings. Develop detailed specifications, addressing seasonal requirements, to ensure plantings are maintained until ready to be assumed by city maintenance crews.

Recommendation # 57 Update staff training and mentoring programs and consider third party services to support staff to maintain planting areas throughout the city.



3 Parks Services Plan

The following sections identify areas of improvement and recommendations pertaining to operational management, service standards, asset management, and performance measures in the environment and parks division.

3.1 Organizational Structure and Staffing

3.1.1 Organizational Structure

Parks development, operations and maintenance responsibilities are shared between Integrated Planning and Public Works (IPPW) and Community Services (Environment and Parks Services division (EPS) as well as Facility Design and Management).

The economic development department in the CAO's office also shares responsibilities through the arts and culture team, to manage festivals and events in Waterloo Public Square and other publicly owned outdoor spaces. This requires skills that are outside traditional operations and maintenance mandate.

As a result of changing roles, EPS is challenged to provide adequate supervision within parks operations. Parks maintenance staff report directly to the operations managers and that includes teams who are responsible for the maintenance of parks and open spaces.

- Turf, construction & playgrounds – natural turf sports fields maintenance and renovations, Uptown, east and north city mowing and winter operations, city wide trail maintenance, park benches construction, playgrounds and park sign inspections and maintenance; shared community outdoor rink program support;
- Sports and outdoor programming – Waterloo Park maintenance and west side city mowing and winter operations, outdoor sports field program delivery and maintenance, outdoor artificial turf fields maintenance, city splash pads oversight, Eby Farmstead operation, park picnics and special events support; City wide Parks garbage and recycling collection;
- Forestry & horticulture – forestry, uptown and city-wide floral displays and planting in parks and on streets, urban forest management; and
- Cemeteries.

Although the EPS organizational structure includes four managers who are focused primarily on operational tasks, the division is lacking supervisory level staff. This is challenging because operations has a large workforce of full-time, seasonal and student employees that require training and daily supervision. A dedicated supervisory level will improve support and health and safety of all staff; allowing mangers time to provide attention to strategic initiatives that align with the Neighbourhoods Strategy, Arts and Culture initiatives and projects that affect city parkland, urban forests and cemetery lands.

Traditionally, the delivery of capital projects, including development and redevelopment of parkland was undertaken by IPPW. Recently, with the creation of the Capital Projects and Stewardship (CPS) team within EPS, the delivery of parkland capital projects started transferring to EPS. Currently the CPS team has two project managers and continues to rely on IPPW and temporary staff resources to be able to deliver capital projects. As the team takes on additional projects, additional staff resources will be required to improve the capacity within EPS to deliver projects.

Recommendation # 58 It is recommended that additional staff resources be provided to improve the capacity within EPS to deliver capital projects. Where funding/approval for permanent positions is delayed, the division should explore alternative staffing models to support capital project needs.

Recommendation # 59 Undertake a review of EPS operational staffing structure to identify position(s) required for optimal staff supervision and improved support for parks projects and strategic initiatives.



Waterloo Park Gardens

3.1.2 Staffing and Skill Levels

Discussions with staff has highlighted that further clarity is required in the process to tie staffing and skill levels to maintenance tasks, and operational standards and regulations. This is particularly needed with the development of urban parks that come with an expectation of increased maintenance and upkeep.

Staffing levels are not currently tied to capital growth and can translate to instances where there is a shortfall in staff to execute maintenance. There should be a link between asset growth and staffing numbers to ensure that new capital assets are adequately maintained.

The goal is to align organizational structures with support and delivery processes. Staff roles must work to meet maintenance standards and remain responsive to the community for special programs, requests and events. The identification of maintenance standards for different classes of parks (see Section 3.2.2) and the development of protocols to address support for special events (see Section 3.2.5) can support this organizational evolution.

The city's review should include examining roles and responsibilities for the maintenance and upkeep of non-park open spaces such as municipal boulevards, floral and landscape displays, and transit corridors that may be owned / managed by other city departments or government

agencies. Service agreements with third parties could be utilized to coordinate such activities, particularly at peak maintenance times when staffing resources may be limited.

Recommendation # 60 Align staffing levels with growth in parkland assets to ensure that there is link between the rate of growth between capital assets and staff.

Recommendation # 61 Review staffing levels and skill sets to align maintenance standards, tasks and frequency requirements to meet changing community needs and the city's built form. Consider need to build-in flexibility to respond to increased service demands for community events and special program requests during evenings and weekends.

Recommendation # 62 As part of the organizational and staffing review, coordinate with other departments to redistribute the responsibility for maintaining of non-park open spaces such as municipal boulevards and rapid transit corridors that are owned / managed by other city departments or government agencies.

Recommendation # 63 Consider skills training and mentorship programs within the division to foster a workplace culture of continuous improvement and staff support.

3.2 Parks Service Standards and Systems

3.2.1 Park Asset Inventory and Management

A parks and facilities inventory was compiled and updated for the purposes of the parkland strategy with a conditions assessment developed separately by the city for the asset management plan. The city has implemented a comprehensive inventory and management system for parks and park amenities that combines all attributes, and that can inform both parks planning and development and operations.

The benefits of a park asset inventory and management systems are:

- effective rehabilitation and replacement planning, including capital needs forecasting;
- asset performance is monitored and assets are rehabilitated or replaced at the appropriate time and in a cost effective manner;
- development of a consistent preventative maintenance program;
- tracking of actual maintenance and operating unit costs and replacement costs; and
- identification of gaps in service where improvements in resources are required to meet standards.

The most efficient and effective way to manage the City's infrastructure is through skillful investments that include treating assets at the right time and for the right cost. The following actions are important considerations.

Parkland / Facilities Inventory

A comprehensive inventory has recently been developed including asset sub-classes, including but not limited to: pathways and trails (by type), irrigation systems, play areas, furniture and furnishings (i.e. trash cans, tables, benches, etc.), fencing, sports fields, tennis courts, lighting, signage, picnic sites, skateboard parks, gazebos, foot bridges, shade structures, park washrooms and other park buildings.

This inventory should also include a summary of land holdings with property descriptions, hectare size, sports and recreation facilities contained within and organized by the parks classification system.

Conditions and Life Cycle Report

A conditions and life cycle report typically includes an assessment of the condition of the asset, the year installed and expected life replacement date. The conditions of each asset should be described in the methodology used by the city's asset management plan (e.g. excellent, good, fair, poor, and very poor). It should also address safe condition of the asset and normal life cycle expectancy of the asset.

