



York flood exhibition, May 2016

A summary of the event and feedback analysis

Version 2: 6th June 2016

We are the Environment Agency. We protect and improve the environment. Acting to reduce the impacts of a changing climate on people and wildlife is at the heart of everything we do.

We reduce the risks to people, properties and businesses from flooding and coastal erosion.

We protect and improve the quality of water, making sure there is enough for people, businesses, agriculture and the environment. Our work helps to ensure people can enjoy the water environment through angling and navigation.

We look after land quality, promote sustainable land management and help protect and enhance wildlife habitats. And we work closely with businesses to help them comply with environmental regulations.

We can't do this alone. We work with government, local councils, businesses, civil society groups and communities to make our environment a better place for people and wildlife.

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Executive summary

Background

This report provides an overview of the public exhibition that was held by the Environment Agency on Friday 20th May and Saturday 21st May 2016 at Hotel 53, 53 Piccadilly, York.

Following the flooding in December 2015, £17 million has been allocated to improving the Foss Barrier, plans to upgrade the Foss Barrier have been produced and works began in March. Additionally, a further £45 million has been secured to upgrade flood defences and better protect more than 2,000 properties within the York administrative area. Further to this, understanding what needs to be done to protect the city in the long term is necessary and as such, a Flood Risk Plan for York is underway.

The Environment Agency organised the public event to inform residents and businesses of York about the upcoming works and plans that will be happening in and around York. There was also an opportunity to sign up for flood warnings and create a community or individual emergency plan.

Feedback

In total, 174 people attended the event including York Central MP Rachael Maskell, City of York Councillors and the independent chair of the City of York flood review panel Angharad Davies.

During the event, the Environment Agency invited attendees to leave feedback on the event, as well as to leave their feedback and opinions on our initial proposals for works in York using the £45M additional funding. 30% of attendees completed the general feedback form and 25% of attendees completed the feedback form for our initial proposals.

Recommendations

Recommendations and actions identified from this public event included:

- Better publicity needed to advertise these public events
- Increased involvement with other Risk Management Authorities is needed
- Information needs to be more easily available and easier to understand
- Engagement and regular updates would be beneficial to affected communities

The York exhibition

Background

Following the flooding in December 2015, £17 million has been allocated to improving the Foss Barrier, plans to upgrade the Foss Barrier have been produced and works have already begun.

Additionally, a further £45 million has been secured to upgrade York's flood defences.

The programme of work to upgrade York's defences will take in, but not be limited to, an area from Clifton Ings to Naburn, and will better protect more than 2,000 properties. Consultants will be appointed soon with the aim of beginning feasibility studies later in 2016, and work beginning on the ground in 2018.

As part of the exhibition, details were provided on what could be done as well as opportunity for feedback on the initial proposals.

The £45 million is in addition to the £17 million that has already been committed for repairs and upgrades to the Foss Barrier, where work started 4 April and will be completed by December 2017. The barrier is being upgraded to make it more resilient and able to handle greater flows in the River Foss.

Further to this, we need to understand what needs to be done to protect the city in the longer term. A Flood Risk Plan for York is underway, which will identify opportunities to reduce flood risk and minimise the impact flooding has on communities and business.

Aim of the exhibition

The exhibition was organised with aim to inform the residents and businesses of York about the upcoming works that are planned for the Foss Barrier; the initial proposals for what works could be possible with the £45M additional funding, the future vision for York and opportunity to sign up for flood warnings and receive assistance with creating personal and community emergency plans. We also provided an opportunity to view the Foss Barrier Investigation report.

Content of the exhibition

Information on display at the public exhibition included:

- The upgrade of the Foss Barrier and the schedule of works
- The additional £45 million that has been secured to improve / upgrade flood defences across York and what could be done with the funding
- The future vision for York
- How people can be better prepared for flooding including signing up for flood warnings.
- The Foss Barrier Investigation report

City of York Council were also present to answer any additional questions.

How the exhibition was advertised

The primary methods used to promote the public exhibition were messages using social media, such as using the Environment Agency's National and Local Twitter accounts; press releases and leaflets / posters on display in local community hubs.

