

Report to Committee

To:

Parks, Recreation and Cultural Services

Date: N

May 5, 2025

From:

Chad Paulin

Committee

File:

10-6160-07-01/2024-

Director, Climate and Environment

Vol 01

Todd Gross

Director, Park Services

Re:

Proposed Practices to Accelerate Blackberry Management in Richmond

Staff Recommendation

That Option 1, as outlined in the staff report titled "Proposed Practices to Accelerate Blackberry Management in Richmond", dated May 5, 2025, from the Director, Climate and Environment and the Director, Parks Services, for the implementation of Himalayan blackberry management pilot program be approved.

Chad Paulin, M.Sc., P.Ag Director, Climate & Environment (604-247-4672)

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Att. 5

Todd Gross

Director, Parks Services

(604-247-4942)

REPORT CONCURRENCE					
ROUTED TO: Engineering Public Works Finance Bylaws	CONCURREN ダ ダ ダ ダ	CE (CONCURRENCE OF GENERAL MANAGER Deland Zwaaz		
SENIOR STAFF REPORT REVIEW	INITIA	LS:	APPROVED BY CAO		

Staff Report

Background

At the Open Public Works & Transportation Committee on October 18, 2023, Committee resolved:

- 1) That staff review options to accelerate the eradication of blackberry; and
- 2) That options for hiring new staff that do not rely on volunteers or Parks staff be presented at the next budget process.

Staff presented an option to accelerate blackberry management in the City's 2025 annual operating budget for consideration, and at the Open Finance Committee meeting, held on December 2, 2024, and it was further resolved:

1. That staff look for strategies and options for more blackberry and other invasive species management and report back to the Parks, Recreation and Cultural Services Committee.

This report summarizes the City's existing blackberry management practices and outlines options for invasive species management, specifically blackberry, in the community.

This report supports Council's Strategic Plan 2022-2026 Focus Area #3 A Safe and Prepared Community:

3.4 Ensure civic infrastructure, assets and resources are effectively maintained and continue to meet the needs of the community as it grows.

This report supports Council's Strategic Plan 2022-2026 Focus Area #5 A Leader in Environmental Sustainability:

5.2 Support the preservation and enhancement of Richmond's natural environment.

This report supports Council's Strategic Plan 2022-2026 Focus Area #6 A Vibrant, Resilient and Active Community:

6.2 Enhance the City's network of parks, trails and open spaces.

Analysis

Himalayan blackberry (Blackberry) is a well-established invasive species in Richmond, native to Armenia and Northern Iran. While valued for its fruit, unmanaged growth forms dense, thorny thickets that outcompete native vegetation. Each square metre can produce 7,000–13,000 seeds, with the potential to germinate quickly or lie dormant in the soil. Blackberry also spreads vegetatively through root and stem fragments, creating challenges for land access, maintenance, and safety across parks, utility corridors, and transportation routes. Richmond's fertile alluvial sediments provide ideal conditions for Blackberry growth. The City's network of channelized watercourses, sloughs and dikes are excellent corridors for the movement of seeds, and Richmond's flat, open landscapes receive prolonged sunlight during the growing season, further promoting its spread. Controlling Blackberry is important because it can impede access to

infrastructure and natural areas, outcompete native vegetation and reduce biodiversity. The City's Invasive Species Action Plan (ISAP) guides invasive species management based on threats to human health and infrastructure, and available resources.

Current Invasive Species Management Practices

Blackberry is one of many invasive species established in Richmond. Similar to most municipalities in the Lower Mainland, blackberry is prevalent among many of Richmond's major transportation corridors, park trails, dikes and drainage canals. The City currently manages blackberry on City-owned property through various practices, policies and bylaws (Attachment 1) that overlap with several municipal services with an estimated annual cost of \$162,500 (Attachment 2). The City also dedicates approximately \$300,000 in capital funding annually to manage invasive species within the purview of the ISAP. Oversight of the invasive species management program is led by one dedicated staff member who coordinates the program across departments. Key management pillars include removal, restoration, and public education. The City also partners with non-profit organizations and volunteer groups through the Partners for Beautification Program to host stewardship events in parks. Though limited in scale, these activities support eradication, education and restoration of key park spaces. A summary of 2024 and upcoming 2025 events is provided in Attachment 3.

