

Transport and Environment Committee

10.00am, Thursday, 11 September 2023

Phased Reduction in Glyphosate Use

Executive/routine
Wards

Executive
All

1. Recommendations

- 1.1 Transport and Environment Committee is asked to:
 - 1.1.1 Introduce a ban from April 2024 on all use of glyphosate-based herbicide for the control of weeds and unwanted vegetation in greenspaces across the Council's estate, with the exception of invasive weeds (see recommendation 1.1.2);
 - 1.1.2 Approve the continued use of glyphosate-based herbicide for the control of invasive weeds i.e. Giant Hogweed, Himalayan Balsam and Japanese Knotweed;
 - 1.1.3 Introduce a phased reduction of the use of glyphosate-based herbicide, with the aim of not using these by 2026 for the control of weeds on our roads, carriageways, pavements and hardstanding areas; and
 - 1.1.4 Note that a weeds policy will be included as part of the next Neighbourhood Environmental Services Policy Assurance review in Spring 2024.

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Phased Reduction in Use of Glyphosate

2. Executive Summary

- 2.1 This report seeks approval for the phased reduction of the use of glyphosate-based chemicals for the treatment of weeds, with the exception of use to control invasive weeds.

3. Background

Impact of chemical treatment of weeds

- 3.1 The chemical treatment of weeds is generally planned to be undertaken twice per year but is subject to weather. In some areas spraying is undertaken using quad bikes and in other areas, such as those within controlled parking zones, it is generally applied by an operative using a knapsack and lance.
- 3.2 Glyphosate-based herbicide is a broad-spectrum herbicide widely used in agriculture, landscaping, and public spaces. It is primarily used to control weeds and unwanted vegetation. However, concerns have been raised regarding its potential adverse effects on human health and the environment.
- 3.3 Numerous studies have linked glyphosate exposure to various health risks, including cancer, reproductive disorders, and endocrine disruption. The International Agency for Research on Cancer (IARC) classified glyphosate as a probable human carcinogen in 2015. Additionally, studies have shown that glyphosate residues can persist in soil, water, and food, leading to potential long-term exposure for individuals frequenting public spaces.
- 3.4 However, the veracity of this finding has been called into question by regulatory bodies such as the European Food Safety Authority, who argue that glyphosate is safe to use. In short, there is insufficient, conflicting and uncertain information for local authorities that undertake weed control operations in public spaces to make scientifically reasoned policy decisions.
- 3.5 Although there is some conflicting evidence relating to the health impact when using glyphosate-based herbicide, there is substantial evidence related to the impact on the environment and wildlife. It has been found to have detrimental effects on biodiversity and ecosystems. It can contaminate water bodies, leading to the

disruption of aquatic ecosystems and harming aquatic organisms. Moreover, glyphosate can negatively impact pollinators, such as bees, which are crucial for maintaining biodiversity and food production.

Glyphosate use in Edinburgh in 2023

- 3.6 Current figures for 2023 show 1,760 litres of glyphosate-based herbicide will be used. This compares to 3,860 litres in 2022, 2,780 litres in 2021. The increased application in 2022 was largely attributed to catching up on reduced activity during the Coronavirus pandemic peak.

Scottish Government strategy

- 3.7 The Scottish Government's 'Pollinator Strategy for Scotland 2017–2027' supports the use and development of pollinator-friendly pest control measures in urban areas and encourages local authorities to apply the principles of Integrated Pest Management in ground maintenance and management.

Trialling new approaches

- 3.8 Each year since has seen the introduction of new approaches to weed management and the trialling of alternatives, including replacing the use of glyphosate-based herbicides in parks and green spaces with more frequent mulching of planting beds and mechanically controlling grass growth along footpath edges with mechanical strimming, edging tools and sweeper mounted "weed rippers".
- 3.9 During 2021 a trial of the use of Foamstream was initiated in the Balerno Area. The "Foamstream" system works by combining hot water and biodegradable foam, made from renewable plant oils and sugars. When applied, the foam creates a layer of insulation over the hot water to stop the heat escaping to the atmosphere. This holds the heat on the vegetation or surface for longer, producing a more effective treatment than hot water or steam alone.
- 3.10 Evidence from this initial trial highlights the Foamstream equipment would not be a financially viable operational alternative to current herbicide application methods on a city-wide scale. However, technology used for alternative methods is continuing to be developed and other more efficient methods may become available.
- 3.11 This evidence has also been confirmed by other studies carried out on behalf of local authorities when looking at alternative methods of control.
- 3.12 In addition to the Pesticide Free Balerno community-weeding initiative, Council officers continue to receive regular enquiries from residents wishing to cease glyphosate applications in their street or area. However, it should also be noted that requests are also received from residents in these areas for chemical weed treatment.
- 3.13 If given sufficient notice by residents of community weeding activities, no glyphosate applications were made in that street or area. We now have a number of locations where this has been actioned – a list of locations is included within Appendix 1.

