Report to: Scrutiny Committee

Date of Meeting: 5th February 2026

Document classification: Part A Public Document

Exemption applied: None

Review date for release N/A

Report summary:

East Devon District Council banned the general use of glyphosate in September 2022 based on evidence of environmental damage and public health concerns from the use of glyphosate (see Links to background information). At its September 2025 meeting, the Scrutiny Committee agreed to conduct a review into the impact of banning glyphosate and be updated on the trials of various alternatives. The report below sets out the results of Streetscene's glyphosate alternative trials and feedback from Councillors in relation to areas where weed growth is a concern. The trials relate only for EDDC areas that are managed and maintained by Streetscene. Devon County Council are responsible for all pavements, gutters, roadways, traffic islands, etc. in East Devon.

Is the proposed decision in accordance with:

Budget Yes ☒ No ☐

Policy Framework Yes ☒ No ☐

Recommendation:

That Scrutiny recommends the following recommendations to Cabinet:

1. Streetscene to discontinue the use of the hot foam method of treatment and continue to use glyphosate-free alternatives and/or manual methods until the efficiency of recent trials can be established.

2. Streetscene to continue to use *Dicophar* selective weedkiller (where suitable) and for its use to be rolled out more widely, subject to the continued success of trials.

3. Councillors/Town and Parishes to continue to report areas of weed growth on pavements and roadsides to Devon County Council.

Reason for recommendation:

The recommendations set out above stem from the ongoing use and trials of glyphosate alternatives, the results of the trials, feedback from Streetscene colleagues, and responses received from ward members.

Officers:

Julia Woodbridge: Operations Manager, Streetscene.

Paul Fealey: Horticultural Technical Officer, Streetscene.

Portfolio(s) (check which apply)**:**
☒ Assets and Economy
☐ Communications and Democracy
☐ Council, Corporate and External Engagement
☐ Culture, Leisure, Sport and Tourism
☒ Environment - Nature and Climate
☒ Environment - Operational
☐ Finance
☒ Place, Infrastructure and Strategic Planning
☐ Sustainable Homes and Communities

Equalities impact: Low Impact

Climate change: Low Impact

Risk: Low risk

Links to background information

Glyphosate, pathways to modern diseases III: Manganese, neurological diseases, and associated pathologies - PMC (Dr Stephanie Seneff, an MIT research scientist, holds 5 degrees and has published over 30 academic papers in peer-reviewed medical journals on topics such as modern-day diseases, analysis of drug side effects, impacts of nutritional deficiencies, and environmental toxins on human health).
Dicophar trials
Dicophar Safety Precautions
Hot foam trial
Vinegar trial
Scoping document use of glyphosate
Feedback from Councillors on weed-related issues
A Growing Problem v2 STC (from Sidmouth Town Council)

Link to Council Plan

Priorities (check which apply)

☒ A supported and engaged community
☒ Carbon neutrality and ecological recovery
☐ Resilient economy that supports local business
☐ Financially secure and improving quality of services

Report in full

1. Introduction

As part of the Scrutiny Committee review into specific issues with weeds and where they were occurring in the district, ward members were asked to feed back on the following:

1. 'Details of any particular problem areas where weeds are causing issues – please be as specific as possible in identifying the exact locations. If you are able to, use "what3words" www.what3words.com to provide location details that would be appreciated;'
2. 'Details as to whether the weeds are causing structural damage, e.g., to hard surfaces, or, if not causing damage, are unsightly;'
3. 'Whether Town/Parish Councils have received any complaints from residents regarding weeds. Any relevant photographs.'

Responses were low so many not be representative to Councillors in general, with only Exmouth, Exe Valley, and Sidmouth ward members providing feedback. Sidmouth and Exe Valley also included feedback from 3 other Councillors combined. It is felt that if many other Councillors had specific concerns, more responses would have been received. The responses can be seen in the Links to Background Information section above.

Many of the weed issues highlighted appear to be along roads and pavements that are managed by Devon County Council's Highways department. A Brampford Speke Councillor expressed opposition to using glyphosate again to treat weed growth, supporting the need to maintain the current ban in place. In contrast, Sidmouth Town Council submitted a report containing images of weed causing damage along footpaths, pavements and in roadside gutters, and advocated the reversal of the ban. Importantly, all areas referred to by Councillors in the responses are either not the responsibility of StreetScene to maintain or are not specific enough to define land ownership and responsibility. As an example of areas highlighted as issues, *paths/footpaths* are referred to in the documents 9 times, and *roads/roadsides* are referred to 8 times. There are also numerous references to weed issues on *pavements*. *Gutters*, *drains*, *culverts* and *traffic islands* also receive mentions. In contrast, *parks* and *play parks* are referred to once each in the following statement that emphasises hard surfaces: *'There are no specific areas and no particular complaints that I receive other than the fact that the town/pavements look a mess with weeds growing everywhere, in roads, pavements, esplanade, parks, play parks, etc'.*

2. Trials of Glyphosate Alternatives

Cabinet banned the general use of glyphosate in 2022, based on evidence of environmental damage and public health concerns. Streetscene staff have carried out various trials on alternatives. In an ideal scenario, the timeframe between the warning of the ban and the ban taking effect would have been much longer than several months. The results of glyphosate alternative trials are outlined below.

