



## Notice of a public

### Decision Session - Executive Member for Environment and Climate Change

**To:** Councillor Widdowson (Executive Member)

**Date:** Wednesday, 12 January 2022

**Time:** 3.00 pm

**Venue:** Remote meeting

## AGENDA

Note: In view of the circumstances around the Covid-19 pandemic, this meeting will now be held remotely. Any decisions made will form recommendations to the Chief Operating Officer

### Notice to Members – Post Decision Calling In:

Members are reminded that, should they wish to call in any item\* on this agenda, notice must be given to Democratic Services by **4:00 pm on Friday 14 January 2022.**

\*With the exception of matters that have been the subject of a previous call in, require Full Council approval or are urgent, which are not subject to the call-in provisions. Any called in items will be considered by the Customer and Corporate Services Scrutiny Management Committee.

Written representations in respect of items on this agenda should be submitted to Democratic Services by **5.00 pm on Monday 10 January 2022.**

## 1. **Declarations of Interest**

At this point in the meeting, the Executive Member is asked to declare:

- any personal interests not included on the Register of Interests
- any prejudicial interests or
- any disclosable pecuniary interests

which he might have in respect of business on this agenda.

## 2. **Minutes**

(Pages 1 - 6)

To approve and sign the minutes of the Decision Session held on 10 November 2022.

## 3. **Public Participation**

At this point in the meeting members of the public who have registered to speak can do so. Members of the public may speak on agenda items or on matters within the remit of the committee.

Please note that our registration deadlines have changed to 2 working days before the meeting, in order to facilitate the management of public participation at remote meetings. The deadline for registering at this meeting is **5:00pm on Monday 10 January 2022**.

To register to speak please visit [www.york.gov.uk/AttendCouncilMeetings](http://www.york.gov.uk/AttendCouncilMeetings) to fill out an online registration form. If you have any questions about the registration form or the meeting, please contact the relevant Democracy Officer, on the details at the foot of the agenda.

## **Webcasting of Remote Public Meetings**

Please note that, subject to available resources, this remote public meeting will be webcast including any registered public speakers who have given their permission. The remote public meeting can be viewed live and on demand at [www.york.gov.uk/webcasts](http://www.york.gov.uk/webcasts).

During coronavirus, we've made some changes to how we're running council meetings. See our coronavirus updates ([www.york.gov.uk/COVIDDemocracy](http://www.york.gov.uk/COVIDDemocracy)) for more information on meetings and decisions.

**4. Weed Treatment – Options** (Pages 7 - 20)

This report examines options for weed treatment to inform how the Council's in house service and external contractors manage weeds for the next two years.

**5. York 5 Year Flood Plan Update** (Pages 21 - 32)

This report provides the Executive Member with an update on the York Five Year Flood Plan and seeks feedback on its content.

**6. Urgent Business**

Any other business which the Executive Member considers urgent under the Local Government Act 1972.

Democracy Officer: Joseph Kennally

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For more information about any of the following please contact the Democratic Services Officer responsible for servicing this meeting:

- Registering to speak
- Business of the meeting
- Any special arrangements
- Copies of reports and
- For receiving reports in other formats

Contact details are set out above.

**This information can be provided in your own language.**

我們也用您們的語言提供這個信息 (Cantonese)

এই তথ্য আপনার নিজের ভাষায় দেয়া যেতে পারে। (Bengali)

Ta informacja może być dostarczona w twoim własnym języku. (Polish)

Bu bilgiyi kendi dilinizde almanız mümkündür. (Turkish)

یہ معلومات آپ کی اپنی زبان (بولی) میں بھی میا کی جاسکتی ہیں۔ (Urdu)

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City of York Council

Committee Minutes

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Meeting	Decision Session - Executive Member for Environment and Climate Change
Date	10 November 2021
Present	Councillor Widdowson

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#### **45. Declarations of Interest**

The Executive Member was asked to declare, at this point in the meeting, any personal interests not included on the Register of Interests or any prejudicial or discloseable pecuniary interest that she might have in respect of the business on the agenda. None were declared.

#### **46. Minutes**

Resolved: That the minutes of the Decision Session held on 6 October 2021 be approved and signed by the Executive Member as a correct record.

#### **47. Public Participation**

It was reported that there had been 2 registrations to speak at the session under the Council's Public Participation Scheme.

Cllr Pete Kilbane spoke on the Corporate Emissions Report and the York City-wide Emissions Inventory. He stated that he welcomed work done to reduce carbon emissions, but felt the report presented a partial picture by excluding scope 3 emissions. Cllr Kilbane stated that the rhetoric of a net-zero York by 2030 was not being matched with appropriate action, since he believed that 70% of emissions were not being counted. He asked whether a specific piece of work had been commissioned with the York & North Yorkshire LEP on measuring scope 3 emissions and the timescale for its completion. He also spoke on air quality, noting improvements over the Covid-19 pandemic, but warning on returning on how to the status quo, calling for the removal of all non-essential vehicles from the city centre and the creation of a local transport plan.

Katherine Crocker spoke on matters related to the general remit of the committee, namely about air pollution on Fishergate. She stated that 25

years ago she had complained about air quality to a Fishergate Ward Committee and that she wanted more information on the Fishergate monitoring system introduced then. She stated that air quality had improved during the Covid-19 pandemic as a result of less traffic, but that air quality, especially in levels of particulates was much lower than World Health Organisation guidelines. Ms Crocker further stated that electric cars would not help with this issue since particulates were emitted by car tyres and brakes. She requested that monitoring station data be used to push for a policy of reducing traffic congestion to improve air quality through the local transport plan, out of town parking and the usage of electric buses.

