



An Update on the Herbicide Reduction Plan

To: Councillor Alex Collis, Executive Councillor
for Open Spaces, Food Justice & Community Development

Environment and Community Scrutiny Committee 23rd March 2023

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Wards affected:

ALL

1. Executive Summary

- 1.1 On the 27th January 2022, the Executive Councillor for Open Spaces, Sustainable Food & Community Wellbeing, after scrutiny, approved a Herbicide Reduction Plan (HRP), which included Newnham and Arbury as the two herbicide free wards and the introduction of up to 12 herbicide free streets.
- 1.2 The Council's declaration of a Biodiversity Emergency (18th July 2019) included a commitment to reducing and removing the need to use herbicides on highway verges, roads, and pavements, and to find viable and effective alternatives, and this was reflected in the development and application of the HRP.
- 1.3 The Council's passing of a Herbicide Motion (ref. 21/32/CN1c (22nd July 2021)), included a commitment to undertake a range of tasks and actions

to reduce the reliance on herbicide, as a means of managing unwanted vegetation on public property asset within the city.

- 1.4 This report updates on the work completed on the HRP to date, including an evaluation of the two herbicide free wards and the herbicide free street scheme; and makes recommendations on the further reduction in the use of herbicides in the city's public realm.

2. Recommendations

- 2.1 The Executive Councillor is asked to consider and endorse the following recommendations
 - a) To approve the expansion of the Herbicide Reduction Plan to include two additional herbicide free wards for 2023 - West Chesterton and Trumpington, (and continuation with Newnham and Arbury herbicide free wards from 2022).
 - b) To approve the continuation and further development of the 'Happy Bee Street Scheme'.
 - c) To note the decision of the County Council on their use of herbicides in the city and to assist them with their new approach (paragraphs 3.2 to 3.4).
 - d) To note the decision of the County Council to change the grass cutting specifications in the city (paragraphs 3.5 to 3.7).
 - e) To support the development of a collaborative communication plan as detailed in Section 5.

3. Background

- 3.1 The Council unanimously voted in favour of declaring a Biodiversity Emergency on 18th July 2019; and this included a commitment to reducing and removing the need to use herbicides on highway verges, roads, and pavements, and to find viable and effective unwanted vegetation control alternatives. The highway verges, roads and pavements in Cambridge are the responsibility of Cambridgeshire County Council, as the local Highway Authority. This commitment was further reinforced and developed in the Herbicide Motion, which was agreed on the 22nd July 2021 and is included in Appendix A.

- 3.2 On the 27th January 2022, the Executive Councillor for Open Spaces, Sustainable Food & Community Wellbeing, after scrutiny, approved a Herbicide Reduction Plan (HRP), which had been developed in partnership with the County Council, and included Newnham and Arbury as the two herbicide free wards and the introduction of up to 12 herbicide free streets. Over the past year, the two councils have worked together to implement the approved HRP and review and evaluate its impacts.
- 3.3 With collaborative working, the Council and its Highway Authority partner, Cambridgeshire County Council, have now identified the opportunity to consider a range of options to stop day to day herbicide use for vegetation management across the city. The Highways and Transport Committee considered a report on the 7th March 2023 and approved the recommendation to move **from a County road network wide chemical weedkilling to priority based weed removal by non-chemical means**.¹ This change broadly aligns to the ambitions of the HRP and will mean that no herbicides will be used on County highway assets.
- 3.3 The two Councils also recognised that unwanted vegetation growing on hard surfaces associated with the city's streets and open spaces can compromise the structural integrity of these assets and create a public health and safety risk, including slips, trips, and falls. Weed growth can also present accessibility issues with narrowing of footpaths, wet growth overhanging pavements and injuries from thorned and stinging plants.
- 3.4 In response, the two Council's will continue to develop and advance the HRP in 2023/24 but with recognition of the need to seek residents' views and have assurances that alternatives are sustainable and effective.
- 3.5 Both Councils agree that the city's outdoor public realm, including our Council's parks and open spaces, and the County Highway estate, provide significant opportunities for biodiversity. This includes helping to buffer and connect the existing network of natural green spaces already designated and managed for their biodiversity value, for example Local Nature Reserves and County Wildlife Sites.

