

Append 2- Final Engagement Report.docx

Green Infrastructure Strategy Implementation Plan
June 21, 2022



Engagement Summary

The Green Network is Saskatoon's collection of green infrastructure, ranging from larger natural areas like the Swales and wetlands, to our parks and other green open spaces, to smaller features like street trees and bioswales. As Saskatoon grows, our Green Network is under increasing pressure to provide all residents with high quality green space while also supporting storm water management and other services. At the same time, external risks such as climate change may make it more difficult for the Green Network to support these needs. In response, the City of Saskatoon has created the Green Infrastructure Strategy (Strategy), which takes a nature-based approach to city planning to ensure Saskatoon is a connected and nature-friendly city that all residents can access.

From June 2021 to February 2022, City Administration engaged with the community on the Green Infrastructure Strategy Implementation Plan (Implementation Plan). Based on what we heard, a Triple Bottom Line review, best practise research and internal funding considerations, City Administration has developed the Implementation Plan and will present it to City Council in 2022.

During the development of the Implementation Plan, the City engaged the community through two phases:

Phase 1: Prioritize Initiatives

- Present the proposed initiatives for prioritization
- Identify program elements that enhance opportunities and limit barriers
- Identify missed opportunities

Phase 2: Close the Loop

- Share relevant components of the Implementation Plan to identify concerns and validate priorities

This engagement summary includes the activities and results that informed the engagement goals for the project. A total of 407 participants took part in the engagement activities, including various meetings, surveys, and workshops. Engagement goals, intended audiences, activities, dates, participation rates and detailed engagement results are provided in the Comprehensive Engagement Report that follows this summary. Engagement results from all activities that informed each goal are summarized below.

Overall Support

Overall, the community strongly supports (>80% of participants) all the proposed initiatives represented within the Green Infrastructure Strategy, as shown below:



1. Natural Areas (96%)
2. Grey to Green (94%)
3. Connected Green Network (92%)
4. Growing Community (92%)
5. Sustainable Food (87%)

Initiatives within the Natural Areas Program received the strongest support (96%), followed by Grey to Green (94%) and Connected Green Network (93%). The most common theme throughout participants' comments was support for the Green Infrastructure Strategy as a whole and for the


City in taking on this work. Many participants identified the need to act on the initiatives now to protect natural areas within Saskatoon and combat the rising consequences of not acting (i.e., habitat loss, impacts of climate change, etc.).

Throughout the engagement process, suggestions for potential partnerships and improvements were provided and will be considered in the future implementation of the initiatives if the Implementation Plan is accepted by City Council. Participants also encouraged the City to continue engaging the community during and following the implementation of the initiatives to continue to improve on them. Respondents stressed that to meet the goals set by the Strategy and address environmental issues immediately, sufficient and sustained funding is required.

Natural Areas Program

**Note: in Green Pathways, the Natural Areas Program is called Pathway 1: Healthy and Thriving Natural Areas.*

When asked to state their level of support for the proposed initiatives within the Natural Areas Program most respondents either strongly or somewhat supported (≥94%) all the initiatives. The level of support is summarized as follows:

- 
1. Natural Areas Management Plans (96%)
 2. Natural Asset Framework (95%)
 2. Natural Storm Water Management (95%)
 4. Natural Area Process and Policy (94%)

When asked to identify their top three medium to long-term initiatives within the natural areas program, participants identified: protecting natural areas as they are included within new neighbourhoods and deciding the level of protection that is needed as being the top priority. This was followed by partnering with Meewasin to conserve natural areas and natural storm water management.

Participants stressed the importance of immediacy in implementing these levels of protection for natural areas and called on the City to be more aggressive in conserving green spaces through new policies and regulations. Maintaining connections between green spaces, ensuring the outcomes of the Strategy (including policies and bylaws) are adopted across all City departments and developers, and increasing funding dedicated to the protection of natural areas were also popular recommendations. Participants stressed the need for environmental considerations to be considered as important (if not more) as developmental considerations instead of often being an afterthought. When asked to identify their reasoning for why the protection of natural areas is important, participants identified residential access to nature (91%), protecting natural habitats for wildlife (89%), and recreational opportunities (87%) as the most important reasons.

The participants strongly supported (98%) incorporating Indigenous perspectives into natural area management plans through the completion of traditional land use and knowledge assessments; however, participants recommended that the work should be led by Indigenous community members, be incorporated more broadly through City policies and practises, and include multiple ways of knowing within the management plans.


Developers expressed their concern for adding these additional costs to new home buyers and ensuring a balance is maintained between density targets and the protection of natural areas within

a new development area. Developers also suggested that existing natural assets do not always align with the community's needs, therefore public use of green spaces and their potential value to the community should be clearly communicated to the developer. It was suggested that the environmental considerations of a site need to be included at the onset of neighbourhood planning to incorporate smart growth principles and efficiently design neighbourhoods that properly mitigate environmental impacts, improve the efficiency of infrastructure, and minimize the tax burden on future residents

Grey to Green Program

**Note: in Green Pathways, the Grey to Green Program is called Pathway 3: Leading by Example for an Integrated Green Network.*

When asked to state their level of support for the proposed initiatives within the Grey to Green Program most respondents either strongly supported or somewhat supported (≥87%) the initiatives. The level of support was summarized as follows:

- 
1. Protect and plant city trees (99%)
 2. Green infrastructure policies (96%)
 3. Green infrastructure projects (95%)
 4. Community and commercial support (93%)
 5. Improve Active Transportation options (87%)


Out of the proposed medium to long-term initiatives, participants identified adding green infrastructure to City projects, updating City policies/standards to increase use of green infrastructure, and creating dark sky and low noise policies as their top initiatives. Also, the community strongly supported (average response was four out of five) the City incorporating the Canadian Standards Association's Bird-Friendly Building Design Standards into future developments and projects. Many respondents suggested that bird-friendly designs should be required for all buildings, including commercial and residential buildings.

Throughout the feedback, participants identified the many secondary benefits in planting trees (i.e., climate change resilience, social value, etc.), encouraged the City to implement strong environmental development standards rather than incentives for developers, and recommended the City balances traffic and building considerations with ecological impacts in future developments.

Growing Community Program

**Note: in Green Pathways, the Growing Community Program is called Pathway 4: Growing Community for a Liveable City.*

When asked to state their level of support for the proposed initiatives within the Growing Community Program, most respondents either strongly supported or somewhat supported the initiatives (≥88%). The level of support was summarized as follows:

- 
1. Natural areas education (96%)
 2. Education, awareness, and partnerships (95%)
 3. Community stewardship (93%)
 4. Grants and incentives (88%)

Participants identified the importance of education and stewardship programs as being critical for the success of all initiatives. Out of the proposed educational opportunities, participants identified

the City providing information on how to add green infrastructure at home, training programs for residents on how to manage green spaces, and curriculum-based resources for schools as their top priorities. Participants strongly supported numerous community stewardship programs, including the planting or maintaining of green infrastructure in public spaces, growing food in public land, and garbage clean-up events.

Providing various grants and community-focused incentive programs were strongly supported, especially incentives for developers to install green infrastructure and rebates to add green infrastructure to residential properties.

Sustainable Food Program

**Note: in Green Pathways, the Sustainable Food Program is called Pathway 5: Food Security from Seed to Table to Soil.*

Both Sustainable Food Projects (93%) and the Sustainable Food Action Plan (91%) were strongly supported by the community. All short-term initiatives were strongly supported, including food forests, traditional food systems, and creating an edible foraging map. Participants stressed the importance of these initiatives in providing food and resources to low-income and structurally excluded residents, as well as providing renters with access to food security programs. Participants also identified the risks of starting too big to effectively manage the programs, over-harvesting, and contaminating food forests and traditional foraging sites; therefore, continual management and adapting the programs to fit both the needs of the community and the environment are essential for the success of the programs.

Connected Green Network Program

**Note: in Green Pathways, the Connected Green Network Program is called Pathway 2: Connecting and Regenerating Green Spaces.*

All proposed initiatives were highly supported by the community, including restoring green spaces (96%), connecting gaps and creating partnerships (92%), and securing land (90%). Participants expressed the need to learn from past experiences by recognizing the importance of natural areas and mandating developers to ensure the protection of natural areas and their interconnection is a priority. Securing land as green space and prioritizing sustainable and environmental considerations over developmental considerations were also common themes shared by participants. When asked to identify their top three medium to long-term actions, participants recommended using more natural species in parks/storm ponds/City landscaping, renewing informal green spaces (ex., rights-of-way, vacant lots, etc.), and upgrading existing green spaces that need improvement.

Consideration of Results

Results from all engagement activities were considered, alongside internal considerations and best practice research, in the development of the Implementation Plan. Results from the prioritization of programs were incorporated into the Implementation Plan and will be considered in future implementation. Specific examples of how the results shaped the design of the Implementation Plan include:

Improve the quantity, quality, and equity of the green network

We heard many comments that reflect the need for increased quantity of green network spaces (e.g., protect natural areas); improved quality of sites (e.g., improve weed management, the need for restoration); and increased equity of green network features (e.g., more equitable distribution of

green space across neighborhoods). This feedback will be used in designing specific initiatives and indicators to track the quantity, quality, and equitability of the green network.

Consider the green network earlier in the development process

We heard that the green network must be considered earlier in the land planning and development process, as this will increase the likelihood of protecting and mitigating the risks to natural areas and other green spaces in Saskatoon. This feedback will be incorporated into upcoming natural area projects, such as incorporating recommendations into the Sector Planning process. Similarly, the City will work to clarify and provide guidance on the importance and implications of protecting natural areas (e.g., what does this mean for the loss of developable land).

Balance incentivization with regulation

We heard that the Strategy and its initiatives should be supported by City requirements (i.e., policies, bylaws, mandates, etc.) to ensure they are followed and enforced. This feedback was incorporated in the reprioritization of initiatives, emphasizing policy work first.

Equity and inclusion

We heard that equity and inclusion, including partnerships with Indigenous communities, elders, and knowledge keepers, should be included at the onset of planning and implementation. We also heard that by incorporating multiple cultural understandings into the Strategy, our actions will be more universal and accessible to all residents. This feedback will be incorporated into specific initiatives, and the City will use tools such as [Equity Toolkit for Projects](#) to guide this work.

Lead by example

We heard that the City must lead by example through the implementation of the Strategy by supporting its uptake across all City departments and processes. In response, the Strategy prioritizes City-focused initiatives related to policy development and internal capacity building/training.

Green network education

We heard that there is confusion for what the green network is and why this work is important for Saskatoon. An education and awareness campaign will be developed following approval of the Implementation Plan by City Council to ensure the community is aware of the initiatives within the Strategy, their associated impacts to Saskatoon's environment, how they can get involved.

Initiative-specific considerations

Much of the feedback collected throughout the engagement process was specific to the implementation of the initiatives and will be incorporated as they are implemented.