#### **48. Corporate Emissions Report**

The Executive Member will considered a report which monitored progress against City of York Council's target to reduce carbon emissions from corporate activity to net-zero by 2030. The Head of Carbon Reduction was in attendance to present the report and respond to questions.

Key points raised during the presentation of the report included:

- That this was the first report of direct emissions created by the City of York Council's corporate activity.
- Over 50% of emissions came from the Council's fleet, however there was a programme over the next 4 years to transition all vehicles over 4.5 tons from combustion engine to electric, which would have a significant positive impact.
- Gas consumption for heating of corporate sites was another significant cause of emissions, for which Heat Decarbonisation Plans were to be produced for the Council's highest consuming buildings, which would present a pathway to accessing public grant funding through the Public Decarbonisation Scheme.
- The Council's switch to purchasing 100% renewable energy in April 2020 had created a positive impact on emissions, and behaviour change campaigns for staff and further improvements through the retrofit programme were also planned to reduce emissions.
- The Council's direct corporate emissions accounted for 3.8% of the city-wide greenhouse gas emissions which showed that York could not achieve net-zero by 2030 through the Council's efforts alone.

The Executive Member noted:

- That she was pleased with the rate of reduction of emissions.
- That identifying what was under the Council's control to change would enable emissions to be reduced further.
- Emissions from all buildings across the city needed to be reduced, since they accounted for 60% of total emissions for York.

Resolved:

- i. That the City of York Council Corporate Emissions Report be approved and the council's contributions to city-wide emissions be noted.

Reason: This report fulfils the commitment in the Council Plan to report on City of York Council's corporate emissions, using the standardised and transparent SCATTER methodology.

- ii. That the actions recommended in the report be approved.

Reason: To progress towards City of York Council becoming a net zero carbon emitter by 2030.

#### **49. York City-wide Emissions Inventory**

This report presented the Emissions Inventory for the city of York. This data was to be used to monitor progress against the City of York Council ambition to achieve net zero carbon emissions for the city by 2030. The Head of Carbon Reduction was in attendance to present the report and respond to questions.

Key points raised during the presentation of the report included:

- This was the second report examining city-wide emissions, since the first conducted last year.
- Over 60% of total emissions in York were generated through buildings, with a roughly even split between homes and other buildings – the vast majority of these emissions were through space heating and hot water.
- Transport contributed to just under 28% of the city's emissions, with other large factors being waste and industry.
- City-wide emissions reduced by just under 2% between 2017 and 2018. It was understood that emissions will have markedly changed in more recent years, but the data was not yet available to be examined.

The Executive Member thanked officers for their work on the report and asked members of the public to increase the efficiency of their homes if possible, through green energy tariffs, insulation and looking on the City of York Council's website for potential funding opportunities to do so.

Resolved:

- i. That the York Emissions Inventory report be approved.

Reason: This report fulfils the commitment in the Council Plan to report on city-wide carbon emissions and monitor progress towards the net zero ambition.

## **50. Air Quality – Annual Status Report**

This report details the latest air quality monitoring results for York and progress on achieving measures in York's third Air Quality Action Plan (AQAP3) to deliver further improvements. The Head of Public Protection was in attendance to present the report and respond to questions.

Key points raised during the presentation of the report included:

- There had been widespread improvements across the board in air quality in 2020, likely due to the Covid-19 pandemic, however air quality had been improving in the city for a number of years.
- There were plans to continue and perpetuate these improvements through the 4<sup>th</sup> Air Quality Action Plan (AQAP4), and linking to the Local Plan, Local Transport Plan and the Climate Change Strategy.

The Executive Member noted:

- That since 2012, reductions in air quality had been significant, although there were still areas for improvement, with one bus stop area not yet meeting air quality guidelines.
- The reduction of traffic during the Covid-19 pandemic had provided a snapshot for how air quality ought to be in the future.
- This work had made available funding for interventions on the 'last mile' into York for deliveries which was the most polluting and expensive mile of travel, which would improve air quality even further.
- She thanked officers for the work and the report.

Resolved:

- i. That the contents of the report be noted, including the continuing improvements in air quality in 2020 and proposals to update current AQAP to complement other key CYC strategies.

Reason: To enable the Executive Member to remain updated on the continuing improvements in air quality.



Cllr P Widdowson, Executive Member

[The meeting started at 3.00 pm and finished at 3.17 pm].

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## Decision Session - Executive Member for Environment and Climate Change

12th January 2022

Report of the Director of Transport, Environment and Planning

### Weed Management of Highways and Associated Areas

#### Summary

1. This report examines options for weed treatment to inform how the Council's in house service and external contractors manage weeds for the next two years.

#### Recommendation

2. The Executive Member is asked to:
  - i. Approve the continued use of glyphosate based treatments as the principle method of weed control.  
*Reason: To ensure the most effective weed control*
  - ii. Approve a two year contract, with an option to extend for two years, the decision being brought back to a future decision session.  
*Reason: To enable the future treatment option to be reviewed having considered changes in product availability and any trials, whilst allowing the council to obtain value for money*
  - iii. Approve a further trial namely the heat method.  
*Reason: To trial a new method which will inform future decision making.*

#### Background

3. In common with most local authorities the Council has used the herbicide, glyphosate as the basis for weed treatment for many years, primarily to control weeds on the highway network.