¹ This is a significant change to the [Highway Operational Standards 2023-2033](#) changing the specification from *within 'built up' village/town areas within 40mph limits or below only (excluding central islands) per annum to a targeted approach at agreed locations identified on risk based approach*

- 3.6 The HRP has also presented opportunities for the two Councils to review the current highway grounds maintenance specification in the city, to deliver improvements in biodiversity, habitat creation and green infrastructure networks to support ecosystem services. The County Highways Operational Standards 2023-2033 requires highway verge grass to be cut 3 times per annum which, in the city, is a significant reduction on the current 16 times per annum cutting frequency. Given the impact of the scale of reduction in cutting frequency on the current appearance of the city's highway verges, the City Council is proposing to adopt a specification of 6 cuts per annum (with the exception of the agreed nature conservation verges, which are managed using a single late cut and collect regime); and to manage highway safety at road junctions, to create a vision splay by maintaining the vegetation to a height of no more than 15cm.
- 3.7 The proposed change in standard, will also address the current variance between what the County Council pays the City Council to maintain the highway vegetation in the city (which is based on the County Highway Operational Standard of 3 cuts per annum and 2 city-wide herbicide applications per annum; and the actual specification cost the City Council currently maintains the highway vegetation to (16 cuts per annum and 2 city-wide herbicide applications (excluding the two herbicide free wards)).
- 3.8 The two councils will develop a supporting communications plan to aid, support, and communicate the proposed changes in standard, as detailed above; and how the public can report any streets and open spaces ground maintenance concerns, issues and service requests.

The lesson learned from the HRP

- 3.9 In 2020², a revised National Action Plan for the Sustainable Use of Pesticides (NAP) was drafted. The revised NAP is intended to supersede the 2013 UK National Action Plan (2013 NAP), laying out a 5-year strategy to increase the sustainability of pesticide use in the UK.
- 3.10 The high-level aim of the revised NAP is to minimise the risks and impacts of pesticides to human health and the environment, while ensuring pests and pesticide resistance are managed effectively.

² Defra, the Scottish Government, the Welsh Government and the Department of Agriculture, Environment and Rural Affairs (DAERA) Northern Ireland ('the four Administrations')

- 3.11 In order to meet this aim, the draft revised NAP consulted³ on five key goals, to:
- a) Ensure continued robust regulation to protect our health and environment
 - b) Support the development and uptake of Integrated Pest Management (IPM)
 - c) Ensure those that use pesticides do so safely and sustainably
 - d) Support in the reduction of the risks associated with pesticides by setting clear targets by the end of 2022, and improving metrics and indicators
 - e) Ensure that we work effectively with others to deliver the NAP goals
- 3.12 The NAP is delayed⁴, but during the HRP we have been able to achieve some of the NAP ambition relating to IPM, safe and sustainable use of pesticides, a reduction in use and working with others.
- 3.13 The Herbicide Motion agreed in July 2021 set a requirement *to explore the potential for making two wards completely herbicide-free at the earliest available opportunity on a trial basis*. The preparatory work for the HRP considered the ward composition with regards property types and where herbicides have previously been used and for what purpose. Both Newnham and Arbury were selected for the HRP as they afforded the opportunity to consider the effect of the HRP on a range of road types, including terraced residential streets and private gardens, as well as state layout properties with communal gardens.
- 3.14 The Summer of 2022 was exceptionally hot and arid and therefore the levels of subsequent weed growth in the HRP areas have made it difficult to determine the impact of not treating annual and perennial weeds and woody shrubs. There was no notable or significant weed growth on most paths in Newnham, whereas some footpaths in Arbury had high levels of growth of woody species such as Buddleia. There were also notable differences in weed growth where street cleaning takes place on a more frequent schedule.

³ The consultation ran for 12 weeks between 4 December 2020 and 26 February 2021. 1,564 responses were received through Citizen Space, and 7 email campaigns organised by NGOs with a combined total of just under 37,000 emails.

⁴ It was to be published in Spring 2022, but no recent updates have been given.

- 3.15 The non-HRP areas had limited or no weed growth in most scenarios, because of the use of herbicide (ie. two treatments over the growing season) and this as expected.
- 3.16 We received ~10 complaints in respect of weeds or weed growth from the HRP areas.
- 3.17 A combination of all these aforementioned factors have impacted our ability to be able to fully appraise and assess the impacts of the HRP (positive and negative) and so to fully understand the feasibility, and associated resource implications, of making Cambridge herbicide free, in terms of its outdoor public realm maintenance.
- 3.18 The HRP has not been able to fully appraise the impact of non-use of herbicide in communal housing areas, with some concerns remaining regarding slips, trips, and falls and accessibility in general, as set out in 3.3. It is important that Officers in Streets and Open Space work with Housing Officers' during 2023 to garner feedback and views from residents before considering a decision to stop the use of herbicides in these areas. It is therefore recommended that from 2023, the HRP is continued in the two existing herbicide free wards – Newnham and Arbury - and extended to include two further wards - West Chesterton and Trumpington⁵ - and that further research and evaluation work is undertaken to ascertain the impacts and associated community views and consider the case for further reductions or a complete end to herbicide use in the Council's maintenance of the city's outdoor public realm.
- 3.19 As part of the HRP we considered and evaluated a range of non-herbicide management options, in terms of financial and operational management implications and vegetation management cost-effectiveness. This work is set out in Appendix B.