The ISAP outlines a strategic, risk-based approach to determine the most appropriate and cost-effective response to manage invasive species that is based on prevention, eradication, containment and control principles (Attachment 4). Under this framework, greater efforts are prioritized on the earlier stages of management to avoid the wide-spread distribution of an invasive species. Once a species, such as Blackberry, is distributed over large areas and abundant in the landscape, containment is no longer feasible. To maximize resources, the City prioritizes species management that pose a significant risk to public health, safety, and City infrastructure. Species such as giant hogweed, knotweed species, and parrot's feather are considered to be in the containment stage of management and are prioritized based on the significant risks they pose to Richmond's ecology and critical infrastructure. Knotweed has been treated on over 500 sites since 2015 due to its potential to erode dikes and damage building foundations. Parrot's feather has also been addressed to reduce localized flooding impacts.

Blackberry is listed as a *moderate priority species* in the ISAP, consistent with *BC's Inter-Ministry Invasive Species Working Group* guidance. The widespread distribution of Blackberry places it within the control stage of management, suggesting that that eradication is no longer viable; instead, control and restoration are the primary management goals. Regionally, Blackberry is also recognized as a persistent and widespread species, with emphasis placed on restoring high-priority sites rather than full eradication.

Blackberry management on private property is managed through development and enforcement, while enforcement is carried out under the City's *Unsightly Premises Regulation Bylaw No.* 7612. Although Blackberry encroachment is enforced when necessary, the City's primary approach relies on education and voluntary compliance, not enforcement. In 2024, the City received 11 blackberry reports, which translates to approximately 5 per cent of all nuisance, vegetation calls.

Staff reviewed the blackberry management practices in neighbouring jurisdictions and found Richmond's approach to be consistent in both principle and execution. Continued alignment with regional and provincial best practices, combined with a focus on strategic site restoration and public education, remains the foundation of the City's management strategy.

Options for Blackberry Management in Richmond

Blackberry infestations present ongoing ecological and operational challenges. While pesticide use is recognized as an effective method for controlling large infestations, the City's Enhanced Pesticide Management Program prioritizes non-chemical approaches. Pesticide use was not included in the options presented below. However, staff note that future consideration could be given to piloting pesticide use to reduce costs. Options for additional blackberry management are outlined below.

Option 1 – Implement a Blackberry Management Pilot Program (Recommended)

This option proposes a one-year blackberry management pilot program focused on removal and ecological restoration at priority sites, followed by a two-year monitoring phase. The pilot would be funded with a one-time operating investment of \$100,000 in 2026, to be drawn from the anticipated 2025 prior-year surplus. The funding would be used for blackberry removals and restoration, while existing resources would be used for follow-up monitoring. The pilot program would be in addition to the current invasive species management program implemented by the City.

Under this approach, staff would identify a limited number of priority sites in fall 2025 focusing on high-visibility areas such as parks and multi-use paths. Then in 2026, the funding would be used for Blackberry removal at these sites, followed by native planting to support ecological restoration. For the two years following implementation (2027–2028), existing resources would be used to monitor and address regrowth.

At the end of the three-year pilot, staff would report back to Council with an evaluation of outcomes, including the success of blackberry removal and restoration activities, resource requirements, and any lessons learned. The report will also identify long-term management needs, potential cost efficiencies and considerations for expanding the program.

While this option allows for targeted improvements and supports visible restoration work, it is limited in scope and may not address infestations outside the selected pilot areas. The results from this short-term pilot can inform the feasibility and design of a larger program in future years.

