

Newlay Weir and Fish Pass: A summary of findings from the public survey July – August 2022

Background to the survey

Newlay Weir is situated on the River Aire, upstream of Leeds. Initial development in the Newlay area began with the construction of a weir and goit in the 12th century to power the corn mill at Kirkstall Abbey. The current Newlay Weir was constructed in 1690 to provide water to Kirkstall Forge Mill. The weir was listed (Grade II) in 1996 under the Planning (Listed Buildings and Conservation Areas) Act 1990 for its special architectural/historic interest and it contributes to the setting of the grade II Newlay Bridge.

As part of a strategy for ecological improvements on the River Aire, the [Developing the Natural Aire \(DNAire\)](#) project began construction of a series of 3 fish passes along the river, following consultation and engagement with interested parties. Fish passes are designed to enable salmon and sea trout to pass over obstructions such as weirs, to enable migration from the sea, through the Humber Estuary, and on to their spawning grounds in the headwaters of the River Aire.



Drone view of Newlay Weir (30-11-2020) - Arup Report

In June 2020, work started to construct a fish pass adjacent to Newlay weir. During construction, in late January 2021 the region was hit by

Storm Christophe. Following the storm and subsequent flooding, the weir failed and a large portion of it was washed downstream.



Image showing collapsed section of weir.

The Environment Agency commissioned Arup to independently investigate the factors that could have contributed to the collapse. The report concluded there were a number of factors likely to have contributed to the collapse. We made the report available to the public by placing it online alongside our public survey, the aim of which was to allow the community of Newlay, as well as other interested parties, to give us their views on the situation.

The public survey

At the end of July 2022, we ran a public survey to understand what issues matter most to the community for the future of the weir and the fish pass, and to take account of these views in our decision making. The survey ran online from 30th June to 13th August 2022. Paper copies of the survey and associated documents were also made available at Horsforth and Bramley Libraries with the option to post or email responses to us. The survey was advertised by notice at both ends of Newlay bridge, and by email to councillors, MP's, Leeds City Council, Aire Rivers Trust, and interested members of the community with a request to share freely.

The survey asked participants to rank in order of importance the issues which were most important to them for the weir and for the fish pass. There were also free text boxes for each section, allowing participants to

tell us if they thought something not already included was highly important to them, and giving space to share their additional thoughts on the future of the weir and the fish pass.

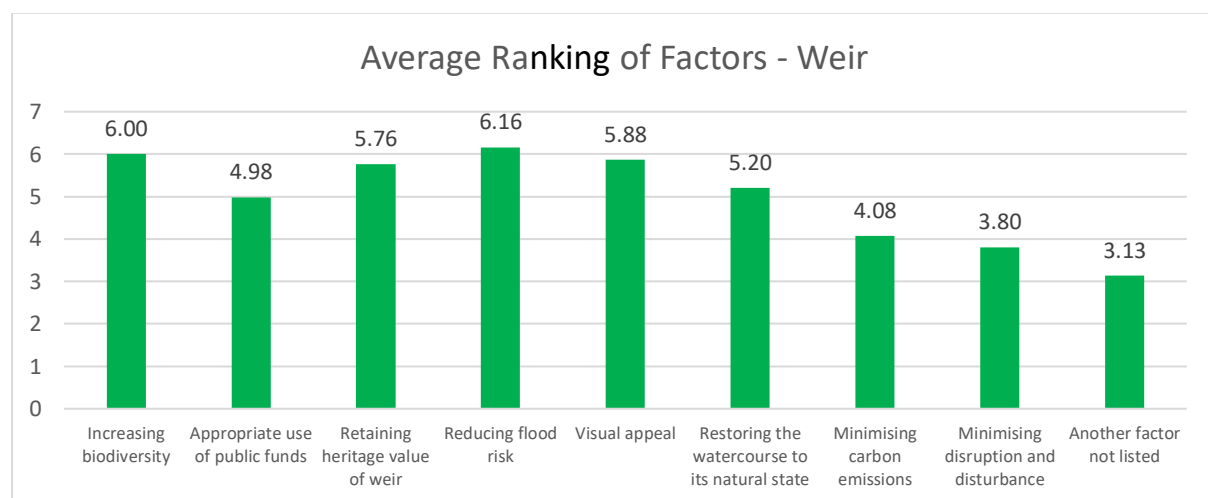
The 2 main questions in the survey asked participants to consider the importance of several factors for the weir and for the fish pass.

