

Green Infrastructure Strategy

Engagement Summary
January 29, 2020



Engagement Summary

The purpose of the Green Infrastructure Strategy is to establish the vision, actions, and implementation framework to enhance Saskatoon's Green Network by integrating green infrastructure into land use planning and asset management.

Engagement for the Strategy included 3 phases:

- Phase 1: Seed - Our Current Situation
 - The [Green Infrastructure Strategy Baseline Inventory Report](#) was published in May 2018 and outlined 10 Guiding Principles and 25 Key Findings (vulnerabilities) in the current green network.
- Phase 2: Growth
 - The engagement goals for this phase were to provide opportunities for participants to acknowledge and understand the Strategy, the Guiding Principles and Emerging Priorities, and to inform development of a vision and identification and selection of actions to help address some of the green network key findings.
- Phase 3: Bloom
 - This phase includes planning and implementation of the selected actions that comprise the Strategy.

This engagement summary includes the activities and results that informed the Phase 2: Growth engagement goals. A total of 699 participants took part in engagement activities (including education campaign, meetings, workshops, surveys and pop-ups) between October 2018 and November 2019. Overall, participants expressed support for the Green Infrastructure Strategy actions and initiatives.

A summary of engagements goals, intended audience, activities, dates, participation rates and detailed engagement results are provided in the [Green Infrastructure Strategy Comprehensive Engagement Report](#).

Engagement results from all activities that informed each goal are summarized below.

Acknowledge & Understand the Strategy & Guiding Principles

Acknowledgement and understanding of the Strategy and guiding principles was informed using input from participants from all engagement activities. A total of 144 residents, natural area users and key stakeholder groups provided input during the following activities which were designed specifically to inform this goal:

- Education Campaign
- Pop-up Events
- Meetings

Participants throughout all engagement activities demonstrated varying degrees of understanding regarding how the Guiding Principles were meant to be used and what the Strategy would aim to accomplish. The majority of comments received were focused on specific Strategy components or topics relevant to the participant and it was unclear if the public understands the purpose of the Strategy as a whole.

A list of recurring themes and areas for improvement related to public understanding included:

- Clear Language Usage
 - Several components or terms used early in engagement were either too vague or may have a different meaning to different people in different situations. These included words like “biodiversity”, “natural” and “heritage”.
 - Overly technical or complex language or concepts (such as Low Impact Development and natural capital asset valuation for example) also caused concern, indicating that participants were not confident that they fully understood the Guiding Principles or Emerging Priorities.
- Level of Impact
 - Because the actions and initiatives were introduced at a “strategy level” it was challenging for some participants to determine if and how they may be impacted by the Strategy.
- What it means to be “Green”
 - Some participants thought the Strategy would include discussion of all things “Green”, meaning sustainable or environmentally friendly, and questioned why single use plastics, composting and active transportation were not included.
- Concurrent Initiatives
 - Several comments reflected topics related to other concurrent initiatives at the City of Saskatoon that were featured in the media around the same time. These include budget deliberations, curbside waste discussions, bike lanes, single-use plastics, Low Emissions Community and Bus Rapid Transit.

At the conclusion of the engagement program, during the Our Green Network Event, questions asked during the presentation suggested that, while participants support the recommended actions of the Strategy, there is concern regarding the perceived level of influence or “teeth” the Strategy would have in future decision making processes. Participants felt that a “Strategy” would not achieve the same level of influence that a Policy or Standard could achieve.

Vision and Actions Identification and Selection

Identification and selection of the green network vision and actions were informed using input from 491 participants as part of the following engagement activities:

- Green Strategy Workshop 2
- Shaping a Natural Community Workshop
- Green Strategy Options Identification Survey
- Growing a NatureCity Workshops
- Meetings
- Our Green Network Event

Stakeholder groups engaged to inform this goal included:

- Subject Matter Experts
- Residents and Natural Area Users
- Key Stakeholder Groups
- Technical Advisory Groups

Engagement results, summarized below, informed identification of green network baseline conditions (Our Current Situation), visioning and mapping, and identification and selection of preferred actions.