Vinegar – Chemical 'contact' weed control method

After extensive research, StreetScene operatives were supplied with vinegar-based weed killer as a glyphosate alternative in early 2022. The RHS vinegar weed killer is under license by the Royal Horticultural Society, which advocates for eco-friendly alternative to glyphosate. The vinegar has a

commercial strength of 60% acetic acid, which is 12 times stronger than household vinegar. It is a *contact* weed killer because it affects all weeds in comes into contact with.

Vinegar trial: A section of a very old path in Sidmouth cemetery was selected by the Horticultural Technical Officer for the trial due to it being out of the way, easy to police, containing a variety of established weed species, and being in poor condition, which was being worsened by the extensive weeds. The trial's first treatment began in September 2021 – 1 year before the glyphosate ban. This treatment was followed by 3 successive treatments, ending in November 2021. This results of this trial were referred to in the 2022 Chemical Review Audit report to Cabinet. Vinegar weed killer was then supplied to grounds teams upon notification of an impending glyphosate ban after Cabinet's decision. Vinegar has been used by grounds teams since 2022, and operatives have become more experienced over the last few years of which weeds the vinegar will kill and which it will not, so experience has helped establish a system of Integrated Weed Management.

Short-term results: The effects of very strong vinegar sprayed on weeds' leaves has been shown to be almost immediate, as plants' internal tissues and structures break down. Fluids containing sap, sugars, enzymes, acids, proteins and dissolved nutrients were lost within hours, and leaves looked dry and wilted. After 1 or 2 days, all leaves were completely brown, dry – and dead. When removed, the condition of weeds – whether alive or dead – was unknown until they either re-grew or they didn't. Re-growth occurred almost exclusively in established weeds, whereas young, small and annual weeds inevitably were killed, even after the first treatment.

Longer-term results: It takes a lot of stored energy for plants to replace those essential elements that make up their tissues, and they don't have leaves to replace lost energy through photosynthesis, so only plants that have developed energy stores in root networks are able to re-growth. These are typically perennials with taproots or fibrous root networks. However, successive treatments when re-growth occurs, but before weeds can absorb more energy, was expected to continue to deplete energy stores as the weeds then tried to replace above-ground tissues. However, it is a difficult task to get the re-spray timing right for weeds across the district. As a result, the longer-term effects for most weed numbers/species were shown to be sustained re-growth after successive treatments.

Conclusion: The results of the trials were mixed, with the vinegar having little effect on perennial grasses, moss and established broadleaf weeds. It was clear that the preferred spraying locations were paved areas in town centres, due to vinegar being adept at killing small/young weeds. See the **Links to Background Information** section above.

VINEGAR WEED CONTROL	
Advantages	**Disadvantages**
Low energy use	Only used in small quantities (knapsack)
Kills young and annual weeds	Resource heavy
Breaks down quickly	Expensive due to undiluted use
Can be used all year	Operator PPE required
No access limitations for operators	Weather dependent
No spraying certificate required	Short-term control for established and perennials/grass

Safer for operators	Repeated applications on soil should be avoided
Ready to use (no mixing) so no user error	Risk of affecting non-target weeds via drift

Hot foam – Thermal 'contact' weed control method

Hot foam has been used on weeds by Streetscene since 2023 in various situations in and around green spaces and town centres across the district. An organic, biodegradable and safe additive that is made from vegetable extracts is added to boiling water to create a boiling hot foam that surrounds weeds and keeps heat targeted for up to 1 minute, which boils them. Operatives' feedback was initially positive (as it was after the 2 trials that were set up by the manufacturer when interest was expressed), but it soon became, and has remained, negative. This is due to them needing to return to the same weeds every few weeks after a treatment. The only positive feedback was the result of hot foam on newly germinated or small, annual weeds, as well as on moss.

