







# **EXECUTIVE SUMMARY**

Pathways for an Integrated Green Network (Green Pathways) is an implementation plan for the *Green Infrastructure Strategy: Towards an Interconnected Green Network* (Strategy). It serves as a 10-year work plan for the City of Saskatoon to progress the vision of an integrated green network that provides sustainable habitat for people and nature.

## What is the Green Network?

The green network is Saskatoon's collection of green infrastructure including natural areas, parks and other green spaces, trees, and built features like green roofs. An integrated green network provides both a great place for residents to live, work, and play, and a home for nature and wildlife.

**Figure 1:** Vision for an integrated green network

# The Green Network provides sustainable habitat for people and nature.



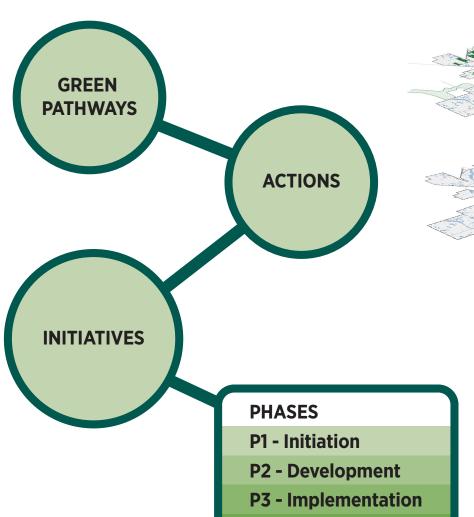
# Why do we need Green Pathways?

As Saskatoon grows, the green network is under increasing pressure to provide high quality green space to all residents, while also supporting urban cooling, habitat, storm water management, and other services. Emerging threats such as climate change and biodiversity loss are also compounding the pressure on green spaces to provide these services. Creating an integrated green network through the pathways defined in this document will help to mitigate threats while achieving significant "co-benefits". For example, a street tree can filter pollutants and storm water, provide shade and habitat, and store carbon. A wetland can manage storm water, provide habitat, and recreation opportunities. Taking the integrated approach defined through the green pathways that optimizes these co-benefits will allow the City to maximize service delivery compared to investment.

As an interconnected and multi-layered system, there is no single "pathway" to reach the integrated green network. Rather, multiple pathways grouped thematically guide improvements, management, and community involvement in the green network. This approach considers different systems that make up the layers of the green network including cultural landscapes, ecosystems, storm water management, recreation, and how these layers interact with the urban fabric.

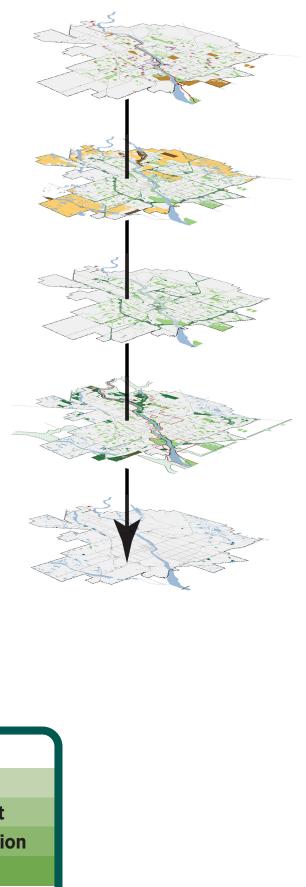
# How to follow the Pathways

Green Pathways provides a structure to progress the integrated green network through actions and phased initiatives over the next 10 years. Specific initiatives will be approved on a budget-by-budget basis, and Green Pathways will be updated, approximately every 5 years, to reflect what initiatives are funded and approved to proceed. Some work extends beyond 2031, and updates to the plan will reflect extended timelines as well as new initiatives that may be identified. A complete summary of the pathways, actions, initiatives, and phases is provided in Table 1.



**P4 - Operations** 

Figure 2: A multi-layered system



**Table 1:** Green Pathways, Actions, Initiatives, and Phases

ACTIONS AND INITIATIVES				PHASE				
ACTIONS AND INITIATIVES	2022-2023	2024-	-2025	2026-2027	2028	-2029	2030-2031	
PATHWAY 1: HEALTHY AND THRIVING NATURAL AREAS								
Action 1.1: Protect prioritized natural areas through policies a	and processes							
1.1.1 - Natural area policy and process	P2	P2	Р3	Р3	Р3	P4	P4	
Action 1.2 Manage and restore natural areas through Natural Area Management Plans								
1.2.1 - Natural Area Management Plans	P2	P	3	P4	ı	24	P4	
1.2.2 - Natural area restoration processes	P2	P	2	Р3	ı	<b>24</b>	P4	
1.2.3 - Tree protection in natural and naturalized areas	P2	P	3	P4	ı	24	P4	
Action 1.3 Create partnerships to support Indigenous land management								
1.3.1 - Traditional Land Use and Knowledge Assessment	P2	P2	Р3	Р3	ı	24	P4	
Action 1.4 Integrate natural assets into the City's asset mana	gement syster	n						
1.4.1 – Natural asset framework	P2	P2		Р3	P4		P4	
Action 1.5 Expand the Naturalized Park Program								
1.5.1 - Naturalized Parks Program expansion	P2	P	3	P4	ı	<b>24</b>	P4	
PATHWAY 2: CONNECTING AND REGENERATING GREEN SPACE	ES .							
Action 2.1 Upgrade and restore parks for enhanced green info	astructure							
2.1.1 - Green network park upgrades	P2	P	2	Р3	ı	24	P4	
Action 2.2 Enhance ecosystem services of underutilized urba	n sites							
2.2.1 - Underutilized space enhancement				P1	ı	P2	Р3	
Action 2.3 Naturalize and restore non-park green spaces								
2.3.1 - Naturalization of rights-of-way and green spaces				P1	ı	P2	Р3	
2.3.2 - Storm Water Management Facility restoration	P2	P	2	Р3	ı	24	P4	
Action 2.4 Identify and address gaps in the green network								
2.4.1 – Green network continuity analysis and remediation						P1	P2	

 Table 1: Green Pathways, Actions, Initiatives, and Phases (continued)

ACTIONS AND INITIATIVES	2022-	2023	2024-2025	PHASE 2026-2027	2028-2029	2030-2031		
PATHWAY 3: LEADING BY EXAMPLE FOR AN INTEGRATED GRE				2020 2027	2020 2025	2030 2031		
Action 3.1 Establish green network policies and work proced	ures for	City o	f Saskatoon D	epartments				
3.1.1 – Green network policies	P	1	P2	Р3	P4	P4		
3.1.2 - Corporate education and training	P	1	P2	Р3	P4	P4		
3.1.3 - Green network asset integration			P1	P2	P3	P4		
Action 3.2 Integrate low impact development principles into City projects								
3.2.1 - Low Impact development projects	P1 P2 P2 P3					P4		
3.2.2 - Low impact development program				P1	P2	Р3		
Action 3.3 Complete nature-friendly building policy, design, and retrofits								
3.3.1 – Bird-friendly civic guidelines or standards	P	1	P2	Р3	P4	P4		
3.3.2 - Nature-friendly building projects					P1	P2		
Action 3.4 Implement the Urban Forestry Management Plan								
3.4.1 – Urban Forestry Management Plan implementation	Timelir	nes are	defined in the	Urban Forest	ry Implementa	ntion Plan.		
Action 3.5 Integrate the active transportation network and g	reen ne	twork						
3.5.1 – Active transportation and green network integration	Timelir	nes are	defined in the	Active Transp	ortation Plan.			
PATHWAY 4: GROWING COMMUNITY FOR A LIVEABLE CITY								
Action 4.1 Implement green network education and awarene	ss prog	rams						
4.1.1 - Green network awareness campaign	Р3	P4	P4	P4	P4	P4		
4.1.2 – Natural areas education	P	2	Р3	P4	P4	P4		
4.1.3 – Green infrastructure school program			P1	P2	Р3	P4		
Action 4.2 Implement a residential and community grants an	d incen	tives p	rogram					
4.2.1 – Environmental Cash Grant	P	4	P4	P4	P4	P4		
4.2.2 – Residential grants and incentives program			P1	P2	Р3	P4		

 Table 1: Green Pathways, Actions, Initiatives, and Phases (continued)

ACTIONS AND INITIATIVES	PHASE						
ACTIONS AND INITIATIVES	2022-2023	2024-	2025	2026	-2027	2028-2029	2030-2031
Action 4.3 Support community stewardship of the green net	work						
4.3.1 – Street Garden Program	Р3	P4 P4		P4		P4	P4
4.3.2 - Community stewardship program	P1	P2 P3		P3 P4		P4	P4
4.3.3 – Social enterprise models						P1	P2
Action 4.4 Support green infrastructure adoption in the Industrial, Commercial, and Institutional (ICI) sector							
4.4.1 – Green infrastructure ICI adoption		P1		P2		Р3	P4
PATHWAY 5: FOOD SECURITY FROM SEED TO TABLE TO SOIL							
Action 5.1 Implement sustainable food projects in the green r	network						
5.1.1 - Green network food program	P1	P	2	P	3	P4	P4
5.1.2 – Food waste projects  Timelines are defined in the Solid Waste Reduction and Diversion Plan and ICI Waste Diversion Strategy.							
Action 5.2 Develop and implement a Sustainable Food Action Plan							
5.2.1 – Sustainable Food Action Plan	P1	P	2	P	3	P4	P4

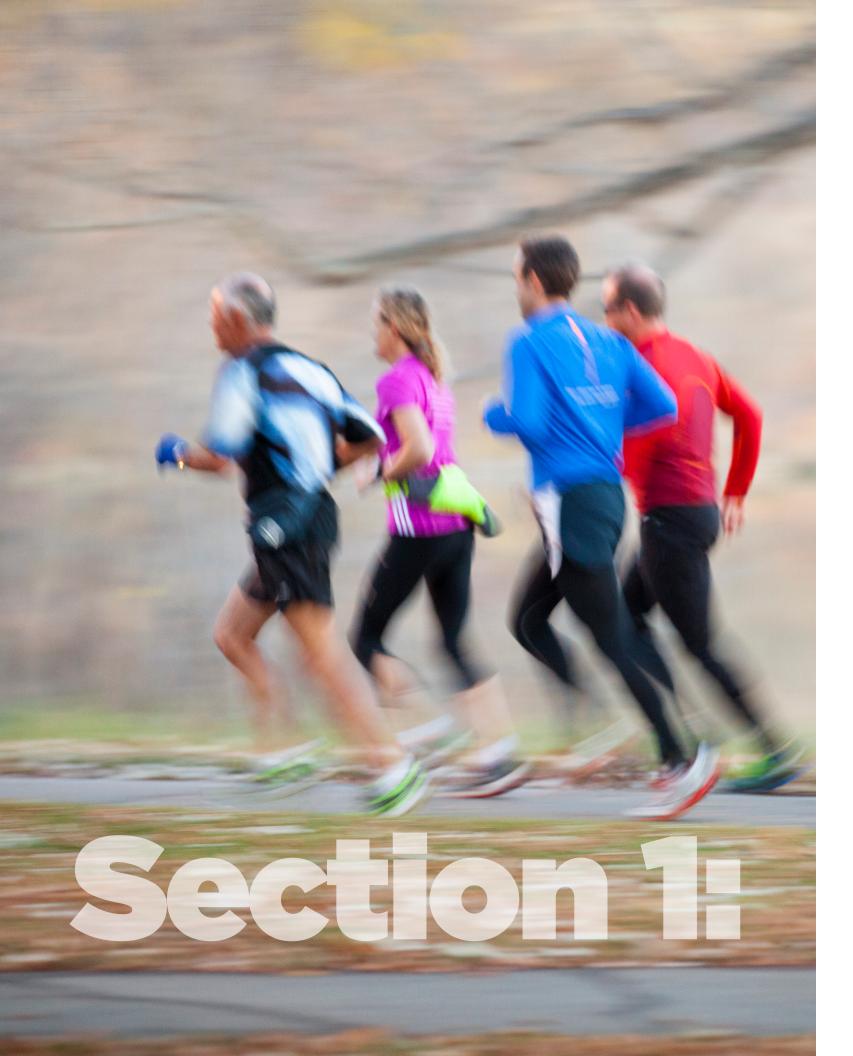




# **CONTENTS**

Executive Summary
Section 1: From Green Infrastructure Strategy to Green Pathways
Introduction
Background
Strategic Plan 2022-2025
Green Infrastructure Strategy 2020.
What is green infrastructure and the green network?
Engagement to define Green Pathways
Section 2: Pathways for an Integrated Green Network
Implementation Phases
PATHWAY 1.0: HEALTHY AND THRIVING NATURAL AREAS
Action 1.1: Protect prioritized natural areas through policies and processes
Action 1.2: Manage and restore natural areas through Natural Area Management Plans
Action 1.3: Create partnerships to support Indigenous land management
Action 1.4: Integrate natural assets into the City's asset management system
Action 1.5: Expand the Naturalized Park Program.
PATHWAY 2.0: CONNECTING AND REGENERATING GREEN SPACES
Action 2.1: Upgrade and restore parks for enhanced green infrastructure
Action 2.2: Enhance ecosystem services of underutilized urban sites
Action 2.3: Naturalize and restore non-park green spaces
Action 2.4: Identify and address gaps in the green network

PATHWAY 3.0: LEADING BY EXAMPLE FOR AN INTEGRATED GREEN NETWORK
Action 3.1: Establish green network policies and work procedures for City of Saskatoon Departments
Action 3.2: Integrate low impact development principles into City projects
Action 3.3: Complete nature-friendly building policy, design, and retrofits
Action 3.4: Implement the Urban Forestry Management Plan
Action 3.5 Integrate the active transportation network and green network
PATHWAY 4.0: GROWING COMMUNITY FOR A LIVEABLE CITY
Action 4.1: Implement green network education and awareness programs
Action 4.2: Implement a residential and community grants and incentives program
Action 4.3: Support community stewardship of the green network
Action 4.4: Support green infrastructure adoption in the Industrial, Commercial, and Institutional (ICI) sector38
PATHWAY 5.0: FOOD SECURITY FROM SEED TO TABLE TO SOIL
Action 5.1: Implement sustainable food projects in the green network
Action 5.2: Develop and implement a Sustainable Food Action Plan
Section 3: Following the Pathways
The Green Network Program
Funding
Partnerships
Monitoring and Reporting Progress
Conclusion
Appendix 1 – Green Infrastructure Strategy and Green Pathway Actions



# **Section 1:**

# FROM GREEN INFRASTRUCTURE STRATEGY TO GREEN PATHWAYS

## Introduction

The Green Infrastructure Strategy: Towards an Interconnected Green Network, February 2020 (Strategy), establishes a vision to enhance Saskatoon's green network by defining and mapping Saskatoon's green infrastructure, valuing ecosystem services, and identifying strengths, weaknesses, and areas for improvement. The vision and principles guiding the Strategy are shown in Figure 3 below.