Our Current Situation

The 64 participants from Green Strategy Workshop 2 were invited to review the Natural Areas mapping and provide comments or corrections related to boundaries, current land uses and missing green spaces that should be designated as Natural Areas.

Visioning and Mapping

Input from 300 participants from Green Strategy Workshop 2, Shaping a Natural Community, Growing a NatureCity and meetings with the Indigenous Technical Advisory Group, Meewasin, University of Saskatchewan and Wanuskewin helped to inform visioning and mapping.

Recurring themes related to values and gaps in the green network related to visioning and mapping are summarized below.

Socio-cultural Value

In addition to ecological and economic indicators, socio-cultural indicators are also important components of the vision for the green network and should be infused in planning and implementation of the Strategy.

Definition and Clarity

The Strategy should provide standardized definitions for key subjective terms to set clear expectations, goals and targets that cannot not be left to interpretation.

Urban Agriculture

Some participants urged for community gardens, private gardens and edible forests to be considered part of the green network and inquired how the Strategy would support urban agriculture initiatives. Other were not supportive of including urban agriculture in the Strategy.

Soil Health

For emerging priorities like afforestation, naturalization and biodiversity to be successful, we need to ensure that there is adequate soil health enhancement and maintenance in addition to access to sufficient clean water.

Connectivity

Connectivity is important and was described in terms of wildlife and plant connectivity as well as human connectivity including access to natural areas, connection to nature and sense of place.

Economic Sustainability

Financial implications for taxpayers as a result of the Strategy must be considered, however, monetary value should not be the only consideration in green network visioning. Actions that would be relatively low cost or no cost were preferred in comparison to other more costly alternatives. However, participants appeared to be more willing to invest in actions with high impact or those that would address the largest gaps.

Sustainable Governance

There is a general mistrust in the City's decision-making processes, including the influence of competing City initiatives and ability of the project team to create change given current governance models. Participants suggested that City Council and Senior Management must adopt and mandate infusion of the vision into all aspects of decision making across the City. Participants identified a need for the alignment or prioritization of the City's Strategic Goals, noting that the following goals conflict the City's Environmental Leadership goals:

- Recreation facilities/park space per capita
- Implement strategies to encourage downtown and infill development, including development process initiatives and financial incentives.
- Proactively prepare concept plans for urban development including a new sector plan with the University of Saskatchewan.
- Storm water management needs were also identified as a potential conflict with protection of natural wetlands.

Distribution

Participants noted a lack of green space and natural areas in the west and northwest portion of the city and recommended that resources are allocated to improve distribution in this region through conservation of existing natural areas within and outside City boundaries (West Swale for example) and exploration of opportunities to add new green spaces.

Identification and Selection of Preferred Actions

A total of 28 participants from the Shaping a Natural Community workshop and Options Identification Survey in addition to participants from internal engagement activities were asked to identify possible and preferred actions to implement as part of the green strategy. A list of over 150 potential actions was compiled and analysed by the project team for themes or "Emerging Priorities". The emerging priorities were shared with the Indigenous Technical Advisory Group, and 388 participants from the Growing a NatureCity workshops and Emerging Priorities Survey for feedback. Participants indicated some additional actions or considerations in response to the emerging priorities. Results of both the actions identification and emerging priorities activities are provided below.

Identified and Preferred Actions

Actions were identified by participants to address the key findings from the Baseline Inventory Report as part of the Shaping a Natural Community Workshop and Options Identification Survey. A complete list of identified actions is available in the Green Infrastructure Strategy Engagement Report. Participants were asked to identify their preferred actions from the list they provided. Preferred actions categorized into key finding themes are listed below.

Governance

- Formalize Administration and Council's commitment to protect or enhance the green network for the next 50 years through a resolution or similar.
- Develop acceptable limits for all pollution including light, noise, air and water to ensure the health of residents and wildlife.
- Improve protection of the urban forest by developing a private tree inventory, private tree bylaw and tree protection policy including post construction monitoring.