Asset Description

Maintenance on an inventory database that includes the following key attributes will ensure consistency: unique asset id, description which would include items such material type and location, estimated service life, and replacement value. The city's asset management system will include other attributes as appropriate. The city should obtain digital copies of "as-built" drawings to assist in maintaining the appropriate GIS layers.

Recommendation # 64 Continue to further the asset management work through the development of processes to maintain the parks inventory and condition within GIS and work with asset management team to maintain data within the city's asset management system.

3.2.2 Parks and Open Space Maintenance Standards

A number of the comments received through the online survey tools pertain to maintenance of Waterloo's parks and open spaces. Vegetation management/trimming, grass cutting, waste collection, dog waste issues are some examples mentioned. Observations made through the parks tour suggest that Waterloo's parks are well cared for at a level consistent with available

funding and municipal service level expectations. However, some maintenance activities are falling behind as more parkland is added to the municipal inventory.

Based on documents provided, and discussions with staff, the environment and parks operations teams utilize traditional maintenance practices and time tracking protocols consistent with those of other municipalities. However, EPS has limited written maintenance service standards that are tied to work plans and yearly business plans. These service levels are known internally by city staff but have not been formally documented or posted for community access. This will be needed moving forward as new parks and trails are developed, more complex urban park designs, management of natural areas, and rising public expectations for event space all have the potential to increase maintenance requirements. Increasing use of parks creates 'wear and tear' and consequently the need to expend more effort to maintain a state of good repair. It is important to consider a formalized and written standard of maintenance and services which is tied to budget allocation and to the needs of various parks and open space types. This will assist in departmental procedures and in fostering better understanding by the public of the city's day-to-day maintenance practices for various sites.

This could be achieved by applying defined service levels for each park and open space area, based on the classification of the parkland or open space, usage and features. **Table 2** provides an example of a maintenance service standard template, with Level 1 being the 'highest' level of standard and Type 3 representing a minimum standard.

The development of service levels should consider maintenance of non-park open space lands, including but not limited to, regional and city right of ways, utility corridors, storm water management facilities, and municipal facilities and who is best to provide these services, i.e. contracted services or internal staff.

The following template is not intended to be used as an actual service standard for the City of Waterloo but rather an illustration of how to develop the standards for the various tasks, levels and standards, which would be based on actual funding, resources available and public consultation. Additional categories or types could be added as needed to reflect the municipal parks and open classifications.

Table 3: Example of High Level Service Standard Template for General Parks Maintenance

Task	Level 1 Service Standard	Level 2 Service Standard	Level 3 Service Standard
Turf			
Mow and trim	1x/5 days	1x 10 days	1 x per year
Aerate	2 x per year	1x per year	As required
Fertilize	2 to 4 x per year	as needed	not performed

Task	Level 1 Service Standard	Level 2 Service Standard	Level 3 Service Standard
Planting bed weed control	1x per year as needed	as needed	not performed
Pick up trash prior to mowing	1x/5 days	1x 10 days	1x 10 days
Control pests	as needed	as needed	as needed
Edge	1x month	1x year	as needed
Trim shrubs	1x month and as needed	1x year	as needed
Gazebos/Shelters			
Clean and sweep	1x week	as needed	as needed
Remove and replace garbage bags and trash containers	daily	as needed	as needed
Paint pavilion	1x year	1 x very 2 years	as needed
Power wash	1x month	1x 6 months	as needed
Inspect electrical system	1x year	1x year	1x year
Roof inspection	1x year	1x year	1x year
Inspect picnic tables	1x week	1x every 2 weeks	monthly
Restrooms			
Clean and restock	2x day weekdays and weekends	1x day weekday 2x day weekends	daily
Odor removal	daily	Daily	weekly
Repair vandalism	as needed	as needed	as needed
Remove and replace garbage bags and trash containers	daily	Daily	2x a week
Mechanical inspections (plumbing)	1x month	1x month	1x month
Lighting ops	1x week	1 week	1x week
Seasonal start up and close up	1x spring and fall	1x spring and fall	1x spring and fall
Playgrounds			
Inspect and document	weekly	Weekly	weekly
Major annual inspections	annually	Annually	annually
Repair	repair immediately	make safe repair within 2 weeks	make safe repair within 1 month

Task	Level 1 Service Standard	Level 2 Service Standard	Level 3 Service Standard
Clean and pick-up trash	daily	daily	weekly
Rake and inspect base	daily	weekly	monthly
Replace base	every 10 years	every 15 years	as needed
Inspect base for pests / bees / glass etc.	daily	daily	daily
Winter Maintenance			
Snow removal walkways / paved trail	x mm of snow fall – bare surface	same as Level 1 - after all Level 1 completed	not provided
Snow removal parking lots	x mm of snow fall – bare surface	same as Level 1 - after all Level 1 completed	not provided

Notes:

1. The chart is an example of documenting service standards and not an actual standard recommended
2. Level 1, 2 and 3 are related to types or classifications of parkland or open space
3. Service standards for each task are examples only and need to be established based on approved unit costs/budget and staffing levels.
4. Tasks are high level examples and actual tasks to be determined by the city

In developing the maintenance service standard, the city should consider the actual cost of the maintenance of parks and open spaces based on their function and attributes, with a view to a more refined cost model and potential re-allocation of annual operational funding for parks based on their classification, types of facilities and usage.

Recommendation # 65 Develop maintenance standards and a costing model that are tied to parks and open space classifications and are reflective of funding allocations, and that can be actively tracked through a work order management system.

3.2.3 Maintenance Management Systems

The city utilizes Maximo as 'work order management system' however, the city currently issues blanket work orders for park maintenance work. This results in staff utilizing informal manual systems, paper and emails to direct work on specific assets. This creates uncertainty around a number of things including:

- Longevity and maintenance costs of the park assets, because work being performed is not quantitatively tracked;
- Development of consistent preventative seasonal work plans;

- Effective data to measure achievements, standards and for the development of performance measures;
- Task time allotted for work being performed; and
- Improvements in response times to community service requests.

The environment and parks services division currently retains third party contractors for a variety of services e.g. waste collection, some forestry works, some winter maintenance, some sports field maintenance. Without utilizing asset specific work orders within Maximo, it is difficult to track unit activity costs and to determine and analyse cost of work performed internally against third party vendor costs.

Recommendation # 66 Implement asset specific Maximo work orders for park maintenance activities to improve efficiencies in work order management, maintenance scheduling, and response to community requests, including the use of in-field digital tablets provided to operational staff so that completed works can be recorded in real time.

Recommendation # 67 Establish a standard requirement for 'as-built' drawings and require submissions of the drawings for completed parks development projects.