Hot foam trial: Systematic hot foam treatments were carried out in in Underfleet car park, Seaton, in early 2025, starting in January. The trial fully tested the efficacy of the hot foam in a designated space that contained a wide variety of weeds. Treatments were carried out with a frequency of between 4 and 5 weeks, based on re-growth speed, with the emphasis of preventing weeds' re-growth from photosynthesising new energy stores. The final treatment was carried out in May 2025. Streetscene's Horticultural Technical Officer oversaw the trial and attended each hot foam application to ensure continuity and regularly monitored signs of re-growth over the trial period.

Short-term results: All leaves and the stems of all but woody weeds became limp within a minute of the hot foam being applied, were mushy after several minutes, and had either turned black or had disintegrated to the point of being unidentifiable by the following day. Only the stems of several weed species remained upright, such as Alexanders, docks, and brambles. Although a large volume of hot foam was used in each treatment, the extent of damage to weeds' roots was unknown, but the hope was that the roots would also be boiled to a point of no return. However, despite hundreds of litres of boiling water being applied to them on multiple occasions, the re-growth of most weeds showed that the roots, although potentially damaged, were not killed. It was felt that the difference in treatment was that the surface plant parts suffered continued heat due to the insulating effect of the foam, whereas the lack of foam below ground allowed the heat to dissipate as the boiling water continued to infiltrate through the soil before most roots could be killed.

Longer-term results: The longer-term results were the same as doing nothing for most weeds. The expectation that each treatment would further weaken most weeds until a tipping point was reached was not fulfilled.

Conclusion: Weed growth was *controlled* for several months during the intensive trial, with re-growth being treated as soon as leaves appeared. However, *controlled* in this context refers to preventing their spread during their inactivity with invasive weeds, and preventing other weeds from flowering and seeding by interrupting their life cycles. 2 months after the last treatment, the coverage and species of weeds in the target area was very similar to how it looked pre-trial, which highlighted the unsuitability of busy grounds operatives using this control method for established weeds, weeds with tap roots, weeds with woody stems, and other perennial broadleaves and grasses. The results

support most of the negative feedback (i.e., time consuming, resource heavy and ineffective on established weeds). Other feedback involved the advantage of hot foam being an excellent moss killer, which can have positive effects for public safety on mossy paths in green spaces and town centres, such as under trees. See the Links to Background Information section above.

HOT FOAM WEED CONTROL	
Advantages	**Disadvantages**
Non-chemical	High use of water and other resources
Non-toxic	Labour intensive
Non-harmful	Restrictions of use due to access
Can be used all year	High energy use
Is not weather dependent	Requires initial investment
Immediate weed control	Weed control is often short-term
Safe for operators	Loud for operators/residential areas
No pesticide qualification required	Non-selective – targets all plants in area
Very good public perceptions	Requires dedicated staff for best results
Weed seeds in the soil are sterilised	Can kill underground bulbs and organisms

Dicophar – Chemical 'selective' weed control method

The solution to the evidenced limitations of the vinegar and hot foam control methods was to trial a non-glyphosate chemical weedkiller, but this time its mode of action would be systemic, whereby toxins would translocate to all parts of selected weeds to cause the plants to die. After extensive research, permission was granted for a chemical weed killer with the brand name of Dicophar to be used in small, isolated areas with problem weeds. Dicophar is a *selective* weed killer because it selects its targets. Selective weedkillers are often used on sports pitches because they target broadleaf weeds.

If operatives are given permission to use Dicophar on a wider scale if trials' outcomes are successful – but only in target areas and not in excluded areas, set out by the Horticultural Technical Officer – after successful trials, the only limitation would be weeds that are not broadleaf, such as grasses, would not be killed, but those weeds would be controlled manually and mechanically over the winter months, when systemic and contact chemical weed killers are not affective. With an Integrated Weed Management approach, annual weed removal is carried out via hand pulling and using hand-held manual tools, whereas mechanical weed removal is with equipment such as the recently procured walk-behind, battery-powered 'weed rippers', which are effective in town centres. Non-glyphosate chemical weed killers would be used for problem areas.

Many selective weed killer brands were researched, and Dicophar was decided upon due to its widest range of kill methods for broadleaf weeds, as well as it breaking down faster in soil/degrading into compounds that are far less harmful than glyphosate-based compounds. Additionally, Dicophar does not impact the neurology, navigation, or behaviour of bees, which mounting evidence against glyphosate points to it being a major cause of pollinator decline, so it does not reduce important biodiversity.