Land Allocation

- Design parks or green spaces with designated space for naturalized areas, conservation, source water and wetland protection in addition to active development space in a way that meets the needs of both adults and children.
- Develop a natural areas inventory for designation consideration.

Green Network

- Improve or maintain wildlife connectivity by installing wildlife or green bridges, corridors, culverts, green roofs and wildflower plantings in ditches, alleys and boulevards.
- Enhance connectivity and access between parks, schools, places of work, business areas and out of city trail systems and allow use of small electric vehicles in green spaces. Improve public transportation to green spaces and natural areas.
- Educate public about the importance of wetlands and all three swales
- Protect the urban forest by developing a tree inventory, increasing afforestation, and reducing stressors on trees to improve survival rates and preference pests.

Storm Water Servicing

- Reduce use of impermeable surfaces and increase use permeable surfaces.
- Conserve treated water by implementing simple grey water systems in residential /community areas that take advantage of the landscape to allow water infiltration, explore technologies for water conservation and reuse, treat only water intended for drinking, and collect and store storm water.

Heritage and Culture

- Protect built heritage in the core from unnecessary demolition.
- Develop or promote place based and experiential learning opportunities.

Emerging Priorities Feedback

Participants from the Growing a NatureCity Workshops, Indigenous Technical Advisory Group and Emerging Priorities Survey suggested actions that should be included or considered as opportunities to help achieve the objectives of each emerging priority area. These suggestions are summarized below under the relevant emerging priority.

Biodiversity Action Plan

Participants envision the Biodiversity Action Plan as a tool to guide and monitor implementation of initiatives, however questioned what definition, tools and criteria would be used to measure biodiversity. Connectivity of natural areas was noted an important aspect of a Biodiversity Action Plan and participants mentioned that no space is too small when it comes to protecting biodiversity. Participants enjoy seeing a variety of birds and mammals, however protection of bee species appears to be a priority for many participants. Participants also want to see Indigenous knowledge, educational opportunities and protection/establishment of culturally important species incorporated into the biodiversity action plan.

Afforestation

Participant recognized the benefits that trees provide like shade and heat mitigation. They would like to see more native and fruiting species planted with a focus on parks, new areas, commercial and industrial areas, berms, and a buffer around the city. Participants would like to see more

communities of trees planted instead of rows. In order to increase planting, participants suggested that any development must be designed with spaces saved for trees. They would like to see more community volunteer opportunities created and suggested shifting the community tree planting program from an “opt in” service to an “opt out” service. In order to ensure the success of the program, participants also mentioned need for additional funding and maintenance. To promote tree planting on private property, participants also suggested incentives such as a free civic pass for every 10 trees planted.

Park Naturalization

Participant expressed support for connecting natural spaces by naturalizing medians, planting more native species and creating micro wildlife corridors for pollinators. They would like to see more protection and planting of flowers, fruiting trees, and shrubs in park spaces to attract wildlife and bees and create opportunities to connect with nature. Participants would like to see more naturalization in Beaver Creek and Brevoort Park specifically and protection of the Meewasin Trail.

While many participants supported a shift away from grass in parks and reduced maintenance needs it was noted that caution should be exercised with anti-grass messaging as more and more residents are shifting to alternatives like paving and artificial turf for landscaping.

Participants would like to see the introduction of natural play-scapes designed to integrate nature and recreation and mentioned opportunities to facilitate biocultural conservation models.

Bird Friendly Standards

Participants were supportive of both protecting and attracting birds, bats and pollinating insects to green spaces in the city and requested a ban on bio-accumulating pesticides. Adding bird and bat houses, feeders and nesting areas around green spaces were suggested along with back yard chicken coops. Participants would like to see more bird identification and protection information shared such as species information and bird strike prevention techniques for new and existing buildings.

Create New Open Spaces

Overall participants were supportive of creating new open spaces. Participants would like to see more green spaces that are connected with green corridors. More community gardens both indoors and outdoors were also suggested and vacant lots restored to green space to improve community safety and parking lots restored to green space to help encourage active transportation. Green spaces should include resilient plantings and there should be planting mandated on boulevards and easements.