3.2.4 Parks Operational and Procedures Manual

Consultation with staff during the parkland strategy indicated the need for an operational and procedures manual to direct operations and the management of full-time, part-time and seasonal staff. The environment and parks services division currently does not have a parks operational and procedures manual; however, there are plans to develop one. A typical manual includes, but is not limited to the following components. The city may have some or all of these processes and procedures already in-place.

- Division / department organizational and reporting structure;
- Human resources procedures (as applicable);
- Staff and volunteer training;
- Vehicle and equipment management (this is often the responsibility of a municipality's fleet services;
- Use, training, repair and maintenance standards for equipment;
- Supply inventory and control;
- Hazardous materials requirements;
- Security requirements;

- First aid, injury, emergency response protocols;
- Internal communications and use of radios and technology;
- Customer service protocols and response process for community requests;
- External communications (this is often developed by corporate communications);
- Work orders;
- Parks and landscape maintenance standards (routine);
- Data tracking;
- Safety protocols and training requirements;
- Inspection management; and
- Updating asset management.

Recommendation # 68 Develop an operational and procedures manual that outlines the protocols and processes to direct day-to-day operations of the environment and parks services division.

3.2.5 Community Event Support

A recurring theme resulting from discussions with stakeholders and from public comments is the need for improved customer service to support community events. There is inadequate staffing to work with residents to deliver of community events. Although the 2008 recreation and leisure services master plan recommended that additional staff are needed for this purpose, particularly on weekends, there is not enough capacity and appropriate skills to deliver community event support. Consequently, some community-run events result in unexpected and unplanned increases in parks maintenance activities, to the detriment of regular standards of service delivery.

Associated with capacity challenges, there is a need to identify parks that can physically support events, both large-scale corporate events as well as local neighbourhood-led events. The city is supportive of neighbourhood events and has made a number of commitments through the neighbourhood strategy and culture plan. However, it would be helpful to all stakeholders to have clear policies in place that address scheduling, bookings, permits, site usage and operational support.

As part of the development of a special events plan (Recommendation #21), it is also recommended that the city undertake an operational review with a view to streamlining and coordinating the process. This would include:

- Who permits parks, (in consultation with Recreation Services – Facility Allocation and Booking team, , Community and Neighbourhood services team, and Arts and Culture team);

- How permits are issued and scheduled, what supports are provided and identify customer service supports (point of contact, event organization support, assistance with promotion);
- Operational support (labour, equipment and support infrastructure); and,
- How funding (grants, in-kind, or direct funding) are to be delivered.

The operational review should consider the likely provision of services after hours, evenings, holidays and weekends, including consideration of the potential for a parks patrol that can monitor and respond to off-hours event activities, security and operational needs.

Recommendation # 69 As part of the development of a special events plan, the city should undertake an operational review of who issues permits for parks, how permits are issued and scheduled, and how customer service, operational support and funding are delivered, with a view to streamlining the process. The operational review should consider event support services after hours (evenings, holidays and weekends), including consideration of the potential for a parks patrol that can monitor and respond to off-hours event activities, security and operational needs.



Mary Allen Park

3.2.6 Continuous Improvement

One of the principles of the Waterloo 2019-2022 corporate strategic plan report is service excellence which strives to create and reinforce an internal and external culture that is founded on responsiveness and is customer centric. Embedded in this principle are service standards, performance measurements and a commitment to continuous improvement. A number of municipalities in Ontario have adopted the Lean program (or other comparable programs) which strive to streamline business processes, identify and implement improvements to service delivery, improve customer satisfaction, and monitor progress and outcomes. The parkland strategy has recommended a number of actions that build staff capacity in areas where not enough is available to run programs efficiently and to add new positions in the operations group so that managers can be empowered to address strategic issues.

The parkland strategy is a tool for fostering a culture of continuous improvement in an effort to improve efficiencies, clarify roles and responsibilities and improve customer satisfaction within the areas of responsibility for environment and parks services. This requires a consistent approach with communications that convey departmental expectations, customer service goals together with processes for monitoring progress and outcomes. It is expected that this will form part of the city's efforts to address service excellence across the corporation.

Recommendation # 70 Encourage and maintain a culture of continuous improvement in environment and parks services. This will include implementing a consistent communication process; establishing departmental expectations, performance measures and customer service goals; facilitating training and technological advances; encouraging innovation, teamwork and collaboration to identify areas for improvement in service delivery; and developing processes to monitor progress and outcomes.

3.3 Urban Forest Management

The city will be undertaking a natural system inventory and strategy study to confirm which lands meet the definitions to be designated under the provincial policy statement and natural heritage reference manual. This study will provide background to help scope a future urban forest management plan that will also provide the basis for updating the 2001 urban forest policy. The purpose of a comprehensive urban forest management plan is to direct the management and enhancement of the city's urban tree canopy cover including treed natural areas and individual or small groups of trees in parks. It typically includes: performance measures such as tree canopy cover and naturalization targets and guidelines for achieving them; strategies for effective management and monitoring of the urban forest; and recommended staffing and resource requirements. Increasingly in Ontario, natural system

inventories and urban forest management plans are completed consecutively as complementary documents because they are understood to be critical tools to mitigate climate change.



Forewell Park

The urban forest management component should investigate all aspects of maintaining the urban forest including:

- overall connectivity of the natural system;
- identifying challenges and opportunities for improving the urban forest;
- setting targets goals and objectives for the long-term sustainability of the urban forest;
- recommending actions including programs, policies, and partnerships; and,
- identifying short and long-term resource requirements including monitoring indicators.

To inform its urban forest management program the city should prepare and implement strategies for the following components, either separately or as part of the urban forest strategy.

3.3.1 Public Tree Inventory and Conditions Assessment

The city's current inventory should be kept up to date and reviewed as targets are achieved or as survey technology improves. This should be done in consultation with city's information technology group to identify individual trees, their size and canopy along with species type and conditions.

Woodlots and open spaces trees would include a summary of the percentage of species type, size and general conditions, including identifying potential hazardous trees that may impact public safety, infrastructure and property.

3.3.2 Tree Canopy Targets

In association with an urban forest management program the city should consider monitoring tree canopy targets for the city as a whole and for different types of public spaces (streets, parks, public properties, schools). Guidelines and incentives for achieving the various targets could be used to encourage tree planting on private lands.

3.3.3 Private Tree Bylaw

Many developing municipalities are pursuing private tree bylaws because there are few tools to protect large specimen trees. The potential for one has been raised in Waterloo and should be evaluated. To be effective appropriate staffing resources and Council / community support must be in place.