Option 2 - Prioritize Blackberry Management with New Budget (Not recommended)

Option 2 proposes to prioritize Blackberry management City-wide by implementing an annual blackberry management program that focuses on long-term ecological restoration, maintaining safety and improving public access.

An annual program requires a one-time investment and annual funding. This includes a one-time capital-funded investment of \$160,000, plus an ongoing annual operating budget of \$545,723 (Attachment 5). The funding would support two additional staff and seasonal labour to plan and deliver annual management activities that cannot be absorbed with existing resources: one staff member to lead a two to three person seasonal field crew focused on Blackberry removal and site restoration; and one staff member to provide strategic oversight responsible for program planning, coordinating restoration and maintenance efforts, managing contractors and ensuring compliance with applicable senior government regulatory requirements. Blackberry growth on private property will continue to be managed through stewardship initiatives that include site visits, educational materials and best practices for invasive species control.

If endorsed, priority sites would be restored and maintained for three to five years to reach 'free-to-grow' status. Over time, these restored sites would shift into long-term monitoring and maintenance phases that will require additional annual operating funding to address persistent Blackberry re-growth. This annual, long-term monitoring and maintenance funding would be in addition to the annual operating budget described above. Long-term monitoring and maintenance program needs would be evaluated after three years as part of a report to Council.

Option 2 is not recommended at this time due to the significant ongoing operating and capital funding requirements, including the addition of new permanent staff positions. A pilot program will allow for the evaluation of enhanced removal efforts and accurate identification of resource requirements.

Option 3 – Maintain Existing Service Levels (Not Recommended)

Option 3 maintains the City's current blackberry management service levels with no changes to funding or staffing. The existing annual operating budget is approximately \$162,500, which supports activities such as mowing, restoration, enforcement, and public education (Attachment 2).

If approved, staff would maintain current practices and continue to work with local non-profit organizations and volunteer groups to manage blackberry in park areas. Development-related activities would also remain the primary driver of blackberry management efforts within the community.

Option 3 is not recommended. While this option does not require additional funding, and addresses immediate public concerns, it is primarily reactive and limited in scope. It does not adequately address the broader spread of blackberry across the City and relies on development and volunteer events to manage small-scale infestations. This approach also lacks a long-term restoration strategy for City assets and requires the unplanned allocation of resources to respond to complaints, making it unpredictable and inefficient.

Financial Impact

Should Council approve Option 1a one-time additional level request of \$100,000 will be submitted as part of the 2026 budget process to support the pilot program. If Council endorses

Option 2, an ongoing additional level would be submitted to the 2026 budget process for consideration. Option 3 has no financial impact.

Conclusion

The City currently manages blackberry in the community with a number of practices, policies and bylaws. However, many of the City's existing mowing and flailing practices only address immediate maintenance concerns and are generally ineffective for long-term management. If endorsed, the pilot program approach allows the City to evaluate the effectiveness of enhanced removal efforts before committing to a long-term program. The pilot will provide valuable data, support interdepartmental coordination, and inform future program development while minimizing risk and financial commitment. If endorsed, staff will report back to Council with results and recommendations for next steps.

Nadia Chan Manager, Environment (604-276-4241) Egan Davis Manager, Parks Operations (604-244-1210)

Att.

- 1: Regulatory Information Related to Blackberry Management in BC
- 2: Current Annual Blackberry Management Program Costs
- 3: Invasive Species Stewardship Events 2024/2025
- 4: Risk Invasion Curve
- 5: Proposed Staffing and Funding Requirements Levels Option 2

