

Environment and Climate Review

In response to the February 14, 2024 Public Spaces Bylaw referral motion, the proposed February 2024 Draft Public Spaces Bylaw has been reviewed for climate interactions and options to better support environmental stewardship in public spaces. The key environment and climate interactions and related considerations are outlined in the table below.

Protection of the Natural Environment	
Purpose and Interpretation	
"Park" definition (new definition) - Section 2(2)(h) in 2024 and 2025 bylaw drafts	<i>Consideration:</i> To emphasize the potential ecosystem services that parks can provide, amend the proposed definition of "park" to include a statement on how parks can provide nature-based solutions in addition to recreational value.
Ecological Integrity	
Unsanctioned trails (revised clause from Parkland Bylaw 2202) - Sections 51 and 82 in February 2025 draft (Sections 47 and 81 in February 2024 draft)	Unsanctioned trails in parks can lead to localized environmental degradation such as soil compaction and erosion, plant and root damage, and wildlife habitat disturbances. As urban density increases and the recreational demands on parks grow, sufficient City-wide infrastructure to meet demand while maintaining the ecological integrity and the safety of park users will be required. <i>Consideration:</i> Other Canadian municipalities have taken the approach of trail maps, onsite signage, and education campaigns as a means of improving trail etiquette and sanctioned trail compliance. Regular engagement with recreation advocacy groups can leverage their outreach while staying informed of the needs of local hiking and cycling communities^{1,2}. There may be opportunities to enhance the City's existing map, signage, and education campaigns to promote responsible use of trails throughout the City's open space network while also assessing the unsanctioned trail network to determine

¹https://hdp-ca-prod-app-whistler-engage-files.s3.ca-central-1.amazonaws.com/6017/0174/1767/bccf5ce78ecc8e05e009d6349295d2f3_Public_UnsancTrails.pdf

² <https://www.toronto.ca/wp-content/uploads/2018/10/8f86-natural-environment-trail-strategy.pdf>

Attachment 5

	which trails could be formalized, signed, and integrated into the management program.
Protection of natural features (legacy clause from Parkland Bylaw 2202) - <i>Section 51 in February 2025 draft (Section 48 in February 2024 draft)</i>	The protection and maintenance of natural features is an effective means to mitigate urban heat island effects, improve air quality, manage stormwater, and reduce carbon emissions through sequestration and storage. A co-benefit provided by an urban tree canopy is shade, shielding both wildlife and people from UV exposure and encouraging higher levels of active transportation. This is in alignment with The City Plan's intention to support the ecological function and energy efficiency of Edmonton's built environment. <i>Consideration:</i> During the implementation phase, consider leveraging and expanding the Partners in Parks and Root for Trees volunteer programs to help manage more types of parks (e.g. the North Saskatchewan River Valley and nearby ravines) as a means to enhance environmental protection and stewardship in parks.
Planting vegetation (new clause) - <i>Section 52 in February 2025 draft (Section 49 in February 2024 draft)</i>	This clause protects ecological integrity by preventing the unauthorized planting of vegetation. Planting unauthorized vegetation could potentially introduce invasive plants to the area, which can quickly disrupt the local ecosystem and outcompete native species. In 2020, municipalities across Alberta spent an average of \$438,828 on invasive species control, with expenditures reaching up to \$2,900,000³. <i>Consideration:</i> Similar to the "respecting traditional spiritual or cultural practices" exception in Section 48(4), consider also including the right to plant traditional medicine and/or culturally significant native plants. This would incorporate traditional ecological knowledge and encourage Indigenous gathering and ceremony, requiring ongoing engagement with Parks and Roads Services and Planning and Environment Services to maintain alignment.
Pollution	
"Biomedical waste"	The definition of "biomedical waste" is now included in Bylaw

³<https://www.invasivespeciescentre.ca/wp-content/uploads/2022/04/Final-Report-2021-National-Survey-Results-Final-Version.pdf>

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definition (new definition) - <i>Section 45(1)(a) in 2025 draft (Section 44(1)(a) in February 2024 draft)</i>	20700 to clarify and expand upon the “chemical” statement in Parkland Bylaw 2202.
“Hazardous waste” definition (new definition) - <i>Section 45(1)(b) in February 2025 draft (Section 44(1)(b) in February 2024 draft)</i>	The definition of “hazardous waste” is now included in Bylaw 20700 to clarify and expand upon the “chemical” statement in Parkland Bylaw 2202
“Pesticide” definition (new definition) - <i>Section 45(1)(c) in February 2025 draft (Section 44(1)(c) in February 2024 draft)</i>	The definition of “biomedical waste” is now included in Bylaw 20700. The statement that herbicide is included as a type of pesticide further clarifies that these substances are not permitted in public spaces.
Prohibited applications and/or deposits (legacy clause) - <i>Section 45(2) in February 2025 draft (Section 44(2) in February 2024 draft)</i>	Prohibiting the release of hazardous waste in public spaces is crucial to prevent the contamination of soil and water, reduce risks to wildlife, and improve the safety of public space users. This includes substances that are flammable or reactive in nature, further reducing the risk of wildfire.
Litter/debris (legacy clause from from Parkland Bylaw 2202) - <i>Section 42 in February 2025 draft (Section 41 in February 2024 draft)</i>	Preventing littering in public spaces will help avoid the smothering of vegetation, contamination of soil and water, and potential harm to wildlife through ingestion or entanglement.
Wildlife Protection	
Wildlife (legacy clause from from	Protecting biodiversity in natural areas mitigates climate change impacts by regulating ecosystem functioning and

Parkland Bylaw 2202) - <i>Sections 16 and 17 in both 2024 and 2025 drafts</i>)	building resilience to disturbances ⁴ . These sections support biodiversity protection through the requirement to not feed wildlife in public areas, with additional requirements to not harass or harm wildlife or disturb their eggs, nests or dens.
Mobility	
Shared Trails	
The appropriate use of a bicycle, e-bicycle, e-scooter, inline skates, roller skates, or skateboard, or any similar device (revised clause from from Parkland Bylaw 2202) - <i>Section 78 in both 2024 and 2025 drafts</i>	By more clearly defining the appropriate use of bikes and personal electric transporters in public spaces, it will encourage higher levels of active transportation and the enjoyment of green spaces across the City. <i>Consideration:</i> Adding more signage to main streets and/or business improvement areas to visibly confirm where the use of bikes and active transportation vehicles (e.g. e-scooters, e-bicycles, etc.) are (or are not) permitted could further provide clarity to the public and increase compliance.
Public Transportation	
Safe use of public transit (revised clause from Bylaw 8353) - <i>Section 34 in 2025 draft</i>	Enforcing the safe use of public transportation can help increase ridership and further advance The City Plan's target of 50 per cent of trips made by public or active transportation by 2040. A shift towards low-carbon transportation of this magnitude could result in GHG emission reductions of up to 28 per cent when combined with other urban form improvements ⁵ .

⁴ <https://onlinelibrary.wiley.com/doi/10.1111/brv.12351>

⁵ <https://www.edmonton.ca/sites/default/files/public-files/assets/PDF/EnergyTransitionStrategy2021-04-20.pdf?c=b=1721159214>