3.3.4 Invasive Species Management Plan

While the city currently undertakes activities and initiatives to address invasive species like the Emerald Ash Borer, these efforts will benefit from an invasive species management plan to target emerging invasive species, priority locations for management efforts and the budgets and staff resources needed to implement.

3.3.5 Block/Neighbourhood Tree Pruning Programs

The city should strengthen its existing neighbourhood or block pruning program whereby forestry personnel prune existing trees neighbourhood by neighbourhood on a rotating basis. The city is currently more reactive than proactive in this regard. Expansion of current practices will require additional resources and increased levels of funding.

3.3.6 Community Advocacy, Community Planting Programs and Incentives

The city's community stewardship program promotes the planting of trees and shrubs within neighbourhood parks. This could be extended to tree planting along neighbourhood streets and

cooperatively on adjacent private properties to expand urban forest cover. Community involvement and feedback on the value of these activities should be investigated.

3.3.7 Sustainability of Street Trees

The viability and long-term sustainability of urban street trees is essential, particularly in areas of intensification and along rapid transit corridors which are subject to harsh conditions that impact their growth to maturity. Greater survival rates are possible if appropriate species, locations, and best practices related to design and installation are employed (e.g., adequate soil volume, engineered soils, planting techniques, spacing, protection during construction, resolution of conflicts with utilities both above and below ground), followed by an appropriate maintenance regime.

3.3.8 Cross-disciplinary Collaboration

Managing the urban forest as a strategic resource and part of the green infrastructure is the responsibility of all departments in the city. A range of municipal planning and operations activities can impact, or be affected by, trees - street trees in particular. A comprehensive set of documented standards addressing street tree planting, utility location and maintenance will assist in identifying city requirements to other Divisions and the development industry. To increase understanding of technical issues and to encourage compliance, the standards should be developed as a cross-disciplinary collaboration with planners, engineers and utility providers. Consultation with the development industry is recommended to reduce resistance to changing standards and requirements.

Recommendation # 71 Use the information provided through the natural system inventory and strategy, which will confirm the Official Plan designated natural features, to inform the development of the urban forest and invasive species management plans.

Recommendation # 72 Investigate separately a private tree by-law; invasive species management plan; and, strengthening of block/neighbourhood pruning programs.

Recommendation # 73 Prepare a comprehensive urban forest strategy / management plan specifically to direct the management and enhancement of the city's urban tree canopy cover including treed natural areas with strategies for effective management and monitoring of the urban forest targets and recommendations for staffing and resources.

3.4 Application of Rates & Fees for Selected Park Services

3.4.1 Overview

Together the Waterloo parkland strategy and the 2008 recreation and leisure services master plan, 2012 outdoor sports field strategy and the 2013 action sports strategy guide the city in delivering parks and outdoor recreation services to residents. These documents acknowledge the ample individual and community benefits that the parks system offers. In principle, the city accepts that the financial costs of providing park-based activities can be partially offset through fee-revenues and economic spin-offs, while also recognizing many intangible and non-monetary intrinsic benefits (e.g. improved happiness, health and welfare of residents). The degree to which costs are recovered – whether through tangible or intangible means – is balanced by the municipal philosophy surrounding the value of the park service that is provided and how social equity may be impacted.

City of Waterloo by-law number 2019-025 outlines the fees and charges for services offered by the corporation for the period covering September 1, 2019 to August 31, 2023. The majority of charges applicable to the parks system are for services administered by the environment and parks services division and the recreation services division. Examples of fees pertain to access permits, commemorative dedication opportunities (e.g. plaques, trees, benches), sports field rental and lighting charges, picnic pavilion/shelter rentals, sports leagues, equipment fees, memberships and season passes, bookable passive park spaces, etc.

3.4.2 Setting Fees for Park Services

The City of Waterloo sets its parks and recreation fees based upon historical rates that are periodically adjusted, as directed by council, with annual increases that reflect changes to the cost of living in the community. In certain instances, the city will undertake a specific cost analysis for setting rates for unique/new services, with the environment & parks division's dedication / commemoration program being a recent example. There is a need for consistency for how charges are applied. From time to time, the city also conducts cost comparisons to other municipalities in and around Waterloo Region. It bears noting that the four-year period covered by the current fees and charges by-law provides cost-certainty to user groups and residents, however, the city may find that this period of time could become overly rigid if service levels or operating conditions change. City staff have also noted challenges with many of its rates being lower than in Kitchener consequently drawing residents of that municipality to Waterloo facilities, which can have an undesired impact of subsidization of costs to non-residents.

Developing socially equitable user fees in the context of municipal parks and recreation facilities / services involves a comprehensive set of tasks that includes:

- engaging stakeholders / end users;
- determining the true cost of delivering the service in question; and then
- evaluating a reasonable level of cost recovery based on key service objectives / philosophies (including consideration to persons that face income-related barriers to participation).

A number of municipalities prepare rates & fees or pricing studies to refresh their price points in light of current budgetary requirements and market conditions. The City of Waterloo has not recently undertaken such an exercise specifically for parks and outdoor recreation facilities/services, instead largely relying upon its historical rates and inflationary increases (typically two per cent per year) as the basis for annual price points.

Price points should be set according to where a given facility/service falls within a spectrum oriented to the public good. Typically, this spectrum is defined by community benefit on one end and individual benefit on the other. A service that creates purely private benefits if those benefits are only accrued by an individual using that service whereas a service that creates purely public benefits are accrued by society at large. Within these two extremes are services that benefit both individuals and the public to varying degrees, with most municipal parks and recreation facilities/services somewhere in the middle of the spectrum.

Municipalities generally establish a recreation service model that benefits the maximum number of residents with the expectation that there will not be full cost recovery. On the other hand, services that benefit only a niche market, or a small group or commercial enterprise are expected to recover a greater percentage of their costs. For example, municipalities do not typically charge fees to access public parks, trails, playgrounds, and other facilities considered to be amenities or accepted as part of the general park experience. Facilities that are oriented to organized sport play (such as sports fields) and park pavilions tend to have fees associated with rentals or lease agreements but their operating costs are such that the fees can be lower than their true operating costs. Facilities such as golf courses or the rental of facilities for commercial purposes are often positioned to break-even or generate an operating surplus for a municipality.

It is recommended that the city prepare a rates & fees study for parks services and assets that includes the following steps (at a minimum).

- Establish a terms of reference that is overseen by a multi-departmental team of staff representing parks, recreation / facility allocation and booking, community and neighbourhood services, finance and others as appropriate.
- Engage users of the parks and outdoor recreation system along with the general public and city council to establish prevailing philosophies and guiding principles.