Figure 3: Green Infrastructure Strategy Guiding Principles

Vision:					
Saskatoon's Green Network provides sustainable habitat for people and nature.					
Guiding Principles					
Climate Change Adaptation and Mitigation	Integrated and Multifunctional				
Ecological Integrity	Public Safety				
Education and Awareness	Recognizable and Unique Places				
Equitable and Accountable	Sustainable				
High Quality	Wellness: Physical and Mental				

Pathways for an Integrated Green Network (Green Pathways) is an implementation plan for the Strategy. To achieve the Strategy's vision, Green Pathways outlines actions and initiatives proposed for 2022 to 2031 to guide decision-making for land use, development, management, improvements, and community stewardship in the green network.

This document sets out 5 pathways that, when integrated, create a thriving green network for Saskatoon. These are:

- 1. Healthy and Thriving Natural Areas
- 2. Connecting and Regenerating Green Spaces
- 3. Leading by Example for an Integrated Green Network
- 4. Growing Community for a Livable City
- 5. Food Security from Seed to Table to Soil

Green Pathways identifies actions that set a course for the next decade of work through phased initiatives that will be brought forward through the City of Saskatoon's multi-year budget process. The actions are achievable and identify priority sites, implementation partners, and key performance indicators from initiation to operations. While high-level engagement and best practice research has occurred to prioritize the initiatives, further work and engagement to develop each initiative will occur, and additional approvals will be needed from City Council.

Through an ongoing Green Network program that focuses on funding securement, partnerships with the community, and regular reporting, Green Pathways positions Saskatoon to achieve an integrated green network: providing essential municipal services while strategically weaving green infrastructure into the urban fabric and meeting the community's need for a high-quality environment to live, work, learn, and play.

# Background

## Strategic Plan 2022-2025

Saskatoon's Strategic Plan 2022-2025 strives to realize miyo-pimatisiwin, (me-o-pi-ma-ti-si-win), or "the good life," for all residents. An outcome in the Strategic Plan is, "The Green Network is integrated, managed and enhanced to protect land, air and water resources". A healthy and thriving green network is instrumental in supporting the well-being of all of Saskatoon's citizens, attracting visitors and supporting a strong place-based economy. Key actions in the Strategic Plan include:

Implement actions in the Green Infrastructure Strategy and Implementation

Plan within proposed timeframes; and

Develop proactive policies, strategies, and practices to ensure the environment is protected from damage and, where possible, ecosystems are enhanced.

## **Green Infrastructure Strategy 2020**

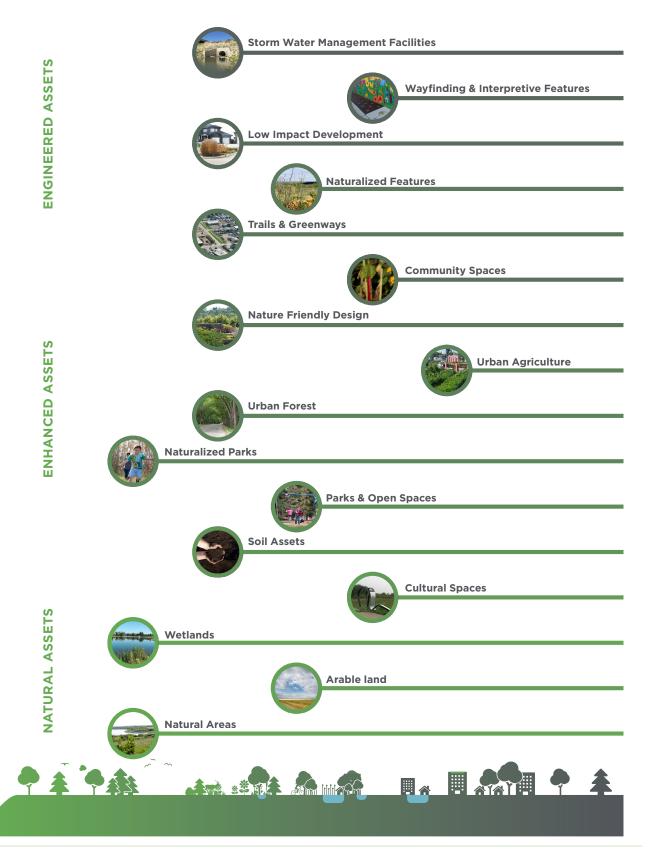
Development of the Strategy occurred in 3 parts between 2018 and 2021 and was funded primarily through the City's capital project reserves.

- Part 1: Seed was completed in May, 2018 with the release of the <u>Green Infrastructure Strategy Baseline Inventory</u>
   <u>Report</u> which established an inventory of current green infrastructure in Saskatoon, risks to the green network, and 10 guiding principles to guide the work.
- Part 2: Grow was completed in February, 2020 when the <u>Green Infrastructure Strategy: Towards an Interconnected Green Network</u> report was presented to City Council. The report outlined a vision and actions towards an interconnected green network. Feedback from over 700 residents, rightsholders, and stakeholders including the City's Indigenous Technical Advisory Group and the Meewasin Valley Authority, informed a series of actions to guide the work which was summarized in the project's <u>Comprehensive Engagement Report</u>. During Part 2, several early priority projects were initiated, including the City's Urban Forestry Management Plan, draft Natural Area Standards, and a Natural Capital Asset Valuation pilot project.
- **Part 3: Bloom** is the Implementation Plan for the Strategy, which is being completed in two parts. A <u>Nearterm Implementation Plan</u> was presented to City Council in June 2021 and outlines early work proposed to be implemented in 2022-2023. Green Pathways is the 10-year plan, including an update to the actions and initiatives that have been funded to proceed in 2022-2023.

### What is green infrastructure?

Green infrastructure is a system of natural, enhanced, and engineered assets that provide municipal and ecosystem services by protecting, restoring, or emulating nature. It includes a range of assets across different landscapes, as shown in following Figure 4.

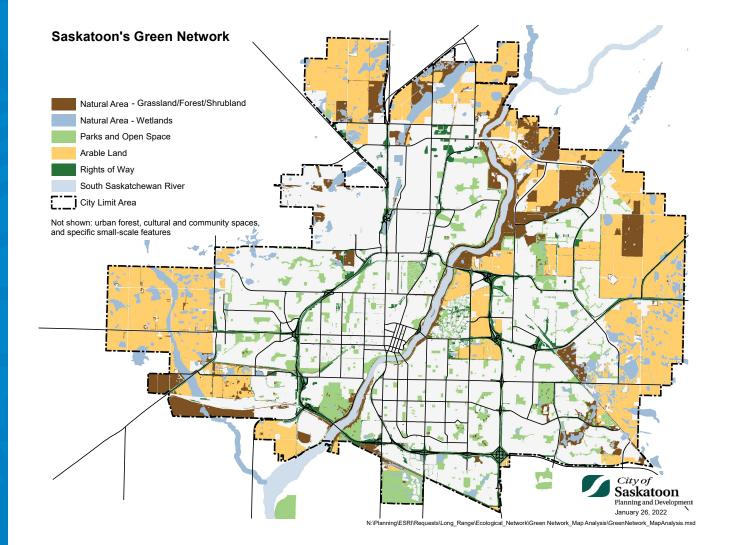
Figure 4: Range of Green Infrastructure Across the City



#### What is the green network?

The green network is the interconnected system of green infrastructure found in Saskatoon such as natural areas, parks, the urban forest, and smaller features such as bioswales. A Natural Areas Inventory completed in 2019 found that Saskatoon's green network comprise almost half of the city's footprint, or 11,150 hectares, excluding green infrastructure in private lands. This includes 3,068 hectares of natural areas and 2,185 hectares of parks, green spaces, and rights-of-way. The urban forest, another important part of the green network, was estimated to cover 10% of the city as of 2017, as reported in the *Urban Forestry Management Plan*.

Figure 5: Saskatoon's Green Network



#### **Vision for the Green Network**

To reach an integrated green network, the Strategy identifies 15 actions that the City and community can take under the five themes of community, governance, open space, ecology, and storm water. Strategy actions are generally intended to improve the overall quality, connectivity, and equity of the green network. The complete list of these actions can be found in Appendix 1.

Figure 6: Vision and Actions of the Green Infrastructure Strategy

#### SASKATOON'S GREEN NETWORK PROVIDES SUSTAINABLE HABITAT FOR PEOPLE AND NATURE.

#### Community: **Open Space**: Ecology: Storm Water: Governance: The Green Network The Green The Green Network The Green More rain is Network facilitates is governed with links all Saskatoon Network conserves managed where it placemaking. an emphasis on residents to biodiversity. falls. Storm water supports high honours culture, and partnerships and high quality, is recognized as an inspires communitytriple bottom line interconnected green quality habitat, and important resource. led transformation solutions. space. increases climate change resilience. Actions: **Actions:** Actions: Actions: Actions: 1. Design the Green **4.** Invest in the 7. Renew formal and 11. Protect, restore. **14.** Integrate natural Network to reflect informal green waterbodies and our collective within the City of space in the Green drainage courses history, honour Network to meet into development cultural diversity, citizen needs. using green **5.** Develop a **12.** Connect and and create a sense infrastructure. 8. Expand the naturalize the Green Network in of belonging for **15.** Increase the use governance approach to Green Network provision and management. Green Network by creating new built-up areas. of Low Impact 2. Inspire Development. publicly available **13.** Improve citizen-driven green space or biodiversity and transformation increasing green **5.** Redefine the of the Green infrastructure. partnership with Meewasin to Network. **9.** Increase achieve collective goals related to conservation, education, and **3.** Increase food walkability production in the and active Green Network. transportation throughout the Green Network in the Green 10. Protect and grow the urban forest.

## **Engagement to define Green Pathways**

From June 2021 to February 2022 the City engaged with the community, stakeholders, and developers on the implementation of the Strategy. Feedback from 407 participants was provided through a community survey, a series of virtual workshops, and individual meetings, asking participants to validate and prioritize the initiatives within the Strategy.

Over 80% of participants support the proposed initiatives within Green Pathways. The most commented theme provided by participants was support for the Strategy as a whole and for the City to take on this work.



# **Section 2:**

# **PATHWAYS FOR AN INTEGRATED GREEN NETWORK**

Through engagement with City stakeholders, project partners, and the community, 5 pathways have been established that form a work plan to progress Saskatoon's integrated green network.

The following sections describe each of the pathways in detail, including the actions, initiatives, and phases within each pathway that aligns with the City's multi-year budget process. The timelines proposed are contingent on completion of earlier phases, including approvals and funding, and therefore may shift from those provided in this section.

**Figure 7:** Pathways for an integrated green network

Pathway 1: Healthy and Thriving Natural **Areas** 

Natural areas provide habitat, sequester carbon, and are celebrated as part of our cultural landscape through protection, restoration, and management.

Pathway 2: **Connecting and Regenerating Green Spaces** 

High quality green spaces connect residents to nature and support municipal and ecosystem services across the green network through enhancements and naturalization.

Pathway 3: Leading by Example for an **Integrated Green** Network

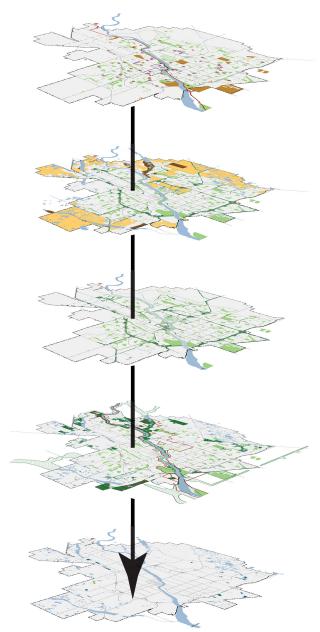
The built-up public realm is peopleand nature-friendly through coordinated municipal policies, planning, development, and asset management.

Pathway 4: Growing **Community for a Liveable City** 

Community-led stewardship of the green network and its uptake on private lands is supported and encouraged to facilitate placemaking, to share knowledge about the unique biodiversity of the region, and to honor cultures.