⁵ These two wards are suggested as they have a mix of surfaces, a mix of new and old developments and give further comparisons in addition to those of Arbury and Newnham.⁶ a broad-based approach that integrates both [chemical](#) and [non-chemical](#) practices for economic [control of pests](#).

3.20 We also researched and considered Integrated Pesticide Management⁶, and this is summarised as follows:

- a) Careful consideration of all available methods,
- b) Ecologically and economically justified and
- c) Minimises risks to human health and the environment.

Diagram 1 below summaries the key steps of an IPM.

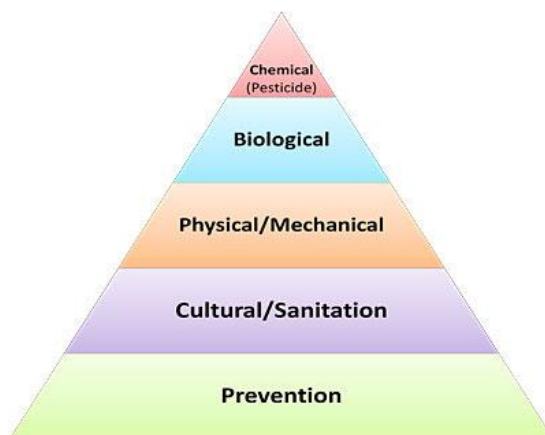


Diagram 1 – Step used in an IPM approach

3.21 The principles of an IPM approach influence the HRP and have resulted in a reduction of applications of herbicide in the city from 3 in 2021 to 2 in 2022.

3.22 The HRP has also created opportunities for contributions, collaborative working and involvement and feedback and learning from a wide range of stakeholders, including Councillors, Pesticide Free Cambridge, On the Verge, residents, volunteers, and community groups.

3.23 Pesticide-Free Cambridge is launching a new campaign⁷ to raise awareness about the health and environmental impacts of herbicides and

⁶ a broad-based approach that integrates both [chemical](#) and [non-chemical](#) practices for economic [control of pests](#).

⁷ A draft letter and guidance document - initially to be sent to schools and colleges, with a planned rollout to private residents and a range of service providers in later months - has been endorsed by Cambridgeshire County Council, and will shortly be shared with Cambridge City Council's Herbicide Reduction Working Group in the hope that they will also come on board as a supporting stakeholder

insecticides in schools and colleges in order to compliment the Council's move to the herbicide-free management of streets and green spaces.

- 3.24 A University College London Pesticides and Urban Nature project⁸ draws in part on the HRP and its impact on environmental attitudes and practices surrounding urban pesticide-use has been launched, with a series of online questionnaires aimed at residents, schools, university colleges, and other service providers. The results of the study will assist the HRP by evaluating the broader societal and environmental impacts of community campaigns and related changes in council policy surrounding urban nature, pest-control, and landscaping practices.
- 3.25 We also conducted 'ward walkabouts' in the Arbury and Newnham Wards, where a range of items, concerns and improvements were identified. These ward walkabouts proved to be a highly effective way to discuss localised service needs and not exclusively relating to the HRP. These ward walkabouts will continue for Arbury and Newnham and be extended to include West Chesterton and Trumpington.
- 3.26 The herbicide free street scheme, which was managed under the title '[Happy Bee Street](#)', was a good example of where the HRP allowed us to introduce new approaches and create opportunities to explore new ideas and to innovate. The uptake and interest in this scheme were encouraging at the start, however some groups found the sign-up process difficult to navigate and feedback was that it was overly complicated⁹. During 2022, we revised the website content, clarified the scheme criteria, and simplified the registration process¹⁰.
- 3.27 As a consequence of the HRP and the Happy Bee Street scheme we created and managed 14 volunteers across 2 Streets through the Streets and Open Space volunteering scheme, from the 6 that expressed an interest. At the time of drafting this report we also have a further 3 new applications for 2023.

