

7 February 2020

Memorandum

To:	Devonport-Takapuna, Hibiscus and Bays, Kaipātiki and Upper Harbour Local Boards
Subject:	Trial of Foamstream for the management of weeds in the road corridor.
From:	Jenny Gargiulo Principal Environmental Specialist, Community Facilities

Purpose

1. To inform elected members about an upcoming trial of a weed management product called Foamstream within the road corridor across the Tahī region.

Summary

- In April 2019 Community Facilities took over the responsibility for weed management in the road corridor. Auckland Transport previously held the weed management contract. Community Facilities has continued to use the same treatment methodology employed by Auckland Transport in the Tahī region. A mix of hot water and mechanical removal with some spot spraying for the treatment of specific weeds.
- Hot water treatment is not an effective way of killing the entire plant including the root system. Hotwater treats the foliage and can prevent/reduce seed production and restrict growth. Hot water does not destroy the foliage of some types of weeds (nutgrass and kikuyu for example)
- Ventia, the Full Facilities supplier for the Tahī local boards, is investigating the use of a product called Foamstream for use within the road corridor in the areas where hotwater is currently being used.
- Foamstream is a product used to manage weeds. When added to hot water it creates a thermal layer that has been found to make it more effective in killing weeds than hot water alone. It is non-toxic and approved for use by the Environmental Protection Agency.
- The Auckland Council Weed Management Policy encourages the investigation into alternative methods of weed management.
- For any weed management product to be considered for use on public land it must comply with all Auckland Unitary Plan rules, have approval from the Environmental Protection Agency and consider organisational targets for environmental improvement. This would include any impact of the foam on the waterways.
- In February 2020, a three-month trial of Foamstream will commence in the Tahī full facilities contract region to evaluate the product for use to manage weeds in Auckland.

Context/Background

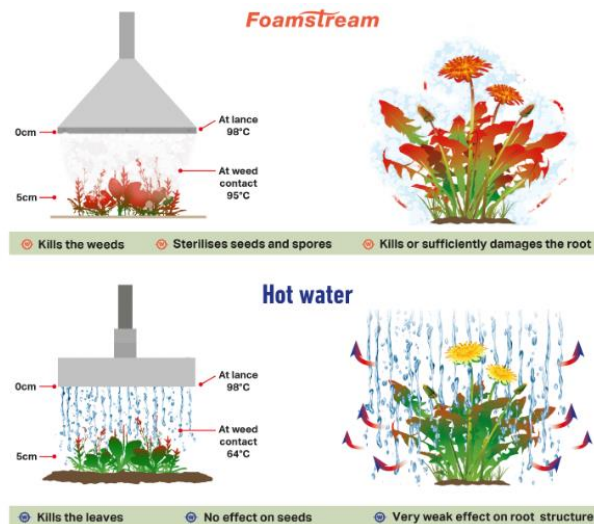
2. Due to Auckland's temperate climate the region is particularly vulnerable to weeds and introduced pest plants which can spread if unchecked, displacing native plants and threatening biodiversity.
3. Council uses different weed control methods depending on the species, site characteristics, infestation level, wider landscape characteristics and other factors such as legislative

requirements. Our weed control methodologies include manual control, mechanical control, biological control, hot water and herbicide.

- Options for weed management completed by the council must take into consideration the eight objectives of the Weed Management Policy 2013 and all the Auckland Unitary Plan rules. For the use of herbicide, the council follows the guidance of the Environmental Protection Agency which grants approvals and conditions for weed control products