4. Main report

- 4.1 As highlighted in previous reports to Committee, if glyphosate-based herbicide volumes are to be reduced on a city-wide scale the most efficient long term solution to weed growth requires an integrated approach. The successful application of chemical weed treatment is highly weather dependant and can only be undertaken when not raining or rain is not forecast for six - eight hours so is essentially focused on Spring and Summer months. This coincides with the busiest season for grass cutting.
- 4.2 One of the main reasons for the control of weeds in amenity or grassed areas is aesthetic – so areas look neat and tidy. In certain areas and circumstances, weeds can cause trip hazards or lead to gradual damage of hard surfaces (such as paving slabs or kerb stones). These only become a problem if weeds are left to grow to an advanced stage. Normal maintenance levels usually remove or kill weeds before they get to this stage.
- 4.3 When managing any amenity area, the level of toleration needs to be identified and this should depend on the function, use, and location of an area. Consideration also needs to be given to the demands of the customer / user. It must be recognised that it is impossible to keep areas wholly weed free and that weeds often have a positive impact on biodiversity and natural habitats.
- 4.4 It must also be recognised the tolerance levels to weeds can be very polarising in opinion. Many people may agree with the banning of chemical use and the greater emphasis on biodiversity but do not necessary want to see weeds growing in their street or on other hard surfaces.
- 4.5 Currently, Neighbourhood Environment Services staff continue to use glyphosate-based herbicide in open spaces, and on hard surfaces, for the control of weeds and unwanted vegetation.

Proposal to reduce the use of glyphosate-based chemicals from April 2024

- 4.6 It is proposed to include greenspaces across the Council estate in a city-wide ban on the use of glyphosate-based chemicals from April 2024.
- 4.7 This will mean the city's parks and greenspaces will become glyphosate free with a clear vision, linked to projects like Living Landscapes, Thriving Greenspaces, Nature Network and directly to biodiversity plans, nature and climate emergency and sustainability targets.
- 4.8 This change can be achieved within existing resources, by reviewing the approach to grass maintenance (which will be required to ensure biodiversity, nature and climate emergency targets are met). Some capital investment, estimated to be £100,000, will also be required for machinery and tools and it is anticipated that this can be funded through external funding in the first instance.

Treatment of invasive weeds

- 4.9 The use of glyphosate-based herbicide will still be required for the treatment of invasive weeds. The Council has a duty under the Wildlife and Countryside Act 1981 (as amended by the Wildlife and Natural Environment (Scotland) Act 2012) to control the spread of invasive non-native species, such as Japanese Knotweed, Giant Hogweed, and Himalayan Balsam. The spread of these species in Edinburgh can currently only realistically be controlled by the continued use of glyphosate-based herbicide.

Treatment on roads and pavements

- 4.10 In recent years greater emphasis has been put on mechanical sweeping and hand scraping of unwanted weeds on our roads and pavements. Recent service improvements and use of new small hako sweepers in appropriate areas has shown regular sweeping to remove detritus can have a positive impact on unwanted weed growth.
- 4.11 As already highlighted, without a viable alternative method for the control of weeds on a city-wide basis, it would be a significant risk for the Council to move to ban the full use of glyphosate-based herbicide immediately. Time is required to increase further use of mechanical sweepers and to investigate further some of the alternative methods available for the effective treatment of street weeds in particular areas.
- 4.12 It is anticipated that this approach will lead to a full ban on the use of glyphosate-based chemicals on carriageways and footways by 2026.

Street care

- 4.13 The management of weeds on the city's streets will become the responsibility of the Street Care Service (formally Street Cleansing) from 2024 and plans to integrate this responsibility into existing and new plans for street cleaning is underway.
- 4.14 As part of the planned changes, the service will move to a more proactive, scheduled clean and the frequency of this will be led by data from historical LEAMS results, COPLAR zoning, type of waste collection provided and the Scottish Indices of Multiple Deprivation. The detail of the approach will be set out in the forthcoming Cleansing Performance Report.
- 4.15 Increased regularity of cleaning to COPLAR Grade A standard will significantly assist in helping manage weed growth on hard surfaces. This will be supported by a renewed inspection regime to ensure crews are focused towards areas of most need. Alongside the proposed proactive regime, the service will continue to maintain reactive capacity to deal with specific complaints about street weeds where deemed necessary.
- 4.16 Members of the public can still report any issues around litter or weeds online and any complaints received will continue to be followed up in the normal way.