4. In recognition of the concerns being raised about the environmental impact of glyphosate in the Pollinator strategy, the Executive in March 2021 asked for alternative treatments to be trailed in the 2021 season.
5. The majority of the highway spraying is carried out on behalf of the Council by an external contractor through a fixed term contact. The current contract has now expired and the decision taken in this report will inform the award of a future contract commencing for the 2022 growing season. The contractor uses a quad bike to access all areas of the city and this is the industry standard form of treatment.
6. Glyphosate is also used to treat a number of injurious weeds and invasive plants, such as Creeping and Spear Thistle, Giant Hogweed and Japanese Knotweed. It is proposed glyphosate remains the treatment of choice for such weeds.

### **Current situation**

7. In house use: Public realm staff spray around obstacles in verges e.g. lampposts, street signs, trees, around communal drying areas and some parks and garden path edges. This takes place in March / April and at ad hoc times later in the year as the need arises. Delivery is by knapsack spraying and uses some 260 litres of glyphosate annually.
8. The contracted service covers kerbs, footpaths / pavement joints, wall bottoms and back lanes, the bar walls upper footpath, bridges and supporting structures. Weed killer is delivered using quad bikes, supported with knapsack spraying. This takes place 3 times a year - April, July and September (subject to weather conditions), and uses on around 200 litres of glyphosate per spraying round.
9. This contract has now expired and needs to be re-tendered in time for the 2022 growing season.
10. In 2021, the weed spraying regime was broadly successful. However, the last spray of the season was delayed by a few weeks as a result of vehicle and parts issues experienced by the contractor (supplies were affected by the covid pandemic). It has emerged that there are a couple of locations on South bank which were not captured on the spraying rounds and these will be updated prior to any contract being awarded.
11. Problem weeds. The authority is also required to address specific weeds which can be dangerous e.g. Giant Hogweed or cause

problems to property e.g. Japanese Knotweed. These have traditionally been an option with the contacted service. Going forward the treatment of such weeds either in house or externally provided will continue to use glyphosate

## **Weed treatment Options**

12. The options for weed control fall into three broad areas

Chemicals e.g.

- Glyphosate
- Acetic Acid applied at 20% strength, also known as vinegar (for human consumption is usually 5% strength),
- Nonanoic acid (or Pelergaonic acid), a naturally occurring fatty acid)

Heat e.g.

- Hot foam – boiling water with added foam (see more detail below)
- Burning – using a portable propane torch

Manual e.g.

- Wire brush / hoe

## **York Trials of alternative weed treatment**

### **Acetic Acid and Nonanoic Acid**

13. As part of the first 2021 treatment three areas of terrace housing were selected for alternative treatments in Bishophill, off Scarcroft Road and off Heslington Road. In early April these area were treated with acetic acid and Enclean (a biocide or hard surface cleaner Nonanoic acid).
14. Areas treated with acetic acid and Enclean showed less weed die back than glyphosate. Site visits with the external advisor in mid-May found several properties had large weeds growing where the pavement meets the property. The weeds had survived the treatment and continued to grow. Complaints from the test area were more frequent than non-test areas and visually the areas were weedier at the time of the second spray in July 2021.
15. For the second treatment the trial was moved to a new area within the council's Hazel Court depot. The Trail tested Glyphosate, Acetic Acid and Nonanoic Acid along with no treatment in four identical areas.

16. In this second trial glyphosate was again the most effective chemical treatment. Annex 1 contains photographs from Hazel Court. Similar results were observed on a larger section of rough ground on the opposite side of the depot car park.

### **Other Alternatives to Glyphosate that have not been trialled in York**

17. The heat method (hot foam) has evolved out of more general street cleansing operators (e.g. chewing gum removal), where a combined heater unit and water tank is mounted on the rear of a flatbed truck and driven to site. Water is heated to between 60 and 100°C and mixed with a biodegradable foam which is applied through a lance onto the weeds or area being treated. The foam helps concentrate the heat on to the plant by reducing heat loss to the atmosphere. A minimum temperature 57°C is required to kill the plant, spores and seeds. No data has been found on what this does to any insect life in the vicinity of the treatment.
18. In 2016/17, Bristol City Council undertook a year-long ward based trial glyphosate-free weed treatment together with a desk top assessment of alternatives. The outcome favoured the short term continued use of glyphosate whilst at the same time exploring alternative treatments and / or reduced use. Full details can be found at <https://democracy.bristol.gov.uk/ieListDocuments.aspx?CId=149&MId=375&Ver=4>
19. In 2017, Hammersmith and Fulham Council began trialling new non-chemical alternatives – with hot foam and hot water being the chosen treatments being used across the borough. Initial details can be found at <https://www.lbhf.gov.uk/articles/news/2017/07/hf-unveils-new-chemical-free-weeding-treatments>
20. North Yorkshire County Council have tested hot foam in 2021. This has taken place predominantly in Harrogate and in Scarborough on a limited basis. *They have found that foamsteam requires 2 to 3 treatments and in the rest of the County they undertake 1 weed spray per year with glyphosate (this is done in June).* Broadly they have found the treatments to be of success but they do not have any current plans to roll the provision out any further across the County. The main reason for this is that it is essentially a machine more suited to urban areas and NYCC do not believe the system to be suitable for more rural and disparate areas. Additionally, the

set up costs for the trial have been high and with the move to Local Government Reorganisation they are not progressing any further.