Contents

Engagement Summary	2
Contents	7
List of Tables	8
List of Figures	8
1 Background.....	9
1.1 Strategic Goals	10
1.2 City Project Team	10
1.3 Spokesperson(s).....	10
1.4 Terminology	10
1.5 Summary of Engagement Strategy	11
1.6 Participants.....	11
2 Engagement Activities.....	14
2.1 Help Grow Our Green Network Community Survey	14
2.1.1 Intended Audience	14
2.1.2 Marketing Techniques.....	14
2.1.3 Analysis	14
2.1.4 What We Heard	14
2.2 Help Grow Our Green Network Workshop	30
2.2.1 Intended Audience	31
2.2.2 Marketing Techniques.....	31
2.2.3 Analysis	31
2.2.4 What We Heard	31
2.3 Land Developers Workshop.....	43
2.3.1 Intended Audience	44
2.3.2 Marketing Techniques.....	44
2.3.3 Analysis	44
2.3.4 What We Heard	44
3 Evaluation of Engagement	47
3.1 Survey Evaluation	47
3.2 Informal Feedback	48
3.3 Data Limitations	48
3.4 Opportunities for Improvement.....	49

4 Next Steps 50

List of Tables

Table 1: Terminology Used for Engagement and in Final Implementation Plan..... 10
Table 2: Summary of Engagement Strategy..... 11
Table 3: Summary of Engagement Activities 11
Table 4: Community Survey Representation 15

List of Figures

Figure 1: Evaluation of Community Survey 47

1 Background

Green infrastructure is the range of living and natural systems within the City of Saskatoon, as well as human-made systems that incorporate natural elements. Green infrastructure provides many benefits to the city and community, such as providing residents access to nature, helping to absorb and filter storm water, and providing habitat for urban wildlife. The Green Network is Saskatoon's collection of green infrastructure, ranging from larger natural areas like the Swales and wetlands, to our parks and other green open spaces, to smaller features like street trees and bioswales. As Saskatoon grows, our Green Network is under increasing pressure to provide all residents with high quality green space while also supporting storm water management and other services. At the same time, external risks such as climate change may make it more difficult for the Green Network to support these needs. In response, the City of Saskatoon has created the Green Infrastructure Strategy (Strategy), which takes a nature-based approach to city planning to ensure Saskatoon is a connected and nature-friendly city that all residents can access.

During the development of the Green Infrastructure Strategy, the City engaged the community through a multi-phased approach:

Phase 1: Seed - Our Current Situation

- Phase 1 of the Green Infrastructure Strategy was completed in May 2018. Public feedback informed the [Green Infrastructure Strategy Baseline Inventory Report](#) that established an inventory of current green infrastructure in Saskatoon, risks to the Green Network, and ten guiding principles to guide the work going forward.

Phase 2: Growth

- Phase 2 was completed in February 2020. Feedback from over 700 residents and community organizations, such as Meewasin and the Indigenous Advisory Committee, informed a vision for Saskatoon's Green Network and a series of actions and initiatives to reach the vision.

The completed [Green Infrastructure Strategy: Towards an Interconnected Green Network](#), along with the [Comprehensive Engagement Report](#) including the results from all engagement activities performed to date, was presented to City Council in February 2020. Following the presentation, an Implementation Plan for the Strategy was identified as a next step.

From June 2021 to February 2022, City Administration engaged the community on the Green Infrastructure Strategy Implementation Plan (Implementation Plan). The engagement goals were to refine the actions in the Strategy into programs that will be implemented over the next decade as well as prioritize short, medium, and long-term initiatives in alignment with the City's multi-year budget process. Based on what we heard, a Triple Bottom Line review, best practise research and internal funding considerations, City Administration has developed the Implementation Plan and will present it to City Council in 2022. Future engagement will be completed as needed as specific initiatives are implemented.

1.1 Strategic Goals

The Green Infrastructure Strategy supports the City's [Strategic Plan 2022-2025](#) by ensuring the Green Network is integrated, managed, and enhanced to protect land, air, and water resources. The following Key Actions are associated with this outcome:

- Implement actions in the Green Infrastructure Strategy and Implementation Plan within proposed timeframes
- Develop proactive policies, strategies, and practices to ensure the environment is protected from damage and, where possible, ecosystems are enhanced.

1.2 City Project Team

- Jeanna South, Director, Sustainability
- Katie Burns, Manager Community Leadership and Program Development, Sustainability
- Twyla Yobb, Manager Environmental Protection, Sustainability
- Jessie Best, Project Manager, Sustainability
- Megan Quintal, Marketing Consultant, Communications & Public Engagement
- Diran Adenugba, Marketing Consultant, Communications & Public Engagement
- Kenton Lysak, Engagement Consultant, Communications & Public Engagement

1.3 Spokesperson(s)

- Jeanna South, Director, Sustainability
- Katie Burns, Manager Community Leadership and Program Development, Sustainability
- Twyla Yobb, Manager Environmental Protection, Sustainability

1.4 Terminology

Some terminology used in the final Implementation Plan evolved from what was used in the engagement activities. These changes were made mainly to clarify project terminology within the City and do not change the content that was presented during the engagement process. A summary of the changes is provided in the table below:

Table 1: Terminology Used for Engagement and in Final Implementation Plan

Terms Used During Engagement Activities	Terms Used in Final Implementation Plan
Green Infrastructure Strategy Implementation Plan	Pathways for an Integrated Green Network (Green Pathways)
Programs	Pathways
Natural Areas Program	Pathway 1: Healthy and Thriving Natural Areas
Connected Green Network Program	Pathway 2: Connecting and Regenerating Green Spaces
Grey to Green Program	Pathway 3: Leading by Example for an Integrated Green Network
Growing Community Program	Pathway 4: Growing Community for a Liveable City
Sustainable Food Program	Pathway 5: Food Security from Seed to Table to Soil

1.5 Summary of Engagement Strategy

Participants were provided the opportunity to inform the following engagement goals:

Phase 1: Prioritize Initiatives

- Present the proposed initiatives to participants for prioritization
- Identify program elements that enhance opportunities and limit barriers
- Identify missed opportunities

Phase 2: Close the Loop

- Share relevant components of the Implementation Plan with the participants to identify concerns and validate priorities

A summary of participants, level of influence, engagement objectives, engagement goals and engagement activities completed are provided below.

Table 2: Summary of Engagement Strategy

Phase	Participants	Level of Influence	Engagement Objective	Engagement Goal	Engagement Activities
1	Community Community Partners Indigenous Organizations Subject Matter Experts	Collaborate /Involve	Prioritize initiatives and identify program elements that enhance opportunities and mitigate barriers	Prioritize Initiatives	Correspondence Meetings Survey Workshop
2	Subject Matter Experts	Involve	Identify final concerns and validate priorities	Close the Loop	Correspondence Meetings Workshop

* Correspondence refers to emails, phone calls, and virtual meetings with participants

A summary of engagement activities selected, activity and event dates, intended audiences, and number of participants engaged for each engagement goal is provided in the table below.

Table 3: Summary of Engagement Activities

Phase	Participants	Activity	Date(s)	Participants
1	All participants	Survey	June to July 2021	367
	Community Partners and Subject Matter Experts	Workshops	June to July 2021	26
Subtotal:				393
2	Subject Matter Experts (home builders)	Workshop	February 2022	14
Subtotal:				14
Total participation from June 2020 to June 2021:				407

Engagement activities, participants, marketing techniques, analysis methods and results are described in this report, followed by a summary of evaluation feedback and data limitations.

1.6 Participants

The participants outlined below were identified due to their knowledge, interest in, or their potential to be impacted by the Strategy. These groups include:

1.6.1 Previous Stakeholders

Previous stakeholders engaged during early engagement phases of the Strategy. Additionally, previous stakeholders who were engaged in other Sustainability initiatives, such as the Low Emissions Community Plan and Water Conservation Strategy, were included if applicable. If the identified stakeholders showed interest in engaging, they were assigned to the most relevant group described below.

1.6.2 Community

Everyone who lives in Saskatoon will be affected by the Strategy. Engaging with the community will enable the City to better develop educational materials, strategic communications and future engagement activities that are inclusive to the community.

- Businesses and business associations
 - Business Improvement Districts
 - Greater Saskatoon Chamber of Commerce
 - North Saskatoon Business Association
- Community Associations
- Greater Saskatoon Catholic School Division
- Saskatoon Public School Division
- Low-income residents and organizations
- Structurally excluded and equity-deserving residents
- Residents

1.6.3 Community Partners

Community Partners were identified in earlier engagement plans. Involving non-profit/community groups ensures that the Implementation Plan includes the diversity of opinions surrounding green spaces and natural areas in Saskatoon. Participants included the following:

- Canadian Parks and Wilderness Society
- Ducks Unlimited Canada
- EcoFriendly Sask
- Friends of the Saskatoon Afforestation Areas Inc.
- Living Sky Wildlife Rehabilitation
- Native Plant Society of Saskatchewan
- Nature Conservancy Canada
- Partners For the Saskatchewan River Basin
- Permaculture Saskatchewan
- Saskatchewan Environmental Society
- Saskatchewan Light Pollution Abatement Society
- Saskatoon Food Action Team
- Saskatoon Food Bank and Learning Center
- Saskatoon Food Council
- Saskatoon Food Forest Initiative
- Saskatoon Swale Watchers
- Saskatoon Wildlife Federation
- SOS Trees Coalition

- South Saskatchewan River Watershed Stewards
- Wild About Saskatoon

1.6.4 Indigenous Organizations

Involving Indigenous communities and organizations can help the recommendations reflect Indigenous values and consider the implications of climate mitigation on Indigenous communities and Indigenous organizations in the City.

- Saskatoon Indigenous Community Action Plan
- Saskatoon Tribal Council
- Wanuskewin Heritage Park

1.6.5 Subject Matter Experts

Those with experience or knowledge related to the Green Network and Green Infrastructure Strategy. These included:

- City Administration
 - Facilities
 - Parks
 - Recreation and Community Development
 - Saskatoon Land
 - Saskatoon Light and Power
 - Saskatoon Water
 - Water and Waste Operations
- CHEP Good Food and Community Garden Leaders
- Developers and Home Builders
 - Arbutus Properties
 - Boychuk Investments
 - Catterall & Wright Consulting Engineers
 - Homes by Dream
 - North Ridge Developments
 - Saskatoon and Region Home Builders Association
 - Victory Majors Development Corporation
- Meewasin
- Saskatchewan Health Authority
- Saskatoon Food Bank and Learning Center
- University of Saskatchewan
 - AgBio
 - Decolonizing Food Access and Land Use
 - Global Institute for Water Security
 - MOST Facility
 - Office of Sustainability
 - School of Environment and Sustainability
 - Urban Wildlife Information Network

Engagement with all participants aimed to be inclusive in terms of neighbourhood, age, gender, marital status, family size, culture, citizenship, income, etc.

2 Engagement Activities

Participants provided their feedback through a community survey, virtual workshops, or by contacting the project team directly. All engagement activities are described in further detail below.

2.1 Help Grow Our Green Network Community Survey

A community survey was held from June 16th to July 4th, 2021. Survey questions presented the proposed initiatives and asked respondents to validate and prioritize the initiatives through 23 closed- and open-ended questions. Respondents were able to write-in an “other” preference for numerous questions and provide explanations for their preferences.

2.1.1 Intended Audience

The survey was intended for the community and all identified participants.

2.1.2 Marketing Techniques

The following marketing techniques were employed for the community survey:

1. City Website
 - a. The Strategy’s Engage Page was updated to encourage participation in the online survey
 - b. An article promoting the survey was communicated to City staff through the internal website
2. Social Media
 - a. The social media campaign, which ran from June 16th – July 4th, included Facebook and Twitter ads promoting the survey. An Instagram story with a clickable link was also used to promote the survey. All paid social media ads used location targeting
3. Digital
 - a. Online banner and display ads were also used, targeted to Saskatoon
4. Email
 - a. Personalized emails were sent to organizations and community members asking them to share the information with their members

2.1.3 Analysis

The results were analyzed for the following indicators:

- Most popular options and recommendations (count)
- Thematic analysis of reasoning offered for prioritizing certain initiatives over others
- Look for options that might improve or reduce community accessibility and uptake

Mixed methods were used to analyze the data. Qualitative methods included the thematic analysis and open coding of responses.