Pathway 5: Food **Table to Soil** 

The sustainable and just local food system is strengthened through community partnerships, provides **Security from Seed to** access to healthy and fresh food, promotes local food initiatives, and considers the full food system from seed to table to soil.



### **Implementation Phases**

To achieve an initiative from Green Pathways, there are generally 4 phases: initiation, development, implementation, and operations. These phases require different funding sources and decision points for Council. The path from initiation to operations may not always be linear; as implementation proceeds, recommendations from one phase may require further development phases to implement a recommendation. A description of each phase is provided in the figure below.

Figure 8: Implementation Phases

Phase	Description
P1 - Initiation	Includes the initial steps to define an initiative's scope, including an assessment of the City of Saskatoon baseline and review of best practices. The outcome of this phase is often a business case. This work will be carried out through the Green Network Program (see Section 3) and is the foundation for pursuing funding applications and preparing options for budget deliberations.
P2 - Development	Includes feasibility work, research, studies, frameworks, assessments, inventories, engagement, or pilots, and is typically completed using capital funding. The result is often a decision or approval report outlining options, implications, and the Administration's recommendation on how to proceed with the initiative.
P3 - Implementation	Includes completing everything required to put Council's decision into action. The specific requirements will be defined during the development phase and may include preparing or amending a policy, bylaw, or procedure; creating a management plan or establishing a level of service; preparing or modifying a program; or acquiring land. Implementation typically utilizes capital funding with a transition plan to operating funding, which requires budget approval.
P4 - Operations	Includes ongoing maintenance and management of green infrastructure, or ongoing delivery of a program to meet expected service levels. Once operational, budget adjustments are made to reflect the actual program cost.



# PATHWAY 1.0: **HEALTHY AND THRIVING NATURAL AREAS**

Natural areas provide habitat, sequester carbon, and are celebrated as part of our cultural landscape through protection, restoration, and management.

#### Scope

This pathway focuses on developing a suite of policy and process tools that will increase the protection and management of natural and naturalized areas, embedding these sites into the City's policy and asset management frameworks, and developing partnerships with the community to care for the land.

#### **Priority Sites and Actions**



#### **Actions**

- 1.1. Protect prioritized natural areas through policies and processes
- 1.2. Manage and restore natural areas through Natural Area Management Plans
- 1.3. Create partnerships to support Indigenous land management
- 1.4. Integrate natural assets into the City's asset management system
- 1.5. Expand the Naturalized Park Program

#### **Background**

Natural areas such as wetlands, grasslands, and forests are a significant part of the city, altogether encompassing about 14% of its footprint, and which include unique ecosystems of the moist mixed grassland and aspen parkland ecoregions, such as the Northeast Swale.

Natural areas are living reminders of the cultural landscape that Saskatoon is now part of and which, since time immemorial, has been cared for by Indigenous peoples. Indigenous partners remind us that as a community, we have a responsibility to care for the land, which provides us many gifts and ecosystem services such as storm water management, carbon sequestration, and improved resiliency to changing climate conditions.

These spaces are also potentially major sources of carbon sequestration, supporting the City's Climate Action Plan goals. The Green Infrastructure Strategy identifies the need to protect, restore, and manage our natural areas to increase our climate resilience, connect citizens to green space, and support urban biodiversity. Through this pathway, we can care for and increase management of our natural areas so that they are delivering the services and resiliency that we rely on as a municipality and community.

#### **Key Performance Indicators**

- Policies and/or bylaw(s) are adopted or updated for natural area protection with supporting policy tools and processes established.
- Natural areas are inventoried and prioritized for inclusion into the green network.
- A template is developed for Natural Area Management Plans that can be applied throughout green network sites.
- Partnerships are established with Indigenous Elders and Knowledge Keepers, rights and title holders, organizations, and communities using an ethical space framework to care for the land.
- Green infrastructure funding mechanisms (e.g., reserve or compensation fund) are established for natural area
- The City's asset management system includes natural assets, and a level of service is assigned to natural assets.

#### **Pathway Partners**

- **City Departments:** Sustainability, Planning and Development (Long Range Planning, Development Review), Parks, Indigenous Initiatives, Saskatoon Water (Engineering and Planning), Organization Strategy Execution (Asset Management), Recreation and Community Development, Saskatoon Land
- Community Partners: Meewasin, University of Saskatchewan, Indigenous Elders and Knowledge Keepers, rights and title holders, Indigenous organizations, community stewardship organizations, landowners and developers, Wanuskewin Heritage Park, Partners for Growth (P4G) Partners

## Action 1.1: Protect prioritized natural areas through policies and processes

#### **Objective**

The City's approach to natural areas protection through policy and process improvements is reviewed, refined, and formalized, as needed.









Cultural



**Naturalized** 



**Arable** 

Lead Department(s): Planning and Development (Long Range Planning), Sustainability

- 5.2 Work with regional partners to coordinate green network development and management in urban areas that intersect with the region.
- 5.3 Work with Wanuskewin to conserve their viewshed and support management of Opimihaw Creek.
- 11.2: Protect significant natural areas using a variety of available protection tools.
- 11.3: Integrate natural assets into the urban fabric while conserving ecosystem function.
- 11.5 In partnership with landowners, direct development in a way that helps retain and protect high quality arable land connecting to the regional agricultural network.
- 12.4 Coordinate with regional partners to connect the City's green network to the Regional Green Network whenever possible.
- 13.3: Reduce point and non-point source pollution to natural assets.
- 14.1: As the City expands, incorporate wetlands and natural drainage paths into the storm water network in greenfield development areas.
- 14.4: Consult with affected organizations when designing storm water infrastructure to mitigate impacts to natural areas and cultural elements within the watershed.

Table 2: Action 1.1 Protect prioritized natural areas through policies and processes: Initiatives and Phases

itiative and Phase	2022-2023	2024-2025	2026-2027	2028-2029	2030-2031
.1 Natural Area Policy and Process					
(1) Initiation completed in 2020-2021					
(2) Natural area policy framework: In alignment with the Official Community Plan, develop a policy framework for the identification, prioritization, protection, and designation of natural areas and connections between natural areas. This may include, but is not limited to, exploring updates to existing policy and processes (e.g., Wetland Policy, Natural Area Screenings), new policy (e.g., Natural Areas Policy or Bylaw), land dedications or designations (e.g., Environmental Reserve and Conservation Areas), or recommendations from Traditional Land Use and Knowledge Assessments (see Initiative 1.3.1).	(2) Development	(2) Development			
<b>(3a) Draft natural area policy:</b> Prepare Policy or Bylaw updates with accompanying administrative procedures where needed.		(3) Implementation	(3) Implementation	(3) Implementation	
(3b) Amend and align existing policies and processes with natural area policy: Prepare amendments to existing policies or processes such as those related to Sector and Concept Planning (e.g., Natural Area Screenings) to ensure that the green network and natural areas are considered for protection earlier and consistently in the development process.		(3) Implementation	(3) Implementation	(3) Implementation	
(3c) Prepare the natural area protection program: Incorporating recommendations from the previous phases, prepare the ongoing program.		(3) Implementation	(3) Implementation	(3) Implementation	
(4) Natural area protection program: Ongoing identification, designation, and protection of prioritized natural areas through policy and process mechanisms.				(4) Operations	(4) Operations

# Action 1.2: Manage and restore natural areas through Natural Area Management Plans

#### Objective

Prioritized natural areas in the green network are protected, managed, restored, and funded through Natural Area Management Plans (NAMPs).







**Lead Department(s):** Sustainability, Parks

- 11.1: Identify natural areas and make management decisions for these sites regarding avoidance, minimization, or compensation.
- 11.4: Develop and implement site-specific management plans, including restoration of natural areas when required.
- 6.2: Collaborate with Meewasin on conservation, naturalization, and the development of trails, interpretive infrastructure, and amenities in areas of interest.
- 13.4: Establish ongoing biodiversity monitoring and reporting with partners.



**Table 3:** Action 1.2: Manage and restore natural areas through Natural Area Management Plans: Initiatives and Phases

Initiative and Phase	2022-2023	2024-2025	2026-2027	2028-2029	2030-2031
1.2.1 Natural Area Management Plans					
(1) Initiation completed in 2020-2021					
(2a) Natural areas inventory and evaluation: Prioritize natural areas for integration into the green network using data from existing inventories and risk assessments.	(2) Development				
(2b) Template development: Develop a template for Natural Area Management Plans that includes management, restoration, monitoring, and asset management considerations. Consider concurrent work at the City such as preparation of Natural Area Policy, Tree Protection Bylaw, Traditional Land Use and Knowledge Assessment, and Integrated Pest Management Strategy that may inform content of the template.	(2) Development				
(2c) Pilots: Prepare Natural Area Management Plans for prioritized sites.	(2) Development				
(2d) Program recommendations: Incorporating best practices from the previous phases, prepare recommendations for the ongoing program to implement existing NAMPs and prepare additional ones. Identify funding needs for the implementation and ongoing delivery of the NAMPs.	(2) Development				
(3) Natural areas management program: Prepare the Natural Areas Management Program including the ongoing establishment of new management plans at prioritized natural areas and the ongoing site-specific work outlined in completed Natural Area Management Plans.		(3) Implementation			
<b>(4) Natural areas management:</b> Ongoing natural areas maintenance and asset management as outlined in completed Natural Area Management Plans.			(4) Operations	(4) Operations	(4) Operations
1.2.2 Natural area restoration processes					
(1) Initiation completed in 2022-2023.					
(2a) Wetland compensation process: Formalize the process of mitigation: avoidance, minimization, and compensation or replacement during development. Assess whether the same process can be utilized for other types of green network sites.	(2) Development	(2) Development			
<b>2b) Site prioritization:</b> Identify and prioritize opportunities to restore an existing wetlands using compensation funds.	(2) Development	(2) Development			
<b>(2c) Pilot restoration:</b> Working with restoration experts, design and implement a wetland restoration pilot utilizing existing wetland compensation funds.	(2) Development	(2) Development			
<b>(3) Restoration program plan:</b> Incorporating recommendations from Phase 2, prepare a program plan for the ongoing restoration of natural areas.			(3) Implementation		
<b>(4) Ongoing funding:</b> Delivery of the ongoing funding program for natural areas restoration.				(4) Operations	(4) Operations

**Table 3:** Action 1.2: Manage and restore natural areas through Natural Area Management Plans: Initiatives and Phases (continued)

Initiative and Phase	2022-2023	2024-2025	2026-2027	2028-2029	2030-2031
1.2.3 Tree protection in natural and naturalized areas					
(1) Initiation completed in 2020-2021					
(2) Needs assessment: Identify the need for policy or management plans to manage trees that are outside the scope of the Parks Department's existing tree inventory (e.g., native and naturalized tree stands, afforestation areas). Consider alignment with concurrent projects such as the preparation of a Tree Protection Bylaw.	(2) Development				
(3) Management plan integration and program preparation: Integrate recommendations from phase 2 with other initiatives such as Natural Area Management Plans and prepare a program plan for the ongoing protection and management of trees in natural and naturalized areas.		(3) Implementation			
<b>(4) See 1.2.1:</b> The operation of this program is anticipated to be integrated into Initiative 1.2.1: Natural Area Management Plans.			(4) Operations	(4) Operations	(4) Operations

# **Action 1.3: Create partnerships to support Indigenous land management**

#### Objective

Partnerships with Indigenous communities are in place to support Indigenous land management in the green network.



Lead Department(s): Sustainability, Indigenous Initiatives, Planning and Development (Long Range Planning), Parks

#### **Green Infrastructure Strategy Actions Addressed**

- 1.2: In partnership with the community, complete a Traditional Land Use and Traditional Knowledge assessment to identify cultural elements in the green network, and establish ways to conserve, honour, and revitalize these elements.
- 4.3: Adopt an ethical space and triple bottom line approach to green network governance, planning the network through sustainability, inclusion, and equity frameworks.
- 5:3: Work with Wanuskewin to conserve their viewshed and support management of Opimihaw Creek.
- 5.4: Partner with Indigenous communities and organizations to explore traditional land management and governance models for the green network.

**Table 4:** Action 1.3 Create partnerships to support Indigenous land management: Initiatives and Phases

Initiative and Phase	2022-2023	2024-2025	2026-2027	2028-2029	2030-2031
1.3.1 Traditional Land Use and Knowledge Assessment (TLU&KA)					
(1) Initiation completed in 2020-2021					
(2a) Framework and partnerships: Incorporating an ethical space framework, and through partnerships with Elders, Knowledge Keepers, rightsholders, and City stakeholders, develop the scope, process, and partnership opportunities for a Traditional Land Use and Knowledge Assessment of the city, and especially green network sites.	(2) Development	(2) Development			
(2b) Policy framework: Identify and develop a framework for policy or process amendments that may result from the TLU&KA recommendations. Coordinate with other policy work such as Initiative 1.1.1 if applicable.	(2) Development	(2) Development			
(2c) Prepare the TLU&KA: Build partnerships with Indigenous Elders, Knowledge Keepers, organizations, and communities to implement the assessment. Ideally, the assessment would be led by an Indigenous organization(s).	(2) Development	(2) Development			
(2d) Pilots: Develop and deliver pilots for early opportunities identified in the TLU&KA if funding is available.	(2) Development	(2) Development			
(3) Prepare ongoing program: Prepare a program or capital project(s) to implement recommendations from the TLU&KA, some of which may require additional development through a phased multi-year approach. Prepare program plans and capital plans as needed.		(3) Implementation	(3) Implementation		
(4) Ongoing program: Maintain and continuously improve program(s), according to specific recommendations from the TLU&KA.				(4) Operations	(4) Operations

# Action 1.4: Integrate natural assets into the City's asset management system

#### Objective

Natural assets are integrated into the City's asset management framework to improve the level of service provided by natural assets.