5. Next Steps

- 5.1 If Committee approve the recommendations of this report, officers will:
 - 5.1.1 Identify funding sources for the purchase of additional hand and vehicle mounted tools;
 - 5.1.2 Facilitate the transition to reduce chemical use across the greenspace estate from April 2024. This means that Winter 2023/24 work will focus on mulching of shrub beds, re-edging of path lines and hard sweeping of path edges;
 - 5.1.3 Complete the routing work relevant for proactive cleansing teams with a focus towards more data driven scheduling. The outcome and approach will be reported to Committee in the next Cleansing Performance Report; and
 - 5.1.4 Update existing information on the Council's website to reflect the revised approach and proposed reduction in chemical usage alongside the anticipated benefits.
- 5.2 A policy on weeds will be included in the next Neighbourhood Environmental Services policy assurance review in May 2024.

6. Financial impact

- 6.1 As indicated in Paragraph 4.8, it is estimated that approximately £100,000 would initially be required for the purchase of weed brush attachments and additional hand tools. It is hoped that this can be funded through third party funding.
- 6.2 As alternative weed control technologies further develop further investment may be sought. Further trials of alternative technologies will continue over the 2024/25 period.
- 6.3 Any investment in alternative technology can be partially offset by the reduction in chemical purchase and associated equipment. This is estimated to be in the region of £25,000 per annum once the reduction, as set out in the recommendations, is achieved.

7. Equality and Poverty Impact

- 7.1 There are no equality or poverty impacts arising from the recommendations in this report..

8. Climate and Nature Emergency Implications

- 8.1 As a public body, the Council has statutory duties relating to climate emissions and biodiversity. The Council

“must, in exercising its functions, act in the way best calculated to contribute to the delivery of emissions reduction targets”

(Climate Change (Emissions Reductions Targets) (Scotland) Act 2019), and

“in exercising any functions, to further the conservation of biodiversity so far as it is consistent with the proper exercise of those functions”

(Nature Conservation (Scotland) Act 2004)

- 8.2 The City of Edinburgh Council declared a Climate Emergency in 2019 and committed to work towards a target of net zero emissions by 2030 for both city and corporate emissions, and embedded this as a core priority of the Council Business Plan 2023-27. The Council also declared a Nature Emergency in 2023.

Environmental Impacts

- 8.3 There are numerous research studies which have shown the adverse effect glyphosate-based herbicide can have on the natural environment. Research has indicated that glyphosate is harmful to fish, frogs and tadpoles, mice, rats, earthworms, amphibians, birds and bees. Farm animals and pets can also be adversely affected.
- 8.4 It was found that glyphosates also lead to the elimination of specific plant growth essential for butterflies and insects.
- 8.5 Studies on rivers found that glyphosate leads to an increase in algal bloom. It damages the fertility of soil, and the demise of earthworms further affects soil quality.
- 8.6 Glyphosate has been also found in wind-blown material which adds to the negative impact on the ecosystem. It has led to the formation of glyphosate-resistant super weeds.
- 8.7 Any reduction in the use of these chemicals will have a positive impact on the biodiversity and environment within Edinburgh. It will directly influence the development of principals which will be required to develop Edinburgh's Nature Network project, it's targets for nature and climate emergencies. and meet specific requirements in the council's biodiversity action plans.

9. Risk, policy, compliance, governance and community impact

- 9.1 Community Consultation has not taken place in developing this proposed reduction in chemical usage. It meets, and complements, Council priorities in respect of climate emergency and biodiversity plans linked to nature networks and living landscapes.
- 9.2 The main risk associated with a reduction in chemical usage is public opinion and a potential increase in complaints. It is proposed to mitigate this by reviewing and refreshing the information on the Council's website to better outline the wider environmental benefits of the proposed change.

10. Background reading/external references

- 10.1 [Report](#) to Transport and Environment Committee, 1 November 2016; and
- 10.2 [Report](#) to Transport and Environment Committee, 5 October 2017.

11. Appendices

- 11.1 Appendix 1 – Locations where chemical treatment is not undertaken, at the request of a street or resident association.

Areas - requests NOT to use pesticides.

North West

Eileon Street
Saunders Street
24 Barntongate Avenue
Hillpark Drive
Glenogle Road [The Colonies]

South West

Balerno Area

North East

Meadowfield/ Jocks Lodge Area

Lismore Crescent
Lismore Avenue
Scone Gardens
Wilfred Terrace
Abercorn Rd
Meadowfield Dr

Portobello/ Joppa Area

Kings Rd
Bellfield Lane
Woodside Terr

New Town Area

Abercrombie Road

Leith Area

Rosevale place
Somerset place
cochrane pl
elm pl
Fingzie pl
Parkvale pl