⁸ Project website - <https://www.ucl.ac.uk/anthropocene/projects-and-seminars/projects/pesticides-urban-nature-and-ecological-public-health>

⁹ We have a legal duty to check right of work status, ensure that those carrying out tasks for us are given a health and safety briefing so that they are covered by our public liability insurance whilst they undertake their volunteering role.

¹⁰ If a resident expresses an interest in their street becoming a Happy Bee Street, a Community Engagement officer will come and do a site visit and give them some guidance around how many volunteers might be needed to manage the growth on pavements by hand. They can also help with a survey to gain the support of households in the street and to help set up those who want to take part

- 3.28 The Happy Bee Street scheme shows great merit in principle, purpose, and aligns to the IPM methodology of cultural change. It is recommended that the Happy Bee Scheme is continued, developed, has its awareness increased and extended so that individuals can sign up from across the City and not just limited to the street they live in (much like the [Streets and Open Spaces Volunteers](#)) We are committed to making this scheme work for residents, we have to listen to learn from their experiences and we will make changes to the scheme where we can.
- 3.29 As part of the HRP in 2022, we also published our herbicide spraying schedules as we completed street rounds; and now that this routing has been created, it is possible to give some advance notice accuracy to future round schedules, subject to changes in weather than can impact on our planned work.
- 3.30 The use of herbicide spraying warning signs was found to be cost prohibitive, and we have not been able to achieve this requirement of the agreed Motion.
- 3.31 In 2020, the Council agreed with the County Council the following annual grounds maintenance ‘specification’ to control unwanted vegetation on the adopted public highway, this specification was used in the HRP in 2022.
- Only treating weeds in the channel¹¹, and the kerb line.
 - Only treat the footway in tarmacked or paved areas.
 - Only treat weeds at the rear of the footway where they abut buildings and hard surfaces.
 - Only treat visible weeds.
 - Do not carry out any weed treatment adjacent to or on grass verges.
- 3.32 This specification has been followed to date, with the exception, in 2022, of the two-HRP herbicide free wards of Arbury and Newnham and any registered Happy Bee Street.

¹¹ a concrete or stone structure typically located at the edge of a road designed to provide road drainage, and as a barrier to prevent vehicles from leaving the road carriageway.

4. Implications

a) Financial Implications

A revenue budget pressure was calculated and is summarised in the HRP for 22/23. This revenue budget pressure was the subject of the published BSR bid B4861 and funded staff resources, media and information, specialist reports and a range of assets to support the delivery of the aims and objectives of the HRP. Further details are available from the [General Fund Budget Setting Report 2022/23 to 2026/27](#), on page 55 and 77, to be considered by Strategy and Resources Committee on the 7th February 2022. There are NO financial implications identified in the reporting period 2023/24.

b) Staffing Implications

The recently completed review of Streets and Open Spaces Development team has created a new post. The Biodiversity Project Officer will add resource to the HRP to achieve the recommendations set out in section 2.

c) Equality and Poverty Implications

The EQIA has identified a potential negative impact relating to Age, Disability, Pregnancy and Maternity. An increase of weeds in pavements and footpaths does create a higher risk of slips, trips and falls. This risk needs to be monitored during the HRP extension and any webpage resource created to support the HRP must have a reporting tool so that the Council can respond to concerns raised.

d) Net Zero Carbon, Climate Change and Environmental Implications

The Plan is currently overall rated as Low Positive. The HRP has medium positive impacts on biodiversity. It has low negative ratings in respect of energy use for alternative weed control items such as hot water and foam, and a low negative rating where extensive weed growth must be cleared, collected, and processed.

e) Procurement Implications

None identified.

f) Community Safety Implications

None identified.

5. Consultation and communication considerations

In the scoping and preparation of the HRP extension a range of consultation and communication tasks have been identified. In summary, these tasks will form an overall Project Communication Plan, to include:

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- A further review of current website content
- Preparation of new website content
- Creation of press and news articles
- Supporting social media campaigns agreed with Partners
- Feedback from residents in communal housing areas
- Feedback on the County Councils specification changes
- Joint communications with Pesticide Free Cambridge
- Research updates and
- Responding to reactive items or new enquiries

6. Background papers

Background papers used in the preparation of this report:

- a) [21/32/CNLC Pesticide-free Motion](#)
- b) Herbicide Reduction Plan
- c) [Best Practice Guidance Notes for Integrated and Non-chemical Amenity Hard Surface Weed Control](#)
- d) EQIA for the Herbicide Reduction Plan
- e) Cardiff City Council Weed Control Trial from 2021 Findings