**Lead Department(s):** Sustainability, Organization Strategy Execution, Parks

- 4.4: Define an appropriate service level and associated funding for the green network to prioritize future investments.
- 4.5: Evaluate the ecosystem services of the green network through the Natural Capital Asset Valuation process.

**Table 5:** Action 1.4 Integrate natural assets into the City's asset management system: Initiatives and Phases

Initiative and Phase	2022-2023	2024-2025	2026-2027	2028-2029	2030-2031
1.4.1 Natural asset framework					
(1) Initiation completed in 2020-2021					
(2a) Natural asset inventories and data management: Continuing work from the Natural Capital Asset Valuation pilot, refine existing natural asset inventories; identify how inventories align with similar natural areas data; and integrate data into the City's asset management system. Assess the need for further studies, mapping, performance tracking, and data management, and develop recommended next steps.	(2) Development	(2) Development			
(2b) Natural asset valuation: Continuing work from the Natural Capital Asset Valuation pilot, work with experts to complete condition and performance assessments of natural assets including ecosystem service modelling. Where possible, integrate outcomes with the City's Climate Action Plan.	(2) Development	(2) Development			
(2c) Level of service: Develop a level of service framework for natural assets and identify recommended next steps to assign service levels to high priority natural assets.	(2) Development	(2) Development			
(2d) Management plan integration: Integrate asset management principles into Natural Area Management Plan (Initiative 1.2.1) or developing recommendations for further corporate asset integration (Initiative 3.1.3).	(2) Development	(2) Development			
(3) Program implementation: Prepare and deliver the natural asset program including ongoing data collection and management, condition assessments, valuation, and levels of service.			(3) Implementation		
<b>(4) Program operations:</b> Operate the program. In some cases, ongoing work will be embedded into other initiatives (e.g., 1.2.1 and 3.1.3).				(4) Operations	(4) Operations

# **Action 1.5: Expand the Naturalized Park Program**

#### Objective

The naturalized park program grows through management plans and dedication of naturalized sites during the development process.

**Note:** this action addresses the establishment of naturalized parks in greenfield sites. Naturalization of park and non-park green spaces in infill areas is addressed in Actions 2.2 and 2.4.

Naturalized Parks



**Lead Department(s):** Parks, Sustainability, Planning and Development (Long Range Planning)

- 12.1 Naturalize parks, storm water infrastructure, and other open space where appropriate.
- 12.3 Increase the City's use of native species in restoration and naturalization work.

**Table 6:** Action 1.5 Expand the Naturalized Park Program: Initiatives and Phases

Initiative and Phase	2022-2023	2024-2025	2026-2027	2028-2029	2030-2031
1.5.1 Naturalized Parks Program expansion					
(1) Initiation completed in 2020-2021					
(2a) Establish process and policy framework: In alignment with the Park Development Standards, refine the process for the establishment of new naturalized parks in greenfield areas and establish desired levels of service and compatible uses for these sites. Coordinating with Initiative 1.1.1, identify policy considerations related to the establishment of new naturalized parks (e.g., Environmental Reserve Dedication).	(2) Development				
(2b) Naturalized park management plans: Aligning with Initiative 1.2.1, and integrating recommendations from Phase 2a, develop and implement management plans for naturalized parks.	(2) Development				
(3) Program preparation: Prepare recommendations for the ongoing establishment and management of new naturalized parks. Integrate recommendations into Initiatives 1.1.1 and 1.2.1.		(3) Implementation			
(4) New naturalized park establishment and management: Ongoing establishment and management of new naturalized parks in greenfield development areas through Parks Department operations.			(4) Operations	(4) Operations	(4) Operations



# PATHWAY 2.0: CONNECTING AND REGENERATING GREEN SPACES

High quality green spaces connect residents to nature and support municipal and ecosystem services across the green network through enhancements and naturalization.

#### Scope

This pathway focuses on identifying breaks or degradation in the current green network and addressing them through enhancements, restoration, or naturalization.

#### **Priority Sites and Actions**

Parks & Open Spaces



Naturalized Parks



Storm Water Management Facilities



Soil Assets Urban Forest



#### Actions

- 2.1: Upgrade and restore parks for enhanced green infrastructure
- 2.2: Enhance ecosystem services of underutilized urban sites
- 2.3: Naturalize and restore non-park green spaces
- 2.4: Identify and address gaps in the green network

#### **Background**

As the world becomes more urbanized, green space is increasingly recognized as a strong influence on mental, physical, and emotional well-being. However, not everyone in Saskatoon has the same access to green space. Some residents face distance, connectivity, and accessibility barriers. And urban wildlife that rely on connectivity often encounter breaks between green spaces. Connecting and regenerating green spaces could include enhancing existing parks; working with rightsholders, landowners, the community, and stakeholders to add native species to a green space; planting wildflowers in a right-of-way for bees; or remediating contaminated sites. By connecting gaps in the green network and restoring sites to their full potential, both people and nature benefit from the healthy and connected green network.

#### **Key Performance Indicators**

- Policies and processes related to park upgrades and management include green network considerations.
- A strategy is in place and implemented to enhance ecosystem services on underutilized sites.
- Management plans and related processes are developed to increase the use of native and naturalized plantings in built-up areas including storm water management facilities.
- A strategy is in place and implemented, and partnerships identified to connect the green network between greenfield and built-up areas, including through private lands and the regional green network.

#### **Pathway Partners**

- **City Departments:** Sustainability, Parks, Planning and Development (Planning Project Services, Neighbourhood Planning, Urban Design, Long Range Planning, Development Review), Recreation and Community Development, Indigenous Initiatives, Saskatoon Land, Saskatoon Water (Engineering and Planning), Construction and Design, Organization Strategy Execution
- Community Partners: University of Saskatchewan, Indigenous communities and organizations, Business
  Improvement Districts, landowners and developers, School Divisions, Community Associations, community
  stewardship organizations, Ducks Unlimited, Meewasin, and many others.

#### Action 2.1: Upgrade and restore parks for enhanced green infrastructure

#### **Objective**

Green infrastructure in existing parks is enhanced through the ongoing park upgrade process.

Parks & Open Spaces



**Soil Assets** 





**Lead Department(s):** Parks, Recreation and Community Development, Sustainability

#### Green Infrastructure Strategy Actions Addressed

- 7.1 Identify high priority formal and informal green spaces to upgrade or redevelop.
- 7.3 Implement park upgrade plans starting in high priority areas.
- 15.5 Pilot raw water use projects.

**Table 7:** Action 2.1 Upgrade and restore parks for enhanced green infrastructure: Initiatives and Phases

Initiative and Phase	2022-2023	2024-2025	2026-2027	2028-2029	2030-2031				
2.1.1 Green network park upgrades									
(1) Initiation completed in 2020-2021									
(2a) Park Development Standards updates: Integrate the Park Development Standards with other green network policies and processes.	(2) Development	(2) Development							
(2b) Park prioritization and enhancements: In alignment with the Park Development Standards, update existing park prioritization and upgrade processes to include green infrastructure, naturalization, urban tree canopy, community stewardship, water conservation, and equity considerations.	(2) Development	(2) Development							
(2c) Park enhancement pilots: Test the updated prioritization and enhancement process at prioritized sites and monitor results.	(2) Development	(2) Development							
(3) Park upgrades implementation: Incorporate updated processes and pilot results into ongoing park upgrades.			(3) Implementation						
(4) Park upgrades program: Occurs through Parks Department operations.				(4) Operations	(4) Operations				

## Action 2.2: Enhance ecosystem services of underutilized urban sites

#### Objective

Vacant or degraded sites are remediated, restored, or upgraded through green infrastructure, including through interim site uses where appropriate.

Parks & Open Spaces



**Soil Assets** 



#### **Green Infrastructure Strategy Actions Addressed**

- 7.1 Identify high priority formal and informal green spaces to upgrade or redevelop.
- 7.2 Increase coordination within the City, and with the community, to encourage informal green space renewal.
- 8.1 Identify green infrastructure opportunities outside the existing green network.
- 8.2 Secure key sites through purchase, donation, or partnership with other landowners, stakeholders, or citizen groups.

Table 8: Action 2.2 Enhance ecosystem services of underutilized sites: Initiatives and Phases

nitiative and Phase	2022-2023	2024-2025	2026-2027	2028-2029	2030-2031
2.1 Underutilized space enhancement					
(1) Opportunity analysis: Assess the opportunity to enhance non-park green and open spaces (e.g., vacant lots, brownfields) considering current legislation, land uses, and concurrent City work such as Corridor Planning. Identify resource and funding needs and prepare business case for phase 2.			(1) Initiation		
(2a) Feasibility assessment: Complete a feasibility assessment for enhancement work including considerations for land ownership and access, regulatory implications, site hazards, community partnership opportunities, and interim use opportunities. Consider opportunities for integration with existing City projects such as Corridor Planning.				(2) Development	
(2b) Soil suitability studies: Soil suitability is often a concern in infill sites. Studies may be needed prior to implementation to assess soil suitability including contaminants, regulatory constraints, and restoration/remediation options.				(2) Development	
(2c) Enhancement pilot: Work with community partners, rightsholders, and landowners to identify currently underutilized or degraded sites that could be restored and prioritize sites for pilot restoration. Develop and deliver the pilot restoration plan and monitor outcomes.				(2) Development	
(3) Program preparation: Incorporating recommendations from the development phase, including the pilot, prepare an ongoing program for infill enhancement.					(3) Implementatio
<b>(4) Infill enhancement program:</b> Ongoing operation of the infill enhancement program.					>>>>

### Action 2.3: Naturalize and restore non-park green spaces

#### Objective

Open spaces and rights-of-way outside parks are naturalized starting in prioritized locations. Storm water management facilities (SWMFs) including former wetlands are enhanced to include naturalized elements where appropriate, improving the ecosystem services of these assets.

Naturalized Parks



Storm Water Management Facilities

Lead Department(s): Parks, Saskatoon Water (Engineering and Planning), Sustainability

#### **Green Infrastructure Strategy Actions Addressed**

- 8.1 Identify green infrastructure opportunities outside the existing green network.
- 12.1 Naturalize parks, storm water infrastructure, and other open space where appropriate.
- 12.3 Increase the City's use of native species in restoration and naturalization work.
- 14.3: Evaluate opportunities to increase naturalization of existing storm ponds to improve water quality and habitat, while balancing community recreation and other considerations.

**Table 9:** Action 2.3 Naturalize and restore non-park green spaces: Initiatives and Phases

Initiative and Phase	2022-2023	2024-2025	2026-2027	2028-2029	2030-2031
2.3.1 Naturalization of rights-of-way and green spaces					
(1) Opportunity assessment: Identify opportunities and best practices to introduce native species to existing green spaces such as berms, buffers, and rights-of-way. Prioritize sites for naturalization.			(1) Initiation		
(2a) Site, resourcing, and capacity assessment: Assess the feasibility of expanding Parks service levels to these spaces including implications for operational resourcing. Coordinate and align with concurrent initiatives such as the Park Development Standards, Naturalized Park program, Wetland Policy operations, Water Conservation Strategy, and Urban Forestry Management Plan. Identify how to increase capacity in local native plant production.				(2) Development	
(2b) Naturalization pilot: Prepare and deliver a pilot for naturalization of an existing green space and monitor outcomes. Incorporate best practices into the ongoing naturalized parks program.				(2) Development	
(3) Program preparation: Prepare the ongoing naturalization of non-park green spaces program, including updates to levels of service and work procedures.					(3) Implementation
<b>(4) Ongoing program:</b> Incorporate naturalization of existing green spaces into ongoing naturalized parks program.					>>>

Table 9: Action 2.3 Naturalize and restore non-park green spaces: Initiatives and Phases (continued)

Initiative and Phase	2022-2023	2024-2025	2026-2027	2028-2029	2030-2031
2.3.2 Storm Water Management Facility restoration					
(1) Completed in 2020-2021					
(2a) Site prioritization: Identify and prioritize opportunities to naturalize existing Storm Water Management Facilities (SWMFs) including considerations for public acceptance, naturalization, and carbon sequestration.	(2) Development	(2) Development			
<b>(2b) Pilot restoration:</b> Working with restoration experts, design and implement a wetland restoration pilot.	(2) Development	(2) Development			
(3a) Establish standards, protections, and maintenance responsibilities: Update the Wetland Design Guidelines and Development and Design Standards to include best management practices for SWMFs. Establish standards, protections, and service levels for wetland management and monitoring.			(3) Implementation		
(3b) Program preparation: Incorporating best practices from the pilot, prepare an ongoing program for SWMF restoration. Identify funding and resourcing needs for the ongoing program.			(3) Implementation		
(4) Wetland and storm pond restoration program: Ongoing delivery of the wetland and SWMF restoration program at prioritized sites including restoration, management, and monitoring.				(4) Operations	(4) Operations

# Action 2.4: Identify and address gaps in the green network

#### Objective

Gaps in the current green network are identified and addressed through partnerships, site restoration, dedication of new green network sites, and land securement.

