



Bristol Avon Flood Strategy Consultation Results

January 2021



www.bristol.gov.uk/bristolavonflood

Bristol Avon Flood Strategy – consultation report

1. Overview

Bristol City Council has consulted on a draft strategy for better protecting homes and businesses from flooding from the River Avon.

The consultation ran from 5 October to 20 December 2020.

The first three weeks were dedicated to contacting those who are currently at risk of flooding - this was done directly via mail so that they had an early opportunity to comment and organise to speak to us if they wished to. This included both businesses and residents who received an information booklet and survey and a covering letter offering conversations. This included those impacted further downstream and upstream in neighbouring authorities. The consultation was then opened up more widely from 26 October 2020.

The focus of both parts of the consultation was to secure responses from those in areas most impacted. Whilst views from across the city and from neighbouring authorities were welcome, promotion was specifically targeted at the areas most impacted.

1.1. Overall support

576 responses were received. Overall there is strong support for the proposals. In terms of the aims of the strategy:

- 92% of respondents (of 567 respondents to this question) agreed/strongly agreed that they supported the aim to future proof the city and neighbouring communities;
- 90% of respondents (of 567 respondents to this question) agreed/strongly agreed that they supported the aim to enable a greener, more active city
- 78% of respondents (of 563 respondents to this question) agreed/strongly agreed that they supported the aim of unlocking Bristol's potential

84% (of 567 respondents to this question) agreed with the proposal for adaptive flood defences which allow for changes in height over time in line with climate change and sea level rise.

More details and analysis of additional questions can be found in section 2 below.

1.2. Effects of Covid 19

Covid has had a significant effect on being able to talk face-to-face with residents and businesses. For the 1610 homes and businesses that were directly contacted from 5 October the intention had been to door knock to enable face-to-face discussion about the proposals. As cases of Covid grew in the city it was decided that we'd offer outdoor drop-in stalls with appointments. However with infections increasing and the introduction of the rule of 6 it was decided that it was better to send the survey and a letter offering the opportunity for a phone conversation, online meeting, or a door-step visit if the recipient preferred that.

1.3. What did the consultation involve?

- Online information setting out the proposed approach to flood defences, survey plus nearly 50 supporting documents.
- Strategic Environment Assessment (SEA) – this was a voluntary piece of work commissioned to assess the environmental impact of the proposed approach. People were invited to comment on this as well.
- Paper copies with an accompanying letter were sent to 1377 homes and businesses in Bristol with a further 233 going to homes and businesses potentially affected by River Avon flooding in neighbouring authorities. They were all offered the opportunity for phone calls or 1:1 conversations. A follow up letter was sent as a reminder.
- Emails were sent to key organisations and groups asking them to share the consultation information and to respond to the survey. They were also offered meetings
- Meetings were arranged with a number of key groups including:
 - Business West x 2
 - Bristol Walking Alliance
 - Bristol Civic Society
 - Western Harbour Advisory Group
 - Cumberland Basin Stakeholder Group
 - Bristol Physical Access Chain
 - Bristol Harbourside Forum
 - Developers Forum??
 - Statutory stakeholders: Natural England, Historic England, B&NES, North Somerset and South Gloucestershire LLFAs, Environment Agency, Wessex Water
 - Temple Quarter Board
 - 1 x meeting in response to mailout
- In addition briefings were held with:
 - Growth and Regeneration Scrutiny
 - MPs briefing
 - Ward Member briefing
 - All member briefing
 - Briefings with members from Neighbouring authorities of B&NES, North Somerset and South Gloucestershire
 - CIWEM SW Branch

The Architecture Centre held a special event about flooding bringing in speakers to discuss a number of issues which included Councillor Beech talking about Bristol's proposals.

1.4. How many responses were there?

There were 576 responses which included 517 online and 59 paper surveys completed

There were 24 responses to the Strategic Environmental Assessment (SEA).

1.5. How was it promoted?

The main promotion was focussed at attracting responses from those people most at risk of flooding in the four key areas of Bristol, and the two areas in adjoining neighbouring authorities. These are the people that will be impacted most and the promotion was targeted at these neighbourhoods specifically.

The main consultation was promoted in the following ways:

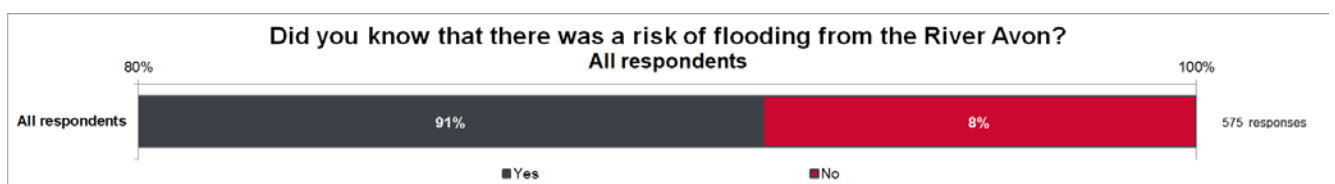
- On social media - through Bristol City Council’s facebook, twitter and Next Door accounts with general posts but also some paid posts targeted at the key areas affected.
- Through LinkedIn - both the Bristol City Council account and key officers’ networks
- Requests for organisations to promote the consultation through their networks - these organisations were sent a toolkit
- Through meetings with interested groups
- Through the Community Development Team and the network of community hubs in the 4 key areas of city
- Through the Voice and Influence Partnership to their network of equalities organisations
- Asking neighbouring local authorities to help promote the consultation particularly in areas directly affected by it
- Press release and press conference on 5 October followed by news articles on Points West and two articles in Bristol Post ([here](#) and [here](#)). This was followed with direct contact with news outlets w/c 26 October with further news articles which included:
 - Article on [BBC Bristol website](#) (9 Oct)
 - [Online article B24/7](#) (26 Oct)
 - Online article in [Planning, BIM & Construction Today](#)
 - Article in Bristol Post 29/10 <https://www.bristolpost.co.uk/news/bristol-news/bristol-flood-scheme-could-involve-4648769>
 - Articles in local publications, e.g. “The Shire” no. 586
- Cllr Beech was also interviewed by BBC Politics (West) but the segment didn’t air because new COVID-19 restrictions were announced the day before it was due to be broadcast
- Mayor’s (Cllr Beech) blog on 26/10

2. Consultation results

Below are the results from the consultation.

2.1. Knowledge about the risk of flooding

Asked whether respondents knew about the risk of flooding from the River Avon before this consultation, 91% said yes and 8% said no demonstrating a high level of awareness.



2.2. Support for key aims of the strategy

The consultation set out 3 key aims for the strategy and asked to what degree respondents supported those aims. The aims were:

- Future-proofing the city and neighbouring communities;
- Enabling a greener, more active city
- Unlocking Bristol’s potential

Overall there is strong support for the aims:

2.2.1. Future-proofing the city and neighbouring authorities

- Of the 576 overall responses to the survey 567 responses were received for this question of which 92% of respondents agreed/strongly agreed that they supported the aim to future-proof the city and neighbouring communities, 2% disagreed/strongly disagreed

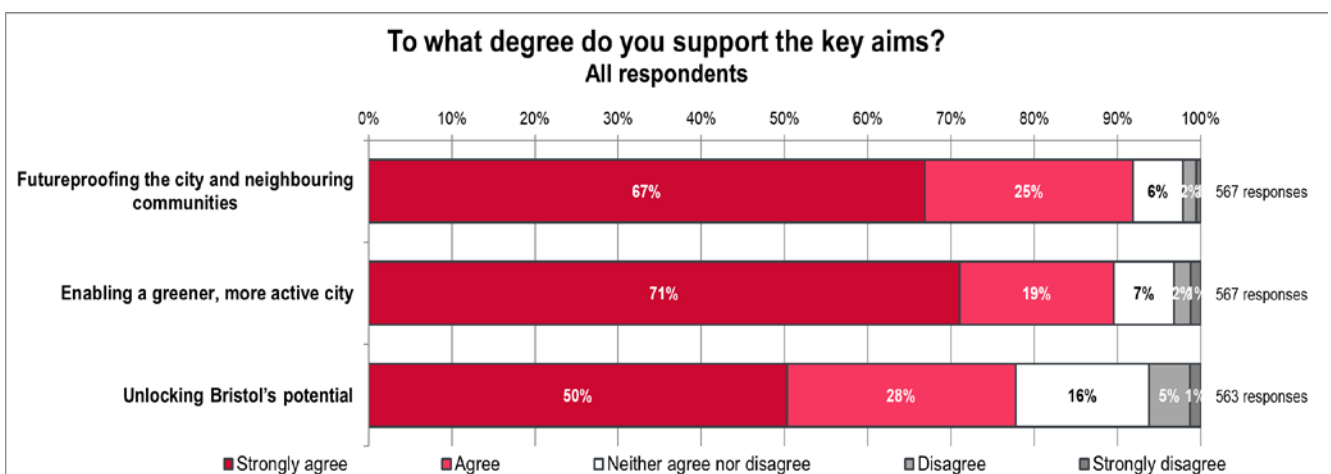
2.2.2. Enabling a green, more active city

- Of the 576 overall responses to the survey 567 responses were received to this question of which 90% of respondents agreed/strongly agreed that they supported the aim to enable a greener, more active city, 3% disagreed/strongly disagreed

2.2.3. Unlocking Bristol’s potential

- Of the 576 overall responses to the survey 563 responses were received to this question of which 78% respondents agreed/strongly agreed that they supported the aim of unlocking Bristol’s potential. 6% disagreed/strongly disagreed.

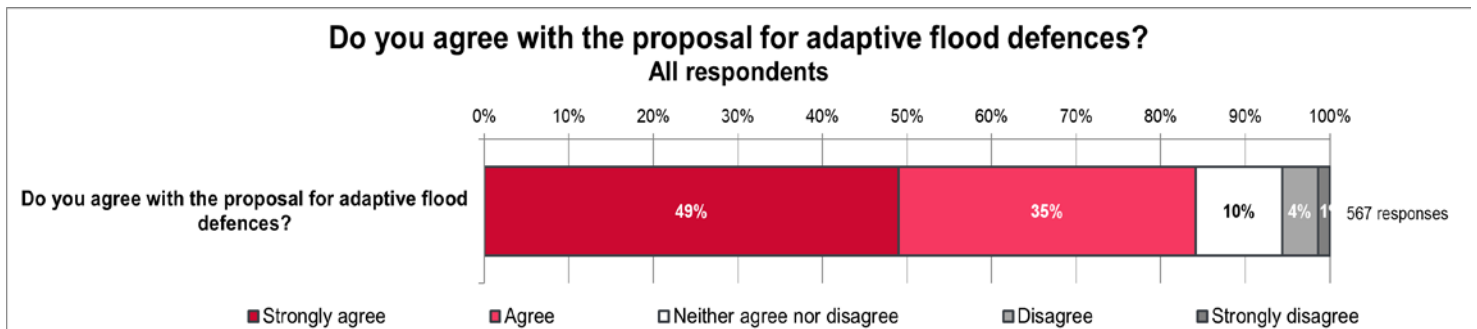
2.2.4. Graph showing responses to all three questions



2.3. Proposals for adaptive flood defences

Respondents were asked to what extent they agreed with the proposal for adaptive flood defences which allow for changes in height over time in line with climate change and sea level rise.