21. The London Borough of Hounslow has switched from using Glyphosate to a manual based approaches. The budget spent on glyphosate has been reused to employ more operatives to manually remove weeds as part of the two weekly ward based cleansing schedule. A dedicated teams with trimmers to support the ward based teams See for more information [https://www.hounslow.gov.uk/info/20006/environment/2229/greener\\_borough/3](https://www.hounslow.gov.uk/info/20006/environment/2229/greener_borough/3)
22. Annex 2 details a how a range of other local authorities treat weeds.

### **Options and analysis**

23. The principal options open to the Executive Member are :
  - a) The choice of principle treatment
  - b) The length of contract
  - c) The frequency of treatment
  - d) The area to be treated
  - e) Any further trials

### **Principle Treatment**

24. From the limited York trial, glyphosate is the most effective chemical treatment currently available and on performance alone officers would not recommend acetic or nonanoic acid.
25. Additionally acetic acid is not recommend as this has additional health risks to both the applicant and the public. The recommend strength to kill weeds can also burn the skin.
26. For this reason it is recommended that the principle treatment needs to remain as Glyphosate.

### **Contract Length**

27. Contracts of this nature are usually let on a minimum 2 year basis with the option to extend the contract.
28. The benefit of a shorter contract is that it allows the treatment options to be reviewed in light of trials or new products reaching the market.

29. The benefit of longer contracts is that they offer more certainty for suppliers which may lead to a better price.
30. For this reason it is recommended that the contract is tendered and awarded for two years, with an option to extend for two years pending the results of any further trials and the developments in the market place.

### **The Frequency of Treatment**

31. Traditionally the external contract has had three treatments per year - April, July and September (subject to weather conditions).
32. This could be reduced to 2 occasions which would reduce the volume of glyphosate used by about 20-25% (it is not possible to be precise as a more glyphosate may be required on each treatment). There may also be a small cost saving which could fund the effects of inflation on any future contract. It is anticipated however, there would be a decrease in effectiveness and an accompanied increase in resident complaints.
33. For this reason it is recommended that the treatment frequency is three times per year commencing approximately April, July and early September.

### **Area to be treated**

34. Many of the 'weeds' that are sprayed from standard practice are useful to many pollinators e.g. dandelions. By reducing the total area sprayed we would be supporting the pollinator population. However, allowing weeds to grow would be contentious for this reason no change is recommended.

### **Additional Trials**

35. Additional trials of acetic or nonanoic acid are not recommended at this stage, but new products are likely to be developed so new trials will be considered in the future. Trials that could be considered for the 2022 season include:

#### Hot Foam

36. Of the non-chemical treatments which could be considered hot foam does have potential. Given the apparent lack of significant adoption across the country there are risks associated with this choice and concerns over the practicalities of how long it would take to treat a city's road network.



37. If this method of hot foam was applied to CYC operations this would require significant investment in new equipment and training coupled with an additional vehicle. To allow time for procurement and training this would come into effect in 2023. If applied to contacted services this could form part of the 2024 highway weed treatment tender.
38. The weedsteam machine would cost £30k to purchase, plus a vehicle on which the petrol / diesel powered hot water boiler sits. It would require a two person crew to operate the vehicle due to the temperature the machine uses water at (at least 60 degrees C) and the risk to pedestrians in built up areas.
39. The machine uses on average 1,000 litres of water per day but this can rise to 1,500 litres in heavily soiled/weeded areas. Using a 1,000ltrs/day equates to around 0.5tCO2 emissions.
40. Whilst there are concerns about glyphosate and the impact on pollinators applying heated foam to plants will have negative impacts.

#### Manual Weeding

41. Manual weeding is also possible, it will require additional staff and additional investment in vehicles to transport operatives to and from their work.
42. The current contractor travelled 1,250 miles to carry out the three treatments. Manually hoeing 450 miles of highway network would be an onerous task. Although this could be combined with other tasks such as the in house treatment of highway obstacles this option would require more detailed consideration to accurately forecast labour costs and vehicle costs but it is estimated to be around £100k. Assuming 450 miles of road per treatment at 0.5 miles an hour, for 6 hours a day it would take 1 person about 32 weeks to manually weed the highway once.
43. Whilst labour intensive, this method would have the least impact on Pollinators. It will require additional investment together with more staff which, given the current recruitment difficulties may be hard to resource. Therefore officers would recommend that a trial of the hot foam method could be undertaken or alternately more work undertaken on the viability of a trail and to continue to scope out options for future years.

## Council Plan

44. This proposal supports and contributes to the following Council Plan priority - a greener and cleaner city. The proposed way forward allows the Council to establish the costs and effectiveness of other alternatives treatment options to glyphosate and supports the Council's aims in relation to Biodiversity and the Pollinator Strategy.

## Implications

45. **Financial** - The funding for the existing service is within current budget provision. A trial of an alternative method will have minimal costs and will also be met from existing budgets. Any alternative delivery methods that are likely to permanently increase costs could not be met from existing budgets and would therefore need to be considered as part of a future budget process.
46. **Public Health** A 2015 review by the European Food Safety Authority (EFSA) concluded on the pesticide risk assessment of the active substance glyphosate. It was concluded that glyphosate does not meet the interim criteria for endocrine disrupting properties concerning human health, and that apical studies in the area of mammalian toxicology did not show adverse effects on the reproduction. However, EFSA noted a data gap which a 2017 review addressed. The conclusion was that the weight of evidence indicates that glyphosate does not have endocrine disrupting properties.
47. A recent review (Aug 2021) in the European Food Safety Authority, concluded the following on the use of nonanoic acid "In the area of mammalian toxicology and non-dietary exposure, no critical area of concerns or data gaps were identified.
48. There are no Legal, Property, Human Resources, Crime and Disorder, or Information Technology implications arising from this report.