2.1.4 What We Heard

Demographics

A total of 367 individuals participated in the online survey. The largest group of respondents were residential homeowners (86%).

Table 4: Community Survey Representation

Sectors Represented	Participants (%)
Residential homeowners	86
I am involved in the environmental sector	19
I rent a property I currently reside or have a business in	13
I own or run a business that owns the building it operates in	4
Property manager for a multi-unit residential property	3
Property manager for an industrial, commercial or institutional business property	2
Other – non-profit or youth	5


Almost all of Saskatoon’s neighbourhoods were represented, with the greatest number of responses from the Nutana, Buena Vista, Caswell Hill, and Haultain neighbourhoods. All age groups from under 18 to 65+ were represented, with most of the responses coming from the 35 – 44 (31%) age categories, followed by 25 – 34 (19%) and 45 – 54 (16%) age categories.

Natural Areas Program

**Note: in Green Pathways, the Natural Areas Program is called Pathway 1: Healthy and Thriving Natural Areas.*

Level of Support for Initiatives

When asked to state their level of support for the proposed initiatives within the Natural Areas Program, most respondents either strongly or somewhat supported (≥94%) all the initiatives. The level of support is summarized as follows:

- 
1. Natural Areas Management Plans (96%)
 2. Natural Asset Framework (95%)
 2. Natural Storm Water Management (95%)
 4. Natural Area Process and Policy (94%)

Numerous respondents provided their comments on the Natural Areas Program and proposed initiatives, which were summarized within the following themes:

Accessibility and neighbourhood connections: respondents indicated there is a need to balance neighbourhood usability with naturalization; communities must remain walkable; communities should consist of green pathways that are easily traversable and efficient networks to access our river and other green spaces

City-wide adoption: the program needs to be genuinely accepted and followed by all City departments and facilities; it was suggested that many of the City’s policies and plans currently go against many of the initiatives outlined in the Strategy

“The natural areas program must be ingrained in city planning and land development projects. It can’t be just about how many lots they can sell and what areas people demand to live in.”

Combating climate change: some respondents stressed that natural areas and green infrastructure are vital in mitigating the impacts of climate change and in providing residents with shaded public spaces

Connecting with nature: this program furthers opportunities for the community to connect with nature which has been shown to provide many benefits, including improving mental health, understanding the importance of ecosystem services, and in promoting greater biodiversity

Connecting green spaces: the connections that link and form the City's Green Network need to be supported; by limiting wildlife corridors and pollinator pathways, the City is creating biological islands and further isolating populations

Educational opportunities: should be included within natural areas to encourage greater community support and visitation (ex., bird hides, information boards, etc.)

"It would be great to include learning spaces in them as well, so schools and families can take children to learn about the natural environment... Things to engage the public."

Equity: it was suggested that green infrastructure contributes to social, economic, and environmental equity since the benefits are the same for all socioeconomic groups; some respondents expressed their concern for those who are structurally excluded not having equal access to natural areas

"I am concerned that the benefits of this project would mostly benefit those who have the socioeconomic stability to afford to drive out to these places or those who can afford to work 5 days a week. How will saskatoons most vulnerable be able to get as much benefit from this as the most privileged?"

"Ensure that these spaces are available to a wide demographic of Saskatoon, not just new developments and high income areas."

Immediacy: the most popular theme; there is a need for these levels of protection and initiatives now without further delay; many respondents called on the City to be more aggressive in protecting natural areas; respondents expressed that many natural areas have been lost to urbanization already, such as the Saskatoon Natural Grasslands and the Brighton wetlands

"This is a nice plan but meanwhile Land Branch is proceeding with development plans that will affect the NE and Small Swales. These places as well as others need protection now. By the time all this is in place... what is left of these areas could be further fragmented and built upon."

"The City needs to move faster and do more to protect our natural areas. For far too long, the focus has been on grey infrastructure without considering the long-term costs to our natural environment."

Improve brownfields and unused spaces: some respondents suggested revitalizing green spaces along major roadways and within ditches, which are viewed as barren or wasted spaces; some respondents commended the City for naturalizing unused spaces

"I am very pleased with the natural parks that have fairly recently been incorporated into large and useable, sustainable area in the newer area that were farming area, leaving water, bushes, birds a wonderful place to live and allow urban life to use and observe these spaces. Thank you."

Monitoring and data: the ongoing monitoring of natural areas is critical in supporting management plans and adapting to changes in our environment; one respondent stressed that there has been

little scientific research to inform the development of many City policies and more data is required to support the decision-making process

Plant more trees: numerous respondents called for the City to plant more trees in green spaces, urban spaces, and neighbourhoods

Protecting and expanding natural areas: many respondents felt that this should be a primary focus for the program; it is important to keep natural areas as natural as possible by conserving the native species and land formations that encompass them; one respondent suggested there is no purpose in creating a management plan for a natural area unless it is protected first

Stormwater management and quality: one respondent expressed their concern for the potential effects on water quality; the inclusion of wetlands should be paired with improvements to the salting/sanding of city streets in winter; mosquitos and increasing their breeding habitats was a potential concern; it was proposed that areas around stormwater ponds need to be naturalized instead of using mowed vegetation and rocks

“Natural storm water management must be in policy for the medium term, not long term. It needs to be a priority, and this will save the city money immediately.”

Valuing natural assets: resources and studies that quantify the value of green infrastructure in comparison to grey infrastructure will need to be provided for the development community to incorporate this framework into their planning activities in a meaningful way; green spaces must be written into policy as a priority over grey spaces, which are typically more favored in current policies

Weeds and invasive species: some respondents expressed the importance of managing and planning for weeds and invasive species, such as foxtail

Short-Term Initiative: Natural Area Management Plans

When asked to state their level of support for additional items that could be included in future management plans, respondents supported or strongly supported the items as follows:



1. Education and volunteer opportunities (95%)
2. How the site connects to other spaces in the Green Network (93%)
3. How the site can help the City adjust to climate change (90%)
4. Food systems (88%)
5. Cultural, traditional, and ceremonial uses of the natural area (86%)
5. Co-management of the natural area with the community (86%)

Other suggestions for items that could be incorporated into management plans included the following:

- Biodiversity, presence of native species, and species richness
- Enhancing grey areas to include natural elements
- Improving health and quality of life for the community
- Indigenous-led or co-management with Indigenous communities
- Minimizing the active management of the natural area
- Mitigating negative human impacts on the natural area
- Pollution clean-up and rehabilitation of contaminated sites
- Potential for active transportation

When asked why protecting natural areas important, respondents provided the following ranking from the suggested answers:



1. It's important for residents to have access to nature (91%)
2. It's important to protect natural habitat so that wildlife can thrive (89%)
3. Natural areas provide recreation opportunities like hiking (87%)
4. Natural areas provide ecosystem services (86%)
5. Natural areas provide education and research opportunities (73%)
6. Natural areas have spiritual or cultural significance (66%)
7. Natural areas are part of the City's heritage (54%)
8. Protecting natural areas needs to be balanced with other City needs (17%)
9. It's not important to protect natural areas (3%)

Other suggestions that were provided included the following:

- Balance between development and conservation
- Connecting with the wider natural system
- Creating a source of pride as a resident of Saskatoon
- Food security
- Helping pollinators
- Human and mental health
- Increase biodiversity
- Mitigating the impacts of climate change
- Promoting a more sustainable lifestyle, such as water conservation
- Protecting green spaces for future generations

Short-Term Initiative: Traditional Land Use and Knowledge Assessment

Incorporating Indigenous perspectives into Natural Area Management Plans is an important step in respecting our Treaty relationships and acknowledging the relationship between Indigenous people and this land. Respondents were asked whether they had any comments regarding a proposed Traditional Land Use and Knowledge Assessment. From the comments provided, the majority (98%) supported this initiative and stressed the importance of the initiative being Indigenous led. The comments provided were summarized into the following themes:

Ceremonial spaces are needed: some respondents expressed that spaces for ceremonies on the land are needed since they serve as a connection point for all Saskatoon residents to learn from

"An overlooked and important component to ensure that not only are (I)ndigenous peoples welcome in these spaces, but the spaces have been designed with them in mind. This may include consultations, locations of sites, availability of natural foods, and other considerations."

Include other cultures: some respondents suggested that one ethnicity or culture should not be the sole focus, but rather incorporating multiple cultural understandings will result in our actions being more universal; all community cultures and traditions need to be respected

Indigenous led: Indigenous people should lead the development and implementation of the program; Elders should be invited to participate throughout the process to provide their guidance and wisdom; the City should not just rely on consulting with one Indigenous group, but rather a diversity of backgrounds, age categories, and organizations/groups

“This assessment must have a strong Indigenous community involvement - through its coordination and research - and not only lead/coordinated behind closed doors.”


Ways of knowing: many respondents expressed their support for including Indigenous ways of knowing into the Natural Areas Program, since they bring their wealth of knowledge and vital understandings and that are crucial for protecting natural areas

“We need a mutual understanding and dialogue between western and traditional ways of knowing, and the relationship with nature can be a core element promoting different knowledges.”

“The Indigenous people of Saskatchewan have more wisdom about living with and respecting nature than anyone else here and their feedback is important.”

Prioritizing Medium to Long-Term Initiatives

Respondents were asked to prioritize the medium to long-term actions within the Natural Areas Program by selecting the top three actions that the City should implement first. Based on the results, the following ranking was provided:

- 
1. Protecting natural areas as they are included within new neighbourhoods and decide the level of protection that is needed (85%)
 2. Partner with Meewasin to conserve natural areas and create new trails and features (64%)
 3. Natural storm water management (55%)
 4. Reduce pollution (37%)
 5. Determine how to manage and fund natural areas to meet community expectations (32%)
 6. Calculate the total value our natural areas provide to the City and community (13%)

Comments provided by respondents were summarized into the following themes:

Intrinsic value: identifying the value of natural areas at the onset of development is critical, especially when major infrastructure projects are being considered; value to the community, species, and climate are important to consider; however, some respondents felt it is impossible to calculate the true value of natural areas and that this process may hinder the review process

“We don't need to know that it is X dollars in value... natural areas are invaluable and by making this an action item, you are basically saying that nature can be bought and sold... The city fills potholes without asking people how much it is worth to them, so let's protect and enhance nature in the same way - as part of business as usual.”

