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The Corporation of **THE CITY OF NORTH VANCOUVER**
ENGINEERING, PARKS & ENVIRONMENT DEPARTMENT

INFORMATION REPORT

To: Mayor Darrell R. Mussatto and Members of Council
From: Angela Negenman, Environmental Technician
SUBJECT: INVASIVE PLANT MANAGEMENT UPDATE
Date: June 14, 2016 File No: 11-5280-07-0001/2016

PURPOSE:

The purpose of this report is to provide Council with an update on invasive plant management activities in the City.

BACKGROUND:

The City's Invasive Plant Management Strategy, adopted by Council in 2013, guides the management of invasive plants on public lands and facilitates the management of invasive plants on private lands. The Strategy includes the following goals:

1. Increase awareness and knowledge of invasive plants within the community;
2. Measurably reduce invasive plant density and distribution;
3. Coordinate efforts between all stakeholders and resources;
4. Effectively monitor, maintain and restore the City's natural areas; and
5. Develop effective policy and practice adaptive management.

This report provides an update on invasive plant management activities in 2015.

DISCUSSION:

Invasive Plant Inventory Update Results

The City contracted Diamond Head Consulting to conduct a baseline invasive plant inventory in 2011 and again in 2015 to update the inventory.

The 2015 inventory shows a major reduction in abundance and distribution of giant hogweed (91% reduction) and knotweed species (71% reduction).

There have also been reductions in Scotch broom, butterfly bush, hops, policeman's helmet and Japanese butterbur, due to invasive plant control work by City crews and the Evergreen City Park Stewards program.

No new provincially listed noxious weed species - species listed under the B.C. Weed Control Act – were found. Also, no emergent species of major concern were found, including EDRR (Early Detection Rapid Response) species. EDRR species are new invasive species requiring a rapid control response.

Significant natural areas were cleared of invasive plants and restored with native vegetation through City park upgrades and restoration projects, through development compensation projects, and by the Evergreen City Park Stewards program and other community volunteer groups.

City crews have cleared hundreds of impacted trees of climbing ivy and clematis thus preventing future canopy loss. Only a small number of trees remain impacted.

Ongoing challenges highlighted by the 2015 inventory include the restriction on use of glyphosate within one meter of the high water mark of watercourses, which has resulted in continued spread of untreated knotweed. There has also been an expansion of English ivy and English holly on the ground.

Earth Day and Rivers Day Events

The popularity of the City's Earth Day and Rivers Day community events continues to grow and a focus on attracting youth and families to these events has increased the number of new volunteers participating in stewardship projects.

City Park Stewards

Since 2005, the City has partnered with Evergreen, a non-profit environmental organization that works to inspire action to green cities through community engagement and naturalization projects. In 2015 the City Park Stewards Project focused on invasive species removal and native planting events in Greenwood, Heywood, Mahon, Mosquito Creek, Moodyville, and Sunrise parks.

Evergreen also hosted interpretive walks with new Canadians in partnership with the North Shore Multicultural Society and a nature-based youth empowerment series with the North Shore Crisis Services Society and the Canadian Mental Health Association.

The City provides support to community groups participating in invasive removal and habitat restoration activities through direct coordination, partnership with Evergreen and by providing supplies and equipment.

A great success in 2015 has been the engagement youth aged 8 to 18 in the "Branching Out" program. Youth participated in mentored nature activities that aimed to increase self-confidence and reduce symptoms of depression and anxiety. Youth are encouraged

to explore the parks in new ways, to learn about local ecology, and to become stewards themselves by participating in invasive pulls and native tree and shrub planting. In 2015, 30 youth participated in the Branching Out program and the program aims to engage 80 youth in 2016.

Overall, in 2015, through the City Park Stewards program:

- over 600 youth and adults were engaged through 35 events;
- a total of 897 volunteer hours were contributed to invasive plant management and ecosystem restoration;
- an estimated 237 cubic meters of invasive plant material was removed; and
- 395 native trees and shrubs were planted.

Hogweed and Knotweed Control

The City retained the Invasive Species Council of Metro Vancouver (ISCMV) and Diamond Head Consulting for the fourth year to conduct treatment and monitoring of noxious weeds (Giant Hogweed and knotweeds) on park lands and City-owned natural areas. Significant reductions in densities of these species has been achieved.

City Crew Activities: English Ivy, Clematis, Hops, Scotch Broom, English Holly

The City's Invasive Plant Strategy identified English ivy and Clematis as a priority, particularly because these species climb and compromise trees and thus can quickly impact forest health. In 2015, City crews manually removed Clematis and English ivy from the base of trees within Cloverley, Greenwood, Hamersley, Heywood, High Place, Hyak, Loutet, Mac Leod, Moodyville, Mosquito, and Wagg parks.

City crews also manually removed hops, Scotch broom and English holly from other identified priority locations throughout the City.

Coordination with Neighbouring Jurisdictions

The City's management approach is consistent with existing programs underway on adjacent lands, including the Districts of North and West Vancouver, Metro Vancouver, BC Parks, BC Hydro, Squamish Nation, and the Provincial Ministry of Transportation.

The District of West Vancouver endorsed an invasive plant management strategy last year and the District of North Vancouver is currently developing a strategy. The Squamish First Nation has been engaged through the broader outreach work of the ISCMV, as well as through estuary restoration works at Mackay Creek and Mosquito Creek.

NEXT STEPS:

The City will continue to implement the work plan as outlined in the City's Invasive Plant Strategy, including:

- prioritization of City invasive plant management resources for maximum efficacy;
- review and development of City policies and bylaws to address potential barriers;
- private land stewardship, particularly for noxious weeds;
- outreach and education;
- North Shore inter-agency coordination; and
- monitoring and maintenance best management practices.

Data from the 2015 inventory will be used to inform invasive plant management work over the next five years. As the City continues to reduce hogweed and knotweed density and distribution, efforts will be shifted to management of other priority species and towards increased planting and rehabilitation of impacted areas.

Outcomes of the City's invasive plant management program include increased forest health and habitat value along with increased safety and usability of City natural areas.

RESPECTFULLY SUBMITTED:

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