Regulatory Information Related to Blackberry Management in BC

	Regulation/Initiatives	Background/Opportunities
1.	Community Charter, Spheres of Concurrent Jurisdiction – Environment and Wildlife Regulation	Blackberry is listed as an alien species whereby "municipalities may regulate, prohibit and impose requirements in relation to control and eradication of alien invasive species."
2.	BC Inter-Ministry Invasive Species Working Group	Considers blackberry as a Provincial priority invasive species listed within the Regional Containment/Control section. This section includes invasive species that are high risk and well established with objectives to prevent further expansion into new areas.
3.	Provincial Integrated Pest Management Act/Regulation	Herbicide use is only permitted outside of the Pesticide Free Zone (10 metres away from waterways).
4.	Provincial Weed Control Act/Regulation	Blackberry is not listed as a noxious weed, therefore herbicide use within the Pesticide Free Zone is restricted, as noted above.
5.	City's Invasive Species Action Plan	The plan considers blackberry as a moderate risk invasive species due to its wide expansion across the City. Many of the species listed within Appendix 1 of the ISAP are controlled in specific circumstances.
6.	City's Unsightly Premises Regulation No. 7162	Management of vegetation overgrowth.
7.	City's Pesticide Use Control Bylaw No. 8514	Restricts the use of traditional pesticides for cosmetic purposes. Amendments to the bylaw can be considered under regulatory authority of alien invasive species listed within Section 8 of the <i>Community Charter</i> .

Current Annual Blackberry Management Program Costs

Funding Source	Service	Current Service Level	Annual Cost
Drainage	Drainage and Dike Maintenance Blackberry is located along most of the City's dike and open drainage network. Overgrowth can impede flow, destabilize banks and limit inspection capabilities.	 a) Control on City property and Right-of-Ways for maintenance and inspection through flailing and mowing and restoration b) Customer service/response to complaints/enquiries 	\$12,500
Climate and Environment*	Development, Restoration and Public Engagement The City's Ecological Network includes riparian management areas and Environmentally Sensitive Areas that make up private and public land. Development is administered through private building and development permits with conditions to fully restore these areas.	 a) Public education b) Customer service/response to complaints/enquiries c) Control, treatment and monitoring: d) City property e) Support for private properties f) Enforcement 	\$25,000
Parks Operations	Parks and Trail Maintenance Blackberry is in many parks and trails. Management can be complex due to ownership, access, safety and resource limitations. Efforts focus on maintaining access for users on an as-needed basis that typically includes flailing and mowing controls.	 a) Public education b) Customer service/response to complaints/enquiries c) Control on City property and Right-of-Ways for maintenance and inspection through flailing and mowing and restoration 	\$25,000
Parks Programs	Parks Partners for Beautification Stewardship Events Throughout the City's park system, volunteer invasive plant pull events are conducted with stewardship organizations such as Green Teams Canada and the Garden City Conservation Society.	 a) Public engagement and education b) Project coordination and implementation (pre-event and day-of event) c) Park sites maintenance, habitat creation and environmental enhancement 	\$25,000
Roads and Construction	Road and Multi-Use Path Maintenance Overgrowth in these areas pose a safety hazard by obstructing sightlines and encroachment onto bike paths, multi-use paths and sidewalks. Efforts focus on maintaining access for users on an as- needed basis that typically includes flailing and mowing controls. Enforcement is used to address overgrowth onto public land from private property.	 a) Control on City property and Right-of-Ways for maintenance and inspection through flailing and mowing and some restoration b) Customer service/response to complaints/enquiries c) Enforcement for private property encroachment 	\$75,000
	Total		\$162,500

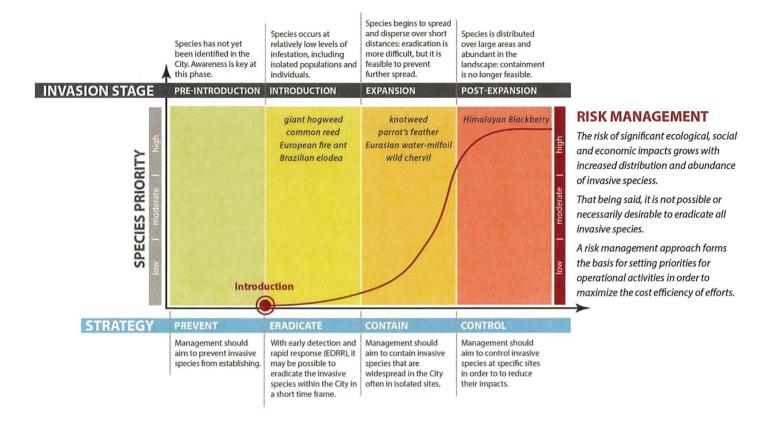
Invasive Species Stewardship Events 2024/2025