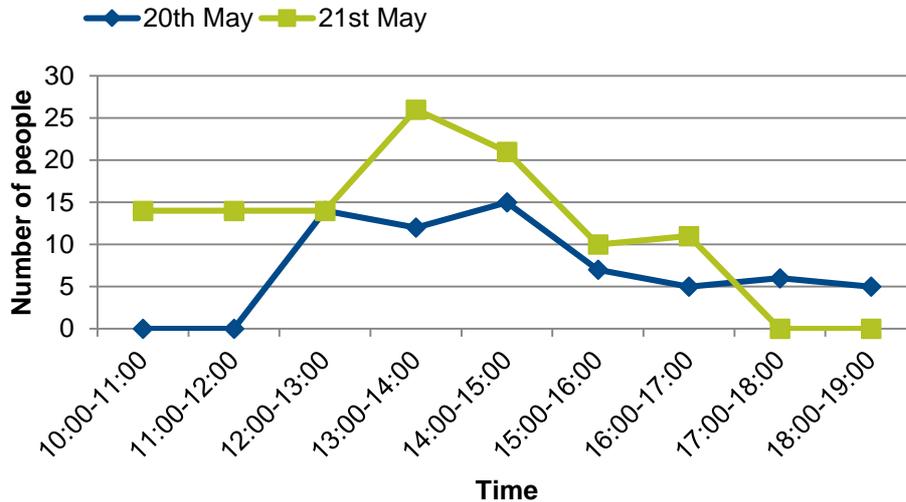
The decision was made not to do a city wide leaflet drop. This approach was used for the public meetings held in January. Whilst over 2000 leaflets were delivered across the city, over 5 events only 72 people attended. As such this was not seen as an effective advertising approach.



General feedback

Summary

The York Exhibition was held at Hotel 53 on Piccadilly on Friday 20th (12:00-19:00) and Saturday 21st May (10:00-17:00) 2016. Over this period, 174 people attended including York Central MP Rachael Maskell, City of York Councillors and the independent chair of the City of York flood review panel Angharad Davies.



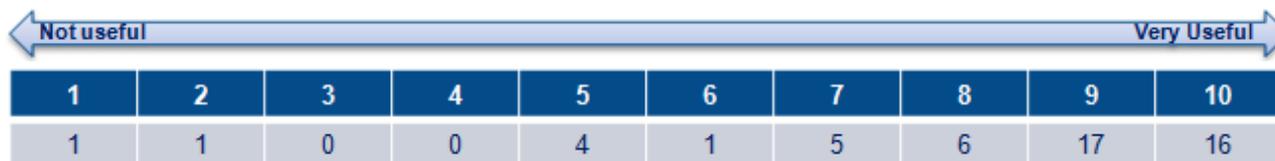
30% of attendees completed a feedback form. This allows us to review the successfulness of the exhibition and identify opportunities to improve those in the future. The exhibition was generally positive with people feeling the event was useful and well organised leaving them well informed and reassured. We asked people specifically to describe in one word how the event was for them:



Analysis of feedback received

How useful did you find the event today?

The majority of people who attended the event found it very useful. 64% of those who completed feedback sheets scoring the day either a 9 or 10 out of 10. People were positive that the City has been allocated additional funding to protect properties within York and found the information on the exhibit 'first class', 'very informative' and 'very easy to understand'.

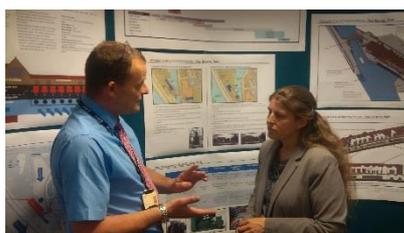


The opportunity for residents to 'speak 1:1 with people with knowledge of relevant issues' was identified. Responders felt that staff were 'very helpful', 'knowledgeable' and were able to provide 'clarity'. Whilst this is particularly positive, the venue was sometimes too crowded, hot and staff too keen.

Although the event was well attended and more events have been requested, many people highlighted issues regarding its publicity. Many found out about the event via friends, social media and a York Press article published on the second day. As a result, people felt that better advertising was required for future events. Suggestions included leaflet drops, posters on community boards, long term displays in public facilities and earlier press and radio articles.



Angharad Davies attending the exhibition and discussing the upcoming works at the Foss Barrier



Rachael Maskell MP attending the exhibition on Saturday 21st May 2016



A snapshot of the exhibition on Saturday 21st May 2016

Whilst the event was an Environment Agency exhibition, supported by City of York Council, a number of residents highlighted the lack of attendance by Yorkshire Water Services. This has been noted by the Environment Agency. As we develop our proposals for the delivery of works within York, taking into account all sources of flooding, we will be working closely with Yorkshire Water Services. As such, we will extend the invitation to future events to Yorkshire Water Services.

Did you find the information supplied about the Foss Barrier helpful and comprehensive?

Whilst two responses suggested the information supplied was not very useful, 31% rated it 10 out of 10. Again, staff were 'helpful and well informed' whilst the information supplied was 'excellent'.



People felt their questions were 'answered satisfactorily' however a number of reoccurring queries were raised for which further information has been requested. This included the impact of increasing pumping capacity on downstream locations (inc. New Walk and Alma Terrace), access to the Foss Barrier investigation report, as well as better understanding as to how evidence (including modelling) will be collated to inform the solution for York as a whole - 'not piecemeal'.

driven only by apparent affordability without factoring damage/costs downstream'. The need for information 'independent of the Environment Agency' was also highlighted. This, however, will be done so through the City of York Council commissioning of the Independent Review into the winter flooding.

Q3: Proposals regarding the Environment Agency work

Question 3 related to the initial proposals on how the £45M additional funding could be spent in the city as well as the long term vision for York.

