

Natural Area Management Plan Pilots – Small Swale and Richard St Barbe Baker Afforestation Area

ISSUE

Natural areas provide important services to Saskatoon: they connect residents to nature, store carbon, provide habitat for species at risk, and are essential for storm water management. However, many natural areas are not currently managed, which creates a risk that these services will be lost. [Pathways for an Integrated Green Network: An Implementation Plan for Saskatoon's Green Infrastructure Strategy](#) (Green Pathways) describes a natural areas program which is now under development, which functions to protect, manage, and restore Saskatoon's natural areas. A key step in this program is the preparation of management plans for unmanaged natural areas that incorporate a natural asset management approach. This report seeks approval to proceed with the preparation of pilot management plans for two unmanaged sites: the Small Swale, and Richard St Barbe Baker Afforestation Area (RSBBAA).

RECOMMENDATION

That the Standing Policy Committee on Environment, Utilities, and Corporate Services recommend to City Council that Administration proceed with the development of pilot management plans for the Small Swale and Richard St Barbe Baker Afforestation Area through the process outlined in this report.

BACKGROUND

At its meeting on May 4, 2020, the Standing Policy Committee on Environment, Utilities, and Corporate Services received the [Natural Capital Asset Valuation - Pilot Project Update](#) report as information.

At its meeting on March 1, 2021, the Standing Policy Committee on Environment, Utilities, and Corporate Services received the [Inquiry on Swale Education, Communications and Partnerships](#) report as information, and resolved in part:

That the reporting on implementation plan for the Green Infrastructure Strategy include specific consideration of the collaborative work of administrative departments to protect the Swale and Small Swale as important and valued natural assets in our city.

At its meeting on December 7, 2021, the Standing Policy Committee on Planning, Development, and Community Services received the [Richard St. Barbe Baker Afforestation Area – Information on Work Plan and Funding Source for Management Plan](#) report as information and resolved that the information be received. The report identifies a management plan for RSBBAA as a potential part of the Natural Areas Program work plan.

At its regular business meeting on June 27, 2022, City Council approved *Green Pathways*.

At the 2022-2023 Business Plan and Budget Deliberations, the Natural Area Management Plan – Templates and Pilots, and Natural Areas Policy and Process Development projects were presented as a [combined Business Plan Option](#) and received funding to proceed in 2022-2023.

Engagement

From June 2021 to February 2022, Administration engaged with the community on Green Pathways. The [Final Engagement Report](#) found that overall, the community strongly supports (>80% of participants) all Green Pathways initiatives, with the strongest support received for the Natural Areas Program (96%). Participants stressed the importance of implementing levels of protection for natural areas and called on the City of Saskatoon (City) to be more aggressive in conserving green spaces through new policies and regulations. Numerous respondents expressed their concern for Northeast and Small Swales and called for the need to protect and conserve these natural areas.

Various past engagement events also indicate a strong public interest in protecting and managing the Small Swale and RSBBA. For example:

- On June 21, 2021, a public information session was held to provide information about the [University Heights Neighbourhood No. 3 Natural Area Screening Report](#). At that event, public feedback was received indicating a strong interest in protecting and managing the Small Swale. This feedback is summarized in the subsequent [Engagement Report](#).
- Stakeholder engagement on the Blairmore Sector Plan held during the summer of 2022 indicates significant interest in having the RSBBA area be conserved.

DISCUSSION/ANALYSIS

This project is the first phase of the City's natural areas program, which works towards protecting, managing, and restoring natural areas and assets in the green network. The projects address the following actions from Green Pathways:

- Action 1.1: Protect prioritized natural areas through policies and processes.
- Action 1.2: Manage and restore natural areas through Natural Area Management Plans.
- Action 1.4: Integrate natural assets into the City's asset management system.

Natural areas in Saskatoon include defined sites like the Northeast Swale, the river valley corridor, naturalized parks, as well as approximately 2,500 hectares that are not within a managed urban green space. Natural areas have the potential to provide significant value to the City and community by connecting residents to nature, supporting storm water management, and improving climate resilience. Saskatoon's unmanaged natural areas already provide some services but in an informal way and with no guarantee that these benefits will be maintained and supported into the future.

Unmanaged sites with no assigned service level or resources cannot fully achieve these benefits and are not guaranteed to be maintained or conserved. The development of management plans for unmanaged sites is a significant step in addressing risks and achieving the full potential of these spaces.

Natural Area Management Plan

This report addresses the preparation of management plans for the two proposed areas. Implementation and ongoing maintenance of the natural areas would be the subject of future reporting.

A Natural Area Management Plan (NAMP) defines the vision, management objectives, desired levels of service, and operating and maintenance needs for a natural area. A new NAMP template is being created, which will build on previous work such as the [Northeast Swale Resource Management Plan](#) and [Northeast Swale Development Guidelines](#), while incorporating an asset management framework to allow financial implications of management to be clearly articulated and connected to service levels.

Applying an asset management framework to natural areas will help to connect the City's investments in natural areas with services and progress towards achieving our strategic goals. Natural asset management is a new approach for the City, and indeed for municipalities across Canada, and so management plans for the Small Swale and RSBBA will proceed as pilots so that this process can be better understood, and compared with existing management plans like the [Meewasin Valley-wide Resource Management Plan 2017-2027](#) and [Northeast Swale Resource Management Plan](#) before applying this approach to other natural areas in Saskatoon. Following the pilots, the NAMP template would be updated to address lessons learned and will be incorporated into the overall Natural Areas Program delivery.

Deliverables and Site Selection

Deliverables of the project include the development of management plans for the Small Swale and RSBBA. It will also include the development of options for site enhancements at each site with phased options for delivery. Implementation of site enhancements would be the subject of future reporting.