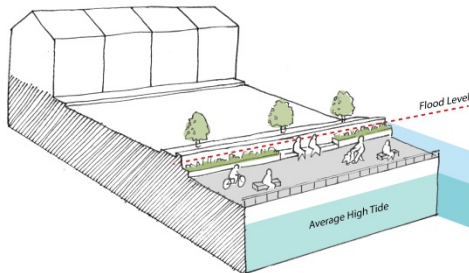
Of the 576 overall responses, 567 responses were received to this question of which 84% agreed/strongly agreed with the proposal. 6% said they disagreed/strongly disagreed. This demonstrates a high level of support from respondents to the proposal.



2.4. How flood defences can be integrated into the city

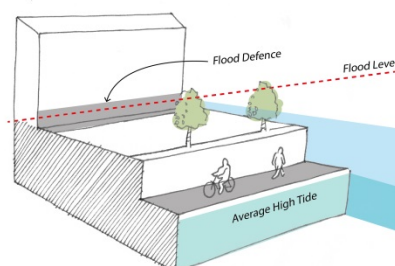
Respondents were asked whether they agreed with the ways that flood defences could be integrated into the city as detailed in 5 possible interventions.

1 - submergible paths which can be used for activities like cycling and walking when not flooded



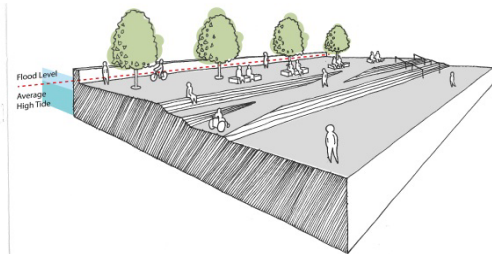
Of the 576 overall responses to the survey there were 564 responses to this question, of which 88% said they agreed/strongly agreed with this approach with 4% disagreeing or strongly disagreeing.

2 – Defences integrated into buildings



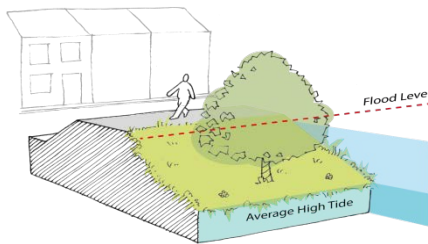
Of the 576 overall responses to the survey there were 563 responses to this question, of which 74% said they agreed/strongly agreed with this approach with 10% disagreeing or strongly disagreeing.

3 – Use of Terracing



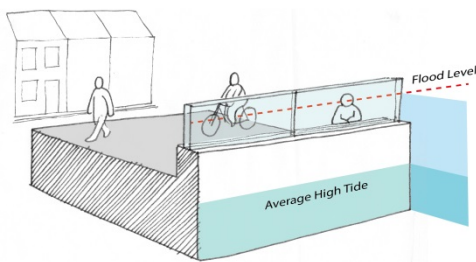
Of the 576 overall responses to the survey there were 563 responses to this question, of which 88% said they agreed/strongly agreed with this approach with 5% disagreeing or strongly disagreeing.

4 – Combining flood defences with opportunities for leisure, active travel, green spaces and increased biodiversity including embankments and linear parks



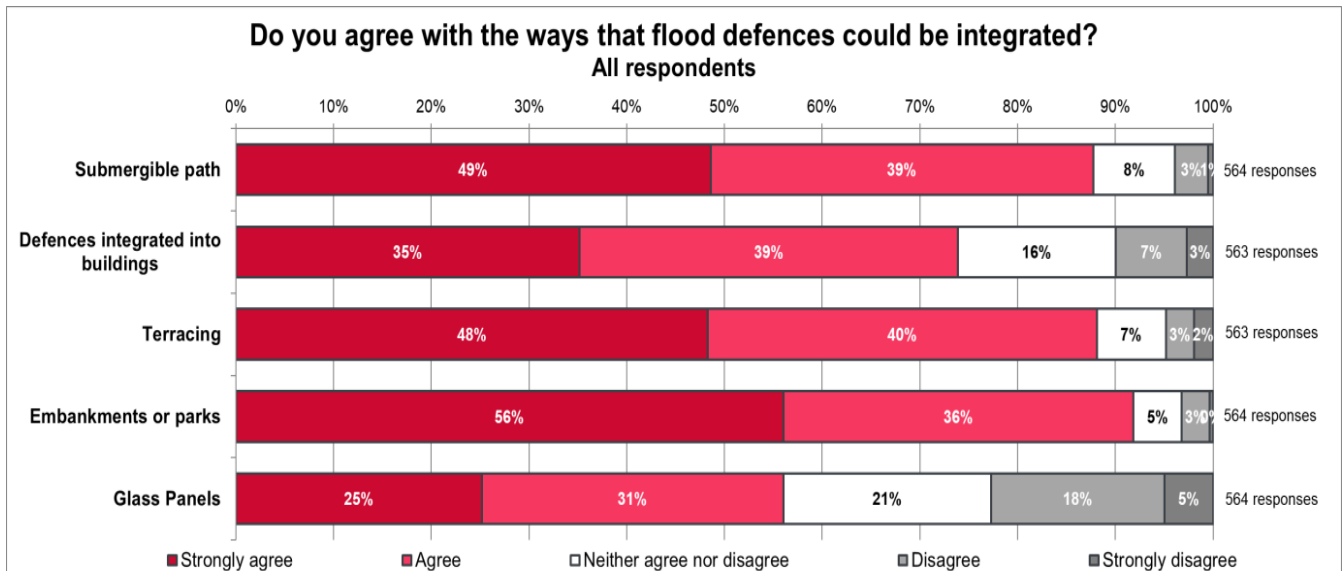
Of the 576 overall responses to the survey there were 564 responses to this question, of which 92% said they agreed/strongly agreed with this approach with 3% disagreeing or strongly disagreeing.

5 – Glass panels which can be used when defences need to be raised over time



Of the 576 overall responses to the survey there were 564 responses to this question, of which 56% said they agreed/strongly agreed with this approach with 23% disagreeing or strongly disagreeing.

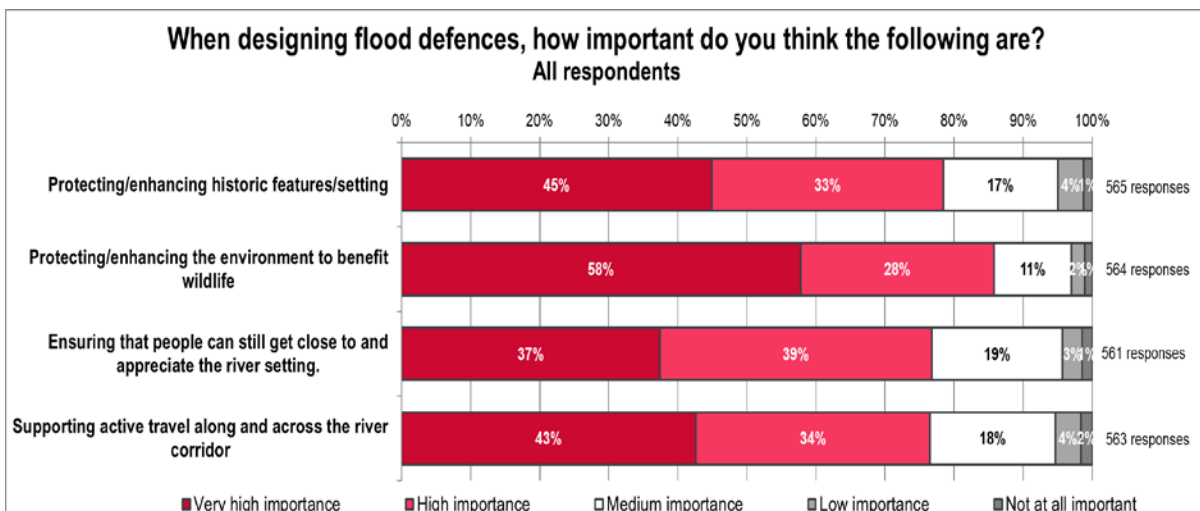
Overall graph showing all responses to all options:



There is support for all the approaches to integrating defences into the city with a particularly high level of support for approaches 1, 3 and 4. Approach 5 received the lowest level of support with nearly a quarter of people disagreeing with it.

2.5. How important certain aspects are when designing flood defences

Respondents were asked to say how important certain aspects were when designing flood defences. 76% or more of respondents to each question felt that each was either very highly important or highly important with 'protecting/enhancing the environment to benefit wildlife' flagged as the most important with 86% rating it of very high/high importance. The chart below shows the results for each question based on the number of people responding to each specific question.



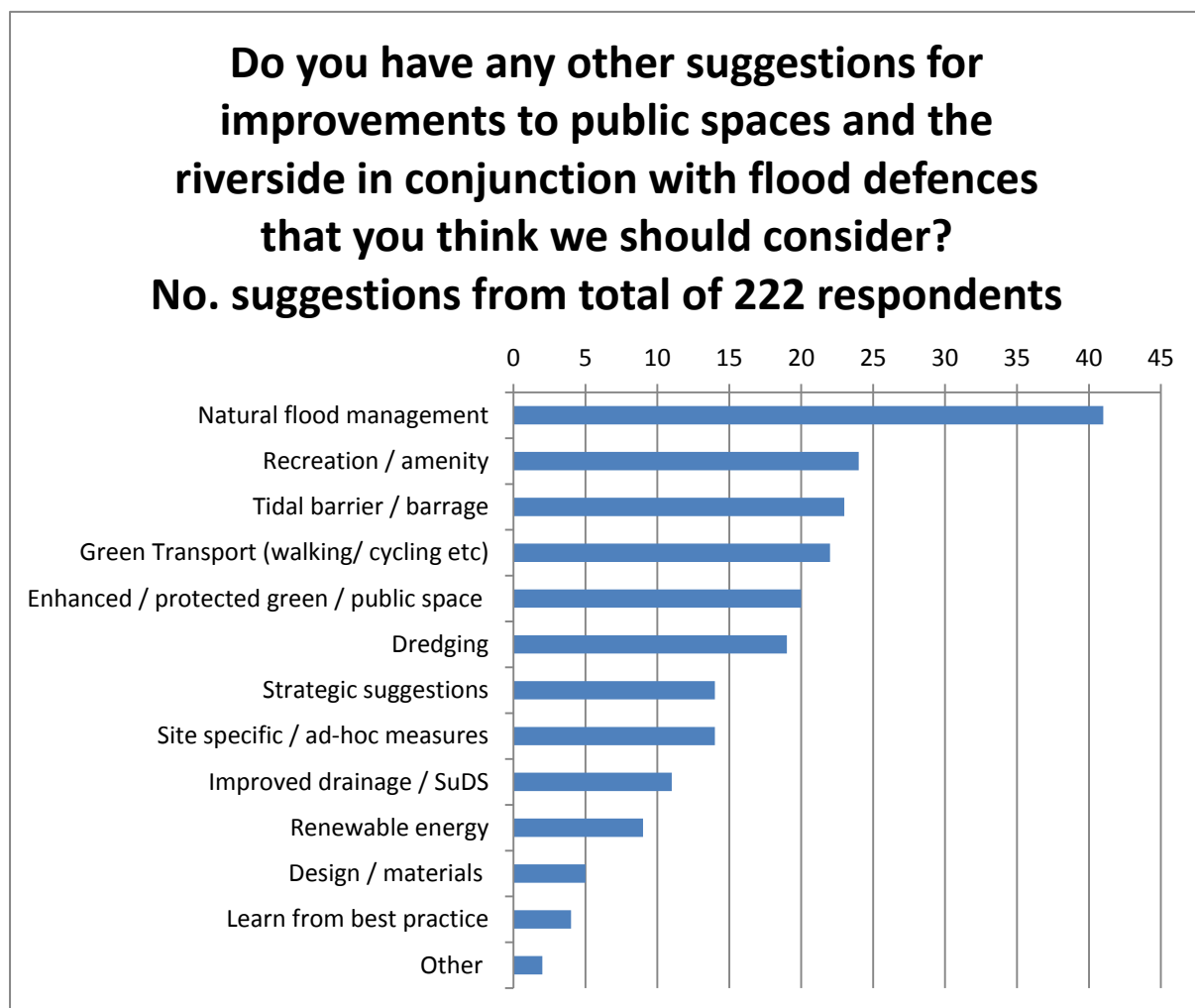
2.6. Any other suggestions for improvements to the public realm in conjunction with flood defences