Q3a: Did you have/take opportunity to express your opinion on our initial proposals on how the additional funding of £45M should be spent in the city?

Q3b: Do you feel more informed about the work the Environment Agency is doing now and into the future?

Whilst the majority of people took the opportunity to express their opinion and as a result feel more informed, some people felt that they did not have time to fully understand the proposals to make informed comments.

In response to this, we have gained approval from City of York Council to hold information on their website:

<https://www.york.gov.uk/flood>

This will include all material shown at the exhibition including feedback forms.

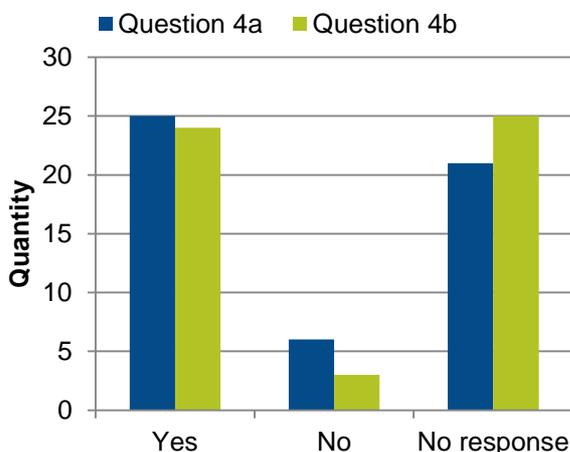
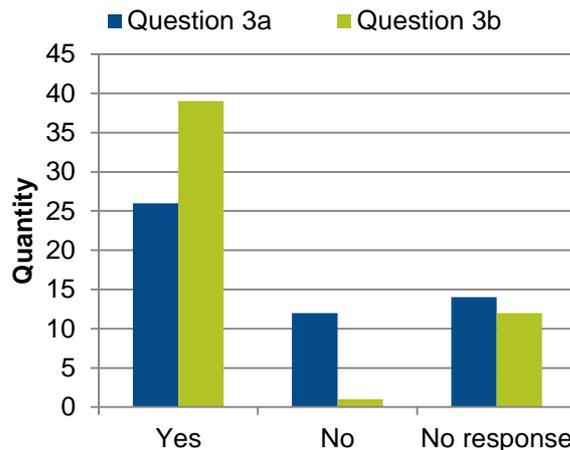
The material displayed at the exhibition will also be available for viewing in York City Library and City of York Council West Offices.

People have until 4th July to provide further feedback via email. Please return all feedback to

yorkshireflooding@environment-agency.gov.uk

Q4a: Do you feel better informed about what you could do to make your property more resilient to any future flooding?

Q4b: Do you feel better informed about how you can sign up to flood warning for the future?



Our Flood Resilience team were in attendance at the exhibition to provide advice to property owners on flood warning and resilience. Many of the people who attended were well aware of the flood warning service and as a result no new registration took place.

Whilst people recognised the role resilience had to play in managing flood risk, many felt community schemes and prevention techniques needed to be the focus of delivery within the city - 'options going forward should focus on a number of properties not individual properties'.

Feedback regarding £45M to kick start investment in York

Summary

Following the flooding over Christmas, we have been successful in securing £45M from Government to better protect properties in York from the impact of flooding. This money needs to be spent, or fully committed, within five years. This opportunity kick starts the delivery of our emerging future vision for York.

Whilst the rules associated with how this money can be spent are yet to be confirmed, we have been identifying options for the residents and businesses of York. The options presented at the public exhibition consisted of proposals for 10 communities (shown in Figure 2) within the City of York administrative area. Information provided on each of the communities consisted of the extent of the area, existing flood services (i.e. flood defences and flood warnings), number of properties at risk from flooding and the resultant increase due to climate change and existing options from historic studies.

Feedback forms were provided at the exhibition so that we could gather opinions on the initial proposals presented, as well as offer an opportunity for the public to feedback any other proposals they would like us to consider. 25% of attendees completed the feedback form which will allow us to observe which of our initial proposals were favoured by residents and businesses in York. A summary of the feedback received can be seen below.