To identify the potential sites for management plan pilots, the list of natural areas that were identified in the 2019 [Natural Areas Inventory](#) was reviewed. From this inventory, the Small Swale and RSBBA were selected as priorities for the management plan pilot due to their high level of ecosystem services, and other criteria described in Appendix 1 – Selection of Sites for Natural Area Management Plan Pilots.

Related Work

Work related to the management plan pilots includes a Natural Area Policy and Process Development Project, and a Traditional Land Use and Knowledge Assessment Project. Project updates will be brought forward to City Council at a later date.

FINANCIAL IMPLICATIONS

Funding for NAMP Preparation

Capital funding of \$595,000 in 2022, and \$405,000 in 2023, for the *Natural Area Management Plan – Templates and Pilots* and *Natural Areas Policy and Process Development* projects, was approved at the 2022-2023 Budget deliberations and is available through the *Green Infrastructure Strategy* (P.02390). Additional funding of \$240,000 for the development of the management plan pilots is available through the *Watershed Management and Assessment Program* (P.02263). An additional \$20,000 is available through *Corporate Asset Management Capacity* (P.10043). The budget for the *Natural Area Management Plan – Templates and Pilots* project is shown in Table 1. The remainder of the capital funding is allocated to the *Natural Area Policy and Process Development* project.

Table 1 – Budget for the *Natural Area Management Plan – Templates and Pilots* Project

Project	Cost Centre/Project or Budget Source	2022-2023 Approved Funding
Natural Area Management Plan – Templates and Pilots	Green Infrastructure Strategy P.02390	\$492,000
	Watershed Management and Assessment Program P.02263	\$240,000
	Corporate Asset Management Capacity P.10043.	\$20,000
Total		\$752,000

The operating impacts of implementing management plans for the Small Swale and RSBBA are currently unknown and will be identified through the management plan pilots.

Earlier work on the NCAV pilot project includes findings on both the Small Swale and RSBBA. The valuation found that Small Swale provides an estimated \$731,000 per year in ecosystem services, and the RSBBA provides an estimated \$347,000 per year in ecosystem services.

OTHER IMPLICATIONS

Planning Implications

Past studies and reports recommend that the Small Swale be conserved. A natural area screening, which completes an inventory and analysis of an area’s ecosystems, has been prepared for the University Heights Neighbourhood No. 3 (UH3) Study Area, and it recommends that the Small Swale be conserved.

Meewasin’s Northeast Policy, which City Council endorsed at its regular business meeting on May 25, 2015, states:

- 11.1. The extent of the Small Swale, including appropriate setbacks shall be delineated utilizing a similar methodology to that used to delineate the Northeast Swale including consideration of geology, hydrology, topography and ecology.

- 11.2. The portion of the Small Swale within the City of Saskatoon corporate limits should be public land and part of the Meewasin Valley.
- 11.3. Only improvements that conserve and/or restore the natural and cultural heritage resources or enhance the recreation and educational use of the Meewasin Valley will be allowed within the Small Swale.

The Small Swale does not yet have a formalized boundary and the surrounding UH3 neighbourhood does not yet have an approved concept plan. Preparation of the management plan will include coordination with the upcoming UH3 Concept Plan, including consideration of boundaries proposed through that process. The University Heights Sector Plan recommends additional study prior to development happening in the area of the Small Swale. The information acquired through this management plan pilot will help inform future development and improvements that could be considered for the area.

It is anticipated that the RSBBA will be recommended for conservation and its boundary defined, in the forthcoming Blairmore Sector Plan amendment.

National Urban Park Feasibility Study

At its regular business meeting on August 30, 2021, City Council received the [Meewasin Updates - Capital Campaign, Funding Request and Urban Park Feasibility Study](#) approval report and moved, in part:

that the City of Saskatoon be an active partner in collaboration with Meewasin on the recently announced feasibility study for an Urban Park model in Saskatoon

The Feasibility Study is still in early development, but Administration is monitoring the potential alignment of the Natural Areas Program with this work.

Environmental

The Small Swale's wetlands and grasslands store approximately 82,900 tonnes of CO₂e. Wetlands, forests, and grassland in RSBBA store approximately 54,081 tonnes of CO₂e. For scale, 2021 annual corporate emissions for solid waste were 94,100 tonnes of CO₂e and Water and Wastewater emissions were 50,400 tonnes of CO₂e. Removal, degradation, or destruction of wetland, forest or grassland ecosystems risks adding naturally stored carbon back into the atmosphere, in addition to depleting biodiversity and impacting storm water management.

NEXT STEPS

Subject to approval of the recommendation, the development of management plan pilots will proceed as outlined in this report.

Engagement and Communications

Subject matter experts in natural areas management and conservation will be consulted on the content of the NAMP template. Additional engagement with rightsholders, user groups, adjacent communities, developers, and other stakeholders will proceed as part of the creation of the management plan pilots. A robust, multifaceted communications plan is being developed to support the Green Network Program.

External Funding Opportunity

The next phases of this work involve the implementation of the management plans and related site enhancements which are currently not included in this scope. The City has applied to the Infrastructure Canada – Natural Infrastructure Fund which could be a funding source for the implementation of site enhancements.

Operating Implications for the Small Swale and RSBBA

Operating impacts will be determined through this work and prepared for consideration for the 2024-25 Capital Plan and Budget process. This current phase of work does not directly result in operating impacts.

Natural Areas Program

For the 2024-2025 Capital Plan and Budget process, recommendations for the ongoing Natural Areas Program will be brought forward. This will include recommendations for the ongoing approach to natural areas prioritization, protection, and management for all of Saskatoon.

APPENDICES

1. Selection of Sites for Natural Area Management Plan Pilots

Report Approval

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