Meewasin: it was suggested that Meewasin can only do the work that they are mandated to do with adequate financial resources; Meewasin's involvement in protecting natural areas is vital since they act as a third party in balancing conservation, development, and the needs of the City


Protection is essential: many respondents expressed the need for the protection of natural areas to come first, in advance of development and land planning stages; some viewed the City's track record in this area as being short-sighted and damaging

Grey to Green Program

**Note: in Green Pathways, the Grey to Green Program is called Pathway 3: Leading by Example for an Integrated Green Network.*

Level of Support for Initiatives

When asked to state their level of support for the proposed initiatives within the Grey to Green Program, most respondents either strongly supported or somewhat supported ($\geq 87\%$) the initiatives. The level of support was summarized as follows:

- 
1. Protect and plant city trees (99%)
 2. Green infrastructure policies (96%)
 3. Green infrastructure projects (95%)
 4. Community and commercial support (93%)
 5. Improve Active Transportation options (87%)

Numerous respondents provided their comments on the Grey to Green Program and its initiatives, which were summarized within the following themes:

Active transportation considerations: it was recommended that active transportation options need to be balanced with traffic considerations and ecological assessments so that they do not impede one another; integrating cycling lanes into existing roadways may not be as effective as developing cycling corridors that combine green spaces and walking paths; planning for recreational opportunities should be in balance and even accent conservation efforts within green spaces

Building considerations: respondents recommended that the City should require and support using green architecture in buildings (i.e., green roofs, installing renewable energy sources, including passive heating/cooling designs, etc.); it was suggested that lot sizes should be larger to allow for more opportunities in residential properties and green spaces

City maintenance: some respondents believe that current City maintenance activities damage green infrastructure and hinder existing Grey to Green Program initiatives; it was suggested that future design standards should be shaped in a way that counters City maintenance practises, such as improving snow/salt/sand storage and using permeable material for parking lots

Community involvement: including residents in the process, such as requiring all new homeowners to select a tree to be planted in their yard, could encourage residents to be part of the solution

Defining green infrastructure: one respondent expressed the need for green infrastructure to be properly defined for residents to more fully understand what it means and encompasses

Encouraging native and fruiting plants: many respondents commented on the need to encourage planting and protecting native and fruiting plants; the community needs to shift their support away from green lawns and towards improving our local biodiversity within residential yards

Keep it simple: respondents suggested keeping all processes and administration requirements simple, such as not making applications too complicated or expensive; make programs accessible, fast and easy to participate in

Planting trees: improving the urban forest in Saskatoon could produce many social, economic, and environmental benefits that typically are not realized or quantified; trees contribute to greater shade cover and climate change resilience; some respondents suggested excluding elms from future plantings which cause more issues than their value; it was suggested that the Urban Forest Management Plan should be universally adopted and a city-wide tree bylaw should be implemented

“Saskatoon must become the ‘Boulevard’ city, where streets are covered by the urban forest canopy. The benefits are manifold, falling into the categories of social, economic and environmental benefits.”

“trees decrease the need for air conditioning, improve air quality, and thus mitigate the effects of urban pollution and heat. They are cost effective for both the city and individual citizens.”

Policies: it was suggested that green infrastructure policies need to be developed and applied; examples of policies could include the size of buildings, percent cover of hardscape used in lots, and making improvements to water catchment


Short-Term Initiative – Bird Friendly Standards

Respondents were asked to state their level of support for the City exploring options to meet Canadian Standards Association’s Bird-Friendly Building Design Standards and incorporating them into more City buildings and projects. The average response provided was four out of five, which indicated a strong support for exploring the options. Many respondents suggested that bird-friendly designs should be required for all buildings, including commercial and residential buildings.

“As the downtown core grows, it’s imperative that bird-friendly engineering is a requirement when constructing buildings with large glass windows. Window strikes are one of the leading causes of bird mortality in North America.”

Prioritizing Medium to Long-Term Initiatives

Respondents were asked to prioritize the medium to long-term actions within the Grey to Green Program by selecting the top three actions that the City should implement first. Based on the results, the following ranking was provided:

- 
1. Adding green infrastructure into City projects (57%)
 1. Update City plants/policies/standards to increase use of green infrastructure (57%)
 3. Create dark sky and low noise policies to reduce stress to wildlife (50%)
 4. Develop education and incentives to encourage community and commercial use (37%)
 5. Storm water management with green infrastructure near buildings (33%)
 6. Identify natural solutions to expand our storm water system’s capacity (31%)
 7. Improve City practises for soil management (21%)

Comments provided by respondents regarding the medium to long-term actions included the following themes:

Reduce urban sprawl: it was suggested that more emphasis should be placed on reducing urban sprawl, which represents an ongoing threat to the viability of many natural areas; some participants felt that our urban footprint is large given our small population, so the focus should be shifted towards downtown infill development

Requirements: requirements are important for landowners and commercial businesses to meet dark sky and noise standards; do not just rely on education and awareness to generate uptake

Understanding before implementing: although these actions are needed, some respondents stressed the need for all City departments and employees to understand why the actions are important prior to their implementation to create long-term, positive changes

“One needs to be careful with policy, program and delivery order... ALL (City) departments, staff and councillors, need buy into Green policies before moving forward with concrete action city wide.”

Growing Community Program

**Note: in Green Pathways, the Growing Community Program is called Pathway 4: Growing Community for a Liveable City.*

Level of Support for Initiatives

When asked to state their level of support for the proposed initiatives within the Growing Community Program, most respondents either strongly supported or somewhat supported the initiatives (≥88%). The level of support was summarized as follows:



1. Natural areas education (96%)
2. Education, awareness, and partnerships (95%)
3. Community stewardship (93%)
4. Grants and incentives (88%)

Respondents provided their comments or concerns for the Growing Community Program and its actions, which were summarized within the following themes:

Costs: some respondents asked where the funding for these initiatives would come from and whether an increase in property taxes would be required; it was recommended that funding projects should be decided by environmental professionals who can more fully weigh decisions; it was suggested that many communities are ready to do more, but not without financial backing

Education: the most popular theme; many respondents view education as being critical for the success of all initiatives; homeowners, new or existing, should be provided with information on the importance of protecting green spaces

“Education will help people see the need for spaces like this and why they are important, which would hopefully increase the amount of those who believe these types of initiatives are important.”

“Please please please provide education to homeowners bordering naturalized spaces as to what those spaces are about and make this information required to provide to buyers in that area.”

Equity: there is concern that inner-city neighborhoods may have less access to these opportunities and for the unequal distribution of municipal resourcing because of this

Measurable outcomes: it was suggested that all initiatives should be linked to measurable outcomes related to social cohesion, satisfaction within the community, and the sustainable actions taken by residents

“All the things listed above need to be paired with action. It's not enough to educate or give away small amounts of money that don't really influence people's behavior - we need to get initiatives implemented, and we need to increase people's capacity by learning through DOING. Training programs, work bees, mentorship initiatives, hiring youth and underemployed people to install projects... These should all be prioritized.”

Partner with existing organizations: respondents suggested supporting community-led initiatives and organizations who are already protecting green spaces and educating the public; the City does not need to reinvent the wheel, but rather support the great work already being done in Saskatoon

“there are many groups that do this work throughout the city so it would be better to forge partnerships and help fund these groups to carry out this work than recreate another layer of administration to do it through the city.”

Time: changing behaviours and attitudes takes time with longstanding initiatives

Short-Term Initiative: Education Materials

When asked what types of education and awareness materials or programs should be developed, respondents provided the following ranking from those that were proposed:



1. Information on how to add green infrastructure at home (68%)
2. Training programs for residents about how to manage green space (66%)
3. Curriculum-based resources and information about green infrastructure that can be used in schools (65%)
4. Interpretive information in green spaces about the history (58%)
5. Programming at specific natural areas or green spaces (54%)
6. Public art, site names, and interpretive features that tell the story of a green space from multiple perspectives (53%)
7. Online tools or apps about the Green Network (46%)
8. Information booths at City festivals and events (34%)

Other suggestions for education and awareness opportunities included the following:

- Anti-racist education
- Develop content for specific groups, such as newcomers
- Do not use print materials that contribute further waste to the environment
- Encourage fenced-in areas for pets to enjoy yards while minimizing the impacts on birds
- Mentor and model the right actions through pilot projects
- Partner with Indigenous organizations and communities to teach through stories and provide land-based educational opportunities
- Partner with schools to get students outside and promote stewardship of natural areas
- Provide native plant seeds and young plants with educational information
- Use already existing materials and digital information provided by other organizations

Short-Term Initiative: Grants and Incentives

Respondents were asked what community-focused incentive programs they would like to see in the future. Out of the proposed incentive programs, respondents provided the following ranking:



1. Incentives for developers/builders to install green infrastructure (74%)
2. Rebates to add green infrastructure to your home (73%)
3. Reductions in your storm water bill if you install green infrastructure (69%)
4. Grants for residents or community groups to look after a public space in the Green Network (67%)

Other suggestions for community-focused incentive programs included the following:

- Grassroot challenges and events that motivate residents and businesses
- Incentives for the community to grow native plants on their property
- More community gardens
- Opportunities for renters who have no access or do not benefit from these incentives
- Pesticide-free yard promotions and incentives
- Publicly accessible food forests with associated outreach programs

- Simplify the current application for discounts on wastewater management
- Subsidize bird-friendly decals and products

Many respondents felt mandates should take precedence over incentives to generate behavioural changes quickly. This is especially important for the industrial, commercial, and institutional (ICI) sector where participants stated that standards should not be optional to follow. Although participants identified that making sustainable building improvements is not cheap, many respondents felt that taxpayer dollars should not be spent on incentivizing the ICI sector and developers who should take on this action by themselves. One respondent suggested these standards should be retroactive in newer subdivisions


“Green Infrastructure should be required rather than encouraged. You’ll never get industry on board otherwise.”

Short-Term Initiative: Community Stewardship Program

Many respondents expressed the importance in supporting volunteers and community stewardship groups in protecting green spaces, such as the Saskatoon Natural Grasslands, which was a volunteer-led initiative. Respondents stated that providing opportunities to help maintain natural areas would mutually benefit the City and the community; however, others stressed to not rely solely on volunteer stewardship and that regular monitoring and conservation efforts should be conducted by the City. Some respondents felt that community stewardship should not take away from the City’s responsibility to adequately staff departments involved in green infrastructure

“Meaningful engagement of youth and creating a generation of residents that values nature, green space, and biodiversity should be one of our highest priorities.”

When asked what community stewardship programs they would like to see, respondents provided the following ranking from those that were proposed:

- 
1. Plant or maintain green infrastructure in public spaces (90%)
 2. Growing food on public land (76%)
 3. Garbage clean-up events (69%)
 4. Invasive species management (67%)
 5. Cultural and traditional land use (61%)
 6. Collecting and sharing information about the wildlife that lives in an area (60%)
 7. Volunteer restoration of damaged spaces (57%)
 8. Opportunities to submit public art or other features (33%)

The following suggestions were provided by participants as additional programs that could be considered:

- Celebrating environmental events, such as Arbor Week
- Converting paved community spaces to green spaces through community stewardship
- Partner with existing organizations and programs that are doing this work already
- Voluntary adopting of local green spaces by community organizations and groups

Sustainable Food Program

**Note: in Green Pathways, the Sustainable Food Program is called Pathway 5: Food Security from Seed to Table to Soil.*

Level of Support for Initiatives

Both initiatives within the Sustainable Food Program were either strongly or somewhat supported, with Sustainable Food Projects (93%) receiving slightly more support than the Sustainable Food Action Plan (91%).

Comments provided by respondents were categorized into the following themes:

Education: community education on food production and food security opportunities is critical

Encourage native plants: natural areas and green spaces should be planted with native vegetation available whenever possible; participants recommended that the City should encourage residents to convert grass lawns into edible landscapes and/or native pollinator habitats; the City should also incorporate permaculture principles into community green spaces

Equity: the most popular theme; programs that focus on providing food and resources to low-income and structurally excluded residents should be a priority; it was suggested that Indigenous people should be provided with greater opportunities for food sovereignty

“Processes are needed to ensure targeting the socially and physically isolated poverty households of elderly and chronically ill or disabled benefit from this program.”

“Healthy food = Healthy citizens. Our core neighbourhoods have limited access to healthy foods due lack of grocery stores/socioeconomic barriers.”