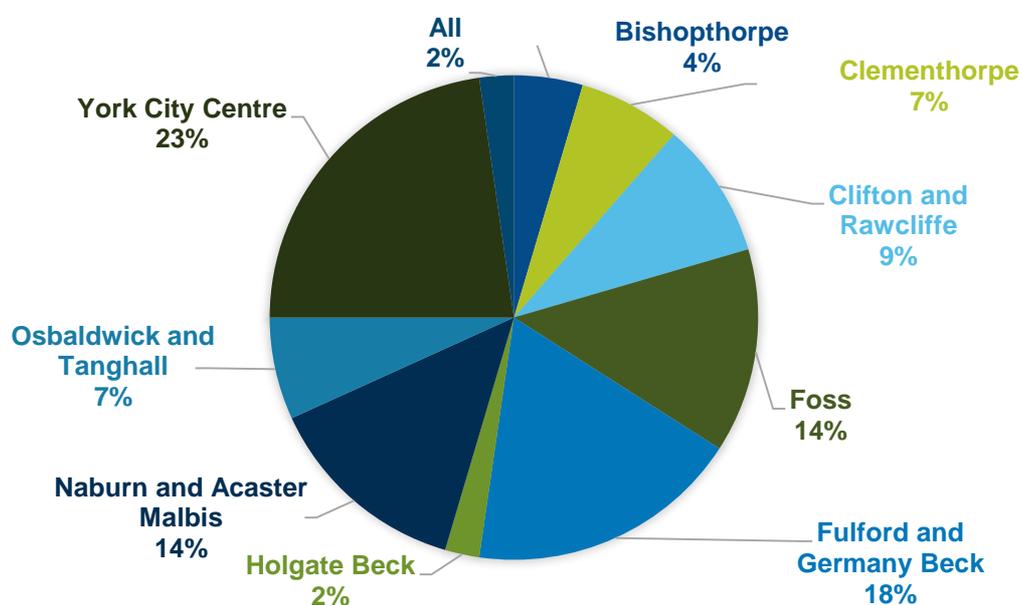


Figure 1: Percentage of feedback forms received per community

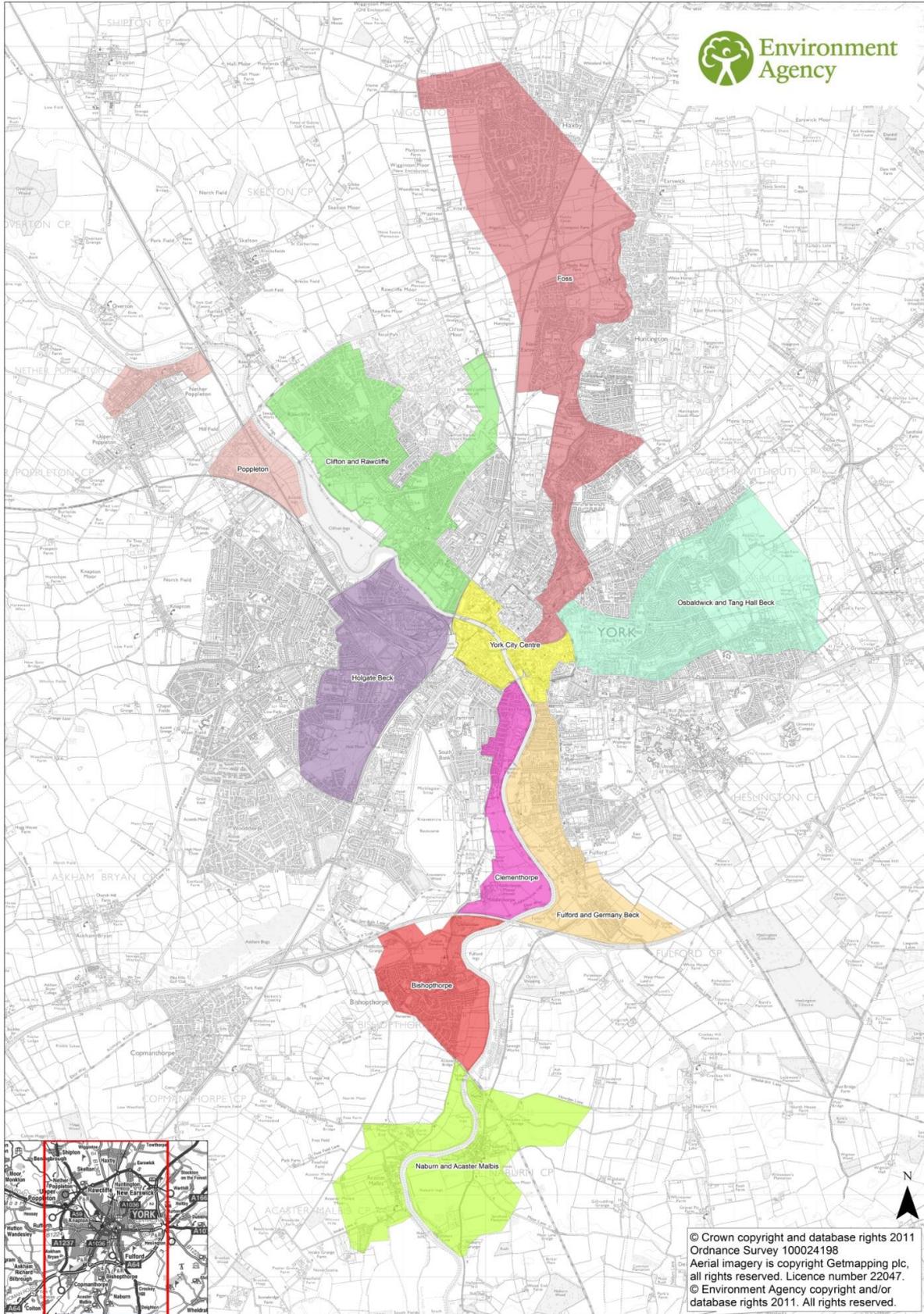
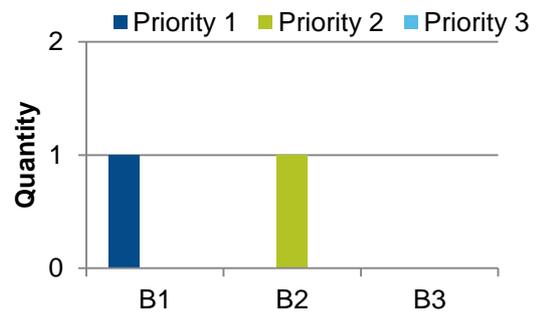