Parks & Open Spaces



Naturalized Parks



Trails & Greenways



Lead Department(s): Sustainability, Planning and Development

#### **Green Infrastructure Strategy Actions Addressed**

- 5.2 Work with regional partners to coordinate green network development and management in urban areas that intersect with the region.
- 8.1 Identify green infrastructure opportunities outside the existing green network.
- 8.2 Secure key sites through purchase, donation, or partnership with other landowners, stakeholders, or citizen groups.
- 8.3 Design and implement green infrastructure expansion in areas of interest.
- 11.5 In partnership with landowners, direct development in a way that helps retain and protect high quality arable land connecting to the regional agricultural network.
- 12.2 Purchase or acquire land in strategic areas to enhance biodiversity outcomes and increase connectivity.
- 12.4 Coordinate with regional partners to connect the City's green network to the Regional Green Network whenever possible.

**Table 10:** Action 2.4 Identify and address gaps in the green network: Initiatives and Phases

Initiative and Phase	2022-2023	2024-2025	2026-2027	2028-2029	2030-2031
2.4.1 Green network continuity analysis and remediation					
(1) Needs assessment: Identify gaps in the green network, and opportunities to bridge gaps including through land securement and restoration of sites that have not been addressed through other actions. Prepare the business case for phase 2 including a work plan, funding, and resourcing needs.				(1) Initiation	
(2a) Gap analysis and prioritization: Complete a gap analysis of the current green network, review strategies to bridge or restore green network gaps, and prioritize restoration opportunities.					(2) Development
(2b) Funding strategy: Develop a strategy for green network continuity, including funding sources, opportunities to partner with rights and titleholders, landowners, developers, and other stakeholders.					(2) Development
(2c) Pilot restoration plan: Develop and deliver a pilot restoration plan to bridge or restore a green network gap at a priority site. Develop recommendations for next steps.					(2) Development
(3) Program preparation: Incorporating recommendations from phase 2, prepare and deliver the ongoing program for green network securement and restoration, including where sites will be managed through the Natural Areas Management Program.					>>>>
(4) Restoration program: Ongoing securement and restoration of green network sites starting in prioritized areas.					>>>>

# PATHWAY 3.0: LEADING BY EXAMPLE FOR AN INTEGRATED GREEN NETWORK

The built-up public realm is people- and nature-friendly through coordinated municipal policies, planning, development, and asset management.

#### Scope

This pathway integrates green network considerations into City of Saskatoon infrastructure projects through updates to policy, standards, work procedures, and support for staff. Initiatives embed elements such as low impact development or nature-friendly design into horizontal and vertical City infrastructure. Through this pathway, important City work that connects to the green network but is led and managed through other strategies is also tracked, such as the Urban Forestry Management Plan and the Active Transportation Plan.

#### **Priority Sites and Actions**

## Low Impact Development



Nature Friendly Design



Trails & Greenways



Soil Assets



#### **Actions**

- 3.1 Establish green network policies and work procedures for City of Saskatoon Departments
- 3.2 Integrate Low Impact Development principles into City projects
- 3.3 Complete nature-friendly building policy, design, and retrofits
- 3.4 Implement the Urban Forestry Management Plan
- 3.5 Integrate the active transportation network and green network

#### **Background**

In built-up areas of the city, the opportunity for green infrastructure shifts to smaller-scale features. Ecosystem services in these sites are often constrained by poor growing conditions, soil compaction or contamination, wildlife stressors such as light and noise, and limited space, so green infrastructure interventions must shift accordingly.

Low impact development (LID) features such as bioswales and rain gardens provide an opportunity for site-level storm water management, while street trees alleviate the urban heat island effect in residential and commercial areas. There are also opportunities to retrofit built assets such as buildings to incorporate nature-friendly design, from bird-friendly glass to dark sky compliant lighting, which reduces stress to urban wildlife.

#### **Key Performance Indicators**

- A framework is in place that guides updates to City policies, processes, and work procedures to include green network considerations.
- Low impact development and design is incorporated into civic projects.
- Civic buildings incorporate nature-friendly design and/or green infrastructure.
- The active transportation network aligns with and considers the green network.
- \*For success measures related to the urban forest, refer to the Urban Forestry Implementation Plan.

#### **Pathway Partners**

- **City Departments:** Sustainability, Planning and Development (Neighbourhood Planning, Development Review, Long Range Planning, Urban Design, Planning Project Services), Saskatoon Water (Engineering and Planning), Parks, Building Standards, Indigenous Initiatives, Transportation, Construction and Design, Facilities Management, Recreation and Community Development, Saskatoon Land, Organization Strategy Execution
- **Community Partners:** Business Improvement Districts, Community Associations, Indigenous communities, University of Saskatchewan, Landowners/Developers, SOS Trees, Utilities, Business Associations, Institutional, Industrial, and Commercial Sectors

# Action 3.1: Establish green network policies and work procedures for City of Saskatoon Departments

#### Objective

Green network outcomes are embedded into applicable City work through updates to policy, standards, and work procedures; and staff are supported to integrate these.





**Nature** 







Lead Department(s): Sustainability, Planning and Development, Organization Strategy Execution

- 4.1 Improve green network planning by updating City work plans, policies, and initiatives to increase green infrastructure across Saskatoon.
- 13.1 Develop dark sky and low noise zones, prioritizing sites to reduce ecological stress.
- 13.2 Develop and integrate wildlife friendly standards into development, including bird friendly standards in highly built-up areas.
- 13.5 Improve management of the City's soil assets.
- 15.3 Update bylaws and regulations to allow more permeable surfaces.

**Table 11:** Action 3.1 Establish green network policies and work procedures for City of Saskatoon Departments: Initiatives and Phases

Initiative and Phase	2022-2023	2024-2025	2026-2027	2028-2029	2030-2031
3.1.1 Green network policies			•		
(1) Policy reviews and prioritization: Review and prioritize opportunities to embed and standardize green network objectives in City bylaws, policies, processes, and work procedures, applying an asset management and Triple Bottom Line lens to this work. Identify relevant policies in the Official Community Plan and how these can be implemented. The review may examine new policies or procedures (e.g., Dark Sky Policy) or updates to and green network alignment with existing policies or procedures (e.g., Zoning Bylaw, Park Development Standards, Active Transportation Plan).	(1) Initiation				
(2) Feasibility assessment and policy framework: Assess the feasibility, funding, and resourcing needs to implement prioritized policy creation, updates, or alignment. Develop the framework and prioritized approach for ongoing policy updates.		(2) Development			
(3) Policy updates and program plan: Prepare the prioritized policy updates as recommended in phase 2. Prepare the program plan for ongoing updates and delivery of policy.			(3) Implementation		
(4) Policy delivery: Delivery of the new or updated policy or policies. Ongoing updates to policy and work procedures according to prioritization criteria.				(4) Operations	(4) Operations
3.1.2 Corporate education and training					
(1) Baseline review: Aligning with Initiative 3.1.1, identify the funding and resourcing needs to deliver a corporate education and training program that supports city staff to integrate green network considerations into work plans and procedures. Prepare the business case to proceed with next steps.	(1) Initiation				
(2) Needs assessment: Identify current training materials and programs at the City and opportunities to integrate with these programs. Identify and prioritize training and education needs to support corporate integration of the green network. Prepare recommendations for phase 3.		(2) Development			
(3) Prepare training materials and program: Prepare training materials and the program plan for City staff to encourage the uptake of green infrastructure into applicable policies, work plans and procedures, and programs.			(3) Implementation		
<b>(4) Deliver training program:</b> Ongoing delivery of the program, coordinating with Initiative 3.1.1.				(4) Operations	(4) Operations

**Table 11:** Action 3.1 Establish green network policies and work procedures for City of Saskatoon Departments: Initiatives and Phases (continued)

Initiative and Phase	2022-2023	2024-2025	2026-2027	2028-2029	2030-2031
3.1.3 Green network asset integration					
(1) Program initiation: Incorporating recommendations from Initiative 1.4.1, identify program and resourcing needs for the ongoing integration of natural assets and green infrastructure into the City's asset management system.		(1) Initiation			
(2) Green infrastructure integration plan: Identify recommendations for the integration of green infrastructure into the City's asset management system.			(2) Development		
(3) Prepare updates to the City's asset management program: Incorporating recommendations from phase 2, proceed with updates to the asset management program.				(3) Implementation	
(4) Ongoing program: Deliver recommendations through the City's asset management program.					(4) Operations

# Action 3.2: Integrate low impact development principles into City projects

#### Objective

City-owned horizontal infrastructure is designed or upgraded through low impact development (LID) practices to enhance the landscape and manage storm water in ways that support the site's natural hydrology.









**Lead Department(s):** Sustainability, Construction and Design, Planning and Development (Planning Project Services), Major Projects, Saskatoon Water (Engineering and Planning)

- 14.2 Identify how green infrastructure can increase the storm system's capacity to respond to intense rain events.
- 15.1 Incorporate Low Impact Development pilots into City projects to show leadership, prioritizing high-pedestrian areas such as BRT corridors and Downtown.
- 15.2 Continue partnering with research institutions and conservation agencies to determine best practices for Low Impact Development.
- 15.5 Pilot raw water use projects.

**Table 12:** Action 3.2 Integrate low impact development principles into City projects: Initiatives and Phases

Initiative and Phase	2022-2023	2024-2025	2026-2027	2028-2029	2030-2031
3.2.1 Low impact development projects					
(1) Opportunity analysis and prioritization: Review and prioritize opportunities to increase uptake of LID in upcoming construction projects. Opportunities could include but are not limited to upcoming Corridor Planning projects, storm water projects, snow storage facilities, and active transportation routes. Prepare business case(s) for low impact development pilots and implementation.	(1) Initiation				
(2a) LID feasibility: Assess the feasibility of the prioritized LID project through its full life cycle including estimated costs, benefits, and maintenance implications.		(2) Development	(2) Development		
(2b) LID pilots: Design and deliver a LID pilot for the prioritized sites/assets, aligning with concurrent City projects such as Corridor Planning, streetscape projects, or drainage improvement projects.		(2) Development	(2) Development		
(3) LID installation: Complete construction of the LID feature and prepare accompanying program elements (e.g., public education about the feature).				(3) Implementation	
<b>(4) LID maintenance and monitoring:</b> Maintain the LID feature and monitor its performance.					(4) Operations
3.2.2 Low impact development program					
(1) <b>Program initiation:</b> Incorporating learnings from Initiative 3.2.1, prepare a business case for an ongoing LID program.			(1) Initiation		
(2a) Needs assessment: Prioritize specific LID elements to include in the program. Assess the need for updates to existing policies and procedures, new policies and procedures, and monitoring needs for prioritized LID elements.				(2) Development	
(2b) Feasibility studies: Research best practices for and feasibility of prioritized LID elements, including overall effectiveness, costs, benefits, and maintenance implications. Complete studies with research institutions if applicable.				(2) Development	
(3) Program preparation: Prepare the ongoing program for phased implementation and monitoring of LID Projects.					(3) Implementation
(4) LID program operations: Continue phased implementation of Low Impact Development projects and monitor outcomes.					>>>

# Action 3.3: Complete nature-friendly building policy, design, and retrofits

#### Objective

Nature-friendly design (e.g., bird-friendly windows, dark sky lighting) and green infrastructure (e.g., green roofs) is incorporated into civic buildings.

Nature Friendly Design



**Lead Department(s):** Sustainability, Facilities Management, Building Standards, Planning and Development.

- 4.1 Improve green network planning by updating City work plans, policies, and initiatives to increase green infrastructure across Saskatoon.
- 13.1 Develop dark sky and low noise zones, prioritizing sites to reduce ecological stress.
- 13.2 Develop and integrate wildlife friendly standards into development, including bird friendly standards in highly built-up areas.

**Table 13:** Action 3.3 Complete nature-friendly building policy, design, and retrofits: Initiatives and Phases

Initiative and Phase	2022-2023	2024-2025	2026-2027	2028-2029	2030-2031
3.3.1 Bird-friendly civic guidelines or standards					
(1) Baseline review: Review the opportunity to adopt bird-friendly guidelines or standards in Saskatoon, and current policies or procedures that may be impacted by the work. Prepare the business case to proceed with work.	(1) Initiation				
(2) Feasibility: Assess the feasibility of adopting Bird-Friendly Guidelines or Standards in Saskatoon through a review of current City policies and procedures, best practices in other jurisdictions, and potential impacts on the development community. Prepare recommendations for phase 3.		(2) Development			
(3) Prepare guidelines or standards: Prepare the Guidelines or Standards and a procedure to integrate these into existing City processes.			(3) Implementation		
(4) Bird-friendly guidelines – operations: Adopt and operate the Guidelines or Standards.				(4) Operations	(4) Operations

**Table 13:** Action 3.3 Complete nature-friendly building policy, design, and retrofits: Initiatives and Phases (continued)

Initiative and Phase	2022-2023	2024-2025	2026-2027	2028-2029	2030-2031
3.3.2 Nature-friendly building projects					
(1) Opportunity analysis and prioritization: Review and prioritize opportunities and complete a feasibility analysis to upgrade existing built assets such as civic buildings to include nature-friendly elements (e.g., bird-friendly windows, dark-sky lighting, green roofs). Early opportunities may include coordinating retrofits with concurrent energy efficiency or renewable energy projects. Prepare the business case for phase 2.				(1) Initiation	
(2a) Policy and process framework: Identify policy implications related to the prioritized opportunities and develop recommendations, if applicable, for policy or process updates to be coordinated with Initiative 3.1.1.					(2) Development
(2b) Nature-friendly pilots: Develop and deliver a pilot for a prioritized building retrofit.					(2) Development
(3) Nature-friendly building – program preparation: Incorporating findings from the pilot, develop the program and identify funding and resourcing needs for the ongoing retrofit or redesign of civic buildings to include nature-friendly design components.					>>>>
(4) Nature-friendly building program: Continue phased implementation of building retrofits.					>>>>

## **Action 3.4: Implement the Urban Forestry Management Plan**

#### Objective

The urban forest is protected and grows through implementation of the Urban Forestry Management Plan.