Asked if there were any other suggestions for improvements to the public realm in conjunction with flood defences 222 responses were received (out of 576 responses to the overall consultation). The comments have been analysed and categorised. Amongst the comments there were 208 suggestions, and 116 concerns raised.

2.6.1. Suggestions

The table below details the types of suggestion topics covered.

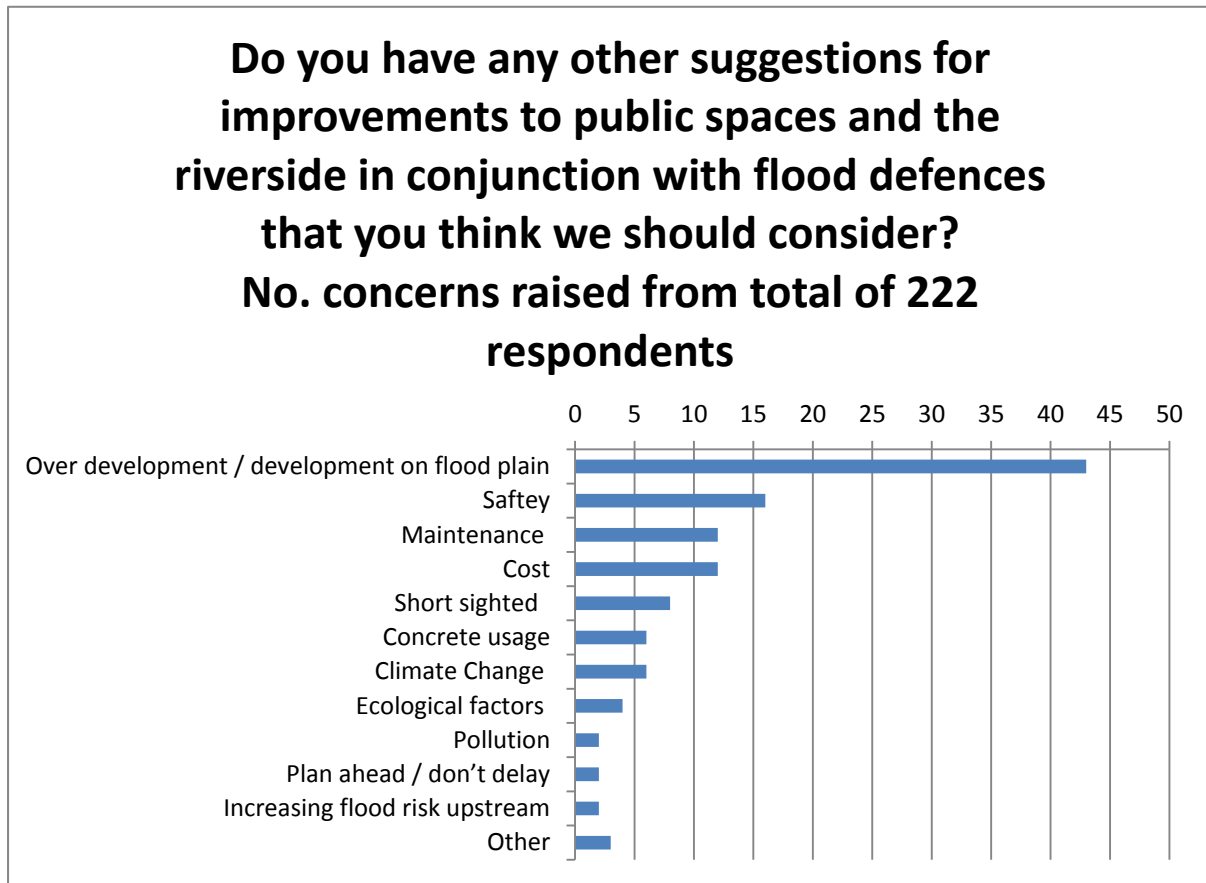
Of the 208 suggestions made, suggestions related to natural flood management (41 responses), recreation/amenity (24), tidal barrier/barrage (23) and green transport (walking/cycling) (22), Enhanced/protected green/public space (20) and Dredging (19) were the most cited.



2.6.2. Concerns

The table below details the categories of concerns raised:

Of the 116 concerns raised, the most cited were over development and development of flood plains (43 respondents), safety (16), maintenance (12) and cost (12).



2.7. Comments about the six areas at risk of flooding

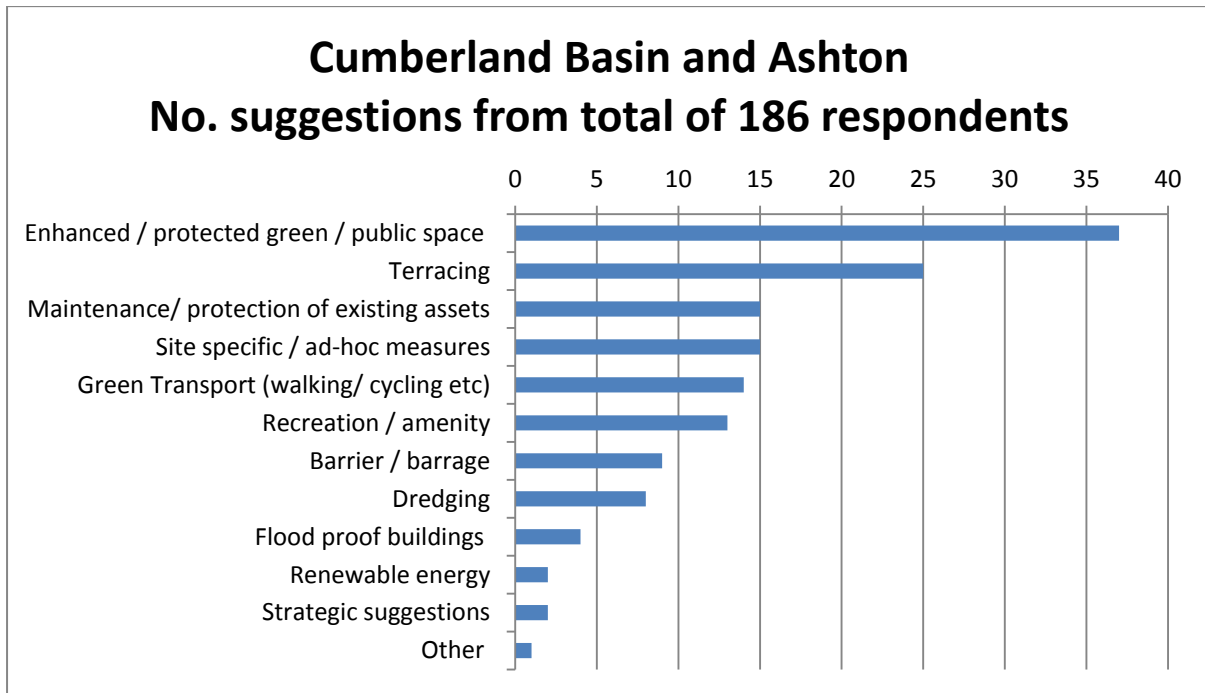
There are six areas along the Avon that are at risk of flooding. The consultation asked respondents to provide comments/suggestions on these six areas. A summary of the key subjects that were raised are detailed below by area. Please note that some respondents have put the same/similar comments under each area. Each time the comment has been made it has been recorded in the separate statistics for each area.

2.7.1. Cumberland Basin and Ashton

Out of the 576 total responses to the consultation 186 responses were received to this question. Responses included 145 suggestions, 68 concerns and 32 comments of general support.

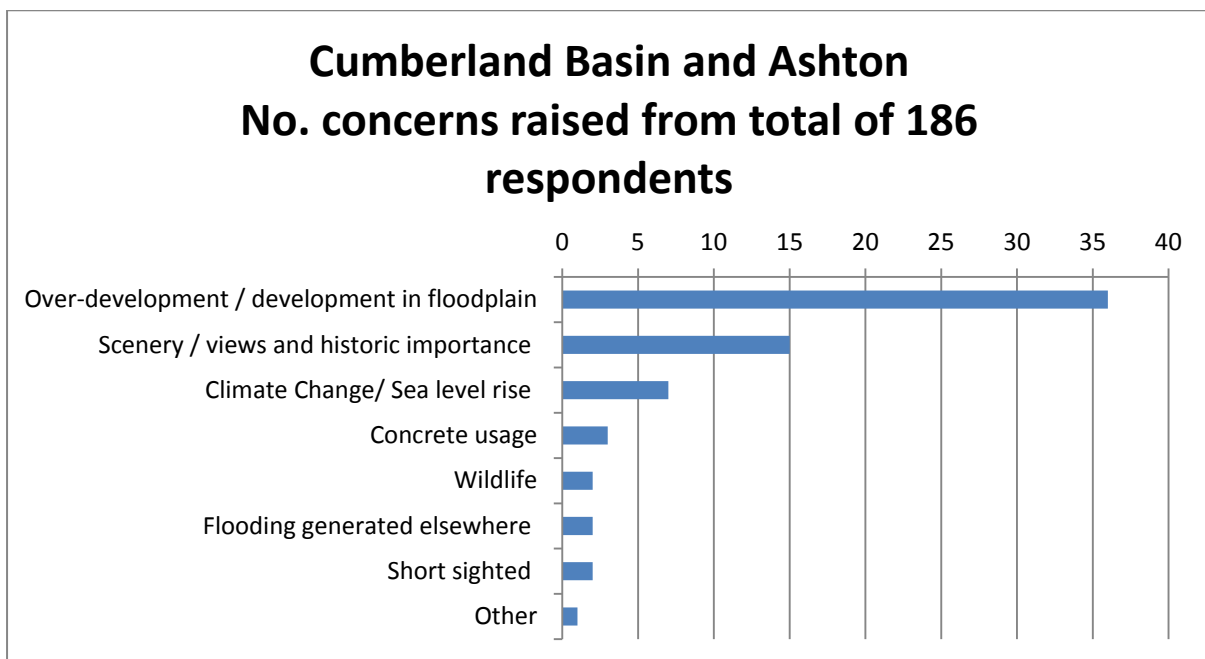
suggestions

The two most cited suggestions were enhanced/protected green/public space (37 responses), and terracing (25).