Figure 2: Communities

Community profile: Bishopthorpe

Two responses were received in relation to Bishopthorpe. One response ranked their top three options for solutions in Clementhorpe whereas the other did not fully complete the form.

What works may be possible	
B1	New defence including pumping station
B2	Property level resilience
B3	Flood warden recruitment

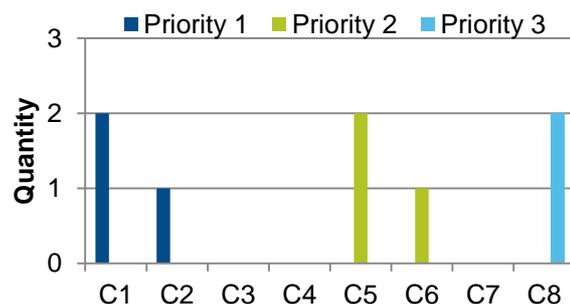


This shows their preferred option for managing flooding from the River Ouse in Bishopthorpe. Further to these solutions, comments were made to ensure that 'any new flood defences do not have negative impact on properties not currently subject to flooding'. The incomplete response included remarks regarding the pumping the station, stating 'don't relocate the pumping station, just increase the pumping capacity'. Strengthening the defences around the Ings (i.e. the soil embankments) was also mentioned as part of the further proposals to consider question.

Community profile: Clementhorpe

Three responses were received in relation to Clementhorpe. Each response ranked their top three options for solutions in Clementhorpe.

What works may be possible	
C1	Install a permanent barrier at Clementhorpe
C2	Construct earth embankment or landscaping downstream of Rowntrees Park
C3	Raise flood banks in Middlethorpe Ings
C4	Review operations of washlands
C5	Property level resilience
C6	Improve/raise existing Lower Ebor defences and replace flood gate
C7	Install a permanent flood wall at Clementhorpe
C8	Raise access ramps to Millennium Bridge

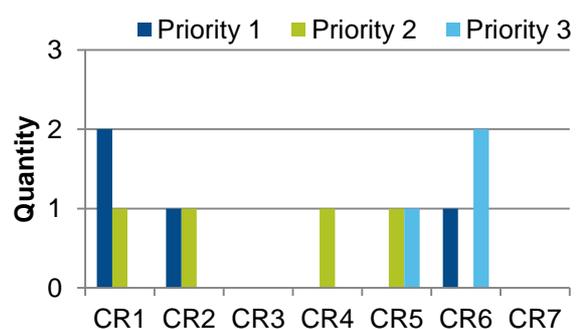


This shows the preferred options for managing flooding from the River Ouse in Clementhorpe. As well as these solutions, the importance of upstream storage and land management was also raised as 'long term preventative upstream measures - slow the release of water' are vital to managing flow through the city.

Community profile: Clifton and Rawcliffe

Four responses were received in relation to Clifton and Rawcliffe. Each response ranked their top three options for solutions in Clifton and Rawcliffe.

What works may be possible	
CR1	Raise Clifton Ings barrier bank and tie into high ground
CR2	Install permanent PS at Blue Beck
CR3	Raise ground adjacent to river outside Government House Road
CR4	Raise embankment at St Olaves School
CR5	Extend flood defence from Lower Bootham
CR6	Replace PS at Rawcliffe Beck as well as increase pumping capacity & install extra pumps
CR7	Replace and raise floodwall along Almerly Terrace and install new floodgates

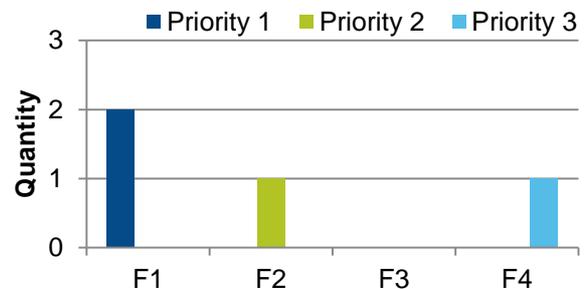


This shows the preferred options for managing flooding from the River Ouse in Clifton and Rawcliffe. In addition to these options, works around the Rawcliffe Allotment holding lake were raised which included increasing its area and raising the hard standing area adjacent to the pump inlet.