**Urban Forest** 



**Soil Assets** 



**Lead Department(s):** Parks, Sustainability

#### **Green Infrastructure Strategy Actions Addressed**

- 10.1 Ensure existing trees are protected, including through policy and bylaw updates.
- 10.2 Review and improve existing programs related to tree watering, maintenance, inventory, and planting techniques.
- 10.3 Continue to trial new tree species and increase biodiversity.
- 10.4 Design sustainable tree planting sites to ensure adequate soil volume, quality, and space for trees.
- 15.5 Pilot raw water use projects.

**Note:** An Urban Forestry Implementation Plan is forthcoming and will provide timelines for specific actions and initiatives related to the urban forest.

# Action 3.5 Integrate the active transportation network and green network

#### Objective

The City's active transportation network blends seamlessly with the green network.

Trails & Greenways



**Lead Department(s):** Transportation, Sustainability

#### **Green Infrastructure Strategy Actions Addressed**

- 9.1: Identify and address accessibility and connectivity barriers to and within the green network.
- 9.2: Increase access to and within the green network, with an emphasis on walkability and multimodal transportation

**Note:** An Active Transportation Plan is in place and defines timelines for specific actions and initiatives related to the active transportation network.



# PATHWAY 4.0: GROWING COMMUNITY FOR A LIVEABLE CITY

Community-led stewardship of the green network and its uptake on private lands is supported and encouraged to facilitate placemaking, to share knowledge about the unique biodiversity of the region, and to honor cultures.

#### Scope

This pathway focuses on creating opportunities for the community to get involved in the green network through education, incentives, and stewardship opportunities. Additional work will encourage and support the uptake of green infrastructure on private lands such as the Industrial, Commercial, and Institutional (ICI) sector.

#### **Priority Sites and Actions**

# Community Spaces







#### **Actions**

- 4.1. Implement green network education and awareness programs
- 4.2. Implement a residential and community grants and incentives program
- 4.3. Support community stewardship of the green network
- 4.4. Support green infrastructure adoption in the Industrial, Commercial, and Institutional (ICI) sector

#### Background

The Strategy is ultimately intended to create a sustainable home shared by the community and nature in balance. This includes embodying respect for the cultural landscape that Saskatoon is now part of. The green network is integral to the Saskatoon community's wellbeing and quality of life. Green spaces can infuse cities with a sense of place, tell the story of how we all came to be here, build social relations, and encourage stewardship.

#### **Key Performance Indicators**

- An education program is in place to enhance community awareness about the green network and its importance.
- Grants and incentives encourage community adoption of green infrastructure in residential areas and private lands.
- A community stewardship framework is in place that encourages resident engagement with the green network
- Guidelines, standards, and incentives increase uptake of green infrastructure in the Industrial, Commercial, and Institutional (ICI) sector.

#### **Pathway Partners**

- **City Departments:** Sustainability, Recreation and Community Development, Parks, Indigenous Initiatives, Planning and Development (Planning Project Services, Long Range Planning, Neighbourhood Planning, Development Review)
- Community Partners: Indigenous communities and organizations, Community Associations, community stewardship organizations (e.g., Wild About Saskatoon, SOS Trees, Friends of the Saskatoon Afforestation Areas, etc.), Meewasin, School Divisions, University of Saskatchewan, Business Associations, Institutional, Industrial, and Commercial Sectors, and many others

### Action 4.1: Implement green network education and awareness programs

#### **Objective**

Education and partnerships increase community awareness about the green network.





Cultural





Lead Department(s): Sustainability

- 1.4 Work with the community to tell the story of Saskatoon's green network from many voices through public art, interpretive features, and other mediums.
- 2.1 Develop and provide education materials about the green network to citizens to increase community awareness and ownership.
- 6.3 Leverage and support Meewasin's educational and public outreach programming and volunteer base to increase conservation, ecology, and natural and cultural resource awareness.
- 10.5 Develop community education and outreach programs to increase public awareness, stewardship, and partnerships for the urban forest.

Table 14: Action 4.1 Implement green network education and awareness programs: Initiatives and Phases

Initiative and Phase	2022-2023	2024-2025	2026-2027	2028-2029	2030-2031
4.1.1 Green network awareness campaign					
(1) Initiation and (2) development completed between 2019-2021					
(3) Awareness campaign implementation: Prepare and implement a community awareness program to provide key messages about the green network to residents. This may include key messages from various initiatives in Green Pathways.	(3) Implementation				
<b>(4) Program operations:</b> Deliver the ongoing awareness program.	(4) Operations	(4) Operations	(4) Operations	(4) Operations	(4) Operations

**Table 14:** Action 4.1 Implement green network education and awareness programs: Initiatives and Phases (continued)

Initiative and Phase	2022-2023	2024-2025	2026-2027	2028-2029	2030-2031
4.1.2 Natural areas education					
(1) Initiation completed in 2020-2021.					
<b>(2a) Opportunity assessment:</b> Identify education opportunities of specific natural and naturalized areas in the green network, including opportunities related to interpretation, traditional knowledge, and citizen science.	(2) Development				
(2b) Natural areas education pilot: Coordinating with Initiative 1.2.1, prepare a pilot for education program(s) at a natural and/or naturalized area.	(2) Development				
(3) Program preparation: Prepare the natural areas education program plan. Incorporate education recommendations into Natural Area Management Plans and the Naturalized Park program.		(3) Implementation			
<b>(4) Natural areas education program:</b> Ongoing delivery of the natural areas education program.			(4) Operations	(4) Operations	(4) Operations
4.1.3 Green infrastructure school program					
(1) <b>Needs assessment:</b> Identify opportunities to work with schools on green infrastructure projects; identify priority school grounds such as community schools or schools with joint use agreements. Identify funding and resourcing needs and prepare business case to proceed.		(1) Initiation			
(2a) Program Development: Develop the program, identifying priority sites, training materials needed, and coordination with joint use agreements.			(2) Development		
(2b) Green infrastructure school pilot: Develop and deliver a pilot green infrastructure project that engages with the school community at a prioritized site.			(2) Development		
(3) Education materials and program plan: Prepare the program plan and related education materials, as well as any associated guidelines or procedures related to green infrastructure in school grounds.				(3) Implementation	
(4) Green Infrastructure School Program: Deliver the ongoing program.					(4) Operations

# Action 4.2: Implement a residential and community grants and incentives program

#### Objective

The City supports community adoption of green infrastructure through grants and incentives.



**Lead Department(s):** Sustainability

#### **Green Infrastructure Strategy Actions Addressed**

• 2.2 Seek opportunities to incentivize green infrastructure in private and commercial areas.

**Table 15:** Action 4.2 Implement a residential and community grants and incentives program: Initiatives and Phases

·					
Initiative and Phase	2022-2023	2024-2025	2026-2027	2028-2029	2030-2031
4.2.1 Environmental Cash Grant					
(1) through (3) completed in 2020-2021.					
(4) Environmental Cash Grant: Operate the green network component of the Environmental Cash Grant.	(4) Operations	(4) Operations	(4) Operations	(4) Operations	(4) Operations
4.2.2 Residential grants and incentives					
program					
(1) Business case: Prepare the business case for a residential grants and incentives program, aligning with Initiative 4.4.1 where applicable.		(1) Initiation			
(2) Needs assessment: Complete a needs assessment for grants and incentives to encourage green infrastructure uptake in the community and residential sectors. Identify current grants/incentives programs at the City and if there are opportunities to integrate with these. Coordinate with Initiative 4.4.1.			(2) Development		
(3) Program plan: Prepare grants and incentives and create a program plan for their ongoing delivery.				(3) Implementation	
(4) Grants and incentives program: Deliver the ongoing program.					(4) Operations

# Action 4.3: Support community stewardship of the green network

#### Objective

Community engagement with the green network is supported through stewardship agreements and support for community projects.

**Community Spaces** 



Cultural Spaces



Wayfinding & Interpretive Features



Lead Department(s): Sustainability, Recreation and Community Development

- 1.1 Complete an Intangible Cultural Heritage Assessment to better understand community uses of the green network.
- 2.3 Develop a program and funding model to support community-led green infrastructure projects, citizen science, and bio-cultural management.
- 7.2 Increase coordination within the City, and with the community, to encourage informal green space renewal.

**Table 16:** Action 4.3 Support community stewardship of the green network: Initiatives and Phases

Initiative and Phase	2022-2023	2024-2025	2026-2027	2028-2029	2030-2031
4.3.1 Street Garden Program					
(1) and (2) completed in 2020-2021					
(3) Street Garden expansion: Prepare materials (e.g., updates to the Street Garden Guidelines and administrative procedure) to expand the Street Gardening program to centre medians.	(3) Implementation				
<b>(4) Street Garden Program:</b> Deliver the ongoing Street Garden Program.		(4) Operations	(4) Operations	(4) Operations	(4) Operations

**Table 16:** Action 4.3 Support community stewardship of the green network: Initiatives and Phases (continued)

Initiative and Phase	2022-2023	2024-2025	2026-2027	2028-2029	2030-2031
4.3.2 Community stewardship program					
(1) Needs assessment: Inventory and prioritize community stewardship opportunities of the green network; complete a gap analysis of current stewardship agreements. Assess the need to complete an Intangible Heritage Assessment to define additional priorities based on current community uses of the green network. Prepare business case for a stewardship framework including Street Garden expansion feasibility.	(1) Initiation				
(2) Community stewardship feasibility and framework including Street Garden feasibility: Develop a standardized approach for community stewardship work including roles and responsibilities of City stakeholders. Complete a feasibility study to identify expansion opportunities of the Street Garden program and other community stewardship opportunities.		(2) Development			
(3) User agreements and implementation: Prepare templates for stewardship agreements and identify education and training needs. Develop training program for stewards as needed. Create user specific agreements as needed with specific stewardship groups. Support stewardship groups in the renewal of public spaces and other stewardship activities.		(3) Implementation	(3) Implementation		
(4) Community stewardship program: Ongoing delivery of the community stewardship program. Create user specific agreements as needed with specific stewardship groups. Support stewardship groups in the renewal of public spaces and other stewardship activities.			(4) Operations	(4) Operations	(4) Operations
4.3.3 Social enterprise models					
(1) Opportunity analysis: Review opportunities to implement green infrastructure projects through social enterprise models that support community development, skills and jobs training, and equity. Identify resourcing and funding needs and prepare business case to develop and implement a pilot project.				(1) Initiation	
(2) Social enterprise pilot: Develop and deliver a social enterprise pilot to test the model.					(2) Development
(3) Program plan: Incorporating results from the pilot, prepare a program plan including funding and resourcing needs.					>>>>
(4) Social enterprise program: Deliver the ongoing program.					>>>>

# Action 4.4: Support green infrastructure adoption in the Industrial, Commercial, and Institutional (ICI) sector

#### Objective

Commercial adoption of green infrastructure is supported through development standards, incentives, education, and training.

Storm Water Management Facilities



**Low Impact** 







**Lead Department(s):** Sustainability

#### **Green Infrastructure Strategy Actions Addressed**

• 15.4 Encourage commercial, institutional, and residential installation of Low Impact Development and onsite storm water management through education and incentives.

**Table 17:** Action 4.4 Support green infrastructure adoption in the ICI sector: Initiatives and Phases

Initiative and Phase	2022-2023	2024-2025	2026-2027	2028-2029	2030-2031
4.4.1 Green infrastructure ICI adoption					
(1) <b>Needs assessment:</b> Assess resourcing and funding needs and prepare business case for ICI adoption of green infrastructure.		(1) Initiation			
(2) Inventory and framework: Inventory existing guidelines, standards, and incentives relevant to the ICI sector; analyze their effectiveness; engage the ICI sector on barriers and benefits for adoption of green infrastructure; and prioritize opportunities to support the adoption of green infrastructure in the ICI sector.			(2) Development		
(3) Program preparation: Prepare guidelines, standards, and incentives for the ICI sector to increase adoption of green infrastructure. Prepare program for delivery.				(3) Implementation	
(4) Green infrastructure ICI program: Deliver the ongoing program.					(4) Operations

# PATHWAY 5.0: FOOD SECURITY FROM SEED TO TABLE TO SOIL

The sustainable and just local food system is strengthened through community partnerships, provides access to healthy and fresh food, promotes local food initiatives, and considers the full food system from seed to table to soil.

#### Scope

This pathway will work towards a sustainable and local food system in Saskatoon through food policy, community support, and demonstration projects.

#### **Priority Sites and Actions**

Urban Agriculture







**Community Spaces** 



#### **Actions**

- 5.1. Implement sustainable food projects in the green network
- 5.2. Develop and implement a Sustainable Food Action Plan

#### Background

Cities across Canada are working towards sustainable local food systems, and this has been shown to improve public health outcomes and reduce the carbon footprint of the food we eat. Past engagement indicates that residents would like the City of Saskatoon to work towards a sustainable food system. Reports like the 2014 <a href="Saskatoon">Saskatoon</a> Regional Food System Assessment and Action Plan identify recommendations for the City, but many of these have not been funded or implemented. Many local community organizations are also working towards a sustainable food system but have provided feedback that the City could improve its support to these programs.

#### **Key Performance Indicators**

- In partnership with the community, food systems and projects are incorporated, managed, and maintained in public green spaces.
- An action plan to support sustainable, local food systems is in place with accompanying policy and processes.