“Indigenous food sovereignty is extremely important in urban areas. Many Indigenous or lowincome residents do not have access to healthy food as they live in a food desert. Creating sustainable food projects as well as changing zoning bylaws in low-income neighbourhoods will help create food security.”

Holistic approach: participants stressed that the program needs to consider food production, preparation, and consumption in a holistic way by understanding how people experience food and how economic, environmental, and cultural elements motivate people to make sustainable choices

“It is about how we connect to nature to produce food, how we enjoy preparing and consuming food, and how we interact with others (within and outside the family) during food preparation and consumption.”

“Sustainable food systems can also bolster efforts to increase green infrastructure, especially if the plants promoted help improve soil quality (reducing fertilizer use), redirect waste via composting and reduce water use via plant selection and mulching. These are also beneficial for bird and insect diversity.”

Less intervention: one respondent suggested the City should take a more “hands-off” approach when dealing with sustainable food projects and allow the community to lead the programs

Renter considerations: numerous respondents expressed the need for the City to find ways for renters to access future sustainable food initiatives; the City could create bylaws that support renters having a stronger say in what is planted on their rental property

Short-Term Initiatives: Sustainable Food Projects

When asked to state their level of support for the proposed Sustainable Food Projects, respondents both strongly supported or somewhat supported all the projects ($\geq 81\%$), with Food Forests and Traditional Food Systems initiatives receiving the most support (86%), followed by the Edible Foraging Map (81%).

Although the planting of foraging plant species was supported by participants, many cautioned that encouraging the public to forage on public land risks over-harvesting and takes experience and knowledge to do properly. Participants identified that the risk of over-harvesting edible plants is higher when edible plants are mapped, especially for those using produce for profit; therefore, foraging sites must be monitored and managed effectively to reduce over-foraging and reduce the impacts to local wildlife.

“The problem with foraging is its effect on the ecosystem. Nature is not a grocery store; areas need to be protected from overuse, especially as the city grows and the percentage of green space is threatened.”

“if we are encouraging people to forage there will need to be some guidance available as to what ethical foraging is as well as some sort of mechanisms in place to ensure land is not over foraged and damaged.”

Comments provided by respondents included the following themes:

Indigenous consultation needed: Indigenous community members should be consulted to ensure the Traditional Food Systems initiative is something they are supportive of; the City should determine how to eliminate barriers for Indigenous people to harvest edible plants in the city

Pilot projects: respondents suggested starting with a pilot food forest initiative to gather knowledge and experience prior to implementing them in other neighbourhoods

Potential for contamination: policies need to be in place to ensure lands that are mapped for edible plants are not contaminated or subject to pollution; the City must ensure the health and safety of residents as a priority

Other opportunities that were suggested by respondents included the following:

- Create a food sustainability department within the City that supports community partnerships
- Create more community gardens to reduce long waiting lists
- Educate urban planners and decision-makers about how planning regulations like zoning can contribute or hinder food security initiatives
- Increase accessibility for senior citizens to participate in community gardening
- Partner with local organizations to share resources and expertise with the community
- Provide greater support to local farmers markets
- Provide plantings for wildlife as well as humans to promote co-existence
- Support boulevard gardening

Connected Green Network Program

**Note: in Green Pathways, the Connected Green Network Program is called Pathway 2: Connecting and Regenerating Green Spaces.*

Level of Support for Initiatives

Respondents were asked to state their level of support for the proposed steps in the Connected Green Network Program. All initiatives were either strongly or somewhat supported ($\geq 90\%$), with Restoring Green Space being supported the most (96%) and followed closely by Connecting Gaps and Creating Partnerships (92%) and Securing Land (90%).

Numerous comments were provided by respondents and categorized into the following themes:

Change in developer mandates: the most commented theme; developer mandates should be revised to ensure the protection of vulnerable and valued natural areas within their jurisdiction takes priority over generating revenue; however, the steps should not allow developers to create a “trade approach” where one natural area is reduced to save another; all new developments and redevelopments should be required to include well-planned green, pedestrian and cycle-friendly areas that are integrated into the neighbourhood concept plans

Connecting green spaces: by connecting natural areas and securing more in the future, Saskatoon can work towards a more sustainable future; connections should include the purchasing of lands within and outside of the City

Conservation agreements: one respondent disagreed with the City buying land unless a conservation agreement was in place (ex. Kernen Conservation Area)

Equity: restoration should focus on neighbourhoods with less access to natural areas

Limit urban sprawl: respondents encouraged the City to invest in infill projects to limit further development into natural areas on the outskirts of the city

Links to other themes: the program should be linked to urban wildlife conservation, mental and spiritual health, and social cohesion

Learn from past experiences: some respondents suggested that the City has consistently approached natural areas as separate without accounting for the connections that are needed for their health; this may require the City to change its approach in protecting natural areas

“We need to do more to keep spaces connected for the health of the land and the species that live there. If we disconnect the swales we could effectively kill their biodiversity. This has happened in the Saskatoon Natural Grasslands and is a lesson we must learn.”

Offsetting actions: it was suggested that increasing green space and restoring natural areas can help to offset damaging land use practises; however, this practise cannot turn into a trade approach for developers

Partnerships: the City should establish partnerships with local organizations and compensate them for doing this work already

Prioritizing Medium to Long-Term Initiatives

When asked to prioritize the medium to long-term actions planned for the Connected Green Network, respondents provided the following ranking:



1. Naturalize – use more native species in parks, storm ponds, and City landscaping (65%)
2. Renew informal green spaces by working with the community to renew rights-of-way, vacant lots, and other underused spaces (56%)
3. Upgrade existing green spaces that need improvement (46%)
4. Traditional land management (45%)
5. Expand the Green Network by identifying new green spaces (38%)
6. Connect our Green Network with green spaces outside Saskatoon (22%)
7. Maintain agricultural land in the City where possible (14%)

Numerous comments were provided by respondents and categorized into the following themes:

Agricultural lands: many respondents expressed their concern for agricultural lands being considered green spaces and therefore requiring the same considerations and level of protection; some respondents suggested converting agricultural lands within the city into green spaces

Encourage residential connections: encourage residents to use their yard as part of a larger network or a mini-neighbourhood corridor by reducing fencing, using native plant species, and improving habitats

Improving before expanding: numerous respondents suggested that improving on current green spaces should be done prior to any further expansion since this infrastructure already exists within our city and they may become neglected; existing natural areas should be maintained better and unused areas, such as freeway rights-of-way, should be converted to naturalized spaces with native species which may reduce the cost of maintenance

Limiting invasive species and weeds: some residents stated that all the proposed actions would be greatly impacted by the advancement of invasive species within Saskatoon; actions need to be taken, which include educating the public and reducing the impacts of invasive species; some respondents identified weeds as being a major concern, especially in restoration areas

Final Comments

Respondents were asked to state their level of support for the programs identified within the Green Infrastructure Implementation Plan based on what they had learned in the survey. Most respondents either strongly or somewhat supported all the programs, with the following ranking determined:



1. Natural Areas (96%)
2. Grey to Green (94%)
3. Connected Green Network (92%)
4. Growing Community (92%)
5. Sustainable Food (87%)

Respondents provided their final comments regarding the Green Infrastructure Implementation Plan, which were categorized into the following themes:

Best practises: use best practises when implementing programs to avoid making mistakes that may delay gains from being realized or cause further irreversible damage

Combating climate change: many respondents feel that the programs outlined in the Strategy provide some of the best opportunities to mitigate the impacts of climate change in Saskatoon; the threats of climate are a major concern for many of the respondents

Costs and funding: many respondents stressed the need for greater funding dedicated to the protection of natural areas, the Strategy and its initiatives; however, some respondents suggested that community support for the program will depend on the associated costs to the taxpayer

Creating action: it was noted that the programs must move beyond policy to implementation and have the decisions place economic, health and environmental well-being over short term profits

Developers and planners: respondents suggested that many of the initiatives require a paradigm shift in how developers and urban planners envision our city and its future; there needs to be a better balance between protecting natural areas and meeting Saskatoon's density targets through infill development since trade-offs will need to be made

Difficulty in prioritizing: some respondents expressed their inability to prioritize many of the initiatives outlined in the Strategy due to either not having enough information or wanting all the proposed initiatives to be prioritized

"Don't make me choose between these! All of them are important."

Immediacy: one of the most popular themes; it was suggested that one of the main issues with the Strategy is the need for actions to be acted on now instead of by 2024; many respondents identified the need to act on these issues now in order to combat rising consequences of the City not acting to protect natural areas; many respondents identified that if action is not taken to protect green spaces, it will be impossible to get them to return to their natural states

"The longer we just talk about it and fail to implement the action plan, the more "grey infrastructure will be build using the old codes that allow trees to be cut down, birds to be killed, and wetland to be paved over. Please take action as soon as possible."

"Do not wait. Start this initiative now. Time is of the essence in this type of restoration preservation and conservation."

Include partners: some respondents identified that there are many groups already undertaking different aspects of the Strategy and suggested the City should focus on existing gaps to not duplicate projects; how can the City determine when it should take the lead or support the initiatives already being undertaken

Leading by example: it was recommended that any program must start with the City taking leadership and setting an example for the community to follow and support the initiatives; it was suggested that the initiatives in the Strategy need to be integrated into all City departments; some respondents expressed their frustration for the lack of progress by the City in accomplishing their goals to protect the natural areas within Saskatoon

"These are all excellent plans, but they need political will behind them. As noted previously, good plans are only good if the financial and regulatory resources are put in place and the plans implemented."

“So good to see this work being proposed. A long time coming. But will it actually be implemented or will the city just make another plan without any tangible outcomes?”

Opportunity for Saskatoon: many respondents stressed this is an opportunity for the City to become provincial and national leaders in protecting natural areas; respondents believed that the Strategy includes many opportunities that if not acted on could result in the further degradation of our natural areas

“Think of the CRED Saskatoon would receive as the best place to live in Saskatchewan and Canada! Natural areas are valuable for all natural species to exist, and invaluable for people to experience.”

Quantifying value: it was suggested that for the community to understand the value of green spaces, proper valuations must be determined and used to justify the implementation of the Strategy

“Without this information, I believe the development community will have a difficult time incorporating this framework into their planning activities in a meaningful way.”

Protecting the swales: many respondents stressed the need to implement the changes represented within the Strategy to save the natural areas that are currently at risk, such as the Northeast and Small Swales; numerous respondents expressed their concern for Northeast and Small Swales and called for the need to protect and conserve these vitally important green spaces

“My concern is with the swales and the sheer amount of development. Those areas are crucial for the watershed, biodiversity, temperature regulation (green space as a mitigation of warming), and wellness. This is the most crucial area of the larger plan: once this land is gone, it can't come back.”

“I urge the city to see the importance of the Swales, and to not build neighbourhoods close to them. Scrap the UH3, restore the land, and keep the Swales healthy and vibrant.”

Support: the most commented theme; many respondents provided their support for the Strategy and for the City in conducting this important work; many respondents expressed their excitement for the initiatives represented in the Strategy and encouraged City Administration to continue their good work

“I really appreciate this work and effort. I just wish you luck with changing policies and practices in other aspects of city operations!”

“The Green Infrastructure Strategy is pivotal to promote and preserve healthy, sustainable and equitable communities today and in the near future. It is undeniable that the city must prepare for extreme changes in climate conditions if the city wants to preserve residents' wellbeing, satisfaction, living conditions and health. The question is not whether we should do this, the question is how we do it effectively and immediately.”