## Risk Management

49. In compliance with the Council's risk management strategy the main risks that have been identified in this report are that a decision is not made on a proposed weed treatment option which could in turn damage the Council's image and reputation. Measured in terms of impact and likelihood, the risk score has

been assessed at “Low”. This means that the risk level is acceptable.

**Annex 1** – Hazel Court trial site photographs.

**Annex 2** – Other local authority approaches.

**Contact Details**

<b>Author:</b>	<b>Chief officer responsible for the report:</b>
Dave Meigh Operations Manager Public Realm	James Gilchrist Director of Transport, Environment and Planning

<b>Report Approved</b>	√	<b>Date:</b> 22.12.21
<b>Specialist Implications Officer(s):</b> N/A		
<b>Wards Affected:</b>	All	√
<b>For further information please contact the author of the report</b>		

**Background Papers:**

None

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Annex 1

Photographs from Hazel Court trial plots

Treatment date July 15<sup>th</sup> – photograph date 7<sup>th</sup> October

	
<p>Control (untreated area)</p>	<p>Glyphosate</p>
	
<p>Acetic Acid</p>	<p>Enclean (Which is)</p>

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## Annex 2

Sample spraying frequencies c/o Association of Public Service Excellence  
(Oct 2021)

Local authority	How often	When and comments
North Hertfordshire	2	May then Sept – Oct
Rochdale	3	March / April June / July September / October
North Ayrshire Council	2	Unknown
Dundee	2	April / May then August.
Caerphilly County Borough Council	1	Unknown
Falkirk Council	2	June and September
North Warwickshire Borough Council	1	To fit around Warwickshire County Council
Warwickshire County Council	2	Unknown
Surrey County Council	2	Unknown
St Helens Metropolitan Borough Council	2	Unknown, town centre has 3 treatments
Sefton Metropolitan Borough Council	3	Unknown, has option for 4 <sup>th</sup> spray
Swansea City & County	3	Unknown
Reading Borough Council	4	March, June, August, October
Aberdeen City Council	2	Unknown, 3 times in 2020
Kent County Council	2	May / June, Sept / Oct
Doncaster Metropolitan Borough Council	2	Unknown
Exeter City Council	2	Unknown. <i>“We have trialled foam stream, hot water and costed out pelergaonic as treatments but they are not currently cost effective alternatives”</i>
Birmingham City Council	1	Unknown
Wirral Metropolitan Borough Council	3	Unknown
Derby City Council	2	April – October 3 is core standard.
London Borough of Hounslow	0	Have moved to hand weeding as part of integrated ward cleaning - <i>Additional operatives to manually remove weeds as part of the two weekly ward based cleansing schedule.</i>

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Executive Member for Environment and Climate  
Change Decision Session

12<sup>th</sup> January 2022

Report of the Director of Economy & Place

## **York 5 Year Flood Plan Update**

### **Summary**

1. The flooding in late December 2015 followed an intense period of rainfall across November and December due to the impacts of Storms Desmond and Eva. Record river levels were observed in many river catchments across the north of England. More than 4000 homes and 2000 businesses flooded across Yorkshire with 453 properties and 174 businesses flooded in York.
2. Funding has been allocated to the Environment Agency (EA) following the floods to renew existing and provide new flood defences across the city, £28m has been allocated to the Foss Barrier improvements and a total of £64m to the wider flood defences across the city.
3. An update on progress has been supplied by the EA, this can be seen in Annex 1. A further paper providing more context on the current programme of funding and its potential outcomes is provided as Annex 2.
4. City of York Council are leading on the development of the scheme in Fulford, appraisal and design work has continued, review sessions and community meetings have been held.
5. City of York Council's Defra funded Innovative Flood Resilience project is being developed further through to the full outline business case that will be submitted to Defra in early in 2022.

### **Recommendations**

6. The Executive Member for the Environment and Climate Change is asked to:

- i. Note the updated report and the evidence presented by the Environment Agency in the session, feedback is sought from the Executive Member on all content.

Reason: To support the delivery of flood resilience interventions in York and across the wider River Ouse catchment.

## **Background**

7. Following the development and publication of the York Five Year Plan (<https://www.gov.uk/government/publications/york-5-year-flood-plan>) the EA have developed the Defra Strategic Outline Business Case and financial approvals have been sought and obtained from Defra. Detailed businesses cases are being developed for 19 flood cells across the city.
8. The Environment Agency continue to work closely with City of York Council on all aspects of the York Five Year Plan, an update has been provided by the EA at Annex 1.
9. The detailed design and appraisal of flood defences and a pumping station on Germany Beck continues, the scheme will provide protection to homes and maintain access on Fordlands Road during flooding. The scheme will also aid future flood resilience on the A19.
10. The programme for delivery of the detailed design and all permissions has been extended due to several key planning matters that require further survey and design and approval works. A public meeting was held on the 14<sup>th</sup> December 2021 to update residents on the project.
11. Planning permission will be sought following necessary redesign and approvals this is expected in early 2022 but the programme is still under review.

## **Consultation**

12. Public consultation on the York Five Year Plan continues through a range of flood cells, this is detailed in the update in Annex1 along with the programme of future consultation events.
13. Consultation on the Germany Beck Flood Alleviation Scheme will continue as the design work commences.

