

Staff Report

Origin

The provincial Ministry of Forests, Lands, Natural Resource Operations and Rural Development ('the Ministry') has applied to renew a regional Pesticide Use Permit ('the permit') to continue management of a highly invasive species of cordgrass in coastal foreshore areas across the Lower Mainland. The provincial pesticide use permit process requires consultation with regional stakeholders including the City of Richmond.

Background

The Province of BC manages the *Weed Control Act* and the *Integrated Pest Management Act*. The *Weed Control Act* is administered by the Ministry and requires all landowners including municipalities to control the spread of listed noxious weeds. The *Integrated Pest Management Act* is administered by the Ministry of Environment and Climate Change Strategy and regulates the use of pesticides to control provincial and/or regional invasive species including noxious weeds listed in the *Weed Control Act*. BC's *Community Charter* enables municipalities to restrict the use of certain pesticides in the community.

Council adopted the Enhanced Pesticide Management Program and the subsequent *Pesticide Use Control Bylaw No. 8514* in 2009. The City's Invasive Species Action Plan was adopted in 2016 and prescribes a strategic, risk-based approach to prioritize the management of invasive species pursuant to the provincial *Integrated Pest Management Act* and the provincial Early Detection and Rapid Response program. The Invasive Species Action Plan lists the City's top eight (8) priority invasive species based on immediate threats to Richmond's natural ecosystems and infrastructure. The City is dedicated to an integrated pest management approach to manage priority species that supports the judicious use of pesticides when necessary. Staff implement a rigorous notification procedure that exceeds the notification requirements under the provincial *Integrated Pest Management Act* when pesticides are used for noxious weed treatment.

The Province is also dedicated to an integrated pest management approach and implements its Early Detection Rapid Response program in partnership with municipalities and federal agencies. The Ministry has been working with Ducks Unlimited Canada to monitor and eradicate an extremely aggressive species of intertidal cordgrass since 2003. Cordgrass is an aquatic grass that establishes on intertidal mudflats and has the ability to reduce open habitat for shorebirds, outcompete native vegetation and alter the natural functions of estuaries. There are currently three species of cordgrass posing an immediate threat to BC's coastline that are believed to have been imported to the region via shipping vessels in the 1800s. Cordgrass has since spread aggressively through California, Oregon, Washington, Puget Sound and Boundary Bay.

BC has committed to the containment, reduction, and eradication of cordgrass and has entered into a cross-border partnership agreement with California, Oregon, and Washington to prioritize the management of cordgrass and promote ocean health. The Ministry has requested the City's comments relating to their regional permit application that currently authorizes the use of herbicide to manage cordgrass regionally.

Analysis

Provincial Cordgrass Management Program

Three species of invasive cordgrass (*Spartina anglica*, *densiflora*, *patens*) have migrated north from California since the 1980's and the first infestations were detected in BC in 2003. The Ministry, in partnership with Ducks Unlimited, have been actively monitoring, mapping, and managing invasive cordgrass infestations in the Lower Mainland since detection. Early integrated management approaches employed by the Ministry have included costly manual excavation, mechanical excavation, and light-shading techniques that have had poor results.

The Ministry secured its first permit from the Ministry of Environment and Climate Change Strategy to manage cordgrass regionally in 2013 for a three year term. It was the first permit in the province issued for intertidal areas and authorized the Ministry to manually apply herbicide to manage cordgrass within the approved limits (Attachment 1). The permit was later renewed for an additional three years in 2016 and remains the only regional permit relating a noxious weed. The Ministry's current permit will expire on May 31, 2019. The Ministry's integrated pesticide management approach has been successful in limiting the spread of cordgrass in Boundary Bay, Robert's Bank, and Burrard Inlet by reports of declining populations since herbicide was introduced.

A single cordgrass plant was identified on Sturgeon Bank by Ducks Unlimited Canada in 2013. The plant and its roots were carefully removed by hand at that time and no additional plants have since been recorded at or near Richmond's foreshores areas.

Proposed Pesticide Use Permit Renewal

The Ministry has submitted an application to extend its current permit for an additional three years (2019 – 2022) in an effort to eventually eradicate the species. The proposed boundaries remain consistent with previous permits and will authorize the treatment of up to 26 hectares of intertidal area annually to control cordgrass infestations. Herbicide will be manually applied directly to individual cordgrass plants during the growing season (typically July to September of each year). Herbicide application will only be conducted by certified pesticide applicators that must following the strict treatment and monitoring conditions of the permit that protect sensitive intertidal conditions. No treatment is currently scheduled in Richmond including Sturgeon Bank.

Staff Feedback

The Ministry's monitoring program is regionally-significant and has reduced the regional spread of cordgrass by incorporating herbicide in its integrated management approach. Staff have reviewed the Ministry's permit application and recommends that Council support the application due to the significant risk that it poses to local ecosystems subject to the following comments:

- The City has not historically received summaries of the Ministry's cordgrass management program consistently. The City requests that a summary of the program's

annual data for each growing season be forwarded to staff when available for review and record keeping;

- The City requests to be notified immediately of any future records of cordgrass within or near Richmond's municipal boundaries;
- That staff receive a copy of the permit and its conditions if issued by the Ministry of Environment and Climate Change Strategy;
- That staff are notified in advance of the Ministry's intent to apply herbicide near the community pursuant to the notification requirements outlined within the permit if issued by the Ministry of Environment and Climate Change Strategy; and
- That staff work with the Ministry and its partners to explore opportunities to improve cordgrass education and identification in the local community.

Financial Impact

None.

Conclusion

The provincial Ministry of Forests, Lands, Natural Resource Operations and Rural Development is currently managing an invasive species of cordgrass in regional intertidal areas. The Province has employed an integrated pest management approach to control the spread of cordgrass that includes the use of herbicide pursuant to an active Pesticide Use Permit that will expire in May 2019. The Ministry's monitoring data implies that management efforts have significantly reduced the spread of the cordgrass since the inclusion of herbicide and a new permit is required to continue the program. Staff have reviewed the application and provided feedback that will be forwarded to the Ministry if endorsed by Council.



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Att. 1: Proposed Boundaries for the Regional Pesticide Use Permit (2019 – 2022)

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