Some participants felt that before creating more open space, the City needs to better maintain existing green spaces. Garbage, dog waste and lack of use of existing irrigation systems were mentioned as areas for improvement.

Participants identified the opportunity for Indigenous groups to both govern and provide land management of new open spaces. Lands could be managed using an approach consistent with the Indigenous Circle of Experts "we rise together" pathway document.

Renew Green Space

Participants acknowledged that some green spaces are deteriorating or underutilized. More watering in dry years was suggested along with additional funding for increased maintenance.

Participants suggested that green spaces should have purpose, such as areas for children to play, wildlife areas, organic gardens, and picnic areas and should incorporate trees, native grasses, bushes, flowers and naturalized areas that bring joy to people and support wildlife and pollinators. Green spaces should be connected to each other with naturalized corridors

Green space should remain or become affordable, accessible, safe and welcoming to all residents regardless of income level. The inner city was identified as an area where green spaces require attention.

Participants would like to see green spaces renewed in areas where people, especially children and Indigenous women, do not feel safe. Crime Prevention Through Environmental Design is one approach to improving feelings of safety in green spaces.

Natural Capital Asset Valuation

Participants suggested that components of the Natural Capital Asset Valuation could include a tree inventory and maps and valuation of wetlands services like biodiversity and water filtration.

Participants also felt that undertaking the valuation has the potential to be a very high cost and complex project. Participants questioned which value indicators would be used to make the valuation and suggested that they must respect all world views. Participants also expressed some concern regarding treating the land as an “asset” instead of a shared resource.

Tree Protection Update

Participants felt it was important to protect local species and aspen stands, and only remove trees that need to be removed for safety and pest management. Participants suggested that the city could make topiaries and should provide more information about tree planting programs for newcomers. While protection of trees was important to people, participants felt that development of a private tree bylaw would infringe too much on property rights. Participant suggested consideration of tree teachings, ceremony and tree spirits into tree protection.

Lighting Policy Update

Participants were supportive of the concept of putting light where it needs to be and suggested using interesting and artistic lighting, new technologies, solar lighting and warm colored or red LEDs to reduce light pollution, mitigate health impacts and improve the feeling of a space.

Urban Agriculture Plan

Participants would like to see more community gardens in underserved areas as they bring joy, nutrition, education opportunities and help to improve food security. They expressed interest in exploring more underused garden locations such as rooftops, boulevards, and apartment windows. To accommodate more urban agriculture, zoning rules would need to change to allow for backyard greenhouses and opportunities to sell what is grown. Participants asked for more fruiting trees in the city, especially native varieties. This would require removal of current barriers preventing fruiting trees and food forests.

While urban agriculture is important, some participants explain that community gardens and food forests are not enough and urge the City to develop a comprehensive local food strategy of which the Urban Agriculture Plan is a component.

Low Impact Development Implementation

Participants suggested that we should stop developing new neighbourhoods in swamps, use more bio-swales, and collect, store and use storm water for irrigation and fountains instead of using treated water for these purposes. Participants also suggested providing education around water filtration could be helpful. Soil management, water run-off and established, regulated wetland buffers were also listed as considerations.

Integrate Green Storm Water Infrastructure

Participants expressed concerns about flooding and suggested we stop directing rainwater into the sewer. Participants suggested that we design better water collection and drainage systems and develop policies and incentives to encourage green roofs, rain tanks and cisterns.

Where new infrastructure is required, retrofit it into existing developed areas and incorporate artistic designs into the infrastructure. If using storm ponds, ensure they are safe and if possible, where appropriate add in a solar pump and introduce fish to the pond.

Participants also identified a need for environmental impact assessment with storm water infrastructure developments or transparency when impact assessment is not used.

Strengthen Partnerships

Participants commented on the beauty of Wanuskewin and suggested educational initiatives to strengthen partnerships.

Participants explained that restoration needs to happen with Indigenous stewardship and suggested the City designate the Northeast Swale as an Indigenous Protected Conservation Area with assistance from Wanuskewin to help with biocultural restoration, conservation and protection.