Weed Management in the Road Corridor

- Since April 2019 vegetation in the road corridor has been managed by Community Facilities through the full facilities contracts. For the first year of the contract Community Facilities has continued with the legacy methodologies from Auckland Transport (Attachment A).
- This continuation of legacy arrangements means that there are differences between local board areas in the methods used to meet weed management outcomes. In Devonport-Takapuna, Kaipātiki and part of Upper Harbour and Hibiscus and Bays local boards the methodology used to control weeds in the road corridor is predominately hot water and mechanical, with some spot spraying of glyphosate for specific weeds e.g. nutgrass.
- Hot water treatment is not an effective way of killing the entire plant including the root system. Hotwater treats the foliage and can prevent/reduce seed production and restrict growth. Hot water does not destroy the foliage of some types of weeds (nutgrass and kikuyu for example). Additionally, this methodology uses 5000L to 6000L of water per day of deployment.
- Venita, the full facilities contractor in the northern region has asked to use the Weedingtech product Foamstream for managing weeds across the Devonport-Takapuna, Hibiscus and Bays, Kaipātiki and Upper Harbour Local Board areas. They will be trailing Foamstream in place of hotwater to evaluate if it is more effective at managing weeds. This would mean less visits and reduced cost and water usage.



Foamstream typically maintains kill zone temperatures for 6x longer than other alternatives.

Source <https://www.weedingtech.com/nz/>

9. Community Facilities is supportive of the trial as it complies with the Auckland Council Weed Management Policy, which states that council should “together with our CCOs, trial alternative methods of weed management and, where successful, promote them internally and externally.”
10. Foamstream is a soluble concentrate which is added to hot water to create a foam that is applied to unwanted vegetation. It contains sugars as the foaming agent, plus other components (coconut, palm kernel and rapeseed oils, glucose from potato, maize and wheat, and polysaccharides). Foamstream has herbicidal properties through a non-toxic mode of action; the herbicidal effect comes from the prolonged heat of the foam. The foam acts to keep the formulation on the plants longer, as well as being an insulator to keep the heat higher for longer.

Foamstream trial

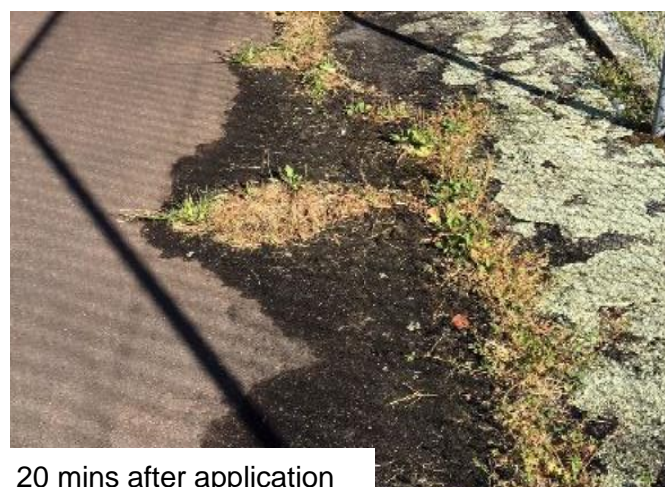
11. Foamstream will be used for the weed management in kerb and channel and berms in the road corridor across the northern region from February to May 2020.
12. The Healthy Waters Lifecycle Teams will be monitoring the stormwater to ensure there is no foam discharges on the network or mobilization of pollutants. Community Facilities will liaise with Healthy Waters and Auckland Transport to ensure there is no impact to the stormwater or infrastructure.

Application and appearance and of the foam

13. Foamstream is applied by trained staff through a hose and lance at a rate of 12L/minute. The low pressure makes it very safe. After application the non-toxic foam will be present for 15 to 20 minutes. Signage on the machinery and onsite will include information on the non-toxic foam.
14. Any further questions from the public on the foam and its use can be directed to the weed management team in Community Facilities at weeds@alkc.govt.nz.



During application



20 mins after application

Next steps

15. From February 2020 Ventia will be using Foamstream across the Tahiri region. There will be regular reporting to council on the locations where the product is used which can be made available to local boards if required.
16. The intent of the trial is to see if including a foam with the hotwater will make for more effective weed control, resulting in less cost and water usage to meet the weed management service levels.
17. At the end of the trial a memo will be provided to elected members with information on the results and any plans for its inclusion into the integrated weed management approach by Auckland Council.