“The Green Infrastructure Strategy seems like a well-thought-out plan, and I'm looking forward to seeing the way that its implementation changes the way we live in and move throughout the city.”

2.2 Help Grow Our Green Network Workshop

A series of workshops were held from June 29th to July 20th, 2021 to collect feedback on the proposed initiatives within the Green Infrastructure Implementation Plan. The virtual workshops included a short presentation that introduced the programs and initiatives being proposed in the Implementation Plan followed by a series of facilitator-led breakout room discussions. A series of

Google Jamboards, highlighting each program within the Implementation Plan, were used to record discussions and to allow participants the opportunity to provide their comments following the workshop.

Participants were invited to provide their feedback on the following questions for each program and initiative within the Implementation Plan:

1. Are there any additional opportunities we should explore for the initiative?
2. Are there any other community partners we should work with?
3. Are there any concerns that you have with the initiative?

2.2.1 Intended Audience

The workshops were intended for identified Community Partners, Indigenous Organizations and Subject Matter Experts.

2.2.2 Marketing Techniques

The following marketing techniques were employed:

1. City Website
 - a. Updates to the Engage Page were made to encourage participation in the online survey.
2. E-invites
 - a. Personalized emails were sent to participants

2.2.3 Analysis

The results were analyzed for the following indicators:

- Most popular options and recommendations (count)
- Thematic analysis of reasoning offered for inclusion of certain options over others
- Look for options that might improve or reduce accessibility and uptake

Mixed methods were used to analyze the data. Qualitative methods included the thematic analysis and open coding of responses.

2.2.4 What We Heard

Demographics

A total of 26 individuals from a variety of organizations and institutions participated in the workshops

Natural Areas Program

**Note: in Green Pathways, the Natural Areas Program is called Pathway 1: Healthy and Thriving Natural Areas.*

Natural Area Management Plans

The comments provided by participants for the Natural Areas Management Plans were summarized into the following themes:

Confusion surrounding protection: some respondents expressed their confusion as to whether natural areas are currently protected within the City and what the level of protection is; are there different opportunities to protect a natural area other than municipal heritage status

Defining boundaries: many natural areas do not have defined boundaries which can make them difficult to protect; management plans need to include determining the legal boundaries for existing natural areas; it was suggested that plans should be flexible in allowing for changes in natural area boundaries as the area changes over time

Environmental considerations should impact development: numerous respondents identified that often environmental considerations are made after development plans have already been established, which seems backwards and counterproductive; natural area management plans need to be considered as (if not more) important than developmental considerations instead of being an afterthought; the development of an area can often be modified to accommodate natural areas while the opposite is not true; how will management plans coordinate with the planning for new subdivisions and how will differences be resolved if the management plans come into conflict with development plans

Funding considerations: one respondent asked who would ultimately pay for creating the management plans (i.e., land developer, taxpayers, the community, etc.)

Immediacy: many respondents expressed their concern that development will proceed much faster than the initiatives represented within the Strategy and natural areas like the Northeast Swale will be irredeemably damaged

Land ownership: it was suggested that work involving private landowners needs to be handled carefully to ensure relationships are maintained

Natural disturbance: incorporating natural disturbance regimes, such as burning and grazing, mimics more natural conditions and facilitates healthier habitats; mimicking natural disturbances will become increasingly more difficult as urban development encroaches further on natural areas

Ongoing monitoring and management: environmental protection for species at risk, habitats, and minimizing invasive species should be ongoing and not solely dependant on funding

Pausing development: natural area management plans typically advance slower than other development initiatives, but are important in the designing process; could processes be created that trigger a faster response when irreversible consequences are identified; it was strongly believed that natural areas should be “off the table” for development since there are so few left

Participants provided numerous suggestions for potential partnerships, which included the following:

- City of Saskatoon Governance and Priorities Committee
- Geotechnical engineers – discussions related to riverbank
- Landowners/developers
- Meewasin – management and monitoring of the riverbank
- P4G Partners– opportunities to connect beyond City boundaries
- Recreational groups – stewardship opportunities
- School divisions and youth sustainability groups – for stewardship programs
- SIAST programs
- University of Saskatchewan – will have an interest along the river and on undeveloped lands
- University of Saskatchewan Environment and Sustainability – student-led projects

- Wanuskewin – opportunities to connect beyond City boundaries

Suggestions for improving the initiative included the following:

- Critical habitat recovery must be considered for species at risk (ex., northern leopard frog, short eared owl, etc.)
- Explore working with the federal government to create an Urban National Park within Saskatoon
- Natural Asset Capital Valuation should be used as a tool for assessing additional greenspaces
- Partner with builders, developers, real-estate companies and landscape businesses that are interested to exhibiting leadership in sustainable practises
- Partners that have experience in managing natural areas should be consulted

Traditional Land Use and Knowledge Assessment

The comments provided by participants for the Traditional Land Use and Knowledge Assessment initiative were summarized into the following themes:

Aligning City standards with cultural practises: the City should consider changing their standards to incorporate Indigenous cultural practises, such as traditional fire ceremonies; it was recommended that sites for traditional ceremonies should follow City standards that can be modified to accommodate all cultural practises as best as possible

Led by Indigenous community: the entire process needs to be led and guided by the Indigenous community, particularly Elders, knowledge keepers, and cultural advisors; cultural standards and traditions must be followed to ensure the traditional knowledge that is shared is recognized as being sacred and respected

Move away from silos: Indigenous engagement and knowledge is often treated as one pillar when instead it should be incorporated equally and more broadly throughout every policy and practise

Recognition of all First Nations: all First Nations must be recognized and consulted when approaching traditional land use and knowledge; by only incorporating Cree within the City's naming protocols, the City could isolate other First Nations that have roots in Saskatoon

Participants provided numerous suggestions for partnerships within Saskatoon, which included the following:

- City of Lethbridge
- Elders/knowledge keepers/cultural advisors
- First Nations and Metis groups within Saskatoon
- Saskatoon Afforestation Area's National Healing Forest concept
- Saskatoon Tribal Council
- University of Saskatchewan

Suggestions provided by participants for improving the initiative included:

- Ethnobotany education and awareness should be included within the assessment
- Indigenous Protected and Conserved Areas should be explored

- The process needs to be more inclusive to ensure including Indigenous people do not feel as if the City is filling a checkbox
- Saskatoon's urban forests should become part of the National Forest Initiative for Truth and Reconciliation

Natural Area Policy and Process

The comments provided by participants for the Natural Area Policy and Process initiative were summarized into the following themes:

Feedback should influence policy: one respondent suggested that policy development will need to consider and incorporate community feedback for any policy to be successfully implemented

Funding required: the creation of a funding source for the care and maintenance of natural areas is key for the success of this initiative

Impact driven policies: one respondent identified that the impacts of a practise are often overlooked at the onset of a project; the City should have the foresight to plan for mitigation or the prevention of potential impacts from happening in the first place; if policies are in place then it forces developers and urban planners to consider them during the planning stage

Importance of policies: some respondents felt that without policy there is little direction to support the protection of natural areas outside of Meewasin's jurisdiction; the first step is to create the policy framework for protecting natural areas rather than natural area identification, which will occur during the planning process; policies need to be resilient and strongly enforced

Participants provided numerous suggestions for partnerships within Saskatoon, which included the following:

- City of Saskatoon Parks
- Geotechnical consultants
- Landowners/developers

Suggestions for improving the initiative included the following:

- Partner with builders, developers and landscape businesses that are interested in becoming leaders in sustainable practises
- Re-examine the City's snow dumps to create less invasive processes
- Replace the City of Saskatoon's tree policy with an urban tree bylaw

Asset Framework Integration

Few comments were provided for this initiative. One respondent suggested researching and establishing a cash market value for carbon capturing could improve the initiative.

Natural Storm Water Management

The comments provided by participants for the Natural Storm Water Management initiative were summarized into the following themes:

Emergent vegetation: emergent vegetation is important for natural storm water management and should not be removed without public engagement; solely relying on emergent vegetation within wetlands for natural storm water management has historically proven to be ineffective

Effects of City maintenance: determine how storm water management is affected by seasonal City maintenance (i.e., salting, paving, etc.)

Participants provided numerous suggestions for partnerships within Saskatoon, which included the following:

- City of Saskatoon Planning and Development
- Landowners/developers
- P4G Partners
- Wanuskewin

Suggestions for improving the initiative included the following:

- A formal revised Water Policy Bylaw should be enacted
- Incorporate more bio-swales to filter contaminants and clean stormwater prior to its release back into the river
- Support and promote the Wetland Policy in conserving natural wetlands within Saskatoon
- Work with existing organizations and the Partners 4 Growth (P4G) to protect natural springs in the City and surrounding areas

Grey to Green Program

**Note: in Green Pathways, the Grey to Green Program is called Pathway 3: Leading by Example for an Integrated Green Network.*

Leading by Example: Policy, Training, and Education

Participants provided numerous suggestions for partnerships within Saskatoon, which included the following:

- City of Saskatoon Building Standards
- City of Saskatoon Construction and Design
- City of Saskatoon Development Review
- City of Saskatoon Indigenous Initiatives
- City of Saskatoon Parks
- City of Saskatoon Transportation
- City of Saskatoon Urban Design
- Indigenous communities
- Nature Canada
- Saskatoon Nature Society
- SOS Trees Coalition

Suggestions for improving the initiative included the following:

- Implement dark sky lighting standards for private/commercial properties, especially in areas surrounding green spaces
- Include considerations for protecting solar access and water infiltration in development plans
- Include native and drought tolerant plant species in areas along roadways
- Require remediation for existing buildings to follow bird-friendly and dark sky standards
- Seek input from Indigenous communities who can provide valuable insight

Leading by Example: Grey Asset Improvements

The comments provided by participants for the Grey Asset Improvements were summarized into the following themes:

Adoption across the City: it was suggested that the Strategy and initiatives must be adopted within all City departments and be incorporated within all decision-making processes in order to be effective; education and goodwill efforts are not enough to generate lasting changes within City Administration

Incorporate advancements: the City could explore modern opportunities and advancements in grey infrastructure, such as reducing the heat island effect downtown by exploring alternatives to concrete and asphalt (ex. infiltration strips within parking lots)

Minimize impacts to wetlands: large, permanent wetlands are often used for stormwater storage and the City could look for opportunities to avoid or minimize the impacts to these systems

Wetland policy: some respondents identified that the current wetland policy appears to favour creating new/artificial wetlands, that may not include all of the natural benefits, over protecting those that already exist

Participants provided numerous suggestions for partnerships within Saskatoon, which included the following:

- City of Saskatoon Long Range Planning
- City of Saskatoon Parks
- City of Saskatoon Planning and Development
- City of Saskatoon Urban Design
- Saskatoon Water

Suggestions for improving the initiative included the following:

- Encourage or mandate developers to enhance developments near green spaces with sustainable initiatives (ex., green roofs/walls, the new Downtown Public Library which reserved 1/3 of the property for green space)
- Impacts to natural areas need to be considered by developers so they limit the destruction of natural assets
- Incorporate Low Development Guidelines within City projects and ensure they are followed
- Make City programs, such as the composting program, more affordable to low-income groups
- Work with and educate developers to incorporate more green spaces and green designs into their development plans, such as community gardens and natural landscaping

Commercial Support

Participants provided numerous suggestions for partnerships within Saskatoon, which included the following:

- City of Saskatoon Development Review
- City of Saskatoon Planning and Development
- Indigenous developers with land holdings/urban reserves

- P4G and Saskatoon Future Urban Growth Areas Partners
- Saskatoon Water

Suggestions for improving the initiative included the following:

- Create a property tax incentive that is tied to the percentage of permeable surface on the property
- Encouraging participation and success stories within the industrial, commercial, and institutional sector would allow them to advertise the environmental endeavours they are undertaking (i.e., green roofs, bird-friendly windows, etc.) and draw public attention to their initiatives
- Include riparian area landscaping around storm ponds instead of mowed grass
- Provide opportunities for businesses to participate in green space stewardship
- Simplify the existing storm water utility incentive so that it is easier to access

Urban Forestry

Participants suggested City of Saskatoon Urban Design as a potential partner to engage with in future Urban Forestry work.