How Dicophar functions

Dicophar contains 4 synthesised plant hormones that mimic plants' natural hormones. These artificial hormones are absorbed into plant tissues due to their similar molecular structures being mistaken for natural hormones, which allows the synthetics to get past plants' defences. Each of the 4 synthetic hormones in Dicophar affects plants in specific ways, and it is the combined effects of the 4 different methods that ensures targeted weeds kills themselves. They plant responses are disorganised and uncontrolled cell division that causes stems to break apart, abnormal cell enlargement that causes the collapse of leaf tissues, malformed leaves and roots that prevent re-growth, and the prevention of photosynthesis that starves plants. Grasses are less affected because they are less sensitive to hormonal changes, so they are slower to respond before the synthetic hormones degrade. The intention is to monitor how grasses respond to repeated treatments over recommended timescales.

Dicophar trial 1: Permission was given for Dicophar to be trialled in beds at Seaton's Underfleet overspill car park by Streetscene's senior management and EDDC's Health & Safety Officer. The beds met the criteria of being small, being away from public access (the overspill car park is closed in the winter), and containing weeds that the grounds team have struggled to control, such as the notoriously resistant ground elder.

Dicophar trial 2: Due to a resident's report of hogweed in a copse in The Green in Budleigh Salterton, Dicophar was used to spot spray several hogweeds. Streetscene's Horticultural Technical Officer identified hogweeds and a small/young giant hogweed. Barrier and signage precautions were installed and kept in place until the plants were re-assessed 1 month later. All the above-ground parts of hogweeds and giant hogweed were seen to be dead, but because they may only be dormant, potential re-growth will be monitored before concluding on the efficacy of Dicophar.

Short-term results: The leaves and stems of the treated weeds did not show any immediate signs of treatment, due to the weed killer being systemic – where the synthetic hormones travelled to all parts of the plants – so needed to maintain leave's vascular structures for transport. 2 days later, it was difficult to identify any differences. A week later, the effects of weeds' hormonal responses were identifiable. After 2 weeks, the changes were pronounced in all leaves and stems, and the targeted weeds looked very unhealthy.

Longer-term results: All leaves were brown/dead after 4 weeks in Trials 1 and 2, and the weeds looked to be dead. The leaves were left in place in Trial 1, but were removed in Trial 2, for public safety. The areas were monitored for potential re-growth until Autumn 2025; there was none. Final assessments will be made in the spring and summer of 2026, following the Standard Operating Procedure to re-assess after 12 months.

Conclusion: Trial 1 was assessed as being provisionally successful but will the need for the weeds to be re-assessed in the spring, and Trial 2 needs assessments until July 2026 before firm conclusions can be made. See the Links to Background Information section above.

DICOPHAR WEED CONTROL	
Advantages	**Disadvantages**
Not resource heavy	1 application in each location per 12 months
Can seemingly mostly replace glyphosate	Pesticide qualification required
No access issues for operators	Cannot be used all year (only March to October)
Economical	Toxic/harmful if used incorrectly
More environmentally friendly than glyphosate	No restrictions for operator access
Able to treat notifiable weeds to maintain public safety Selective – does not affect grasses More operator PPE and legislated requirements	Potential for drift onto other plants
Wide range of uses	Spraying logs must be kept, so an increase in admin.
Removing the cost of a specialist contractor for giant hogweed	
More efficient than glyphosate alternatives used from 2022	
Removes the potential for glyphosate resistance	
Compliant with regulations	
Concurs with Integrated Weed Management	

Summary of actions: Results of re-assessments of potential re-growth of the single giant hogweed and multiple hogweeds in the Trial 2 area, along with the re-assessment of the targeted ground elder re-growth in Trial, 1 will be used to decide on the level of success of the very restricted Dicophar trials. This will be communicated when complete. If shown to be very successful, there will be the recommendation for a wider use of Dicophar across all grounds teams/qualified operatives, but only in specifically designated Streetscene areas; other weed control methods will continue as normal in less troublesome areas in the Integrated Weed Management approaches that teams have developed since 2022, often through the trial and error of glyphosate alternatives. The Risk status on Page 1 has been set as Low. However, this risk level would increase if the glyphosate ban was reversed, as it would, again, become the sole method of weed control.

This potential wider-scale use of Dicophar would mean the return of operatives using backpack sprayers to spray chemicals to control weeds, as they did with glyphosate, but it would be in a prescriptive way and for a trial period in designated areas that they have struggled to control weeds.

When Councillors, residents and even grounds teams call for the return of glyphosate, it is important to understand if they are simply calling for something that kills most weeds (on Streetscene land) as well as glyphosate has in the past, rather than specifically wanting glyphosate. A wider scale roll out of Dicophar in selected areas for a trial period will clarify this.

Financial implications:

Although the differing cost implications have not been covered in the report, it is assumed that they are not material, and preferred solutions can be met within existing budget provision.

Legal implications:

There are no substantive legal issues to be added to this report (ALW/002541/Feb).