Concerns

The most commonly cited concerns were: overdevelopment/development in flood plain (36) and scenery/views and historic importance (15).

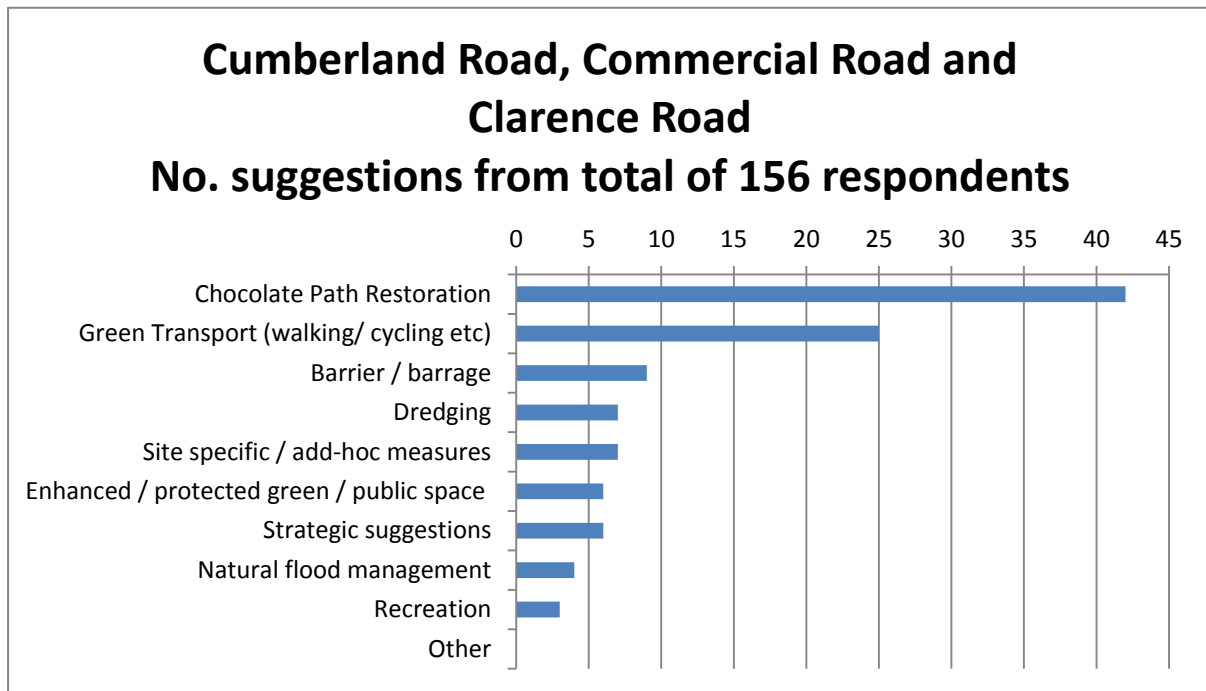


2.7.2. Cumberland Road, Commercial Road and Clarence Road

Of the 576 respondents to the whole consultation, 156 responses were received to this question. Responses included 109 suggestions, 31 concerns and 40 comments of general support for the strategy.

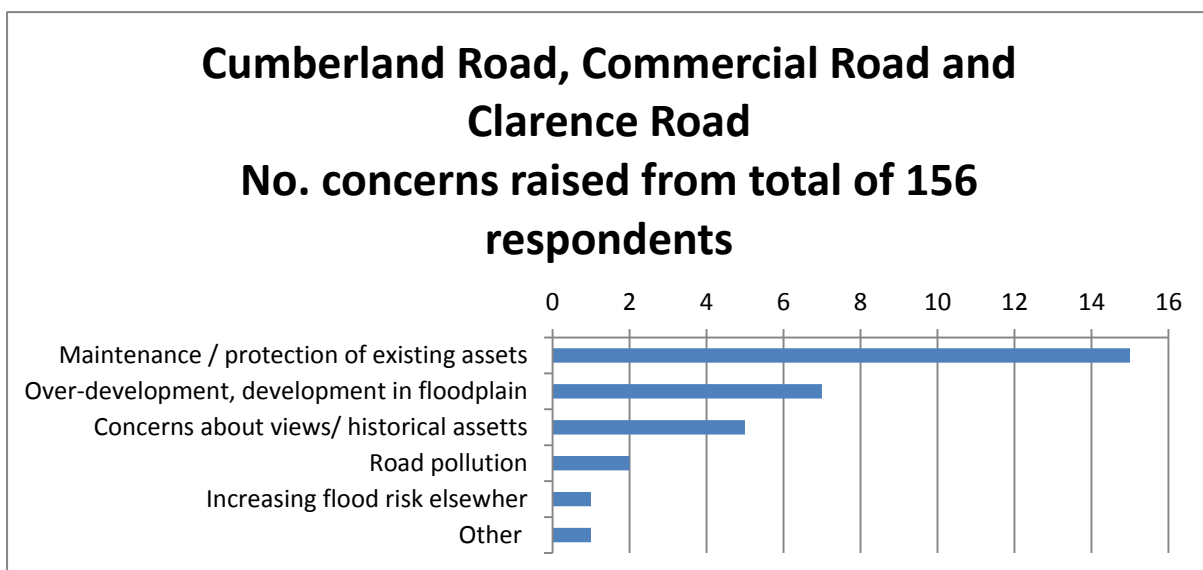
Suggestions

The two most commonly cited suggestions related to Chocolate Path restoration (42 respondents) and green transport (walking, cycling etc) (25).



Concerns

The most commonly cited concern was related to maintenance/protection of existing assets (15 responses).

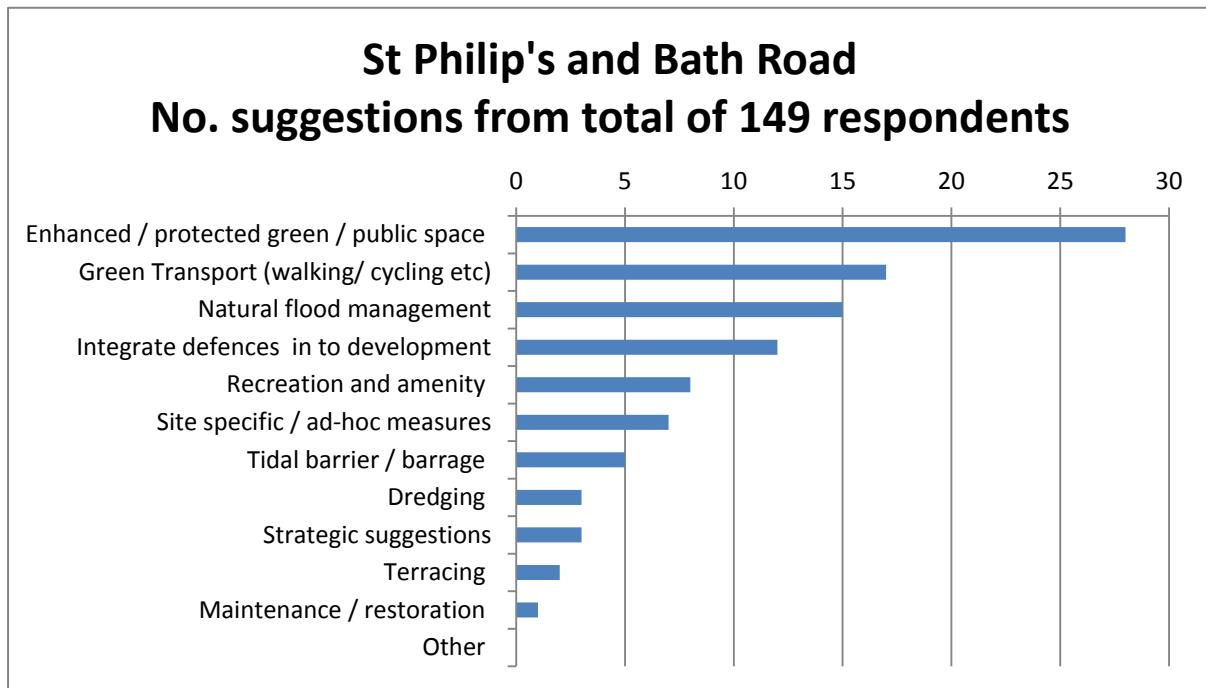


2.7.3. St Philips and Bath Road

Of the 576 responses to the whole consultation 149 responses were received to this question. Comments included 101 suggestions, 38 concerns raised and 37 comments of general support.

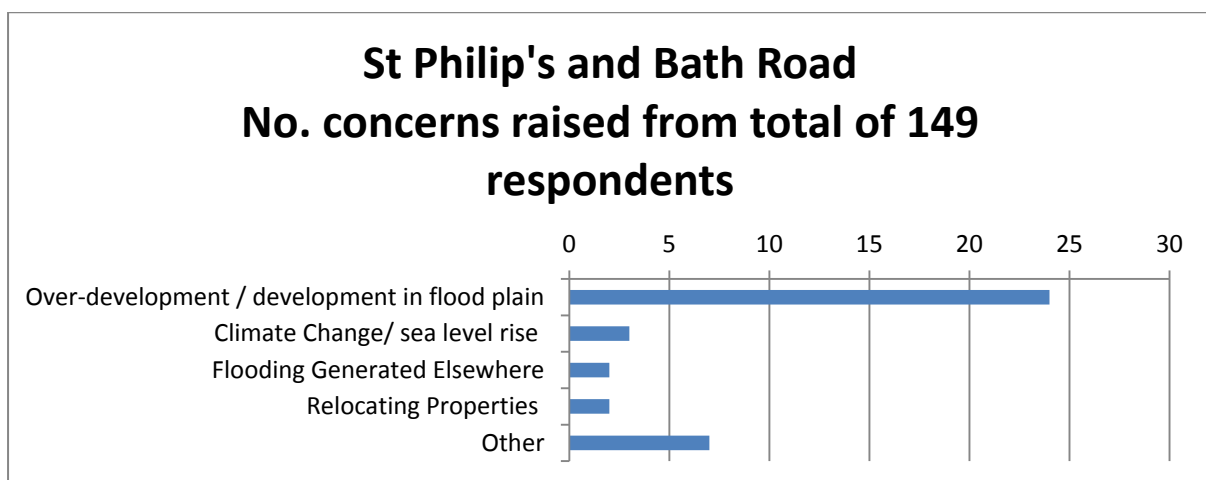
Suggestions

Of the 101 suggestions, the most commonly cited suggestions related to enhanced/protected green/public space (28 responses), green transport (walking/cycling) (17), natural flood defences (15) and integrating defences into development (12).