- Determine the true cost of delivering parks and outdoor recreation services, factoring into account both the direct costs (supplies and equipment, program instructors, field operations and maintenance, etc.), the indirect costs (e.g. time of management staff, promotion, etc.) and/or unit costs (e.g. the cost to provide a summer camp or other program, an hour of lit/unlit sport field use, etc.).
- Identify the current level of cost recovery based on existing revenues that are being generated as a percentage of the true cost of recovery, and subsequently establish a desired level of cost recovery in consideration of public input, prevailing rates in nearby jurisdictions (e.g. Kitchener, Cambridge, Guelph) and other municipalities with similar socio-demographic characteristics. When needed phase in rate increases over time to allow user groups time to adjust to the new costs.
- Review fee categories and stipulations such as hourly and daily rates, resident and non-resident rates, pricing applicable to not-for profit and for-profit entities, discounted rates for affiliated versus non-affiliated groups, etc. It bears noting that the City of Waterloo's fees and charges by-law does not differentiate rates between different classes of users which is a shortcoming that should be reviewed in light of best practices found elsewhere.
- Ensure that appropriate financial assistance policies are in place so that households and organizations with limited financial means have an opportunity to participate within the new fee structure.

Recommendation # 74 Prepare a rates & fees study that reviews existing rate structures, and establishes cost-recovery thresholds and pricing points based on the city's true costs of delivering parks and outdoor recreation services.

3.5 Cemeteries

The City of Waterloo provides cemetery services at Parkview Cemetery which includes a chapel, cemetery and crematorium situated on 11.7 hectares of land surrounded by trails and sports fields (Bechtel Park); and Mount Hope Cemetery on the Waterloo-Kitchener border which dates to the mid-1800s and is jointly managed with the City of Kitchener. The management of Parkview Cemetery and Bechtel Park is directed by the cemetery services – Bechtel Park master plan (2009) which establishes a vision for the site, including the cemetery, natural areas and park activity areas, with implementation over 15 years. There is a long-term plan for the entire site to be a cemetery with accommodation of the existing sports fields elsewhere. The master plan also establishes an approach to overall service delivery for Waterloo cemeteries operations, as a self-funded enterprise model. The city is close to achieving self-sufficiency, however some tax based funding may be required during the 2020 to 2024 horizon.

Given that the cemetery services – Bechtel Park Master Plan is now 10 years old and the ratio of burial and cremation practices have changed (in favour of cremation), a review and update of the plan is warranted. The plan update should reflect evolving preferences and should consider but not be limited to:

- status of actions, recommendations and accomplishments of the current approved plan;
- updating current burial capacity and future growth potential in Waterloo's cemeteries, taking into consideration burial capacity within the Region;
- examination of forecasted needs in the bereavement industry, including different burial types such as cremation, scatter gardens, green burial and other cemetery services;
- review of the current financial model and identification of opportunities for revenue generation, including potential for new burial sites, columbaria, memorial trees and benches;
- examination of suitable passive recreation uses for the Bechtel Park lands, followed by a site master plan.

Recommendation # 75 Undertake a review and update of the 2009 cemetery services - Bechtel Park master plan.

3.6 Community Involvement / Partnerships

Waterloo has over forty cultural affiliates, many of whom are actively involved in delivering festivals and events in park. There are also close to thirty neighbourhood associations, homes associations, and informal neighbourhood groups in Waterloo that connect residents through both formal and informal community building activities that seek to create and enhance leisure and recreation opportunities and create a sense of belonging. A number of the neighbourhood associations and groups are engaged in planning and environmental matters at a city-wide level and contribute to parks and recreation at a neighbourhood scale, including fundraising for specific projects. The homes associations were initiated through covenants formed by the original developers and focused around private homeowner shared assets such as pools and tennis courts, which are located on private property but many of these groups have also taken on a broader community building role.

Neighbourhood led and delivered recreation, leisure, and community events and projects are supported by the city through a number of ways such as staff support and various programs such as partners in parks, outdoor rinks program, and community vegetable gardens.

The partners in parks program provides a tangible opportunity for residents to contribute to stewardship activities in the city's parks and open space system. These include both short and long-term projects, many of which focus on ecological restoration. Other partnership opportunities in Waterloo that could benefit parks services include but are not limited to:

- expansion of planting and maintenance of floral displays, the provision of benches and other street furnishings through agreements with a local BIA or businesses;
- corporate and personal giving and events sponsorships;
- private concessionaires operating within a land lease; and
- capital readiness for grant funding applications.

In the case of the latter, higher levels of governments or corporations often announce grants for projects based on shovel ready projects that benefit and improve local communities. The city could have a number of park projects in the queue so that there is a timely response to such grants.

The city has recently clarified its role, relationship and actions to support its neighbourhoods through the neighbourhood strategy (2018), which was completed in consultation with other agencies, community organizations, and the public. The strategy indicates the need for more city support in neighbourhoods without formal neighbourhood associations and new ways to support resident-led community building. As well, public consultation completed for the neighbourhood strategy identified a desire for neighbourhoods to be more involved in "shaping the look and feel of their parks, when a new park is developed or an existing park is renovated".

In determining whether to maintain or increase funding for community partnership programs the city should consider the real value that they accrue to the community which may include:

- an ability to offer enhanced or new park amenities beyond a basic level of service (through matched funding, in-kind services, or access to grants not available to the municipality);
- meeting other community goals, such as the promotion of equity, diversity and inclusivity;
- builds a sense of belonging in the communities to strengthen social connections, increase safety and reduce isolation; and
- actions that build a sense of pride, strong social networks, sense of belonging, inclusion and stewardship of a neighbourhood / local park.



Geotime Trail

In looking at the most beneficial partnership models, the city should provide support to those that need the City's support to be successful in their own initiatives and thereby building capacity for future projects and complement the city's resources.

The continuation and advancement of community collaboration will require dedicated personnel resources, through combined efforts from designated staff persons, sustained funding and volunteer organizations or neighbourhood committees. As well, concerns over liability and insurance costs can place significant limits on what level of citizen involvement municipalities, including Waterloo, will entertain. Costs and liability implications also impact interested community groups, as steps can include the requirement to purchase insurance or detailed volunteer requirements that can discourage participation. If increased community involvement is to be considered, this must be developed in partnership with community and neighbourhood services.

Some municipalities have successfully engaged in partnerships with not-for-profit umbrella organizations that provide assistance in coordinating the efforts of different volunteer groups, identifying priorities and in applying for external funding. Examples from other municipalities include Toronto's Park People, Evergreen Foundation, and the Calgary Parks Foundation. Most of these organizations have evolved out of existing community organizations and have

dedicated commitment and leadership, as well as seed money or external start-up monies (e.g. grants), as well as sustained municipal funding in order to be successful.