## Options

14. The principal options open to the Executive Member for Environment and Climate Change are to comment on and review the work undertaken to date, the future work identified and the representations made by the Environment Agency and City of York Council on all detail provided in this report and its annexes.

## Analysis

15. Ongoing liaison will continue between the Executive Member for Environment and the CYC Flood Risk Manager, future briefings to the Executive Member for Environment and Climate Change Decision Session will be made to ensure key outputs and decisions are supported by CYC and to provide formal opportunities for members and the public to consult. Further recommendations will be made for agreement at these sessions.

## Council Plan

16. Improved provision of flood defences supports a prosperous city for all through safer communities for residents, businesses and visitors, a wide range of consultation events will ensure this is in line with the needs and expectations of local communities.

## Implications

17. **Financial** – Funding is allocated directly to the EA, the additional funding is available to be directed towards key flood risk projects in the city in the short term. The extent of required works may require wider funding and Defra funding bids will be developed. There are likely to be contribution requirements as part of this wider work.
18. **Property** – The Site Investigation programme will include sites under CYC ownership and/or control, consultation will be carried out with Estates teams and all relevant agreements will be put in place.
19. Human Resources (HR) – No implications  
One Planet Council/Equalities – No implications  
Legal – No implications  
Crime and Disorder – No implications

Information Technology (IT) – No implication

**Risk Management**

20. No known risks are identified at this time, detailed risk management work will be developed as the business case and detailed design works commence.

**Contact Details**

**Author:**

**Steve Wragg  
Flood Risk Manager  
Highways**

**Chief Officer Responsible for the report:**

**Neil Ferris  
Director of Economy & Place**

**Report**  **Date** 22/12/2021  
**Approved**

**Wards Affected:** List wards or tick box to indicate all **All**

**For further information please contact the author of the report**

**Background Papers: None**

**Annexes: Annex 1 York 5 Year Flood Plan Update Jan22**



# York Flood Alleviation Scheme

December 2021

## Update for January's Executive Decision Session

This is an update of the progress made over the last three months on the flood alleviation work in York, as well as providing information on the programme and expected timelines for delivering the remaining work. In this update we have provided:

1. Summary of activities per flood cell
2. Engagement highlights
3. Environmental benefits being realised as part of our work
4. Programme information tables
5. Map of the York Five Year Plan flood cell outlines

### 1. Summary of activities per flood cell

#### Scarborough Bridge to Ouse Bridge right bank (B4)

We have completed our work to better protect 39 homes and businesses and key transport routes in this area. This includes replacing the large flood gate under Lendal Arch and applying non slip treatment to the slanted floor plate the gate seals against to reduce risk of slips and falls.

#### Clementhorpe (B8)

Our flood defence work in this area is progressing well. In the last three months we have built a new flood wall between Postern Close and Postern House, prepared the foundations for the new gate which is being fabricated for Clementhorpe Road and made good progress with the underground seepage cut off.

Following concerns over vehicle movements, in particular vehicle speed on Butcher Terrace, a public consultation was conducted to ascertain the need and desire to install speed cousins. The results on the consultation were split and the decision from CYC Highways was to not install speed cousins at this time.

#### Clifton and Rawcliffe (B10)

Work in this area has started with the compound area and necessary access routes. The sustrans route diversion is underway, despite concerns over potential delays from high river levels. This work includes drainage improvements to the sustrans track and to the SSSI grassland. In addition, we have placed mesh fencing in key locations to help protect the endangered Great Crested Newt.

#### Coppins Farm to Scarborough Bridge (B11)

The glass panels to raise the flood defence height of Almerly Terrace flood wall are in the process of being replaced. The old panels have been removed and new seals are being fitted. The panels are being re-installed in the coming weeks.

The embankment raising work is complete and work to finish the flood wall is ongoing.

#### Scarborough Bridge to Lendal Bridge (B12)

Earth works within Museum Gardens are now complete, which includes the significant element of moving a manhole. Landscaping work to the newly raised embankment is ongoing and will continue in the New Year. Elsewhere, brick cladding of the newly raised flood wall sections is ongoing with glass panels and new flood gates along Earlsborough Terrace being installed. The new gate at Scarborough Bridge pedestrian access has been fitted with preparations made to remove the step.

### *Bishophorpe (C1)*

We have installed 175m of 6.5m deep steel sheet piles, which will minimise the passing of water through the ground and under the above-ground flood defences. We have also completed work to install two new manholes with associated pipe work, reconnecting the surface water system and allowing the removal of the temporary over pumping system. Work has started to construct the flood wall.

### *Foss Storage Area (F8, F10 and F11)*

Work has started on site establishing the compound, the base of which has been created. The team did experience some delays due to heavy rainfall but all planned work for this winter have been completed. The next phase of work is planned to start in spring 2022 once weather and ground conditions allow.

### *Foss Barrier*

Work to fully refurbish and upgrade the Foss Barrier is complete. There are some outstanding activities mainly concerning training and handover which is ongoing. An opening ceremony is being planned for March 2022.

### *PFR*

#### *Foss Confluence to Fulford (B16)*

Installation of bespoke flood protection measures to all 44 properties involved in the scheme at this location have been completed.

#### *South Bank (B8)*

The first batch of installations are booked in to take place from week commencing 6<sup>th</sup> December. We are continuing to engage with the remaining properties. Once agreements are in place the measures can be procured and installations booked.