Concerns

Of the 38 concerns raised the main concern was over development/development in flood plain (24 responses).

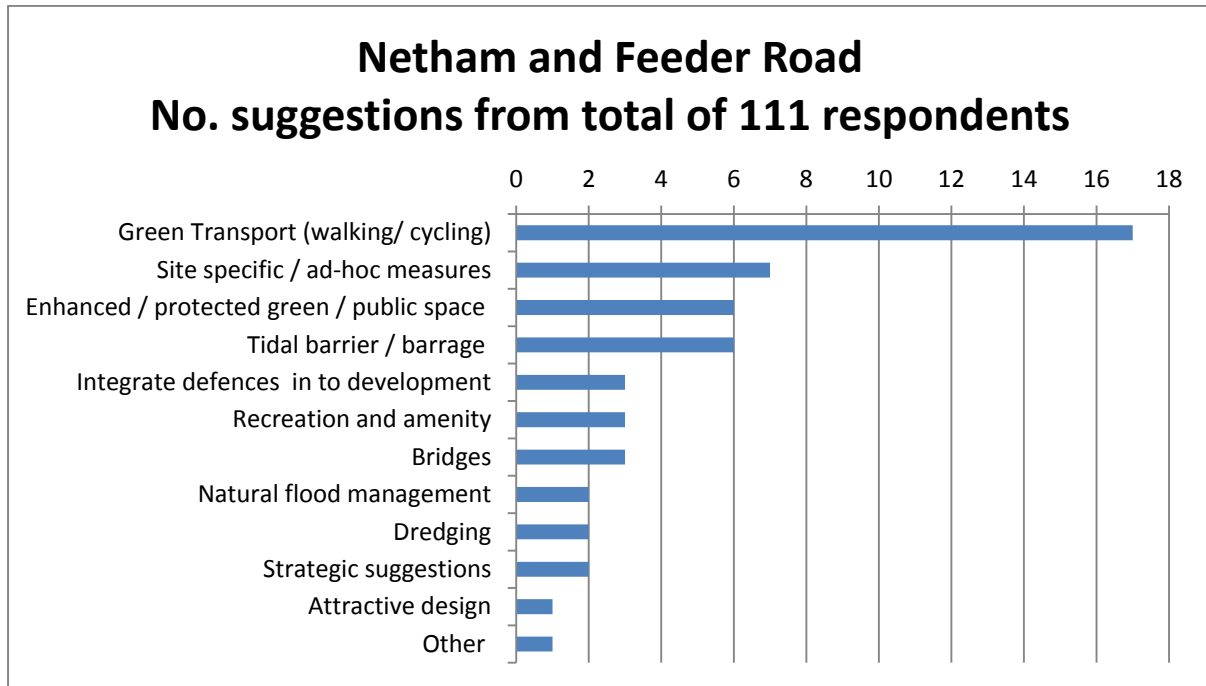


2.7.4. Netham and Feeder Road

Of the 576 responses to the whole consultation 111 responses were received to this question. Responses included 53 suggestions, 22 concerns and 24 comments in general support.

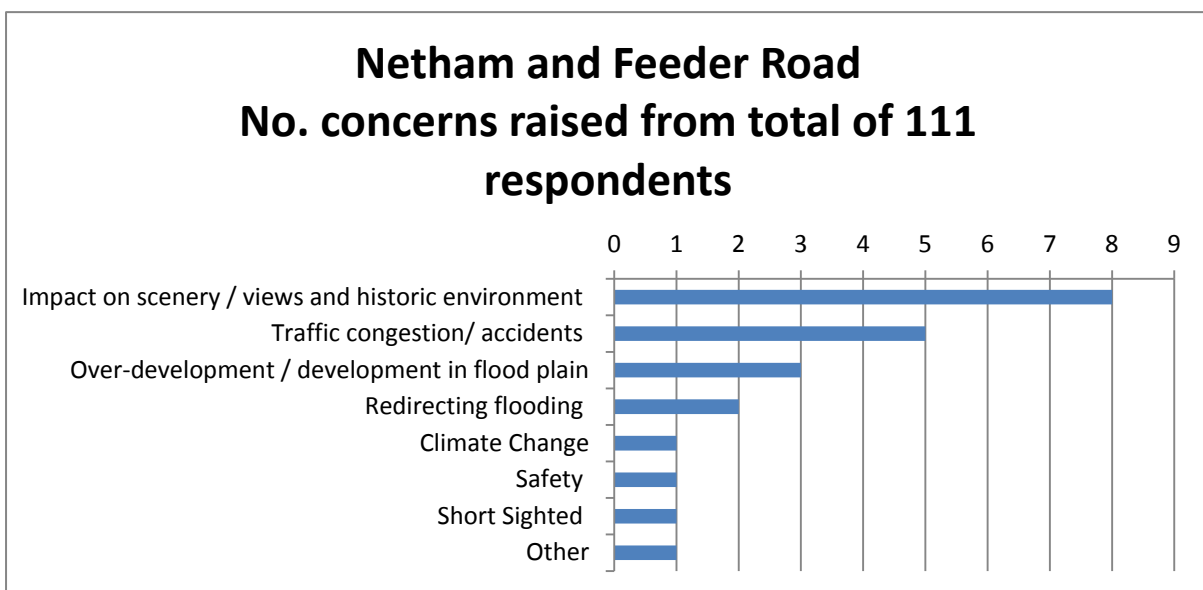
Suggestions

Of the 53 suggestions, the most commonly cited suggestions related to green transport (walking/cycling) (17), site specific/ad hoc measures (7), enhanced/protected green/public space (6) and a tidal barrier/barrage (6).



Concerns

Of the 22 concerns raised the most commonly cited concerns were impact of views/scenery and historic environment (8) and traffic congestion/accidents (5).

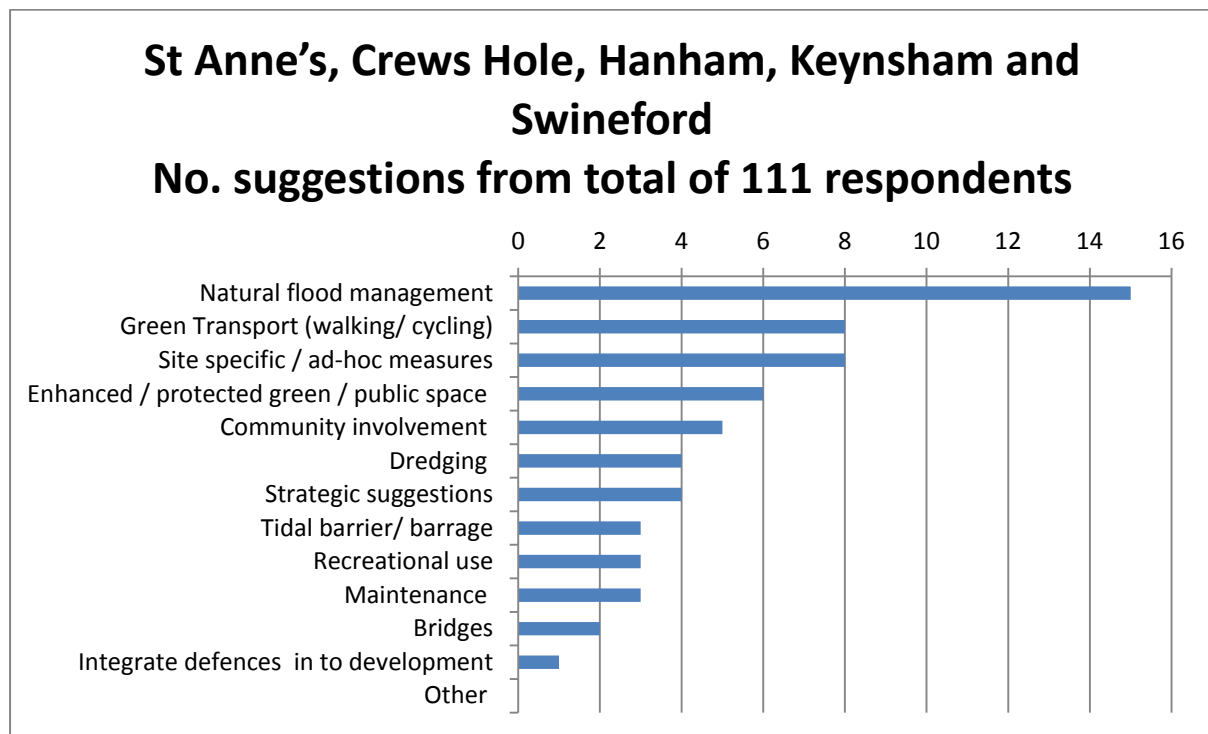


2.7.5. St Anne's, Crews Hole, Hanham, Keynsham and Swineford

Of the 576 responses to the whole survey, 111 responses were received to this question. These included 62 suggestions, 28 concerns and 19 comments of general support.

Suggestions

Of the 62 suggestions made, the most commonly cited suggestions related to natural flood management (15), green transport (walking/cycling) (8) and site specific/ad hoc measures (8)

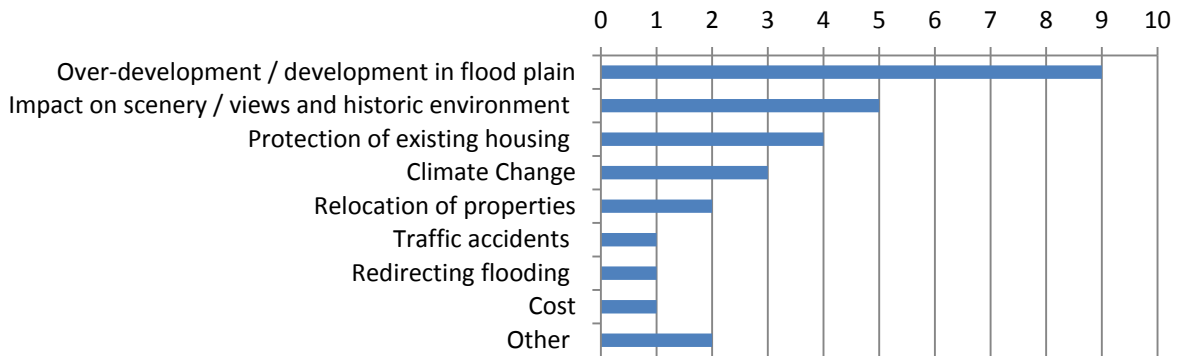


Concerns

Of the 28 concerns, the most commonly cited concerns related to over-development/development in flood plain (9), Impact on scenery/views and historic environment (5), and protection of existing housing (4)