Community profile: Foss

Six responses were received in relation to the Foss community. One response gave a ranking of their top three options, a second gave an incomplete ranking and the remaining did not complete the ranking of the proposals for solutions in Foss.

What works may be possible	
F1	Create upstream storage such as Westfield Beck
F2	Channel maintenance
F3	Property level resilience
F4	Install a low wall at the end of Huntington Road

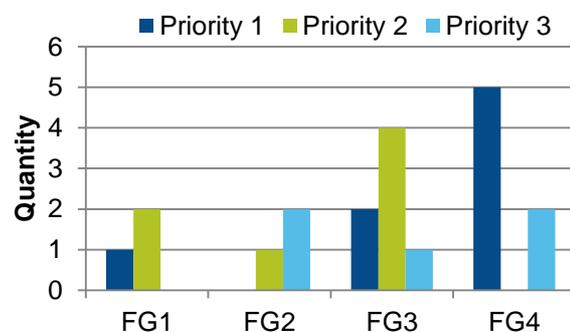


This shows the preferred options for managing flooding from the River Foss in the Foss community. Further to these options, additional comments were made with regard to what further options we could consider. These included reviewing the washlands, holding back the flow and increasing the pumping capacity at Westfield Beck pumping station. Development options included retrofitting SuDS in urban areas of the Foss and taking more action to prevent paving over gardens. An option for new defences or improvements to drainage system that could help further down Huntington Road was also highlighted.

Community profile: Fulford and Germany Beck

Eight responses were received in relation to Fulford and Germany Beck. All responses ranked their top options for solutions in Fulford and Germany Beck area.

What works may be possible	
FG1	Make use of the washland
FG2	Review operation of washland
FG3	Property level resilience
FG4	New flood defence at New Walk



This shows the preferred options for managing flooding from the River Ouse in Fulford. As well as these solutions, the issue of new development in floodplains were raised. Furthermore, additional options to consider that were submitted in the feedback included raising Fordlands Rd; installation of sirens in conjunction with website; work to be done up in the Dales to slow the flow of water in the Ouse; new flood storage areas upstream and catchment management and SuDS; strategic review of upstream land management and use of agricultural land.

Community profile: Holgate Beck

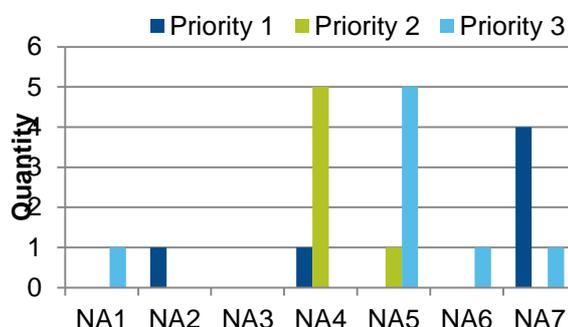
One response was received in relation to Holgate Beck. The response ranked the relocating and increasing the capacity and resilience of the pumping station as their top option.

What works may be possible	
HB1	Relocate PS, increase capacity of the pumps and improve resilience
HB2	Property level resilience

Community profile: Naburn and Acaster Malbis

Six responses were received in relation to Naburn and Acaster Malbis, however all responses focused solely on Naburn. All responses ranked their top three options for solutions in Naburn and Acaster Malbis.

What works may be possible	
NA1	Property level resilience
NA2	PS resilience
NA3	Reprofiling of the road
NA4	Install flood storage on Howden Dyke
NA5	Review outfall of Howden Dyke
NA6	Alterations to Naburn Local and weir
NA7	Install new defences within Naburn Village

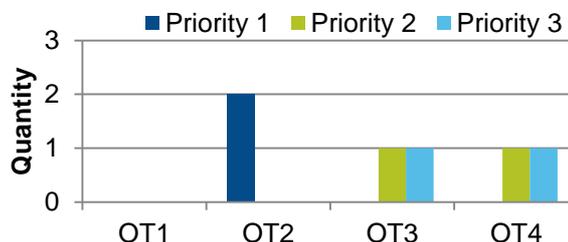


This shows the preferred options for Naburn and Acaster Malbis. Two responses suggested joint schemes, one scheme being an amalgamation of NA5 and NA1, whereas the other suggested a joint scheme between NA5 and NA6. Further to these suggestions, an option to raise the electrics in the existing sewage pump was raised. Additional comments included that if large drainage works are determined to not be feasible then property level resilience should be the next priority.

Community profile: Osbaldwick and Tanghall

Three responses were received in relation to Osbaldwick and Tanghall Beck. Two responses gave a ranking of their top three options for solutions in Osbaldwick and Tanghall Beck.

What works may be possible	
OT1	Property level resilience
OT2	Trash screens
OT3	Install an automated system into Tang Hall sluice
OT4	Online storage



This shows the preferred options for Osbaldwick and Tanghall Beck. No further comments or suggestions were included within the feedback for Osbaldwick and Tanghall.