#### *Lendal Hill, Skeldergate, Naburn, Government House Rd, Kings Staith, Bishophorpe and Acaster Malbis (B12, B7, C3, B11, B15, C1 and C2)*

The contract to deliver PFR in these flood cells has had to be put to tender. The tender process is ongoing with planned date for our new contractor to start by March 2022. We are continually engaging with home and business owners to gather information on individual properties and flood history. We would like to encourage residents and businesses to fill in our questionnaires to allow us to process the information ready for the new contractors as soon as they start. This questionnaire is a pre requisite to having a free property survey which will determine suitability of the property and propose required measures.

## 2. Engagement highlights

### Reopening of our community Hub

Our community flood hub in York, set up in 2017, has reopened to the public.

The hub was created to keep the city's residents up to date with progress on our £45 million flood defence work.

Reopening comes with the launch of the Environment Agency's annual Flood Action Campaign, giving advice on how people can better prepare themselves this winter for the risk of flooding.

### Floodmobile - On the road to COP26

Ahead of COP26, members of the York team joined Mary Dhonau at a stop off as part of Flood Re's 'Floodmobile' tour to Glasgow, travelling across flood hotspots in the UK. The tour began in Worcester, travelling through York and Carlisle, arriving in Glasgow on Thursday 28 October for two days.

The objective of the tour was to highlight the need for adaptation and flood resilience measures. The tour aimed to help communities learn about different measures they can take to reduce their flood risk. Whilst 'net zero' is critically important, it is adaptation and resilience that should now take centre stage in tackling the climate crisis.

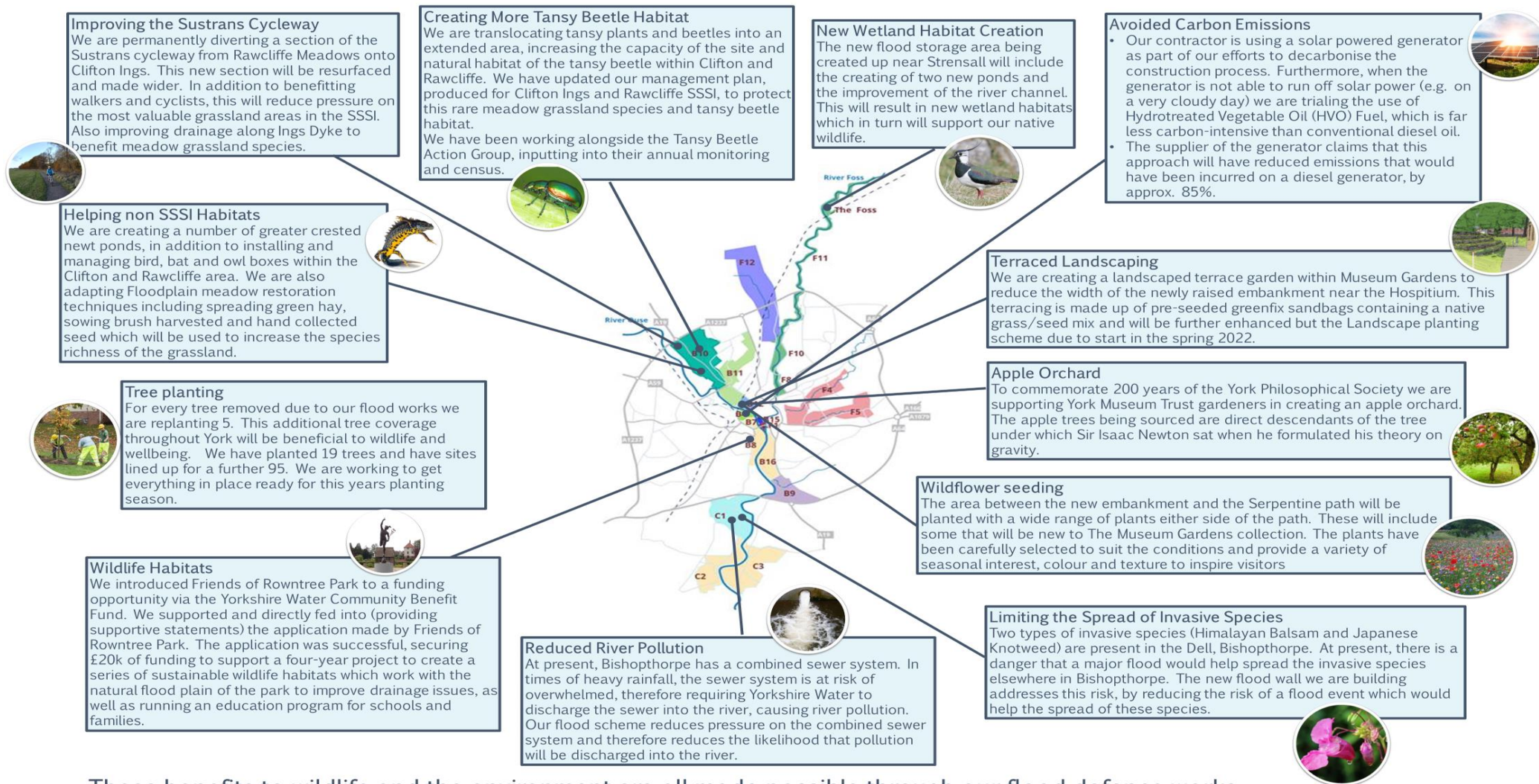
The Floodmobile is a vehicle showcasing 50 property flood resilience measures. It is part of the Ox-Cam Pathfinder project, which is one of three projects across the country aimed at increasing awareness about what homeowners and businesses can do to be resilient to the impacts of flooding.