St Anne's, Crews Hole, Hanham, Keynsham and Swineford

No. concerns raised from total of 111 respondents



2.7.6. Pill, Shirehampton and Sea Mills

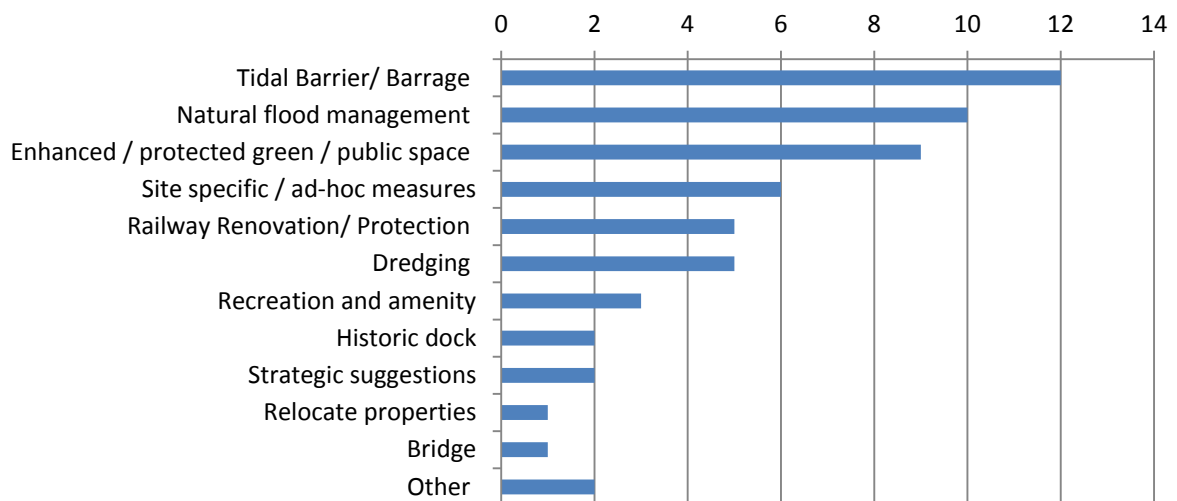
Of the 576 responses to the survey 99 responses were received to this question, including 58 suggestions, 23 concerns and 26 comments of general support.

Suggestions

Of the 58 suggestions, the most commonly cited suggestions related to a tidal barrier/barrage (12), natural flood management (10) and enhanced/protected green/public space (9).

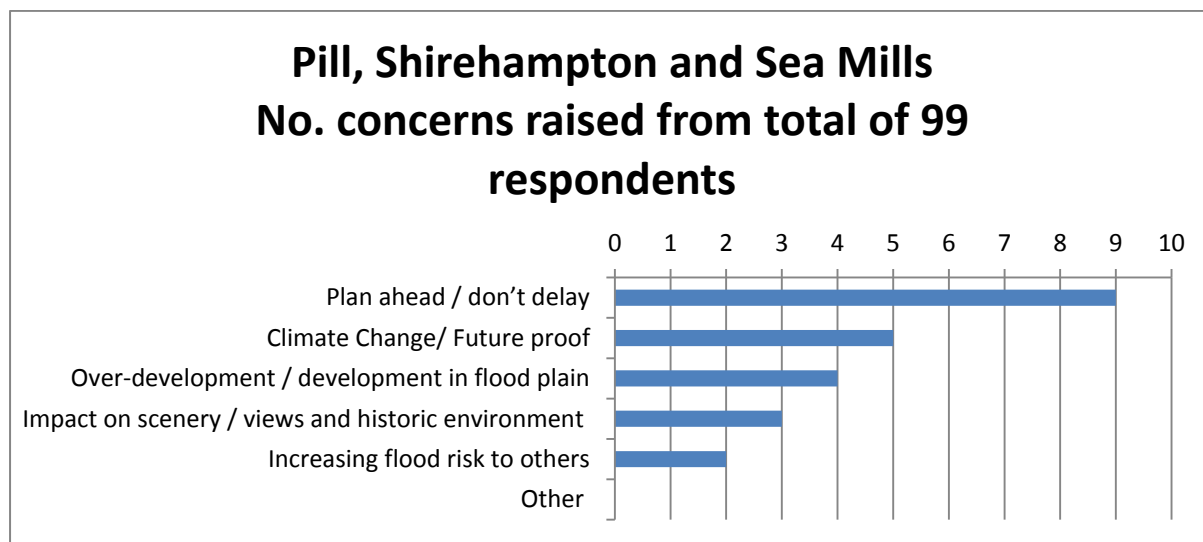
Pill, Shirehampton and Sea Mills

No. suggestions from total of 99 respondents



Concerns

Of the 23 concerns the most commonly cited were related to plan ahead/don't delay (9) and climate change (5).



2.8. Strategic Approaches considered but not taken forward

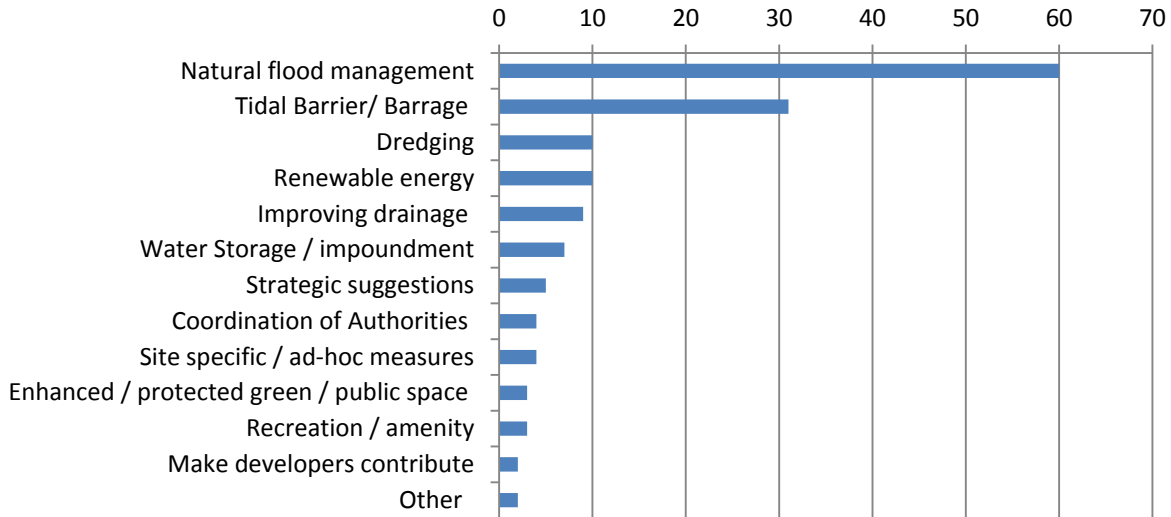
Respondents were asked to comment on other measures or strategic approaches that we considered but are not recommending taking forward. Of the 576 overall to the survey there were 183 responses to this question. This included 150 suggestions to consider or re-consider alternative measures, or expressed concerns related to the strategic approach we are proposing, 58 concerns related to the strategic approach we are proposing and 22 comments in general support. In some cases respondents repeated comments they'd made in response to previous questions

Suggestions

Of the 150 suggestions made the most cited was natural flood management (60 comments), Tidal barrier/barrage (31 comments), dredging (10), and renewable energy (10)

Do you have any comments about the other measures or strategic approaches that we considered but are not recommending taking forward?

No. suggestions from total of 183 respondents

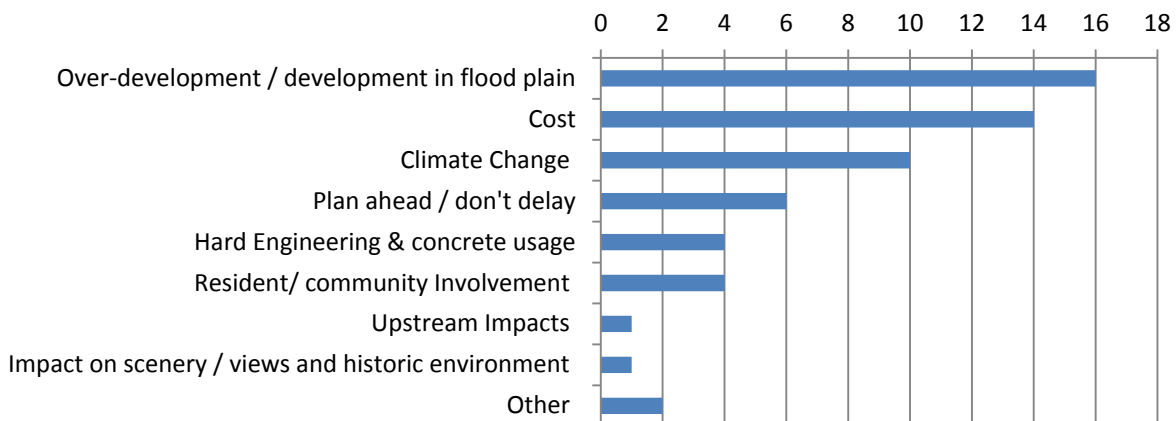


2.8.1. Concerns

Of the 58 concerns the most commonly cited concerns were over development/development (16), cost (14) and climate change (10).

Do you have any comments about the other measures or strategic approaches that we considered but are not recommending taking forward?

No. concerns raised from total of 183 respondents



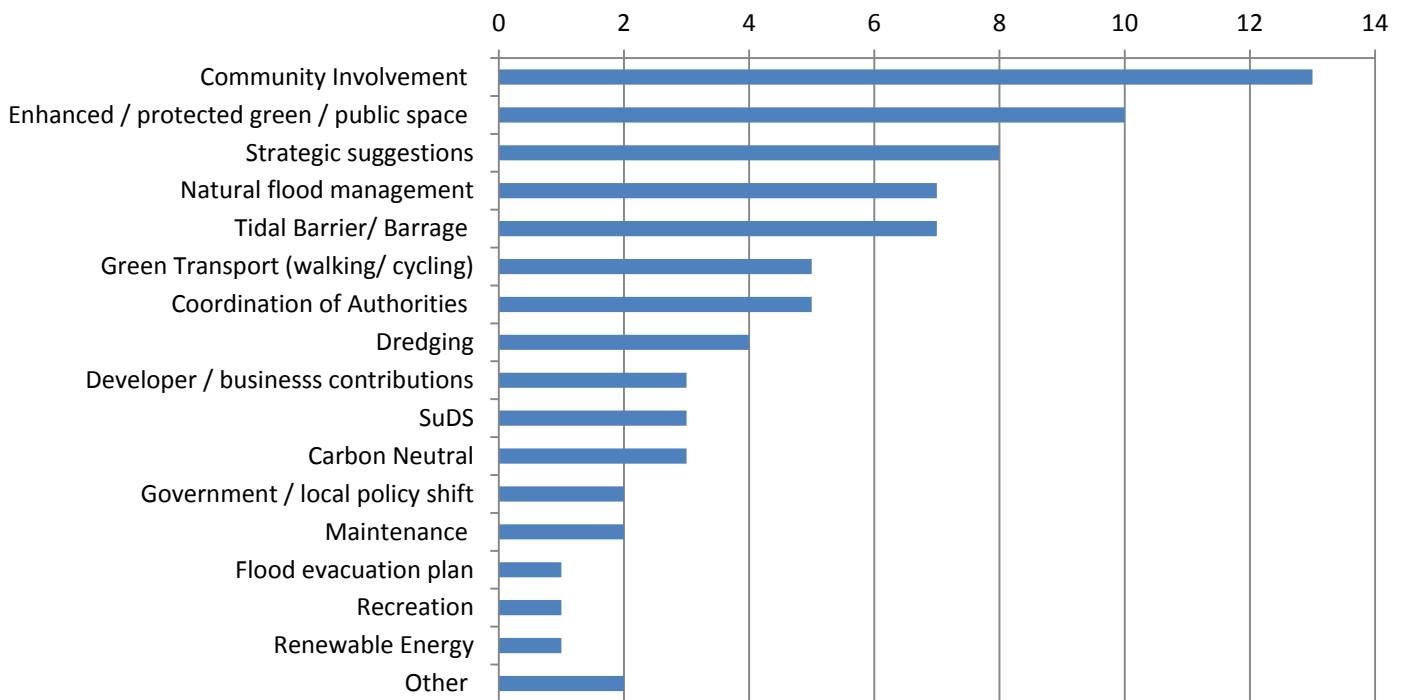
2.9. Any other comments

Respondents were asked if they had any other comments. Out of 576 responses to the overall survey 129 respondents answered this question. This included 77 suggestions, 66 concerns and 12 comments of general support.