Community profile: Poppleton

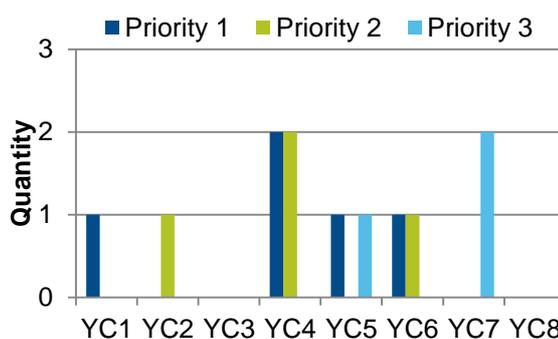
No responses were received in relation to Poppleton.

What works may be possible	
P1	Road reprofiling
P2	Property level resilience

Community profile: York City Centre

Ten responses were received in relation to York City Centre. Five responses ranked their top options for solutions in York City Centre whereas the remaining responses included their own options.

What works may be possible	
YC1	Raise the walls surrounding the Foss Barrier
YC2	Upgrade the capacity of the pumps at the Foss Barrier
YC3	Raise defence along North Street and extend to War Memorial and Post Office
YC4	Reinforce wall along Tower Street
YC5	Property level resilience
YC6	Low flood event wall along King Staithes
YC7	Road reprofiling on Tower Street
YC8	Raise defences along Museum Gardens and tie into high ground and replace flood gates



This shows the preferred options from the completed ranked responses. Public options highlighted included spending on the Foss Barrier; upstream storage and property level resilience, as well as protecting businesses and residents around Tower Street. Support for the implementation of flood sirens accompanied with flood exercises and community emergency plans was also expressed. Further suggestions consisted of works on Navigation Road such as 'relatively low level defences' and raising the wall along Tower Street which would be in addition to the reinforcing option given. One resident also expressed that 'a greater priority should be given to cleaning up and restoration of public spaces after flooding'.

Next steps

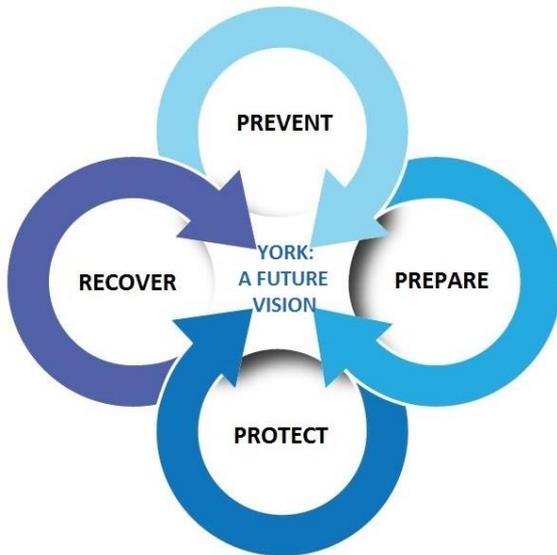
From the public exhibition until autumn 2016, using the feedback received and further investigation we will continue to identify options and develop the evidence to support them. Once the rules associated with how the £45M can be spent have been published, we will apply them to the identified options and shortlist a programme for delivering the £45M. A public exhibition will be held in autumn to share our findings and encourage community feedback.

There is opportunity to provide feedback on our current proposals listed above until Monday 4th July 2016. All material shown at the exhibition, including feedback forms, will be available on the City of York Council website: <https://www.york.gov.uk/flood>

Please return all feedback to yorkshreflooding@environment-agency.gov.uk

The material displayed at the exhibition will be available for viewing in York City Library and City of York Council West Offices.

Feedback regarding the Future Vision for York



The Future Vision for York is a long term plan for the City. Currently under development by the Environment Agency, in partnership with City of York Council, it will identify how flood risk is currently managed and what can be done to improve all elements of flood risk management.

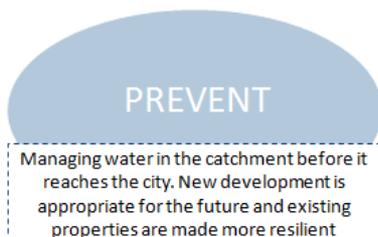
Working in partnership, we will identify actions that will form the basis of both our own and the Councils programme of works in the short, medium and long term. Other key flood management authorities will be involved in this Plan - Yorkshire Water Services and the Internal Drainage boards. Whilst the £45M kick starts the delivery of this Vision, a number of actions will not be funded. We will develop an investment plan to determine how our actions can be funded and timescales for their delivery.

AIM: To consider and agree what can be done to manage the risk of flooding from the Rivers Ouse and Foss within the City of York administrative area both now and in light of climate change. There are four, key strands to our vision – How we can: PREVENT flooding happening; effectively PREPARE for when flooding occurs; directly PROTECT communities from the impact of flooding, and ensure the city can RECOVER quickly from flooding.