Paul Stockhill, Helen Batt and Marilyn Sanderson met Mary Dhonau, aka 'Flood Mary', a flood resilience advocate and described as the 'human face of flood' to the British public. The tour also fell on the week marking the 21st anniversary of Mary Dhonau's first flood campaign, which started in Worcester.



### 3. Environmental benefits being realised as part of our work

## Helping wildlife and people in and around York



These benefits to wildlife and the environment are all made possible through our flood defence works

creating a better place for people and wildlife





## 4. Programme Information Table

## Capital Schemes being delivered

Flood Cell / Scheme	Estimated total cost (£k)	No. of properties better protected (approx.)	Brief description	Expected completion
B4 - Scarborough to Ouse Bridge (Right Bank)	2,555	39	A new flood wall along Leeman Rd from Westgate Apartments to a new embankment in the grounds of York City Rowing Club, with demountable flood barriers across the main and second entrance to the Memorial Gardens. A new, larger flood gate under Lendal Bridge. Raised height to existing flood wall along North St with replaced flood gates, including increased width to northernmost gate to improve pedestrian flow.	Complete
B8 - Clementhorpe	7,717	135	A new flood wall in front of Waterfront House. Raised steps between Waterfront House and Dukes Wharf and raised road beside Dukes Wharf. A new flood wall and flood gate at Rowntree Park Caravan Site. Raised height of existing flood wall at Roomzzz Hotel. A new flood wall at the top of the steps between Postern Close and Postern House and raised wall corners at these properties. A new bi-fold floodgate on Clementhorpe Road and a 240m long, up to 6m deep underground seepage cut-off along Terry Avenue.	Aug 2022
B10 - Clifton & Rawcliffe	20,600	140	Increased height of the existing barrier bank and extended at both northern and southern ends. A wider 'footprint' of the bank to reduce the angle of the slope and so reduce the risk of bank slippage in the future. A new pumping station within the barrier bank to control water levels in Blue Beck storage lagoon.	Nov 2023
B11 - Coppins Farm to Scarborough Bridge (Left Bank)	3,665	156	Raised height of the flood embankment in St Peters School fields. A new transition wall between the embankment and the development at the end of Almere Terrace. New floodgates and glass panels to increase the height of the flood defence along Almere Terrace. A new flood gate at the top of the Almere steps and piling within the Network Rail embankment.	Feb 2022
B12 - Scarborough Bridge to Lendal Bridge (Left Bank)	2,950	57	Increased height of the existing flood wall from Scarborough bridge to Museum gardens. This includes new flood gates and glass panels along Earlsborough Terrace and Esplanade Court, a new flood gate near Scarborough Bridge and new demountable panels for the Marygate flood gate. Increased height of the embankment within Museum Gardens and also extended at	Feb 2022

			southern end. This includes terracing of the embankment adjacent to the Hospitium to preserve the rare True Service tree.	
C1 - Bishopthorpe	3,390	117	A 180m long flood wall along Chantry Lane with a 6m deep steel barrier underground cut off. A flood gate across the bottom of Chantry Lane. A new manhole chamber with a penstock mechanism.	Apr 2022
F8 /F10/F11-Foss Storage Area	17,526	490	Construction of a new embankment with outfall control structure upstream of York, designed to hold up to 1million m <sup>3</sup> during times of extreme rainfall. Once downstream river levels recede, the stored water will be released at a controlled rate. The creation of two ponds connected to the River Foss, together with improvements to the river channel, will result in new wetland habitats to support wildlife.	Nov 2023
Foss Barrier	38,000	1600	Greatly increased pumping capacity with replacement of all 8 pumps, including new infrastructure and new power supplies. In addition to 2 independently sourced High Voltage electricity supplies the barrier has 5 new back-up generators to maintain operation of all eight pumps at maximum capacity in the event of catastrophic power failure. All vulnerable infrastructure raised to first floor height. A new taller barrier gate, lifting equipment and housing.	Jan 2022

### Capital Schemes still in the design phase or being delivered by our partners

Flood Cell / Scheme	Description	Being delivered by	Stage
B9 – Germany Beck	City of York Council (CYC) led project with multiple benefits including increased flood protection to Fordlands Road and the A19 as well as reducing flood risk to local homes and businesses. Initial design is progressing well with planning submission planned for later this year.	CYC	Design
F1 – Tower Street	We are investigating options on how to provide flood protection along Tower Street to prevent exceptionally high flood levels on the River Ouse bypassing the defences within St Georges Car Park and entering the Foss Basin which would pose increased flood risk in the lower Foss. This scheme will initially involve raising of the wall between St George’s car park and the Foss Basin tying into Skeldergate Bridge. We are working closely with the CYC Castlegate project team to ensure our projects align.	Environment Agency	Design
F4/F5 – Tang Hall and Osbaldwick Becks	We are in early conversations with CYC and other partners to investigate how to incorporate Natural Flood Management and Sustainable Drainage processes to reduce flood risk in this area.	Environment Agency	Design

F12 – Westfield Beck	The flood risk in this area is complicated as it is influenced by a number of sources. We have been in discussions with our partners to consider what options may be available. To mitigate flood risk here a number of factors need to be considered to ensure that any work does not have adverse impact on another flood risk source. We will continue to work with our partners to identify possible options and how any work may be delivered.	N/A	N/A
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5. Map of the York Five Year Plan Flood Cell Outlines