Suggestions for improving the initiative included:

- Explore providing carbon credits for tree plantings within the city
- Greater public/developer education is needed surrounding the importance of urban forests and the benefits they provide
- Incentivize the planting of native trees in neighbourhoods and active transportation routes to increase local shade cover and combat climate change
- Increase funding for Parks to combat the rising consequences of climate change and other environmental issues
- Providing education and awareness pamphlets for Dutch elm disease through the City landfill and utility bills
- Provide greater incentives to plant trees in commercial areas

Active Transportation

Participants suggested partnering with Meewasin and the P4G and Saskatoon Future Urban Growth Areas Partners on future Active Transportation initiatives.

Suggestions for improving the initiative included:

- Bikeway infrastructure could be increased to encourage greater active transportation
- Consider how to incorporate green spaces when upgrading or designing infrastructure
- Plan routes around green spaces and not through them
- Work with Meewasin to improve wayfinding signage that includes accessibility information

Connected Green Network Program

**Note: in Green Pathways, the Connected Green Network Program is called Pathway 2: Connecting and Regenerating Green Spaces.*

Green Network Gap Analysis

Participants provided numerous suggestions for partnerships within Saskatoon, which included the following:

- City of Saskatoon Long Range Planning
- City of Saskatoon Parks
- Land developers
- Meewasin
- P4G Partners
- Saskatoon Water
- SOS Trees Coalition
- University of Saskatchewan
- Wanuskewin

Suggestions for improving the initiative included the following:

- Identify areas as critical habitats for the recovery of Species at Risk
- Incorporate policies from the International Union for the Conservation of Nature (IUCN) to conserve natural areas
- Incorporate this process into development and planning considerations for the Northeast Swale to increase local connectivity and promote wildlife corridors
- Inventory all City lands and rights-of-way to find opportunities for green infrastructure in currently unused sites
- Seek partnerships to create Indigenous Conserved and Protected Areas

Land Securement and Funding Strategy

The comments provided by participants for the Land Securement and Funding Strategy initiative were summarized into the following themes:

Costs: securing land can be expensive, especially when close to the City limits; however, these are important areas to secure

Immediacy: many respondents suggested that funding is needed for land securement currently and delaying further budgeting considerations until 2024 could result in numerous natural areas being lost; the City should actively seek out natural areas and secure them quickly

Protecting prairie features: one respondent suggested that environmental features (ex. swales, prairies, grasslands, etc.) within prairie cities are often viewed by land developers as grey scape since they are relatively easy to develop and do not provide the same visual aesthetics as a forest

Sustainability and development: participants stressed that development should not always be prioritized over protection; could Sustainability have the same level of access to City-owned land as developers; the value of carbon sequestration, water security, and ecosystem services could be leveraged when considering the development of natural areas

Participants provided numerous suggestions for partnerships within Saskatoon, which included the following:

- City of Saskatoon Long Range Planning
- City of Saskatoon Parks
- Meewasin
- Real estate organizations
- Saskatoon Land
- Saskatoon Water
- SOS Trees Coalition
- University of Saskatchewan

Suggestions for improving the initiative included the following:

- Change the processes and goals of development planning to include environmental considerations and the importance of natural areas
- Pursue the creation of an Urban National Park within the Northeast Sector that includes the Northeast and Small Swales
- Sustainability should participate in the P4G planning committee in order to properly engage in land securement
- Stronger policy direction is needed regarding the conservation of natural areas
- Use Brightwater as an example to follow
- Work closely with P4G Partners to incorporate best practises when possible

Green Network Restoration

Participants provided numerous suggestions for partnerships within Saskatoon, which included the following:

- City of Saskatoon Long Range Planning
- City of Saskatoon Urban Design
- Indigenous communities
- Meewasin
- P4G Partners
- SOS Trees Coalition

Suggestions for improving the initiative included:

- Determine how the Strategy syncs with the P4G regional plans
- Explore planting more woodlands near wetlands to encourage raising the water table

Sustainable Food Program

**Note: in Green Pathways, the Sustainable Food Program is called Pathway 5: Food Security from Seed to Table to Soil.*

Food Projects

The comments on Food Projects provided by participants were summarized into the following themes:

Combining permaculture, horticultural and urban agriculture: some respondents stressed the need to combine elements of urban agriculture and permaculture to create a more holistic understanding of food forests and food security; these two disciplines do not stand in opposition with one another, but rather can work in combination to provide residents with many different options for their yards; however, it should be recognized that neither practise will be able to consistently produce food for a community

Food forests: food forests are important green spaces that should be promoted and funded; one respondent suggested there should be greater promotion and production of Saskatoon berries within the city which would benefit local tourism; some participants stressed the need to incorporate the use of native plants whenever possible

Overharvesting: greater education and awareness is needed to promote sustainable harvesting within the community

Participants provided numerous suggestions for partnerships within Saskatoon, which included the following:

- CHEP
- Central Urban Metis Federation Inc.
- Indigenous communities
- Landowners/developers
- Permaculture Saskatchewan
- Residential community
- Saskatoon Indian and Métis Friendship Centre
- Saskatoon Tribal Council
- School divisions
- Urban agricultural groups

Suggestions for improving the initiative included:

- Convert brownfields, vacant lots, and unused spaces (ex. below electrical transmission lines) to pollinator gardens, food forests, and community gardens if soils are not contaminated
- Engage Indigenous communities and food security partners to restore degraded land
- Explore community greenhouses and cold rooms to produce and store food
- Explore the selling of food grown in community gardens and food projects
- Offer youth employment opportunities as part of this initiative
- Partner with schools to create food forests with students
- Partner with the City's ICI Organic Waste Diversion Program to provide compost and demonstrations to the community
- Perform an assessment of reclaimable food rather than food operations
- Soil testing must be completed for all gardening and food forest sites

Sustainable Food Action Plan

Participants provided numerous suggestions for partnerships within Saskatoon, which included the following:

- Farmers markets
- Food producers
- Local chefs and kitchens

Growing Community Program

**Note: in Green Pathways, the Growing Community Program is called Pathway 4: Growing Community for a Liveable City.*

Education and Awareness

The comments provided by participants for Education and Awareness initiatives were summarized into the following themes:

Existing resources: the City should explore educational resources that already exist through other organizations who have worked to validate conservation as a municipal concern; many environmental organizations are doing great work but they do not have the resources to educate at a larger level

Protection versus education: education will not be meaningful unless natural areas are protected; one respondent suggested that although education is important, there is also a need to protect natural areas and deciding the importance of each when resources are limited will be challenging

Participants provided numerous suggestions for partnerships within Saskatoon, which included the following:

- City of Saskatoon Communications and Public Engagement
- Meewasin
- Saskatoon Nature Society
- School systems
- University of Saskatchewan
- Wild About Saskatoon

Suggestions for improving the initiative included:

- Become leaders by seeking and piloting new community programs, such as community chicken co-operatives
- Clarify the City's relationship with Meewasin in conserving the river valley
- Offer funding to community groups for educational programming
- Offer school programs and camps that speak to the benefits of green spaces
- Partner with community groups to provide ecological literacy workshops for organizations, including the City of Saskatoon
- Partner with community organizations and associations to host events/opportunities that strengthen connections to local green spaces
- Provide community demonstrations of best practises, such as bioswales and native plantings

Grants and Incentives

Suggestions for improving the Grants and Incentives initiative included the following:

- Ensure offering incentives results in generating greater community uptake

- Incentives should be paired with funding, mentorships, and resources so actions are carried out in a meaningful way
- Provide additional funding support for smaller pilot projects

Community Stewardship Agreements and Projects

Participants provided numerous suggestions for partnerships within Saskatoon, which included the following:

- Heritage coordinator
- National Healing Forest Initiative for Truth and Reconciliation
- Saskatoon Nature Society Young Naturalist Program
- School systems
- University of Saskatchewan

Suggestions for improving the initiative included:

- Develop stewardship/ambassador programs for specific natural areas with the surrounding schools
- Encourage pollinator gardens that increase an abundance of microhabitats
- Engage schools to encourage public education and awareness
- Explore digital methods of educating the community, such as apps
- Explore pocket parks and community greenhouses in downtown, low-income, and congested neighbourhoods
- Incorporate community stewardship programs into the school curriculum
- Model school stewardship programs from the Destination Conservation Program that was offered by the Saskatchewan Environmental Society
- Model stewardship programs on the Crime Prevention Through Environmental Design program to encourage community stewardship
- Offer stewardship programs for student service hours
- Providing funding and staff support for stewardship programs in important green spaces

Natural Areas Education

Participants provided numerous suggestions for partnerships for Natural Areas Education, which included the following:

- Meewasin
- Saskatoon Nature Society
- School systems
- South Saskatchewan River Watershed Stewards
- University of Saskatchewan
- Wanuskewin
- Wild About Saskatoon

Suggestions for improving the initiative included the following:

- Combine funding with partners to draw connections between numerous environmental themes and projects

- Every project must have a youth component to encourage greater uptake and create legacy projects
- Fund already existing programs and organizations that are already doing this work
- Explore natural playgrounds and the value in naturalizing areas around playgrounds by using the Prairie Habitat Garden as a model
- Partner with Indigenous Elders to provide their expertise and knowledge
- Provide a list of the initiatives the City is looking to fund or support and allow community organizations to show what they are interested in partnering with the City on

Final Considerations

Numerous respondents provided their final comments on the Green Infrastructure Implementation Plan, which were categorized into the following themes:

Continued engagement: continued engagement on the Strategy and the proposed actions is necessary if the Strategy is to be implemented in a successful way; things could start to crumble if the community is not re-engaged and included in future discussions on what improvements can be made

Engage developers: respondents suggested that developers need to be included in engagement activities and program considerations to generate greater uptake; the City needs to improve and strengthen their relations with developers to improve the City's education efforts and ensure both parties listen to one another

Lofty goals: City Administration and Council have made lofty goals for numerous sustainable initiatives and some respondents expressed their confusion as to why they are not being acted on

Proper funding required: respondents stressed that to meet the goals set by the Strategy, proper and continued funding is required; it was suggested that proper funding allows City divisions to move more swiftly with initiatives that address immediate environmental concerns

Set expectations: many respondents stressed the need for Sustainability to strongly adhere to following the projects/policies/bylaws that they are establishing and not allow elements to be changed based on furthering development; it was suggested that many departments within the City set expectations that other departments have to follow, which should be the same for Sustainability initiatives; some respondents felt that developers can often bypass levels of protection for natural areas

Triple bottom line: the process for conducting a triple bottom line analyses should be shared with the public; how is the City ensuring that all applicable projects are advised by a triple bottom line assessment

2.3 Land Developers Workshop

A workshop for land developers was held on February 23rd, 2022 to collect feedback on the proposed initiatives within the Green Infrastructure Implementation Plan. The virtual workshops included a short presentation that introduced the programs and initiatives being proposed in the Implementation Plan followed by a series of facilitator-led discussions. A series of Google Jamboards, highlighting each program within the Implementation Plan, were used to record

discussions and to allow participants the opportunity to provide their comments following the workshop.