2.9.1. Suggestions

Of the 77 suggestions made the most cited was community involvement (13), enhanced/protected green/public space (10)

If you have any other comments or suggestions please provide them No. suggestions from total of 129 respondents

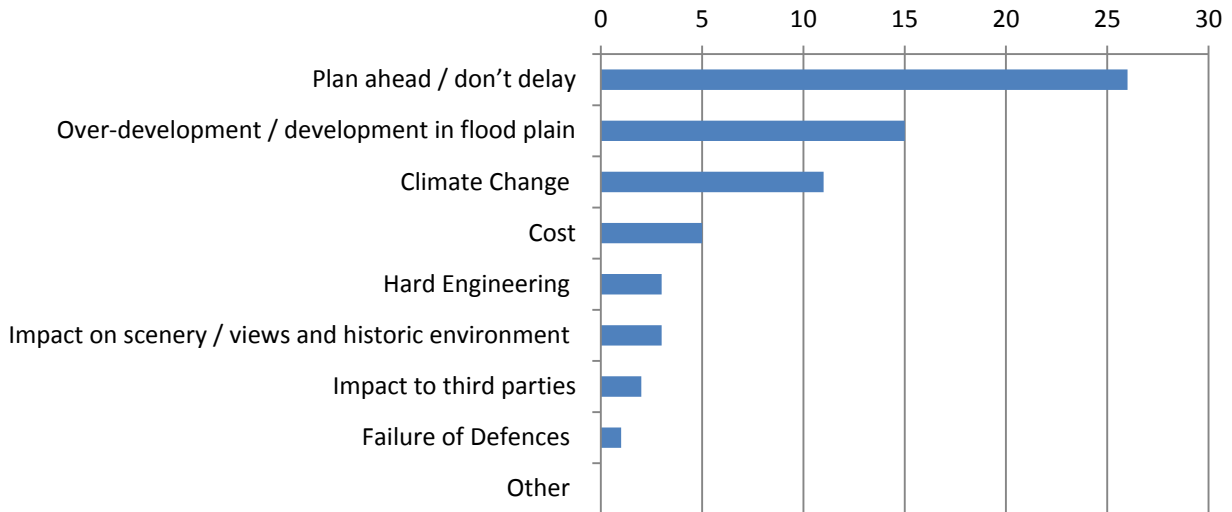


2.9.2. Concerns

Of the 66 concerns raised the most commonly cited were to plan ahead/don't delay (26), over-development/development in a flood plain (15) and climate change (11).

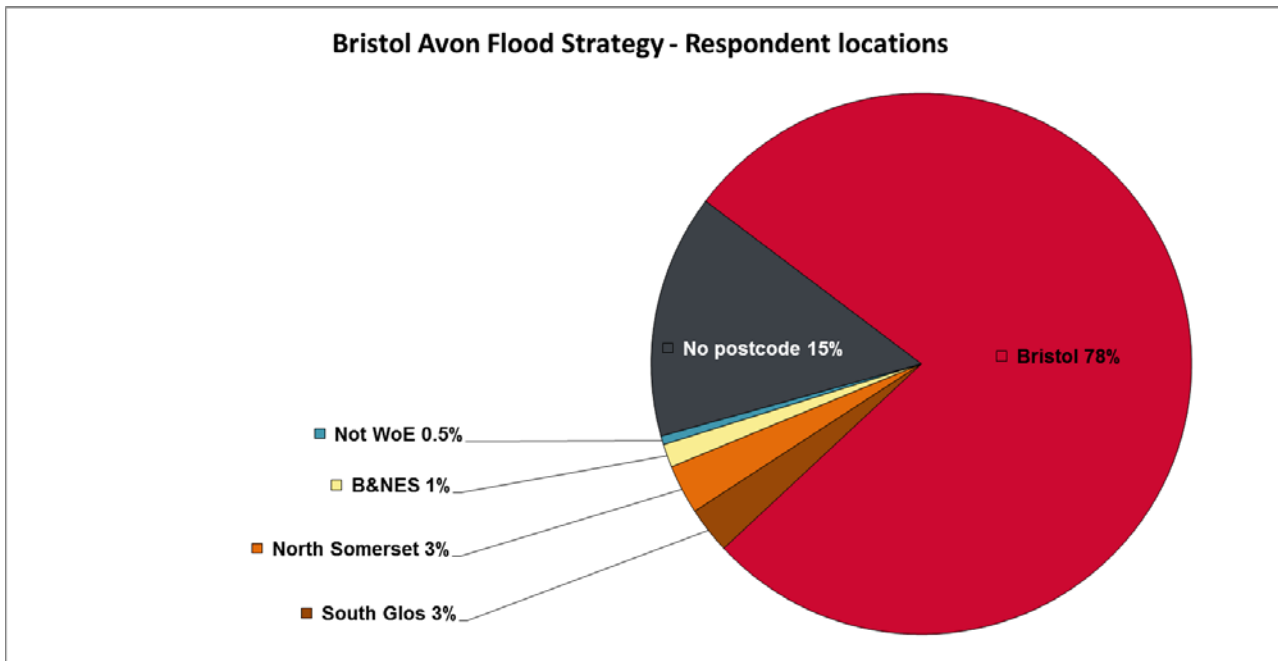
**If you have any other comments or suggestions
please provide them**