Events 2024	Background	Cost
March 9 and 23	Community event in cooperation with the Garden City Conservation Society and MLA Yao involving over 100 volunteers. Project involved extensive mechanical removal of Blackberry roots and vegetation and site preparation by staff for a subsequent Mini-Forest planting. March 9: Invasive Plant Pull March 23: Follow up Miyawaki Forest planting and invasive pull	\$5,000 (\$2,500 Grant included)
April 28	Earth Week Nature Park Blueberry Removal – 35 Volunteers, 14 cubic metres. Mechanical removal of roots and installation of landscape fabric to suppress growth. Lower Mainland Green Team lead.	\$5,500
August 9	Bark Park Fox Tail Pull – 5 Volunteers and 5 City staff working together removed all visible fox tail barley from No. 3 Road Bark Park. Ongoing collaboration with community wherein staff and community communicate, monitor and work together to respond to episodic occurrence of foxtail barley.	No additional costs (staff labour costs during normal working hours)
October 12	Blackberry Management Terra Nova, Lower Mainland Green Team lead. Mechanical removal, 52 volunteers, totaling 11 cubic metres. Protect area from further encroachment near the newly planted Miyawaki Forest. Hand removal.	\$5,500
October 25	TD Tree Days: 135 trees and shrubs – Terra Nova Park brush cut and tilled blackberry, blackberry monitoring will continue into 2025.	\$10,000, Grant included
Ongoing 2024	The Terra Nova Nature School (TNNS) organized several blackberry removals in and around the Edwardian Cottage. City supported with the removal of vegetative material.	No additional costs (staff labour costs during normal working hours)

Events 2025*	Background	Cost
April 22–23	Anderson Elementary School conducted an Earth Day event removing English Ivy from Garden City Park.	City support with staff time and lending supplies for the event.
April 26	Paulik Park Garden Club Invasive Pull	Disposal costs for volunteers.
April 27	King George Park – Blackberry Pull Lower Mainland Green Team Lead	\$5,500
September 13	King George Park – Additional removal of Blackberries with the Lower Mainland Green Team Lead	\$3,500 (with costs offset by an Environmental Enhancement Grant and staff support)
2025 Ongoing	Richmond Garden Club removing invasive plant material as part of their ongoing work at Paulik Park. City supported with the removal of vegetative material.	Volunteer driven. No additional costs (staff labour costs during normal working hours)
2025 Ongoing	Garden City Conservation Society monitoring and removing invasive species and weeds from the six Miyawaki Forest planting projects.	Volunteer driven; no cost to the City.

^{*}Note: Events identified for 2025 are those currently planned as of April 1, 2025. Additional events will likely occur as funding sources, project sites and community partners are identified.

Risk Invasion Curve



Proposed Staffing and Funding Requirements – Option 2

Anticipated Resources and Costs	One Time	Annual Ongoing	Requesting Department
a) 1 Regular Full Time Environmental Coordinator 2		\$149,961	Climate and Environment
b) 1 Regular Full Time Natural Areas Practitioner		\$164,866	Parks Operations
c) Parks Blackberry Management – Temporary Full Time Labour		\$100,000	Parks Operations
d) Roads Blackberry Management – Temporary Full Time Labour		\$100,000	Roads and Construction
e) Vehicle (1)	*\$160,000	\$28,896	Parks Operations
f) Cellular phones (2)		\$2,000	Climate and Environment; and Parks Operations
Total	*\$160,000	\$545,723	

^{*}This one time will be capital funded from the Rate Stabilization Account