#### **Pathway Partners**

- **City Departments:** Sustainability, Recreation and Community Development, Planning and Development (Neighbourhood Planning, Long Range Planning), Indigenous Initiatives, Parks
- **Community Partners:** Saskatoon Food Council, CHEP Good Food, Saskatoon Food Bank and Learning Centre, Saskatoon Poverty Reduction Partnership, University of Saskatchewan, Saskatoon Friendship Centre, Saskatchewan Health Authority, Saskatoon Poverty Reduction Partnership, and many others.

### Action 5.1: Implement sustainable food projects in the green network

#### Objective

Food security projects in partnership with the community demonstrate a sustainable food system, complementing related policy work.

**Note:** This action describes food projects specific to the green network. For food projects related to waste diversion, see the Solid Waste Reduction and Diversion Plan, and the Industrial, Commercial and Institutional Waste Diversion Strategy.







**Lead Department(s):** Sustainability, Recreation and Community Development, Parks, Planning and Development (Neighbourhood Planning)

#### **Green Infrastructure Strategy Actions Addressed**

- 3.3 Work with and support partners to incorporate food and fruit production or traditional food systems into high priority urban areas.
- 3.4 Identify potential sites and partners to develop a food forest pilot project.

**Table 18:** Action 5.1 Implement sustainable food projects in the green network: Initiatives and Phases

Initiative and Phase	2022-2023	2024-2025	2026-2027	2028-2029	2030-2031
5.1.1 Green network food program					
(1) Initiation completed in 2020-2021					
(2a) Feasibility and development: Work with community partners and City departments to identify the feasibility of urban agriculture projects with a focus on best practices, appropriate land bases, and constraints.	e feasibility of urban agriculture projects with a cus on best practices, appropriate land bases, and  (2)  Development  Development				
(2b) Sustainable food pilots: Work with community partners and City departments to implement urban agriculture on public land including traditional foods and medicines and food forests. Where applicable, align pilots with concurrent initiatives such as food waste diversion pilots. Identify best practices and opportunities to embed into ongoing food projects and the Saskatoon Food Action Plan.	(2) (2) Development Development				
(3) Sustainable food - program preparation: Upon completion of the pilots, prepare the program plan, addressing priorities for ongoing food projects.			(3) Implementation		
(4) Sustainable food program: Deliver the ongoing sustainable food program.				(4) Operations	(4) Operations
5.1.2 Food waste projects					
Concurrent sustainable food pilots focused on waste diversion are identified through the Solid Waste Reduction and Diversion Plan, and the Industrial, Commercial and Institutional Waste Diversion Strategy. These will be aligned with 5.1.1 where possible.	Timelines are defined in the Solid Waste Reduction and Diversion Plan and ICI Waste Diversion Strategy.				

## Action 5.2: Develop and implement a Sustainable Food Action Plan

#### **Objective**

A sustainable and equitable food system in Saskatoon is nurtured through policy and community support.







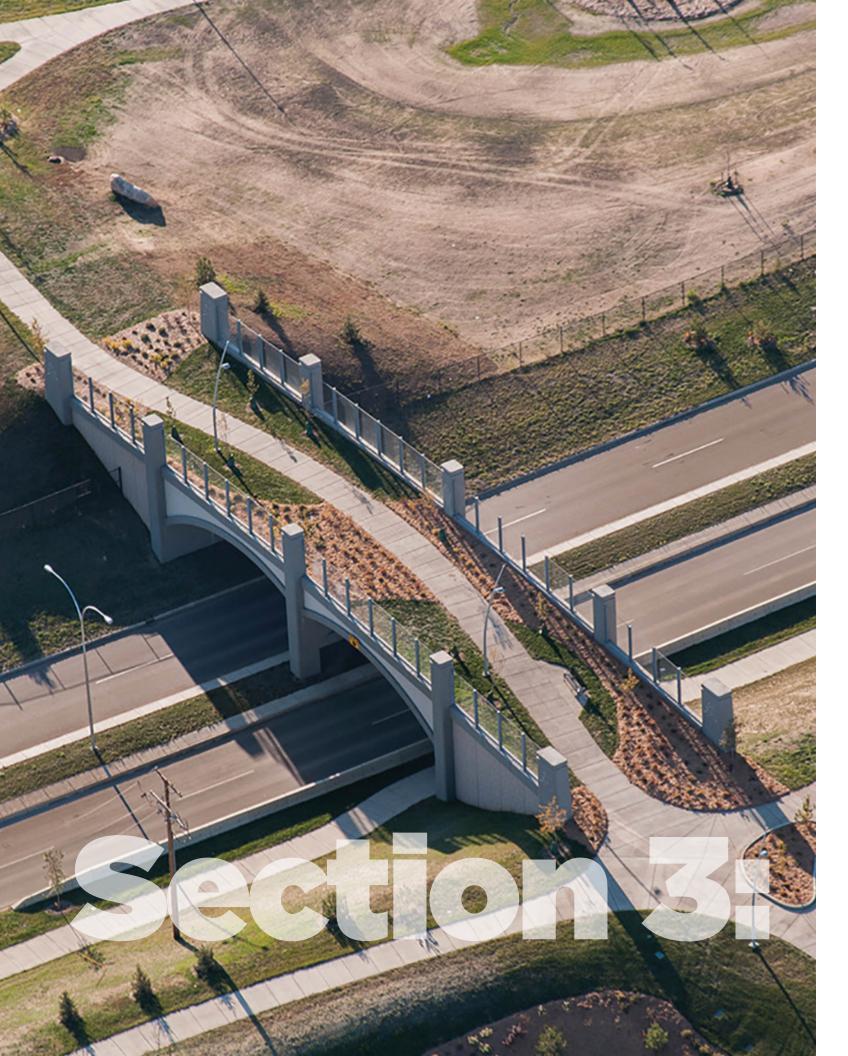
Lead Department(s): Sustainability, Planning and Development

#### **Green Infrastructure Strategy Actions Addressed**

- 3.1 Update policies to improve urban agriculture outcomes and community or regional partnerships.
- 3.2 Work with partners to develop a comprehensive food strategy, including implementation of the Saskatoon Regional Food System Assessment and Action Plan.

Table 19: Action 5.2 Develop and implement a Sustainable Food Action Plan: Initiatives and Phases

Initiative and Phase	2022-2023	2024-2025	2026-2027	2028-2029	2030-2031	
5.2.1 Sustainable Food Action Plan	5.2.1 Sustainable Food Action Plan					
(1) Food systems needs assessment: Identify existing programs and policy such as the Community Garden Program, Allotment Garden Program, and Vacant Lot Adaptive Reuse Policy. Identify opportunities for an integrated approach to food systems policy at the City. Prepare business case for the Sustainable Food Action Plan.	(1) Initiation					
(2) Prepare Sustainable Food Action Plan: Work with and support community partners to develop the Sustainable Food Action Plan; build on existing food systems initiatives and grassroots community projects; and consider all aspects of the food system – from seed to table to compost heap and back again.		(2) Development				
(3) Program plan: Prepare the ongoing sustainable food program, identifying funding and resourcing needs.			(3) Implementation			
(4) Sustainable food program: Implement prioritized recommendations from the Sustainable Food Action Plan through programs or additional capital projects.				(4) Operations	(4) Operations	



# Section 3: FOLLOWING THE PATHWAYS

Green Pathways establishes a broader, multifaceted roadmap for the next 10 years to meet the goals set out in the Green Infrastructure Strategy. The pathways towards an integrated green network will take time, energy, and resources. Both the City and the community will be asked to embrace change to achieve the actions and initiatives.

### **The Green Network Program**

The broader Green Network Program is responsible for aligning work with City Council's Strategic Priorities on green infrastructure, monitoring the progress of Green Pathways, and providing resources, education and subject matter expertise to the City and the community.

The core operational Green Network Program is outlined in Table 20, and it includes program management, implementation of projects in their initiation stages, education and communication, partnership development, and pursuing external funding opportunities. Green Pathways is evergreen, meaning that it is intended to be monitored, reported, and refreshed on a regular basis. Monitoring and reporting are included in the Green Network Program.

This document does not commit Council to a workplan, rather it sets out a series of pathways to progress implementation of the Green Infrastructure Strategy for Council's consideration across multiple budgets. To develop specific initiatives, additional capital resources will be requested. Green Pathways includes capital development and operational stages for a clear understanding of each initiative's trajectory.

**Table 20:** Core responsibilities of the Green Network Program

Core Responsibilities	Description	Short-Term Priorities
Program Management	Provides support for capital projects within Green Pathways including acquiring resources and coordinating the efforts of team members.	Develop business cases as prioritized by each initiative
Equity and Inclusion	Ensures that equity and Triple Bottom Line outcomes are embedded into all green infrastructure programs.	<ul> <li>Coordinate with the City's reconciliation, equity, diversity, and inclusion (REDI) team to embed equity into the initiatives.</li> </ul>
Research and Data Management	Oversees data, studies, and progress towards performance measures.	<ul> <li>Continue building existing research partnerships with the University of Saskatchewan and others.</li> </ul>
Education and Communications	Oversees a communications plan to broadly support implementation and increase awareness of green infrastructure.	<ul> <li>Develop a communications plan for Green Pathways and in alignment with program-specific education and communications.</li> </ul>

**Table 20:** Core responsibilities of the Green Network Program (continued)

Core Responsibilities	Description	Short-Term Priorities
Partnerships	Supports existing partnerships such as with Meewasin and the University of Saskatchewan. Develops and maintains partnerships with the community, partner organizations, rights-holders, other levels of government, and other stakeholders.	<ul> <li>Continue partnership building with Meewasin in alignment with the City- Meewasin Master Agreement.</li> <li>Work with the Indigenous Initiatives Department to build relationships and partnerships with Indigenous communities, organizations, Elders, and Knowledge Keepers.</li> </ul>
Funding	Leads funding applications and monitors opportunities for programs and initiatives. This includes preparing, administering, and reporting as part of a funding cycle.	<ul> <li>Oversee implementation of externally funded projects and ensure reporting and other funding requirements are delivered.</li> <li>Monitor and apply for additional federal funding opportunities.</li> </ul>
Community Grant	Oversees the green network component of the City's Environmental Cash Grant.	<ul> <li>Maintain the current green network component and seek opportunities for promotion and expansion.</li> </ul>
Monitoring and Reporting	Monitors progress towards the Green Pathways vision and reports regularly on outcomes and progress towards performance measures. Leads regular updates of Green Pathways.	<ul> <li>Update the City's Environmental Dashboard to include progress towards the interconnected green network.</li> <li>Provide regular progress reports to City Council.</li> </ul>

## **Funding**

To progress Green Pathways and sustain the Green Network program, funds and resource allocations are required, which could occur through various mechanisms:

- **Capital Funding:** Capital funding through the City's Reserve for Capital Expenditures, or other sources may be considered as funding source for the development and implementation of new initiatives. Funding requests would be brought forward as business cases through the City's multi-year budget process. Risks to this approach are that the Green Pathways initiatives are considered alongside other important City capital projects and may not be prioritized for funding.
- External Funding Opportunities: Recent federal investments in green infrastructure such as the Natural Infrastructure Fund, Nature Smart Climate Solutions, and Two Billion Trees represent a significant opportunity for the City to leverage existing funding to expand the scope of current plans. While the Green Network Program will provide resources to monitor and apply for such opportunities, the City capital portion needed to proceed with external funding opportunities needs to be defined on a case-by-case basis.

- **Compensation or Reserve Funds:** Through the *Wetland Policy*, the City can receive compensation funds from the loss of wetlands to development. Formalizing a process for this fund and considering compensation and a reserve for additional types of green infrastructure, may provide a funding source for the restoration of green infrastructure.
- Other Reserves: Green Pathways capital project phases can be considered for funding from the Sustainability Reserve and other reserves where eligible. Where applicable, other reserve funding could be used to leverage external funding. Other reserves may be able to contribute to initiatives partially, but the amount and availability of these funds is limited.
- Carbon Offsets, Green Bonds, and other mechanisms: Carbon offsets and green bonds are another potential tool to cover the cost of tree planting or other carbon sequestering green infrastructure. A carbon offset is a credit for greenhouse gas reductions achieved by one party that can be purchased and used to compensate for the emissions of another party.
- **Operational funding** for program sustainment is required in the initiatives as outlined in Green Pathways.

#### Summary of 2022-2023 Resourcing and Funding

Table 21 summarizes the confirmed funding available for 2022, including capital funding carried over from previous years and items included in the approved funding plan for 2023. The 2023 funding will be confirmed at the 2023 budget deliberations. Further financial analysis and projections of initiatives scheduled for 2024 and beyond will be brought forward through future reporting, and initiatives will be approved on a budget-by-budget basis. Financial analysis and projections will occur through the Green Network program.

Table 21: Summary of 2022-2023 resourcing and funding

Initiative(s)	Cost Centre/ Project	2022 Funding Available	2023 Funding Plan
1.1.1 – Natural area policy and process 1.2.1 – Natural Area Management Plans	Watershed Initiatives P.02263	\$240,000	\$0
1.2.3 - Tree protection in natural and naturalized areas 1.4.1 - Natural asset framework 1.5.1 - Naturalized Park Program expansion	Green Infrastructure Strategy P.02390	\$595,000	\$405,000
1.3.1 - Traditional Land Use and Knowledge Assessment	Green Infrastructure Strategy P.02390	\$225,000	\$0
4.3.1 - Street Garden Program	Green Infrastructure Strategy P.02390	\$51,500	\$0
5.1.1 - Green network food program	Sustainable Food P.10013	\$140,000	\$0
4.1.1 - Green network awareness campaign 4.1.2 - Natural areas education 1.2.2 - Natural area restoration funding mechanisms 2.3.2 - Storm Water Management Facility restoration	Green Infrastructure Strategy P.02390	\$289,000	\$0
Green Network Operating Program	Green Network Program P.100413	\$0	\$165,000

### **Partnerships**

City departments, external groups, and the community are already doing vital work to manage and improve Saskatoon's green network. A partnership approach emphasizing projects that meet the needs of multiple groups will ensure that funding and resources are leveraged, expertise across the community is engaged, and management of green space is maximized to its full potential. Specific partnerships may arise from various initiatives but will also be nurtured through the Green Network Program.