7. Appendices

Appendix A – Herbicide Motion detail

Appendix B – Non-herbicide treatment options assessment

8. Inspection of papers

To inspect the background papers or if you have a query on the report, please contact Mr Alistair Wilson, Development Manager, 01223458514, alistair.wilson@cambridge.gov.uk

Appendix A – The Council Herbicide Motion agreed on the 22nd July 2021 resolved

- *To explore the potential for making two wards completely herbicide-free at the earliest available opportunity on a trial basis, including:*
- *Carrying out a full assessment of the resources needed for any trial (which may include additional signage).*
- *Working with local communities in the wards identified to raise awareness of the trial and encourage participation / feedback, which may include the need for additional signage alongside other digital methods such as social media/ council website.*
- *In order to do this, to continue our assessment of the full range of alternative weed control options available (including but not limited to brush cleaning equipment) to use in the herbicide free wards (and others where possible).*
- *To assess alternative options with active involvement of Pesticide Free Cambridge representatives and frontline council staff to select the product, prior to the next planned round of treatments in 2021. This now 2022.*
- *To report back to the Environment and Community Scrutiny Committee on the differences between the herbicide-free wards and those wards that are not pesticide-free in any identified trial, and on the use of identified alternatives before the start of the 2022 cycle of treatments. This would include information about operative time and savings, or costs made, feedback from residents and operatives, and the level of any complaints or compliments.*
- *To explore the most effective methods of communicating with residents (and any additional resource implications) about any necessary herbicide applications, which may include the following commitments (both existing and additional):*
 - *publishing the planned dates of herbicide treatments by road/ward for the remainder of 2021 and thereafter on the council's website, allowing residents to find out when a treatment is planned. This is because it can take several days before it is clear that a pesticide treatment has been applied and residents need to be informed so that they can choose to*

avoid the area and to keep children and animals in particular away from the treatment sites.

- displaying signage in situ on the relevant roads and pavements with dates of any herbicide treatments from 2022 onwards.*
- publishing the amount of herbicide used each month and the cost to the council.*
- To commit officer time to working with community groups who may wish to volunteer to clear their street spaces to avoid herbicide use.*
- To complete a comprehensive assessment of the resources needed to ensure we can make Cambridge City Council herbicide free by the end of 2022.*
- To publish a regular six-monthly update to be included in the environmental reports already made to Area Committees on any exceptional usage of herbicide (for example for Japanese Knotweed) and to establish a clear protocol for any such usage, ensuring that the least harmful options are selected, including sign off by a senior manager before any use is permitted.*

Appendix B – An assessment of alternative vegetation treatment methods to herbicide to be used in the HRP is included in the Table below.

Table 1 - assessment of alternative vegetation treatment methods to herbicide to be used in the HRP

Method	Use	Advantages	Disadvantages
Hot Foam	Weeds in hard surfaces, Moss on hard surfaces and play area safety surfacing, Grass growth around trees, Non-chemical graffiti removal	Foam holds hot water against plants Pesticide free Can be used in all weather. Kills 85% of targeted weeds	New technology needs refinement. Expensive to purchase Additional cost of fuel, diesel consumption and pollution
Hot water / steam	Weeds in hard surfaces, Moss on hard surfaces and play area safety surfacing, Grass growth around trees, Non-chemical graffiti removal	Lower initial purchase cost	Requires more treatments as heat is not held onto plant. Diesel consumption and pollution
Propane / Flame gun	Weeds on hard surfaces	Relatively cheap to purchase	Health and Safety risk Not particularly effective and very unlikely to be used.
Manual weeding	Weeds in general	Very effective if done well.	Very time consuming Requires large amounts of labour, which add to cost

Method	Use	Advantages	Disadvantages
		Low set up costs (excluding labour)	
Mulching – bark and or membrane	Weed control within shrub borders, under trees etc.	Improves appearance of the site and retains moisture in the soil to aid plant growth	Can be labour intensive, may be expensive depending on supply of material
Vinegar based solutions	Weeds in hard surfaces	No licence required for application	Has been trialled but not has not been effective, Strong smell can give operator headache
Volunteer programmes	Weed control and championing of principles of herbicide free	Residents and Groups may have other priorities and wish to manage weeds in different ways and with alternative methods	Some Groups may not be able to resource this approach in the medium to long term.