No. concerns from total of 129 respondents



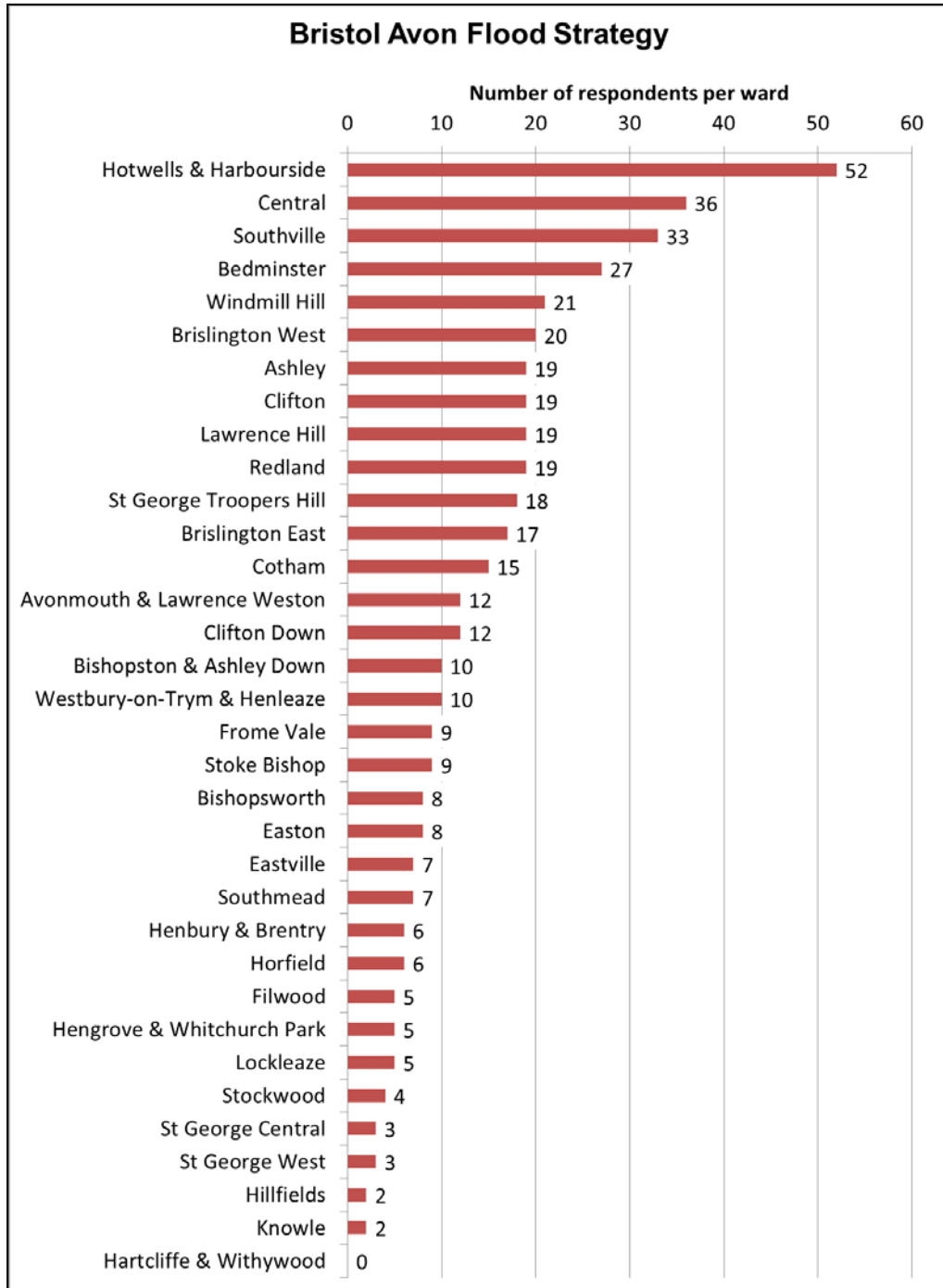
3. Where the responses came from

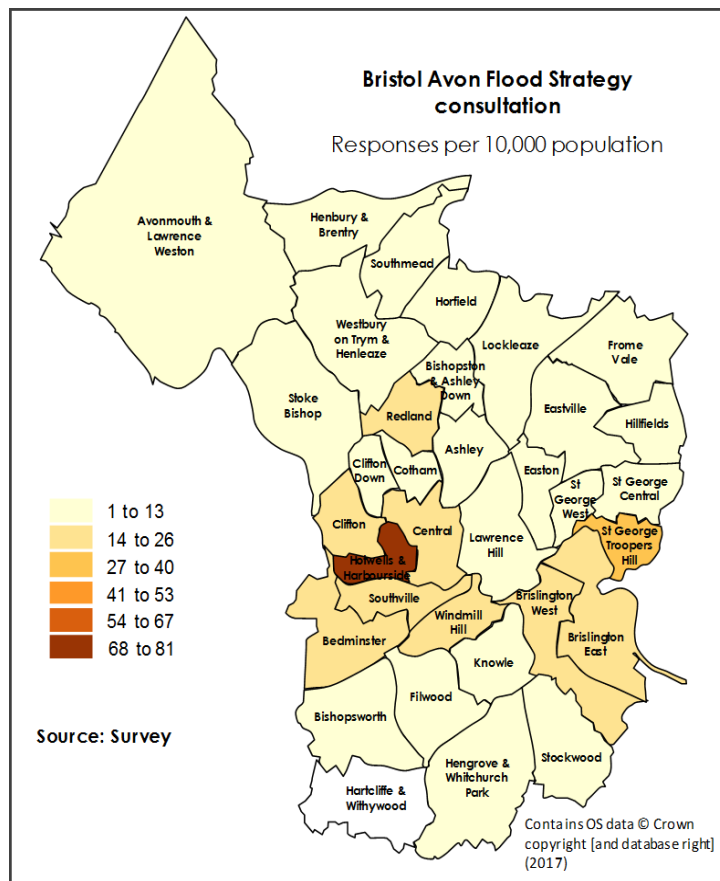
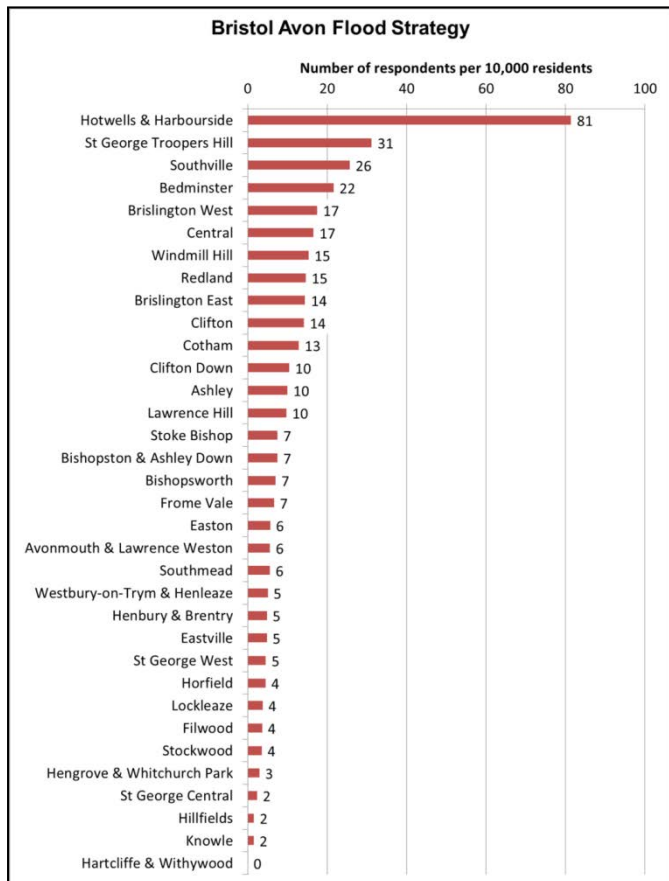
78% of responses came from Bristol with 7% in total coming from the neighbouring authorities of North Somerset, South Gloucestershire and Bath & North East Somerset. The consultation identified areas of these authorities as needing flood protection measures.



4. Response by ward

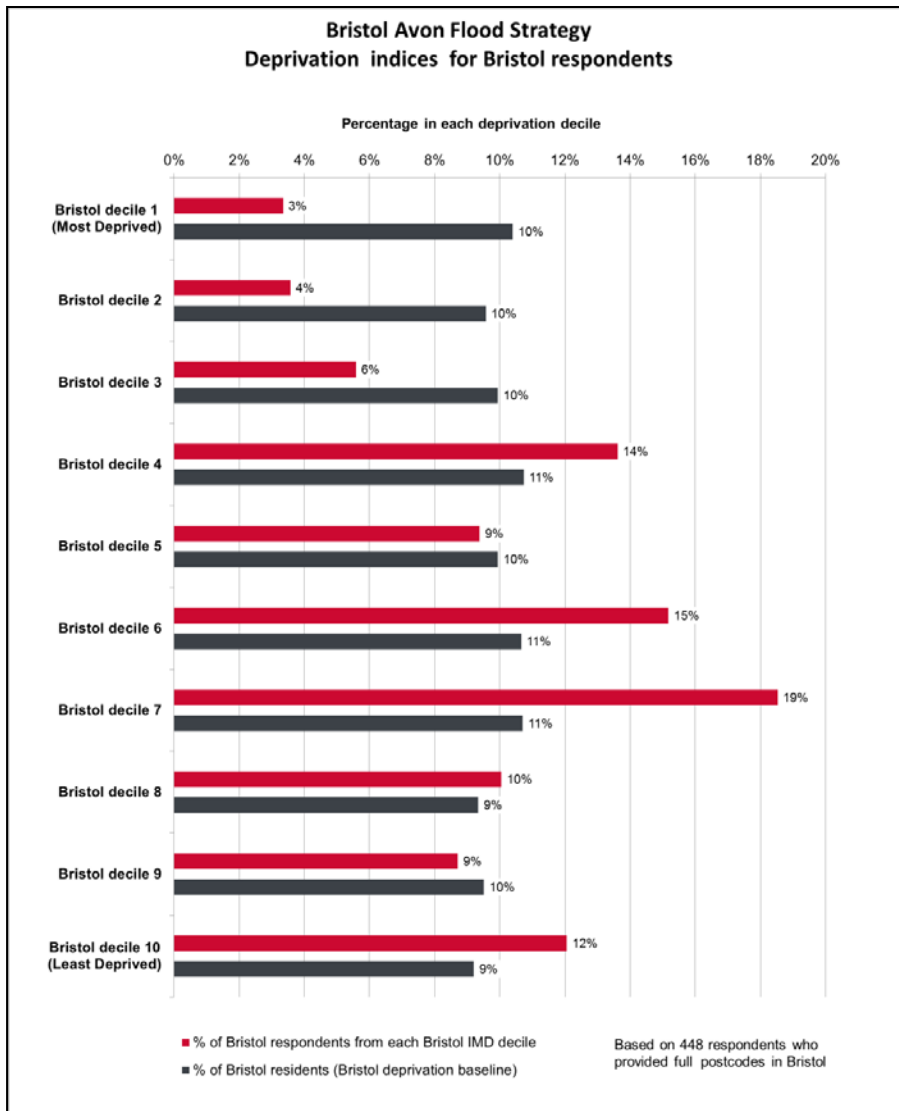
The following tables show the responses by ward in the Bristol local authority area only. The consultation was largely promoted in areas where there is risk of flooding and where the flood proposals are identified as being needed. The first chart shows actual responses by ward. The two charts following show responses by ward per 10,000 population – each ward has a different number of citizens and this gives an proportional view of representation.





5. Response by area of deprivation

The table below shows the percentage of responses from each deprivation decile. The highest level of responses came from the middle deciles, 4, 6 and 7.



6. Additional submissions

In addition to responses to the main consultation survey, 12 organisations/individuals made written submissions. Below are some of the comments made:

- Overall general level of support for the strategy and it's adaptive approach.
- Natural Flood development techniques should form part of strategy
- Need to make sure the strategy aligns to the Bristol One City Climate Strategy, WECA spatial and green infrastructure strategy, Emerging Local Plan
- Support to the UK Government's 25 Year Environment Plan and the NPPF in respect of biodiversity netgain.
- The need to take into account investors, potential commercial partners and private sector more fully
- Strategy should build an awareness programme around the flood risk
- Need for greater speed in developing flood defences and more urgency is implementing policy.
- Improved collaboration with developers
- Improved collaboration between key partners such as BCC and Environment Agency, particularly in regard to developments.
- Recognition of the flood threat in the city centre and the need for flood protection measures
- Would like to revisit the barrier and consideration of a detention reservoir
- Support aspiration to improve public realm and walking and cycling, introduce green infrastructure and wildlife
- To use this programme of work and opportunity in association with addressing some of the longer standing issues of transport and future development patterns.
- Highlighting challenges in actual delivery due to constraints, particularly around Cumberland Basin and the Knuckle
- Take more consideration of fluvial flooding and think about how water can be absorbed by green infrastructure
- Greater clarity over costs and financial figures used in the strategy needed
- Question building in areas at great risk of flooding – such as St Philips and Western Harbour. Identification of development land should be done outside this strategy but reflecting the Government's flood risk policy. Reference the Environment Agency's Flood and Coastal Erosion Risk Strategy.
- Need to ensure the council's commitment to the tackling the Climate and Ecological emergencies and showing respect for the natural environment.
- A number of technical comments associated with the strategy, boundaries and flood protection. Suggestions for further modelling to encompass risk to other areas
- Strategy supports aims in own local/neighbourhood plans
- strongly supportive of the forward looking approach to flood prevention and defence in the documentation
- welcome and support the need for constant high quality maintenance and improvement for all defences along the river side and for ensuring the highest tides of the year do not cause anxiety and damage to residents and their homes closest to the river.
- feel measure would support local groups projects along the river
- opportunity to work closer together with parish councils/local people
- support for strategy and would like to explore partnership working opportunities to promote SuDs through flood alleviation works or areas of redevelopment within the city and in line with Wessex Water's Drainage and Waste Water Management Plan

- Development of strong partnerships to deliver improvements to drainage and water environment
- Ensure any separate work taken by the EA and Bristol under this strategy is coordinated
- Measures welcomed - overall the strategy will not only benefit the city bringing a betterment to the properties and commercial centre through a reduced flood risk and place making enhancements but will bring funding and measures to all the surrounding councils which as individual projects would have taken longer to gain funding.
- Importance of a coordinated approach with many partners including WECA.
- Prominence of the river as a green corridor recognised – sits next to areas of international, regional and locally designated sites for nature.
- The strategy should be flexible as things change over coming years and adaptable dependent on new evidence
- Should clarify which options are ruled out forever and which could be reconsidered in future
- Support for tactical approach for delivery
- Impact on key views should be considered – helpful to see how these might be affected
- Ensure engagement/consultation as detailed designs come forward
- Improved walkways and cycle routes should be joined up and take into consideration shared use concerns
- Improvements should take into account good maintenance moving forward and security of businesses along the riverside.

7. Strategic Environmental Assessment

The council voluntarily did a Strategic Environmental Assessment (SEA) on the Bristol Avon Flood Strategy and alongside the main consultation respondents were invited to comment on this. 24 responses were received. These will be analysed and considered separately from this report.