Existing plans like Moriyama Plans and Meewasin were mentioned as partnerships or plans already in place that are working well and should continue and be recognized for their contributions.

Participants explained that partnerships are critical and suggested that exploring opportunity for partnership should be considered mandatory for all aspects of the Strategy. Others felt that the Strategy could be led by community partnerships, with the City contributing oversight only.

Participants also referenced the need to partner with residents and suggested there should be a consultation process for design of specific places.

Intangible Cultural Heritage Inventory

Participants enjoy participating in activities and community events in spaces like River Landing and would like to see more opportunities organized. They would like to see park and gathering spaces designed for cultural use and suggested exploring use of less structured parks with more “organic” elements.

Heritage, Culture and Reconciliation

Participants would like to see First Nations rights to enter land for fishing and hunting protected. They suggested working with elders and knowledge keepers to learn about how best to care for the land and documenting current land uses like berry picking and harvesting.

Participants appreciate the Moose Jaw Trail and suggested seeking more opportunities to incorporate stories of diverse peoples and their relationship to the land and space.

Participants from several engagement activities, but most notably the Indigenous Technical Advisory Group, suggested a different approach to discussion around connection, culture, heritage and reconciliation that is based in Story Telling.

The term “heritage” was rejected by several participants along with the concepts of “past and current culture”. Participants explained that culture is always evolving with no “then” and “now” so to only value or share culture based on historical events is not enough. Participants suggested framing heritage and culture discussions around telling the stories of how we all came to be here from several different perspectives told by and in the language of the story holders. Pieces of the story could then be told in and about our green spaces, natural areas and notable sites.

Emerging Priority Preference

A total of 187 participants responded to the Emerging Priorities for Saskatoon’s Future Green Network Survey to inform selection of preferred emerging priorities. Participants were asked to identify which of the Emerging Priorities were important to them as residents.



Most important: Afforestation, Park Naturalization, Low Impact Development Implementation, Biodiversity Action Plan and Integrate Green Storm Water Infrastructure were important to the greatest number of respondents with 86% to 90% respondents indicating that they these Emerging Priorities are important to them.

Least Important: Heritage, Culture and Reconciliation and Intangible Cultural Heritage Inventory were considered important by only 55% and 63% of respondents respectively. Heritage, Culture and Reconciliation was considered Not Important by 30% of respondents and 16% were unsure. Intangible Cultural Heritage Inventory saw nearly equal responses for Not Important (19%) and Not Sure (18%) indicating that additional information may be required regarding what this Emerging Priority would entail.

Emerging Priorities Survey and Growing a NatureCity participants were asked to select the 5 priorities they would most like to see implemented as part of the Green Strategy.

A total of 265 residents and green space users participated in prioritization exercises.

At least 40% of participants would like to see the following emerging priorities implemented:

- Biodiversity Action Plan
- Afforestation
- Park Naturalization
- Green Space Renewal
- Urban Agriculture Plan

Less than 25% of participants would like to see these emerging priorities implemented:

- Heritage, Culture and Reconciliation
- Natural Capital Asset Valuation
- Strengthen Partnerships
- Intangible Cultural Heritage Inventory

While Low Impact Development Implementation and Green Storm Water Infrastructure were considered important by more than 86% of Emerging Priority Survey respondents, when asked to prioritize initiatives, these two Emerging Priorities were selected by fewer than 26% of participants.

Heritage, Culture and Reconciliation and Intangible Cultural Heritage Inventory were considered important to the fewest number of Emerging Priority Survey participants and were also selected as priorities by fewer than 26% of participants.

When asked to explain why they selected the 5 Priorities they did, participants shared their decision-making process and justification for their selections which included consideration of:

- Greatest Impact
- Climate Change Mitigation or Adaptation
- Prerequisites that should be undertaken first to lead the way for other initiatives
- Balance between social, economic and ecological considerations.
- Low cost
- Immediate results
- Ease of implementation
- Focus on existing spaces in a way that maximizes maintenance of existing spaces
- Gaps that need to be addressed

The Emerging Priorities selected by participants who indicated use of specific decision-making indicators were counted. The Emerging Priorities selected by the most participants based on each decision-making indicator were also noted.