### **Monitoring and Reporting Progress**

Progress towards an integrated green network will be monitored through the Green Network Program and reported to City Council through progress reports every two years. Reporting can occur in alignment with the budget cycle so that new business cases and priorities are linked directly to progress and risks. Green Pathways will also be refreshed approximately every 5 years and is scheduled for its first review in 2026.

Reporting will include progress towards the key performance indicators provided in the initiatives, as well as the overall status of the green network. Progress towards the indicators will also be listed on the City's Environmental Dashboard, and other platforms as needed. The Strategy represents a broad array of initiatives, all of which have different types of indicators that can be used to track success. However, these should all progress the overall work towards the green network vision.

#### Conclusion

Two key actions in the City of Saskatoon 2022-2025 Strategic Plan are to implement actions in the Green Infrastructure Strategy and Implementation Plan within proposed timeframes, and develop proactive policies, strategies, and practices to ensure the environment is protected from damage and, where possible, ecosystems are enhanced. These actions are required to ensure that the Strategic Plan's outcome for the green network is achieved, that it is integrated, managed and enhanced to protect land, air and water resources.

Through the actions and initiatives identified in Green Pathways, we progress strategic goals and our stewardship of a green network that is comprehensive and resilient. To have *miyo-pimatisiwin*, or the good life, for all residents of Saskatoon, a thriving and regenerative green network is key, and the five Green Pathways and their actions provide us with clear direction on how to get there.



# Appendix 1 -

# GREEN INFRASTRUCTURE STRATEGY AND GREEN PATHWAY ACTIONS

The following tables provide the list of actions from *The Green Infrastructure Strategy* and their connection to each action in Green Pathways.

Green Infrasti	ructure Strategy Community Actions	Green Pathway Action(s)
	1.1: Complete an Intangible Cultural Heritage     Assessment to better understand community uses of the Green Network.	Action 4.3: Support community stewardship of the green network
1. Design the green network to reflect our collective history, honour cultural	1.2: In partnership with the community, complete a Traditional Land Use and Traditional Knowledge assessment to identify cultural elements in the Green Network, and establish ways to conserve, honour, and revitalize these elements.	Action 1.3: Create partnerships to support Indigenous land management
diversity and create a sense of belonging for all.	1.3: Continue meaningful engagement with affected groups to design the Green Network through an equity and inclusion lens.	All
	1.4: Work with the community to tell the story of Saskatoon's Green Network from many voices through public art, interpretive features, and other mediums.	Action 4.1: Implement green network education and awareness programs
2. Inspire	2.1: Develop and provide education materials about the Green Network to citizens to increase community awareness and ownership.	Action 4.1: Implement green network education and awareness programs
citizen-driven transformation of the green	2.2: Seek opportunities to incentivize green infrastructure in private and commercial areas.	Action 4.2: Implement a residential and community grants and incentives program
network.	2.3: Develop a program and funding model to support community-led green infrastructure projects, citizen science, and bio-cultural management.	Action 4.3: Support community stewardship of the green network
	3.1: Update policies to improve urban agriculture outcomes and community or regional partnerships.	Action 5.2: Develop and implement a Sustainable Food Action Plan
3. Increase food production	3.2: Work with partners to develop a comprehensive food strategy, including implementation of the Saskatoon Regional Food System Assessment and Action Plan.	Action 5.2: Develop and implement a Sustainable Food Action Plan
in the green network.	3.3: Work with and support partners to incorporate food and fruit production or traditional food systems into high priority urban areas.	Action 5.1: Implement sustainable food projects in the green network
	3.4: Identify potential sites and partners to develop a food forest pilot project.	Action 5.1: Implement sustainable food projects in the green network

Green Infrastr	ucture Strategy Governance Actions	Green Pathway Action(s)
	4.1: Improve Green Network planning by updating City work plans, policies, and initiatives to increase green infrastructure across Saskatoon.	Action 3.1: Establish green network policies and work procedures for City of Saskatoon Departments  Action 3.3: Complete nature-friendly building policy, design, and retrofits
4.2: Compile City-wide data sets for more effective data management and create data sharing agreements with other agencies.  4. Invest in the		Green Network Program
green network within the City of Saskatoon.	4.3: Adopt an ethical space and triple bottom line approach to Green Network governance, planning the Green Network through sustainability, inclusion, and equity frameworks.	Action 1.3: Create partnerships to support Indigenous land management
	4.4: Define an appropriate service level and associated funding for the Green Network to prioritize future investments.	Action 1.4: Integrate natural assets into the City's asset management system
	4.5: Evaluate the ecosystem services of the Green Network through the Natural Capital Asset Valuation process.	Action 1.4: Integrate natural assets into the City's asset management system
	5.1: Work with research and education institutions such as the University of Saskatchewan and school divisions, conservation agencies, landowners, and other stakeholders on green space management and education.	Green Network Program
5. Develop a cooperative governance approach to	5.2: Work with regional partners to coordinate Green Network development and management in urban areas that intersect with the region.	Action 1.1: Protect prioritized natural areas through policies and processes  Action 2.4: Identify and address gaps in the green network
green network provision and management.	5.3: Work with Wanuskewin to conserve their viewshed and support management of Opimihaw Creek.	Action 1.1: Protect prioritized natural areas through policies and processes  Action 1.3: Create partnerships to support Indigenous land management
	5.4: Partner with Indigenous communities and organizations to explore traditional land management and governance models for the Green Network.	Action 1.3: Create partnerships to support Indigenous land management

6. Redefine the partnership with Meewasin to achieve collective goals related to conservation, education, and development of the green network.	6.1: Establish regular meetings with Meewasin to review plans and priorities to strategically align mutual work.	Green Network Program
	6.2: Collaborate with Meewasin on conservation, naturalization, and the development of trails, interpretive infrastructure, and amenities in areas of interest.	Action 1.2: Manage and restore natural areas through Natural Area
	6.3: Leverage and support Meewasin's educational and public outreach programming and volunteer base to increase conservation, ecology, and natural and cultural resource awareness.	Action 4.1: Implement green network education and awareness programs
	6.4: Seek opportunities to collaborate on external funding with Meewasin.	Green Network Program
	6.5: Update the Meewasin-City service agreement and other documents as needed to reflect the redefined partnership.	Green Network Program
Green Infrastr	ructure Strategy Open Space Actions	Green Pathway Action(s)
7. Renew formal and informal green space in the green network to meet citizen needs.	7.1: Identify high priority formal and informal green spaces to upgrade.	Action 2.1: Upgrade and restore parks for enhanced green infrastructure  Action 2.2: Enhance ecosystem services of underutilized urban sites
	7.2: Increase coordination within the City, and with the community, to encourage informal green space renewal.	Action 2.2: Enhance ecosystem services of underutilized urban sites  Action 4.3: Support community stewardship of the green network
	7.3: Implement park upgrade plans starting in high priority areas.	Action 2.1: Upgrade and restore parks for enhanced green infrastructure
8. Expand the green network by creating new publicly available green space or increasing green infrastructure.	8.1: Identify green infrastructure opportunities outside the existing Green Network.	Action 2.2: Enhance ecosystem services of underutilized urban sites  Action 2.3: Naturalize and restore non-park
		green spaces  Action 2.4: Identify and address gaps in the green network
	0.2. Cooure key sites through nurshass denstion or	Action 2.2: Enhance ecosystem services of
green	8.2: Secure key sites through purchase, donation, or partnership with other landowners, stakeholders, or citizen groups.	underutilized urban sites  Action 2.4: Identify and address gaps in the green network

9. Increase walkability and active transportation throughout the green network.	9.1: Identify and address accessibility and connectivity barriers to and within the Green Network.	Action 3.5 Integrate the active transportation network and green network
	9.2: Increase access to and within the Green Network, with an emphasis on walkability and multi-modal transportation.	Action 3.5 Integrate the active transportation network and green network
10. Protect and grow the urban forest.	10.1: Ensure existing trees are protected, including through policy and bylaw updates	Action 3.4: Implement the Urban Forestry Management Plan
	10.2: Review and improve existing programs related to tree watering, maintenance, inventory, and planting techniques.	Action 3.4: Implement the Urban Forestry Management Plan
	10.3: Continue to trial new tree species and increase biodiversity.	Action 3.4: Implement the Urban Forestry Management Plan
	10.4: Design sustainable tree planting sites to ensure adequate soil volume, quality, and space for trees.	Action 3.4: Implement the Urban Forestry Management Plan
	10.5: Develop community education and outreach programs to increase public awareness, stewardship, and partnerships regarding the urban forest.	Action 4.1: Implement green network education and awareness programs
Green Infrastructure Strategy Ecology Actions		Green Pathway Action(s)
11. Protect, restore, and manage significant natural areas.	11.1: Identify natural areas and make management decisions for these sites regarding avoidance, minimization, or compensation.	Action 1.2: Manage and restore natural areas through Natural Area Management Plans
	11.2: Protect significant natural areas using a variety of available protection tools.	Action 1.1: Protect prioritized natural areas through policies and processes
	11.3: Integrate natural assets into the urban fabric while conserving ecosystem function.	Action 1.1: Protect prioritized natural areas through policies and processes
	11.4: Develop and implement site-specific management plans, including restoration of natural areas when required.	Action 1.2: Manage and restore natural areas through Natural Area
	11.5: In partnership with landowners, direct	Action 1.1: Protect prioritized natural areas through policies and processes

12. Connect and naturalize the green network in built-up areas.	12.1: Naturalize parks, storm water infrastructure, and other open space where appropriate.	Action 1.5: Expand the Naturalized Park Program Action 2.3: Naturalize and restore non-park green spaces
	12.2: Purchase or acquire land in strategic areas to enhance biodiversity outcomes and increase connectivity	Action 2.4: Identify and address gaps in the green network
	12.3: Increase the City's use of native species in restoration and naturalization work.	Action 1.5: Expand the Naturalized Park Program Action 2.3: Naturalize and restore non-park green spaces
	12.4: Coordinate with regional partners to connect the City's Green Network to the Regional Green Network whenever possible	Action 1.1: Protect prioritized natural areas through policies and processes  Action 2.4: Identify and address gaps in the green network
13. Improve biodiversity and ecosystem health throughout the green network.	13.1: Develop dark sky and low noise zones, prioritizing sites to reduce ecological stress.	Action 3.1: Establish green network policies and work procedures for City of Saskatoon Departments  Action 3.3: Complete nature-friendly building policy, design, and retrofits
	13.2: Develop and integrate wildlife friendly standards into development, including bird friendly standards in highly built-up areas.	Action 3.1: Establish green network policies and work procedures for City of Saskatoon Departments  Action 3.3: Complete nature-friendly building policy, design, and retrofits
	13.3: Reduce point and non-point source pollution to natural assets.	Action 1.1: Protect prioritized natural areas through policies and processes
	13.4: Establish ongoing biodiversity monitoring and reporting with partners.	Action 1.2: Manage and restore natural areas through Natural Area
	13.5: Improve management of the City's soil assets.	Action 3.1: Establish green network policies and work procedures for City of Saskatoon Departments

Green Infrastructure Strategy Storm Water Actions		Green Pathway Action(s)
14. Integrate natural waterbodies and drainage courses into development using green infrastructure.	14.1: As the city expands, incorporate wetlands and natural drainage paths into the storm water network in greenfield development areas.	Action 1.1: Protect prioritized natural areas through policies and processes
	14.2: Identify how green infrastructure can increase the storm system's capacity to respond to intense rain events.	Action 3.2: Integrate low impact development principles into City projects
	14.3: Evaluate opportunities to increase naturalization of existing storm ponds to improve water quality and habitat, while balancing community recreation and other considerations.	Action 2.3: Naturalize and restore non-park green spaces
	14.4: Consult with affected organizations when designing storm water infrastructure to mitigate impacts to natural areas and cultural elements within the watershed.	Action 1.1: Protect prioritized natural areas through policies and processes
15. Increase the use of low impact development.	15.1: Incorporate Low Impact Development pilots into City projects to show leadership, prioritizing high-pedestrian areas such as BRT corridors and Downtown.	Action 3.2: Integrate low impact development principles into City projects
	15.2: Continue partnering with research institutions and conservation agencies to determine best practices for Low Impact Development.	Action 3.2: Integrate low impact development principles into City projects
	15.3: Update bylaws and regulations to allow more permeable surfaces.	Action 3.1: Establish green network policies and work procedures for City of Saskatoon Departments
	15.4: Encourage commercial, institutional, and residential installation of Low Impact Development and onsite storm water management through education and incentives.	Action 4.4: Support green infrastructure adoption in the Industrial, Commercial, and Institutional (ICI) sector
	15.5: Pilot raw water use projects.	Action 2.1: Upgrade and restore parks for enhanced green infrastructure  Action 3.2: Integrate low impact development principles into City projects  Action 3.4: Implement the Urban Forestry
		Management Plan