We will work with our partners to identify how a catchment approach can be established to not only reduce flooding within York but also reduce the impact on communities both upstream and downstream.

Feedback received

We asked members of the public to note down any comments or ideas related to the development of the Future Vision for York. The comments and ideas captured have been related to each relevant strand of the vision and are recorded below.



- Change in land use in the higher catchment would have environmental benefits by retaining peat (with CO2) and allow water to be absorbed and released slower. Currently we pay a subsidy to grouse moors. This is nonsensical given we pay them more for the worse flooding
- Buy up farmland and use it differently
- What are farmers/ landowners doing about water on their land?
- Changing course of linear flows, alter flow to meanders
- 2 stage channels, pools to help storage/ slow flow
- Return more natural rather than concrete

- Analysis of any changes in crop pattern on Foss catchment. (Increases in maize, etc)
 - Flood storage on Westfield Beck
 - Really like the idea of trialling more natural barriers in the Foss catchment area to compliment work on Foss Barrier
 - Tree planting
 - Flood plain
 - Ensure any new builds use environmentally friendly/ preventative building. Don't allow building that adds to future floodplain problems
 - No more building in flood plains - even if already agreed to.
 - SuDS work! Needed at Germany Beck as it worked at Derwenthorpe on Boxing Day 2015
 - Reprofilng SuDS on the Foss catchment
 - More soakaways on new development
 - Sites such as Germany Beck (and other large housing areas) need to be designed to prevent increased runoff
 - Attempt to stop people getting rid of gardens => parking spots. People need to realise they are part of the flooding problem
-

PREPARE

Working with partners and the public to understand the flood risk in the city and prepare personal and city wide plans

- Early warning system that uses into higher up river/ hills to predict what to do further down river Buy up farmland and use it differently
 - Flood warnings and maps are vital
 - Website is our life line - it is fantastic
 - If we could have more regular updates during the flood period would be brilliant re - current levels and forecast
 - Network of camera to view River as it rises
 - Reinstate the original Environment Agency online map of the catchment area showing all river courses and recording stations. (New system does not clearly show watercourses throughout the entire catchment area)
-

PROTECT

Taking action with partners and the public to reduce the impacts of flooding to people and property.

- Definitely raise access ramps on Millennium Bridge. I live near it and it's used almost constantly from early a.m. to v. late in the evening: recreational, going to school, going to university/ work. Used by pedestrians and cyclists
-

RECOVER

Supporting communities and businesses through City of York council to return the city back to normal conditions after a flood.

- In city centre area where flood prevention measure are limited - (i.e. King Staithes, South. Esplande, Tower Gardens) the time taken and effectiveness of the cleanup operations were poor. Tower Gardens and riverside areas look neglected and forgotten - you could do more to improve the image of the city centre
- I would value a formal approach by City of York Council and Environment Agency to all insurance companies involved to mitigate the impact on house/contents insurance in the future

Recommendations

Overall the feedback for the public exhibition was very positive. Nevertheless some concerns were highlighted that we have recorded and will look to act on and improve. Some concerns expressed during the public event can be seen below.

What you raised with us	What action we will take
Discuss proposals that are taken forward with residents as there may be practical issues to address	Frequent liaison with residents that are impacted by any proposed works
Better publicity needed in key neighbourhoods for these drop ins/ information days, such as targeted leafleting	Earlier advertising of future events will be done as well as dispensing leaflets / invitations at key hubs and using local press outlets
Publicise these 'drop in' days better	See above
Involve other risk management authorities in the public events, such as Yorkshire Water	Ensure that all relevant authorities are invited to future public events
Long term/ permanent display/ information on floods/barriers/changing environment so that schools/groups/public can all gain information on floods/ changing environment and the effects on York now and in the future for the future of York	Following the public exhibition, the material displayed will be available for viewing in York City Library and City of York Council West Offices for an additional 4 weeks We will identify further ways to be visible in the community as well as where information may be able to be displayed
Badly organised this Christmas by CYC/EA - no one knew what to do/ where to look for info - public did a lot themselves - great however needs better organising. All homes could provide/ sign up to alert via email/ social media/ volunteer info, etc.	Information about flood warnings and river levels are currently available on the Environment Agency website. Information regarding future works in York will be available on the City of York Council website and will be updated accordingly when new information is available Active flood warning sign up and flood warden recruitment will continue to take place to help improve resilience within communities
It would have been useful to see flood zone maps instead of just 'white area maps'. Probably also showing extra 'climate change' flood zones	Ensure that a larger variety of maps showing necessary and relevant information is available at future public events

Acknowledgements

We thank Hotel 53 for allowing us to use their venue to host our public exhibition and also for their excellent hospitality.

Thanks also to City of York Council for attending the public exhibition and for allowing us to make use of their website to hold and display Environment Agency information.

**Would you like to find out more about us
or about your environment?**

Then call us on

03708 506 506 (Monday to Friday, 8am to 6pm)

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