Recommendation # 76 Examine ways to optimize and expand community collaborations and partnerships that complement the community's goals and city's own resources by enhancing community benefit of parks. Case by case evaluation can be applied to determine the cost and benefit of these programs.

Recommendation # 77 Identify and fund resources and services needed to coordinate community partnership and volunteer efforts, which may include: staff re-assignment; a designated staff person; a volunteer committee; or the establishment of an umbrella volunteer organization.



4 Implementation Plan

The implementation plan for the recommendations contained in this strategy are focused on key initiatives that include the policy framework to improve equity and inclusion, parkland acquisition, provision targets and distribution.

The recommendations also address functional issues related to programming and services that are available in new and redeveloped parks. These include evolving the role of some parks towards community hubs, gathering and event spaces.

The community consultation revealed that users are looking for more and better quality amenities to support informal outdoor leisure activities. These include accessible playgrounds, splash pads, multi-use trails and comfort amenities like shade, drinking water and Wi-Fi.

There is also a need to match the expansion of parkland facilities and programming with an operational structure that is updated to meet current and future service standards. This involves new skills to address management of natural areas and the urban forest.

The recommendations are presented in the table below. It is a compilation of the recommendations that are found throughout the report and a prioritization into three categories; those that are high priorities for short term action (within 1-3 years), those for medium term action (4-7 years) and long term for those that should be undertaken during the lifespan of the 10 year capital plan. Overarching recommendations that extend through the lifespan of the master plan are indicated in all three implementation terms.

Table 4: Recommendations for Implementation

Recommendation	Short Term	Medium Term	Long Term
Recommendation # 1 Moving forward, parks staff will need to work closely with the Indigenous initiatives, anti-racism, accessibility and equity staff team, to implement projects that include meaningful engagement with local urban Indigenous communities in order to meet identified needs.	☑	☑	☑
Recommendation # 2 Moving forward parks staff will need to work closely with the Indigenous initiatives, anti-racism, accessibility and equity staff team, once hired, to review the parks strategy using an anti-racist lens and to consult with local racialized communities in order to meet identified needs.	☑	☑	☑

Recommendation	Short Term	Medium Term	Long Term
Recommendation # 3 In association with the implementation of actions and strategies in the City of Waterloo strategic plan, focus on tools and policies for addressing accessibility, equity and inclusivity in parks and associated recreation opportunities.	☑	☑	☑
Recommendation # 4 Prioritize projects that improve barrier-free access to facilities and activities within parks, specifically actions that bring parkland into compliance with AODA legislation and associated standards, and in consultation with the Grand River Accessibility Advisory Committee (GRAAC).	☐	☑	☑
Recommendation # 5 Moving forward, working with equity seeking community members and leaders, service organizations and neighbourhood associations, the city must prioritize underserved areas for future acquisition and for park improvements that upgrade the amenity standards to meet equity expectations that are aligned with the City of Waterloo strategic plan.	☐	☑	☑
Recommendation # 6 Prepare and approve a parks and open space classification system which provides more consistency, reflects the current and anticipated range of park types and which is suitable for both planning and operational purposes.	☑	☐	☐
Recommendation # 7 Include park classification(s) to better categorize the new type of urban park that is anticipated in areas of intensification and transit oriented development.	☑	☐	☐
Recommendation # 8 Once finalized, apply the parks and open space classifications to the existing inventory to inform provision targets and maintenance standards and encourage consistency of terms across city departments.	☑	☐	☐

Recommendation	Short Term	Medium Term	Long Term
Recommendation # 9 Review parkland provision targets and adopt a city-wide parkland provision target of 3 ha / 1000 population to better reflect community needs going forward. Other open space types should not be included in the inventory of parkland although they form part of the open space system and may contribute to recreation uses.	☐	☑	☐
Recommendation # 10 Continue to plan for new parks based on the provision of a park within 600-800 m of residential areas, unobstructed by major pedestrian barriers such as expressways, arterial roads, active railway lines and watercourses. Consider opportunities to co-locate parkland with schools, religious or other institutions or mixed uses to facilitate sharing of common infrastructure such as parking or sports fields.	☑	☑	☑
Recommendation # 11 Continue to use area-specific plans such as the uptown public realm strategy to guide the planning and design of parks and open space and other aspects of the public realm in areas where significant development or population growth is anticipated.	☑	☑	☑
Recommendation # 12 Identify lands and corridors for acquisition that will address gaps in the off road trail systems to improve access to the CTC. Work with partners to create trails to improve pedestrian linkages. Identify gaps in the natural system and identify lands for acquisition to support passive recreation and ecological objectives.			☑
Recommendation # 13 Continue efforts to secure a location, or locations, for the development of new sports fields based on existing (or updated) projections in the outdoor sports field strategy. In the event that a single parcel of land cannot be secured, or distribution across existing parkland is not feasible, the city may wish to consider partnerships with other providers, or the acquisition and development of lands outside of the urban boundary.		☑	

Recommendation	Short Term	Medium Term	Long Term
Recommendation # 14 To support parks and facilities needs in growth areas it is recommended that the city seek lands to acquire for new neighbourhood / local parks and urban parks in areas that that are underserviced.		☑	☑
Recommendation # 15 Explore opportunities to expand parks by purchasing adjacent/adjoining properties and linkages to improve existing parkland assets for purposes such as: securing park frontages and key access points, improving connectivity and active transportation linkages, providing space for enhanced park amenities and expanding and protecting the natural environment and key green infrastructure assets.		☑	☑
Recommendation # 16 Encourage a wide range of urban open spaces to supplement parkland in densifying urban areas. This includes privately owned public space (POPS), flexible and shared streets that support a 'linked system' of vibrant, multi-functional urban parks.		☑	☑
Recommendation # 17 Develop a policy, use and maintenance agreement template as well as design guidelines to address the provision of POPS.		☑	
Recommendation # 18 Identify and develop existing and new community parks, distributed geographically across the city, as 'community hubs' with the objective of enhancing the outdoor amenities and programs to animate the park, encourage social interaction and support community events.	☑	☑	
Recommendation # 19 Develop strategies that support the City of Waterloo culture plan to apply best practices for animating parks. Coordinate with other program providers for communicating the opportunities and delivering the programming and events. Identify criteria to select sites for pop-up and temporary events.	☑	☑	
Recommendation # 20 In the design of community hubs, provide the infrastructure and required staff resources to enable pop-up, temporary events and facilities.		☑	