2.3.1 Intended Audience

The workshops were intended for land developers who were identified with the assistance of the Saskatoon and Region Home Builders Association.

2.3.2 Marketing Techniques

The following marketing techniques were employed:

1. City Website
 - a. Updates to the Engage Page were made to encourage participation in the online survey.
2. E-invites
 - a. Personalized emails were sent with the help of the Saskatoon and Region Home Builders Association asking them to participate

2.3.3 Analysis

Mixed methods were used to analyze the data. Qualitative methods included the thematic analysis and open coding of responses.

2.3.4 What We Heard

Demographics

A total of 14 representatives from a variety of land development organizations participated, including:

- Arbutus Properties
- Boychuk Investments
- Catterall & Wright Consulting Engineers
- Dream Development
- North Ridge Developments
- Pinter and Associates Engineering
- Saskatoon and Region Home Builders Association
- Saskatoon Land
- Victory Majors Development Corporation

Green Infrastructure Development Considerations

Numerous developer considerations were provided by participants, which were summarized into the following themes:

Balancing development and environment requirements: developers often look at the trade off between the net developable area versus the area that is designated for other uses to determine whether a piece of land is beneficial to develop; the margins get thinner as more natural areas are encountered; much more work goes into the planning around green spaces, such as routing service lines, which complicates things

Change only when needed: one respondent stated that policies such as the Wetland Policy are still fairly new and may still be effective, so it may be best to continue with them until further problems are identified

Consistency: the initiatives need to work in conjunction with other City policies and initiatives to ensure consistency is maintained for developers; ensure that the changes being implemented are actually needed to improve processes and policies rather than hinder development overall

Costs: it will be difficult for developers in a new area to pass the costs of initiatives and programs (ex. dark sky lighting, stormwater mitigation, etc.) onto future home purchasers; it was identified that the costs in maintaining the surrounding natural areas will inevitably get passed to the developers and taxpayers

Designations: if developers are expected to provide additional infrastructure around green spaces, extend city services, while also providing land dedication without any incentives, it could greatly impact their financial performance; once sites are designated for environmental or recreational opportunities there needs to be better communication between the City and developers and more flexibility if this designation changes due to funding or other considerations

Flexibility: developers need to be flexible in their planning and designs to account for the changing conditions of the land and environment; if development plans are too restrictive then neighbourhoods become less efficient and include unnecessary infrastructure to mitigate problems that could have been avoided

Holistic planning: some respondents stated that the environmental considerations of a site need to be incorporated at the onset of the planning stage to efficiently design neighbourhoods that properly account for and mitigate potential issues; incorporating smart growth principles into neighbourhood planning improves the efficiency of infrastructure and minimizes the tax burden on future residents; accounting for the hydrology and local topography of an area is vital in ensuring a neighbourhood drains effectively; incorporating the surrounding wetlands into the stormwater management planning is critical for ensuring proper hydrology is maintained over time; the same could be applied to accounting for the connectivity between green spaces

Interested in case studies: many developers are interested in learning from past developments that have successfully incorporated and considered green infrastructure within their development plans (ex., Brighton neighbourhood as a case study for the Wetland Policy)

Maintaining density targets: participants stated it can be challenging to maintain density targets (i.e., eight units per acre) while accounting for protected areas without overtaking the area with multi-unit housing; the Strategy and other green initiatives need to balance expectations outlined in the Official Community Plan to meet the required density targets

Small green spaces: smaller green spaces can be challenging to account for during the design process, especially when trying to maintain connections between it and other green spaces; their value must be emphasized during the design stage for developers to fully understand why they should be protected; if there is a benefit in protecting a natural area for the neighbourhood and City, then developers will look to account for them within their design stages

Suggestions for Improving Uptake

Suggestions provided by participants for improving the Implementation Plan to help increase uptake amongst the develop community include the following:

- Introduce more flexibility when working with land developers during the development of neighbourhood designs
- Maintain consistency across all development policies and requirements
- Provide case studies of successful developments that integrate natural areas and connect green spaces successfully and sustainably
- The City and land developers need to work more closely together throughout the neighbourhood design process
- The City should provide information to developers on the importance/significance of natural areas within a future neighbourhood for developers to understand its value

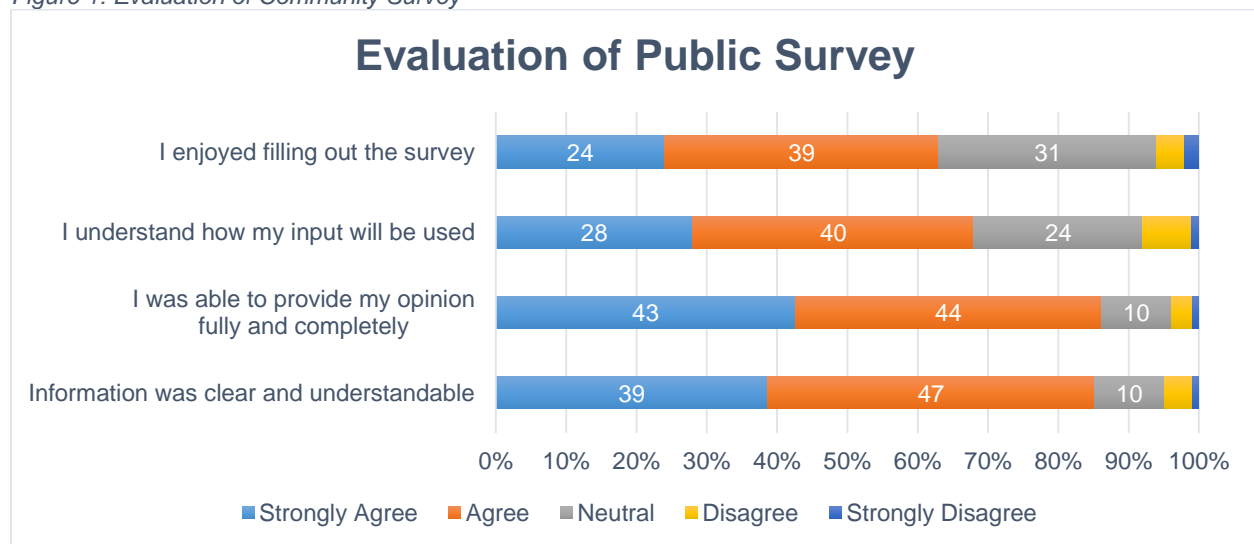
3 Evaluation of Engagement

Evaluation is discussed in terms of feedback received during engagement activities and through informal comments, data limitations and opportunities for improvement.

3.1 Survey Evaluation

Participant evaluation through the survey indicated support for both the level of engagement conducted and the opportunities provided. 86% of participants agreed or strongly agreed with the information that was provided being clear and understandable, with 87% feeling they were able to provide their opinions fully throughout the process.

Figure 1: Evaluation of Community Survey



Comments provided by participants were supportive of the process:

“The educational element of this survey is impressive: integrating Indigenous uses per our place on Treaty 6 territory can only benefit a healthy society.”

“Thank you for doing this work. I appreciate being consulted but don’t know enough about all the issues to prioritize. I would defer to the experts.”

“Thank-you for bringing these programs to my attention. In many ways I thought that they were already part of the City’s planning and policies.”

Some respondents provided their criticisms for the survey, especially on its length:

“This survey is far too long and extremely detailed. Perhaps it should be broken down into smaller steps?”

“Was longer than I expected. A lot of information.”

“It was difficult to find and I have seen NO advertising about it, so I really hope folks who care find it and take the time to wade through it. it is extremely dense with many tangents (info links) where one could get lost.”

“I love completing these surveys, however I worry about how someone with a lower educational

background or someone who speaks English as a second language would fair with the survey. The language used in the survey is written at an academic level and not all residents would be able to participate in the survey.”

3.2 Informal Feedback

Informal feedback was received through meetings where participants indicated that they appreciated the continued engagement throughout the COVID-19 pandemic. Many participants supported the City’s effort in developing the Implementation Plan, stressing the importance of the proposed initiatives for the future of Saskatoon’s sustainability efforts.

3.3 Data Limitations

Due to the public health orders related to the COVID-19 pandemic, all engagement activities for this project were conducted virtually. Virtual engagement has limitations, primarily by limiting accessibility for those without internet access or with limited computer literacy and by enabling greater accessibility to those who are more active online. Multiple avenues were available for the public to provide their input and mitigate the inability to conduct in-person activities; however, engagement practises and procedures were limited due to the COVID-19 pandemic, especially in conducting physical meetings with the community. Additional considerations for low-income, Indigenous and residents who are structurally excluded will need to be incorporated into future engagement opportunities.

The COVID-19 pandemic also shifted the priorities for many people, resulting in numerous participants being unable to participate in our engagement process due to more pressing concerns. Therefore, some participants may not have been able to fully participate in the engagement activities conducted; however, the results are considered to provide the best available indication of how participants perceive the Implementation Plan at the time.

Although our goal was to prioritize the programs and initiatives within the Implementation Plan, it was clear that many participants had difficulty doing so. All of the proposed initiatives were strongly supported ($\geq 80\%$), with many of the initiatives receiving equal support; therefore, it is difficult for the project team to prioritize the initiatives based on the feedback received. One reason for all initiatives receiving such strong support could be due to past engagement activities that had already refined the Implementation Plan to include only those initiatives that were identified as important by the community and subject matter experts. Numerous participants identified that they had difficulty prioritizing the initiatives because they wanted all the initiatives to be implemented urgently to combat the further degradation of natural areas and green spaces in Saskatoon.

“I feel like I am watering down my level of support by selecting ‘Strongly Support’ for everything, but I truly feel this way.”

“To help with prioritization, I think more ‘select top 3 options’ should have been included. I feel strongly about the green infrastructure initiatives, but some issues (like indigenous consultation, naturalization and sustainable food systems) I view as more urgent since they form the basis for long-term sustainable growth. This was hard to express directly in long lists asking if I supported a wide diversity of green initiatives.”

This may have also been due to the difficulty in comparing initiatives without the proper knowledge and experience of the following:

- The potential impacts to the community

- The difficulty to implement them
- Their correlation with other City and sustainable initiatives within Saskatoon
- Their potential benefits.

Although the strong support for all initiatives may have limited the prioritizing of initiatives based solely on the engagement data, its combination with best practise research from other municipalities and internal considerations allowed for this to still be achieved.

3.4 Opportunities for Improvement

Based on participant feedback, the following opportunities for improvement will be considered for future engagement activities:

- Any written or verbal information uses plain language and easy-to-understand terms
- Considerations for engaging with low-income, Indigenous, renters and equity groups needs to be incorporated into future engagement opportunities
- Educating the community on the importance of natural areas and green spaces should be a priority for future awareness campaigns
- Steps should be taken to explore virtual options for workshops, which are an important tool for engaging communities

4 Next Steps

The next steps for the Green Infrastructure Implementation Plan are described below:

Phase 1: Prioritize Initiatives

- Present the proposed initiatives for prioritization
- Identify program elements that enhance opportunities and limit barriers
- Identify missed opportunities

Phase 2: Close the Loop

- Share relevant components of the Implementation Plan to identify concerns and validate priorities

Report to City Council

- The Implementation Plan will be presented to City Council in 2022