

TOWARD A GREEN NETWORK PLAN: Recommended Strategies and Policy Directions

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This capstone responds to *OurWinnipeg 2045's* policy direction to create a **master green space and natural corridor plan** and associated direction in *Complete Communities 2.0* and the *Winnipeg Parks Strategy*.

Create a master green space and natural corridor plan by-law that enables conservation, management, restoration, and enhancement of the inherent value and ecological functioning of parks, waterways, natural areas. Increase quantity of such lands by 1,000 acres that can be accessed for recreation and connection of people with nature, as population growth occurs.
- *OurWinnipeg 2045* - 2.20

The functional demands of cities influence the design of their green spaces and networks. Over time, these forms evolve in response to the changing expectations assigned to them. This capstone considers the historical functions and forms of green corridors and networks in Winnipeg, connecting them to the city's current planning context. It also studies current green network plans adopted by Halifax, Saskatoon, and Edmonton to identify planning practices and strategies applicable to Winnipeg. These serve as valuable models, providing best practices to inform the development and implementation of a similar plan for Winnipeg. The study of these precedents is necessary to ensure that a future green space and natural corridors plan is effective and successful.

My research was guided by precedent study, reviewing planning documents to gather data and address my **research questions**:

1. How have the functions of green corridors in Winnipeg changed over time?
2. How have the functions of Winnipeg's green corridors influenced their form?
3. How can best practices developed elsewhere in Canada inform a future Master Greenspace and Natural Corridors Plan for Winnipeg?

My **findings** in response to research questions 1 and 2 identified several themes and trends based on the analysis of historical Winnipeg planning precedents. Winnipeg's green network grew more functionally diverse over the 20th century, reflecting positively on the flexibility of its form and its ability to accommodate new uses as the city's needs evolved, including **green infrastructure** and **active transportation**.

Ensuring the **accessibility** of Winnipeg's green network has been a priority of planners since the beginning. At the same time, the city's form has often constrained its green network, with development encroaching on rivers and preventing public access. In response, Winnipeggers have long demanded that the city acquire **riverbanks**, establishing continuous green corridors converging Downtown.

Halifax, Saskatoon, and Edmonton have recognized the diverse ways in which green networks contribute to the urban environment through the development and implementation of green network plans. My findings, in response to research question 3, identified several best practices in these planning precedents. These included the importance of: a **holistic** approach to planning; **sustainability** as a central concept; clear articulation of policy priorities; recognition of **cultural landscapes**; a **collaborative** approach to planning; and effective and **accountable implementation**.

Based on my findings, I recommend a set of strategic priorities and policies in support of Winnipeg's future green space and natural corridor plan.

Strategic Priorities and Policy Directions

Holistic

1. Develop a master green space and natural corridor plan by-law that is holistic and network-based in its planning approach.

Network

2. Establish Winnipeg's rivers and streams as the vital matrix around which to form its green network.
 - 2.1 Acquire parcels needed for continuous green corridors along rivers and establish guidelines and standards for green corridor development, maintenance, and level of service delivery.
 - 2.2 Integrate the Floodway and Birds Hill Park into Winnipeg's green network, working with the Province to develop the floodway's ecological functionality and opportunities for green infrastructure services and recreation.
3. Establish Winnipeg's Downtown with the Forks as the focus and point of convergence for the city's green network.
 - 3.1 Extend and connect green corridors and spaces Downtown, improving residents' access to the rivers and other destinations.

Sustainable

4. Approach planning through a sustainability lens to sustain a healthy and resilient urban environment and society, as called for by the United Nations Sustainable Development Goals (SDGs).
 - 4.1 Together with Indigenous Elders and organizations, incorporate Traditional Ecological Knowledge (TEK) into green space and natural corridor management and decision-making.



Green infrastructure

5. Manage and develop Winnipeg's green network as green infrastructure, enhancing its ability to deliver stormwater management, flood mitigation, and passive wastewater treatment, and other services wherever possible.
 - 5.1 Encourage the incorporation of green infrastructure technologies, including naturalized stormwater retention ponds, bioswales, rain gardens, and green roofs, in public and private developments through the provision of resources and incentives.

Accessibility

6. Ensure that green corridors provide opportunities for recreation and active transportation for all people, regardless of ability.
 - 6.1 Design and maintain active transportation routes and trails to allow universal access, eliminating barriers that prevent use by people with visual and mobility impairments, wherever feasible to do so.

7. Maintain active transportation infrastructure to a high standard, encouraging year-round use.
 - 7.1 Establish and maintain a high standard of ice and snow removal on a minimum year-round network of separated or traffic-calmed active transportation routes.

Collaboration

8. Promote reconciliation by developing and maintaining partnerships with Indigenous communities and organizations.
 - 8.1 Access TEK relating to the local environment and its ecological functions, conserving and revitalizing green network elements together with Indigenous partners.
 - 8.2 Identify and honour Indigenous cultural landscapes, managing them in co-stewardship with Indigenous communities.
9. Pursue collaborative and well-defined relationships between various levels of government and watershed authorities to enhance and expand the green network.
 - 9.1 Partner with watershed districts (e.g. Seine Rat Roseau Watershed District) to enhance the scale and scope of green infrastructure services and lobby the provincial government for legislation establishing enhanced conservation authorities similar to those in Ontario.

Implementation

10. Ensure appropriate and adequate implementation tools are provided in the master green space and natural corridor plan to effectively execute strategic priorities and policy directions.
 - 10.1 Use key performance indicators (KPIs), clearly defined timeframes and roles, and legally enforceable targets to support implementation of policy directions.
11. Enable effective green network implementation through robust monitoring and evaluation tools.
 - 11.1 Monitor and evaluate green network implementation with the support of third parties, including research institutions and non-governmental organisations, reporting regularly, transparently, and publicly.