Recommendation	Short Term	Medium Term	Long Term
Recommendation # 21 Prepare a special events plan to identify which parks within the parkland inventory can support events of varying sizes and types. The plan should provide guidelines for facility requirements, maintenance and additional customer service to manage bookings, within the environment and parks services division.	☑		
Recommendation # 22 Apply the evaluation criteria (above) to establish priorities for the redevelopment and upgrading of older parks, to inform priority setting and the 10-year capital budget.	☑		
Recommendation # 23 To assist in the process of prioritizing parks upgrading and redevelopment, monitor booking inquiries and park use. This type of assessment can be achieved by observations by front-line staff, and other suitable measurement techniques. Surveys of park and facility use and post use bookings conducted by volunteers or students can be executed on a site or area-specific basis.	☑	☑	
Recommendation # 24 Consult with the local neighbourhood on planned park upgrades to confirm community interests. Prepare park master plans for major park redevelopment projects to allow for public and stakeholder consultation, innovative design, application of municipal standards and to confirm budgets.	☑	☑	☑
Recommendation # 25 When designing new parks, and when updating older parks, ensure that provision of new facilities meets both active recreation (sports) needs (identified in the outdoor sports field strategy, the action sports strategy) with new community gathering / social spaces and amenities that have been identified in this parkland strategy.	☑	☑	☑

Recommendation	Short Term	Medium Term	Long Term
Recommendation # 26 Ensure that the design of parkland is equitable, inclusive and flexible to enable access to all users, different ages, abilities, income levels, cultures and genders, as appropriate to the park's location and function. Specifically, increase the number of amenities for children and youth (playgrounds, splash pads), focus on trail connections and the provision of seating and shade.	☑	☑	☑
Recommendation # 27 Establish a protocol for regular, annual monitoring of implementing the actions and recommendations of the parkland strategy. Undertake an update of the strategy in ten years.		☑	
Recommendation # 28 Develop a playground strategy to guide future playground renewal and development and to define playground levels of service, design standards and development priorities in the short, medium and long-term.	☑		
Recommendation # 29 It is recommended that playgrounds be a priority for local parks and be located within 800 m walking distance, unobstructed by major pedestrian barriers such as expressways, arterial roads, railway lines and watercourses.	☑	☑	☑
Recommendation # 30 Update playground development and renewal budgets to reflect a suitable allowance for barrier-free design elements, shade for users and caregivers, and innovative features that offer more creative play and cater to a wider range of children and youth.		☑	
Recommendation # 31 Continue efforts to advance splash pads located elsewhere within Waterloo Park, consistent with the Waterloo Park master plan.		☑	
Recommendation # 32 Continue with plans to construct new splash pads city-wide. Select locations based on a set of criteria that includes the ability to balance geographic distribution and underserviced communities.	☑	☑	

Recommendation	Short Term	Medium Term	Long Term
Recommendation # 33 Consider refrigerated ice rinks or paths when planned in conjunction with other major civic or urban planning initiatives. Due to the high costs, appropriate economic and financial analysis needs to be prepared to evaluate the ability of the city to operate and maintain refrigerated facilities.		☑	☑
Recommendation # 34 Natural rinks should continue to be supported through the city's existing volunteer rink program, as well as be located in parks that have access to suitable space and are appropriately serviced.	☑		
Recommendation # 35 Construct tennis courts at a minimum of two park locations (existing or future), in a manner that strengthens geographic distribution. Tennis courts may be designed to allow multiple uses, consistent with the Waterloo recreation and leisure services master plan direction for play courts.		☑	
Recommendation # 36 Develop a minimum of four dedicated pickleball courts to create a centralized facility capable of delivering organized programming. A city-wide or community park typology would be preferred to ensure the availability of supporting infrastructure along with access to major transportation corridors. Ideally, this amenity would be integrated within the west side recreation facility recommended by the outdoor sports field strategy.			☑
Recommendation # 37 Construct a minimum of four outdoor pickleball courts at community or neighbourhood parks located west of King Street through construction of dedicated courts, multi-use lining of existing hard surface courts, or a combination thereof. Additional neighbourhood-based courts may be considered if warranted by future demands and participation levels at existing pickleball courts.			☑

Recommendation	Short Term	Medium Term	Long Term
Recommendation # 38 Develop outdoor basketball courts at a minimum of two parks, focusing upon future designated residential greenfield areas in the city's northwest and/or northeast, as well as in established neighbourhoods that do not have access to a city-owned court within reasonable walking distance. Basketball courts may be designed to allow multiple uses, consistent with the city's recreation and Leisure services master plan.		☑	
Recommendation # 39 Undertake a site search for the development of at least one off-leash area, ideally in the west end, to increase the distribution across the city.	☑		
Recommendation # 40 Develop policies and standards for dog parks in high density neighbourhoods, to direct their location and establishment, including a model for small urban parks. In locations that are intensifying with reduced public space, opportunities for creating dog facilities within the footprint of these developments need to be explored as a solution to accommodate pet owners on their own sites.	☑		
Recommendation # 41 Explore collaboration opportunities for expanding community vegetable gardens through partnerships with other government, agency and community-based organizations, together with advancing rebranding to better support local neighbourhoods.	☑		
Recommendation # 42 To expand outdoor programming in parks and park redevelopment plans, introduce outdoor fitness equipment elements along trails in local / neighbourhood parks and as destination fitness circuits in community parks. Ensure that the selected locations and designs will benefit a broad range of users and that maintenance cost are reflected in operating budgets.		☑	
Recommendation # 43 Develop criteria, range of options and a funding strategy for the provision of shade in parks as both a requirement of new park development and upgrading of existing parks.		☑	

Recommendation	Short Term	Medium Term	Long Term
Recommendation # 44 Develop criteria for the provision and location of comfort amenities in parks including the provision of washrooms and hydration stations. Implementation could be tested through pilot projects prior to introducing as policy.		☑	
Recommendation # 45 Include integrated public art as elements of new and redeveloped parkland. Collaborate with city staff whose mandates include the delivery of the municipal public art program.	☑	☑	☑
Recommendation # 46 Investigate the desirability of expanding technology in parkland and identify appropriate locations for the provision of Wi-Fi in selected urban spaces and city-serving parks. Opportunities for partnerships with service providers or through sponsorship by corporations could be considered to offset costs.		☑	
Recommendation # 47 In association with investigations into programming and activation of parks (Recommendation #21) consider how technology may contribute to enhancing park usage by informing the public about events and activities.		☑	
Recommendation # 48 If and when community interests result in widespread demands for unforeseen park amenities that are beyond current programs, additional studies will need to be undertaken to determine appropriateness and to direct their provision and location.		☑	☑
Recommendation # 49 Design and implement a comprehensive, consistent, accessible wayfinding and signage system to facilitate multi-modal uses that facilitate ease of access, user safety and support diverse users and activities.		☑	