Biodiversity Action Plan was among the emerging priorities that received the largest number of selections in relation to the greatest number (5) decision making indicators which included greatest impact, prerequisite, immediate results, easy and focus on existing space. Park Naturalization and Urban Agriculture Plan were each among the highest number of selections for three decision making indicators including prerequisite, easy and focus on open space.

Consideration of results

The vision of Saskatoon's green network is to provide sustainable habitat for people and nature. To achieve this vision, the Strategy identifies a combination of actions initiatives for future implementation categorized under five broad themes including community, governance, open space, ecology and storm water. Public engagement informed selection of the actions and initiatives in each theme in the following ways:

Community

We heard from the Indigenous Technical Advisory Group that stories, including the way we write and share them, are important. Initiative 1.4 "Work with the community to tell the story of Saskatoon's Green Network from many voices through public art, interpretive features, and other mediums" was added to reflect what we heard.

During all engagement activities, the need for consideration of equity and inclusion in all Green Network design was expressed. Initiative 1.3 "Continue meaningful engagement with affected groups to design the Green Network through an equity and inclusion lens" was added specifically to address this need.

The Saskatoon Food Council, among other groups, has recommended the need for a city-wide food strategy which we have captured in Initiative 3.2 “Work with partners to develop a comprehensive food strategy, including implementation of the Saskatoon Regional Food System Assessment and Action Plan”.

Several engagement participants urged the City to provide support and resources to community groups or organizations who are already managing and enhancing aspects of the green network effectively. Action 2 “Inspire citizen-driven transformation of the Green Network” was added to address this opportunity.

Governance

Many stakeholders expressed concern that data pertaining to green network planning wasn't transferrable across multiple groups. Initiative 4.4 “Compile data sets across the City of Saskatoon for more effective data management, and create data sharing agreements with other agencies” was added to help address this barrier.

We heard that co-management of natural areas with Indigenous groups was an opportunity we should explore further so we added initiative 5.4 “Partner with Indigenous communities and organizations to explore traditional land management and governance models for the Green Network”.

We heard from Wanuskewin that establishment and conservation of the park's view shed, captured in initiative 5.3 “Work with Wanuskewin to conserve their viewshed and support management of Opimihaw Creek”, was important for many reasons.

Action 6 “Redefine the partnership with Meewasin to achieve collective goals related to conservation, education, and development in the Green Network” and its initiatives were designed in partnership with Meewasin. Support for more collaboration with Meewasin was expressed by participants in several engagement activities.

Open Space

Action 9 “Increase walkability and active transportation throughout the Green Network” was added to address stakeholder concerns related to accessibility and connectivity barriers in the green network specifically around active transportation. The need for protection and growth in the urban forest (Action 10) was mentioned by several participants in all engagement activities.

Ecology

We heard in all engagement activities that protection of natural areas was important to participants. Action 11 “Protect, restore, and manage significant natural areas” initiatives explore protection of natural areas through various approaches. We also heard that development of a biodiversity action plan should be a priority for the Strategy. As such, it was included as a function of Actions 11 to 13.

In all engagement activities, participants noted the importance and benefits of incorporating native species into plantings, especially in relation to creating pollinator habitat. This was captured in Initiative 12.3 “Increase the City's use of native species in restoration and naturalization work”.

Storm Water

Stakeholders expressed a need for engagement with local organizations to identify natural and heritage resources as part of storm water planning. Initiative 14.4 “Consult with affected

organizations when designing storm water infrastructure to mitigate impacts to natural areas and cultural assets within the watershed” formalizes this request.

We heard that some of the City bylaws contradict green infrastructure objectives, making it more difficult to add or retrofit with green infrastructure. Initiative 15.3 “Update bylaws and regulations to allow more permeable surfaces” would address this issue.