

Green Space Weed Management Pilot Project

ISSUE

Parks and green spaces in Saskatoon, especially in newer neighbourhoods, are seeing increased levels of weeds. This report discusses Administrations' proposed approach to further improve the City of Saskatoon's green spaces, specifically turf and sports field conditions.

RECOMMENDATION

That the Standing Policy Committee on Planning, Development and Community Services recommend to City Council that Administration be directed to proceed as outlined in this report.

BACKGROUND

The following motion was approved at City Council's Regular Business [meeting](#) held on November 27, 2024:

“That Administration report back about the creation of a pilot project to manage weeds in public green spaces using tools that are not currently employed, such as herbicides. Please include information about potential timelines, public engagement, effectiveness, practices in other jurisdictions, and financial implications. The focus should be on dealing with areas where current methods have proven ineffective at weed management.”

City Council, at its Regular Business meeting held on March 6, 2017, were presented with the [Options to Reduce Broadleaf Weeds in Parks and Open Spaces](#) report while some of this information is still relevant, other applicable information has been updated in this report. In addition, City Council, at its Regular Business meeting held on March 8, 2021, were presented with the [Foxtail Seed Strategy](#) report for information. This report provides background on why weeds, such as foxtail have established in newer areas.

This report specifically focuses on turf and sport fields within active park areas. Considerations for medians and boulevards will be the topic of future reporting later this year.

DISCUSSION/ANALYSIS

The Parks Department uses an integrated strategy to control weeds. In turf areas, horticultural practices that include fertilizing, irrigating, mowing and aerating are used to limit weed establishment. Chemical herbicides and mechanical controls are used to reduce weeds in shrub beds, hard surfaces (medians, pathways, tree grates, etc.), natural areas (riverbank) and naturalized parks.

As outlined in the 2017 report, managing weeds involves several different approaches, including chemical, biological, cultural and mechanical controls. Weed control options can be selective (targeting certain types of plants) or non-selective (usually killing all plants). For weeds in turf, a selective control option is required.

The City of Saskatoon (City) has not had a city-wide herbicide program in turf and sport fields since 1994, with additional use of herbicides to control turf weeds halted in 2004. The elimination of the chemical herbicide program was considered environmentally prudent and in line with the general direction taken by other major cities across Canada.

Approaches in other Municipalities

A scan of prairie jurisdictions including Winnipeg, Edmonton, Calgary and Regina found a diverse landscape with respect to herbicide use on public property. For example, Regina and Edmonton restrict the use of herbicides on public property unless for control of noxious weeds and to support specific uses, including premier athletic fields, sports fields in district parks and golf courses. The City of Calgary has weed control thresholds depending on specific uses with a lower tolerance for weeds on sports fields than general use turf in parks, but has weed control programs for both spaces. Winnipeg is subject to more specific provincial pesticide restrictions when compared to other prairie cities. Manitoba restricts pesticide use near municipal playgrounds, picnic areas and dog parks and has exemptions for noxious or invasive weed species, maintenance of specialty turf for lawn bowling, tennis and cricket and sports fields used in international tournaments.

Improving Turf and Sport Field Conditions

To improve turf and sport field conditions, a combination of herbicide spraying, topdressing, aerating and seeding is recommended to be conducted four separate times during a single growing season. Herbicide application would only occur once at the start of the season and only used when necessary to ensure other efforts are successful. This approach helps grass outcompete weeds and level uneven spots on sport fields. A similar approach was used in McKay Park, in Rosewood with relative success during the transition period to City responsibility. While the remediation work at McKay Park included the possible use of pesticides, none were ultimately used.

Using the process outlined above, costs to improve turf conditions can be estimated at approximately \$5 per square meter for four courses of treatment. At this cost, an average soccer field with a size of 0.71 hectares (7,100 sq m) would be approximately \$35,500.

Pilot Location Considerations

In general, parks in newer areas have higher levels of weed growth. This is due to a combination of factors, including drought and being near greenfield land, as well as land which has been cleared and is awaiting construction where seed banks develop that will last decades. Soil quality of the specific location and drought conditions, which are cyclical, also contribute to weed growth and establishment. Larger school enrollments

in newer neighbourhoods can also contribute to weed growth due to high foot traffic on newly established turf adjacent to schools.

Based on number of complaints and other factors, Administration has identified Prairie Lily Park, in the Brighton neighbourhood as a candidate for a Green Space Weed Management pilot; specifically, 1.26 hectares (12,600 sq m) of the northern portion of Prairie Lily Park is recommended, as shown in Appendix 1. This remediation is estimated to cost approximately \$65,000, would involve one round of herbicide spraying, four courses of treatment and higher levels of irrigation. The treated areas would not be fenced off; however, signage would be installed advising of the type of work in that area. The work would be completed in July and August 2025. Notification of area residents would occur prior to any work beginning.

For effective reduction of green space weeds, the approach outlined above would require treatments over more than one season, with additional reductions in weeds occurring each year. For the purposes of this pilot, results from the first season will be used as the basis to report back on the effectiveness of this approach and will inform any budget options brought forward.

As part of the Parks' Asset Management Plan work, additional recommendations will be included on a cycle for condition assessments for turf and other park assets, as well as development considerations to limit future weeds, such as not clearing land too far in advance of development, confirming soil quality meets park specifications and regular weed management on bare land.

As part of the process, Administration intends to initiate a public engagement process in 2025, with a specific focus on public perceptions around:

- Acceptable turf conditions in parks and green spaces; and;
- Preferences around remediation activities to restore the condition of deteriorated turf and green spaces.

Public engagement would consist of a survey, be statistically representative and conducted by a third party.

Administration will report back on the results of the pilot, public engagement and provide recommendations on a weed management program that will include:

- Costs and proposed funding approaches;
- Turf condition assessments, data collection and prioritization of maintenance and remediation efforts;
- Sustainability considerations; and
- Requirements to maintain improved conditions over the long-term.

This report will be provided in time for 2026-2027 multi-year business plan and budget deliberations.

FINANCIAL IMPLICATIONS

The work outlined in this report will be funded through existing budgets. Administration will bring details forward regarding a formal weed management and remediation program and identify any service level options through the multi-year business plan and budget process, at the appropriate time.

NEXT STEPS

Recognizing that the City's current approach to weed management may not address all scenarios, the proposed pilot will inform alternative approaches going forward. In summary, below are the next steps Administration intends to take in 2025, unless otherwise directed by City Council:

1. Proceed with engagement activities to better understand public opinions on acceptable turf conditions in parks and green spaces and preferences around remediation activities to restore green spaces and control weeds.
2. Proceed with a pilot to remediate weed and park conditions in the 1.26 hectare northern portion of Prairie Lily Park, in Brighton. This location was chosen based on its moderate size, overall condition and number of complaints.
3. Report back on the results of the pilot and provide options for a formal weed management and remediation program.

APPENDICES

1. Prairie Lily Park Pilot Project Area

REPORT APPROVAL

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SP/2025/PK/PDCS/Green Space Weed Management Pilot Project/bn