Recommendation	Short Term	Medium Term	Long Term
Recommendation # 50 Future consideration of improvements and expansion of trails and pathways in parks are a priority. The community wide multi-use trail and bikeway system needs to be coordinated through the transportation master plan update. Local park trails are well used and there is additional demand for expanding all season use and associated maintenance.		☑	
Recommendation # 51 In addition to actions and strategies identified in the corporate climate change adaptation plan, the ongoing development / redevelopment of parks needs to incorporate design standards and measures that include slowing storm runoff, controlling invasive species and selecting native plant materials to support a healthy urban forest canopy.		☑	
Recommendation # 52 Create a comprehensive natural areas management plan to compliment the upcoming natural system inventory and strategy. The management plan should address invasive species management and community stewardship actions including providing appropriate resources to fund this initiative.		☑	
Recommendation # 53 Improve the perception that re-naturalizing areas are not maintained, by increasing environmental education efforts, regularly grooming the edges of natural areas, removing litter and using plantings that include native wildflowers to improve the aesthetic quality, particularly along the sides of walkways, in the areas close to park amenities and where there is low plant diversity.		☑	
Recommendation # 54 Apply additional resources to managing boundary encroachment into public parkland including, and when warranted, boundary fencing without gates, signage, enacting a by-law to enable enforcement with fines to recover the cost of protecting the natural areas.		☑	☑

Recommendation	Short Term	Medium Term	Long Term
Recommendation # 55 Clarify the roles and responsibilities of strategic partners to address the management of natural areas including actively seeking collaborations to deliver services to achieve mutual goals of protecting natural heritage resources.		☑	
Recommendation # 56 Update and establish maintenance procedures for new park plantings. Develop detailed specifications, addressing seasonal requirements, to ensure plantings are maintained until ready to be assumed by city maintenance crews.		☑	
Recommendation # 57 Update staff training and mentoring programs and consider third party services to support staff to maintain planting areas throughout the city.		☑	
Recommendation # 58 It is recommended that additional staff resources be provided to improve the capacity within EPS to deliver capital projects. Where funding/approval for permanent positions is delayed, the division should explore alternative staffing models to support capital project needs.		☑	
Recommendation # 59 Undertake a review of EPS operational staffing structure to identify position(s) required for optimal staff supervision and improved support for parks projects and strategic initiatives.	☑		
Recommendation # 60 Align staffing levels with growth in parkland assets to ensure that there is link between the rate of growth between capital assets and staff.		☑	
Recommendation # 61 Review staffing levels and skill sets to align maintenance standards, tasks and frequency requirements to meet changing community needs and the city's built form. Consider need to build-in flexibility to respond to increased service demands for community events and special program requests during evenings and weekends.		☑	

Recommendation	Short Term	Medium Term	Long Term
Recommendation # 62 As part of the organizational and staffing review, coordinate with other departments to redistribute the responsibility for maintaining of non-park open spaces such as municipal boulevards and rapid transit corridors that are owned / managed by other city departments or government agencies.		☑	
Recommendation # 63 Consider skills training and mentorship programs within the division to foster a workplace culture of continuous improvement and staff support.		☑	
Recommendation # 64 As the city moves forward with its next phase of the asset management program, environment and parks services should continue to further its work through compilation of, and regular updates to the following: • Parks and facilities inventory; • Conditions and life cycle reports; • Asset description; and, • Estimated value of asset to replace.	☑	☑	☑
Recommendation # 65 Develop maintenance standards and a costing model that are tied to parks and open space classifications and are reflective of funding allocations, and that can be actively tracked through a work order management system.		☑	
Recommendation # 66 Implement asset specific Maximo work orders for park maintenance activities to improve efficiencies in work order management, maintenance scheduling, and response to community requests, including the use of in-field digital tablets provided to operational staff so that completed works can be recorded in real time.			
Recommendation # 67 Establish a standard requirement for 'as built' drawings and require submissions of the drawings for completed parks development projects and linked to the city's asset management system for parks.		☑	

Recommendation	Short Term	Medium Term	Long Term
Recommendation # 68 Develop an operational procedures manual that outlines the protocols and processes to direct day-to-day operations of the environment and parks services division.		☑	
Recommendation # 69 As part of the development of a special events plan, the city should undertake an operational review of who issues permits for parks, how permits are issued and scheduled, and how customer service, operational support and funding are delivered, with a view to streamlining the process. The operational review should consider event support services after hours (evenings, holidays and weekends), including consideration of the potential for a parks patrol that can monitor and respond to off-hours event activities, security and operational needs.		☑	
Recommendation # 70 Encourage and maintain a culture of continuous improvement in environment and parks services. This will include implementing a consistent communication process; establishing departmental expectations, performance measures and customer service goals; facilitating training and technological advances; encouraging innovation, teamwork and collaboration to identify areas for improvement in service delivery; and developing processes to monitor progress and outcomes.	☑	☑	☑
Recommendation # 71 Use the information provided through the natural system inventory and strategy, which will confirm the Official Plan designated natural features, to inform the development of the urban forest and invasive species management plans.		☑	
Recommendation # 72 Investigate separately a private tree by-law; invasive species management plan; and, strengthening of block/neighbourhood pruning programs.		☑	

Recommendation	Short Term	Medium Term	Long Term
Recommendation # 73 Prepare a comprehensive urban forest strategy / management plan specifically to direct the management and enhancement of the city's urban tree canopy cover including treed natural areas with strategies for effective management and monitoring of the urban forest targets and recommendations for staffing and resources.	☑		
Recommendation # 74 Prepare a rates & fees study that reviews existing rate structures, and establishes cost-recovery thresholds and pricing points based on the city's true costs of delivering parks and outdoor recreation services.		☑	
Recommendation # 75 Undertake a review and update of the 2009 cemetery services - Bechtel Park master plan.		☑	
Recommendation # 76 Examine ways to optimize and expand community collaborations and partnerships that complement the community's goals and city's own resources by enhancing community benefit of parks. Case by case evaluation can be applied to determine the cost and benefit of these programs.		☑	
Recommendation # 77 Identify and fund resources and services needed to coordinate community partnership and volunteer efforts, which may include: staff re-assignment; a designated staff person; a volunteer committee; or the establishment of an umbrella volunteer organization.		☑	