A standard method was used to calculate how each factor is ranked; this formula is shown in the appendix along with the online results.

Summary of findings

We have summarised the main findings below. The full results from the online survey are available in the appendix.

Summary of results – The weir



Average ranking given by participants to each issue when asked to consider the future of the weir

Reducing Flood Risk ranked as the most important factor on average. 160 people ranked this in their top three most important factors, 7 participants chose this as least important.

Increasing Biodiversity ranked as the second most important factor. 151 people ranked this in their top three most important factors. 16 people chose this as least important.

Visual Appeal ranked as the third most important factor. 40 people chose this as their highest priority, 11 people chose it as the least important.

Retaining Heritage Value ranked as the fourth most important factor. 80 people chose this as their most important consideration, however 40 people felt it was the least important factor.

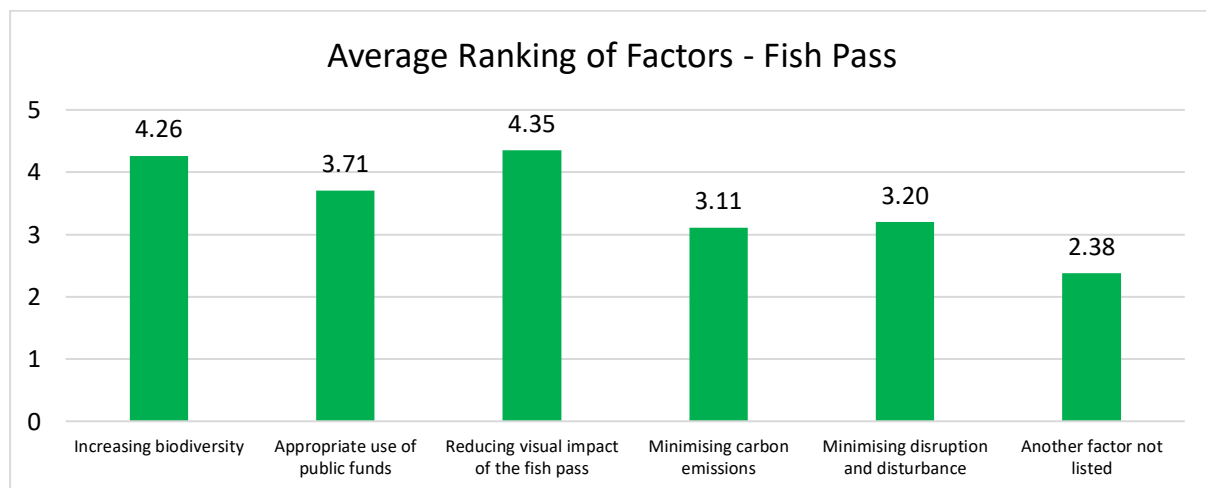
Restoring the watercourse to its natural state ranked as the fifth most important factor; 6 people chose this as most important, 19 as least important.

Appropriate use of public funds ranked as sixth most important factor. 15 people chose this as most important, 17 people as least important.

Minimising carbon emissions ranked as seventh most important factor. 6 people felt this was the most important factor whilst 32 people chose this as the least important factor.

Minimising disruption ranked as eight most important factor. 5 people felt this was most important to them and 20 people chose this as least important.

Summary of results – The fish pass



Average ranking given by participants to each issue when asked to consider the future of the fish pass.

Reducing visual impact of the fish pass ranked as the most important factor. 109 people ranked this as their most important factor and 26 people chose this as least important.

Increasing biodiversity ranked as the second most important factor. 104 people chose this as their highest priority, 29 people chose this as least important to them.

Appropriate use of public funds ranked as the third most important factor. 35 people ranked this as their highest priority, and 22 the least priority.

Minimising disruption and disturbance ranked as the fourth most important factor. 14 people chose this category as most important, 23 the least important.

Minimising carbon emissions ranked as the fifth most important factor. 17 people gave this category the most importance, whilst 36 placed it the least important.

Other factors not listed

A small number of people stated other factors as their most important issue, these included:

An issue concerning scour (the action of water moving bed or bank material), which is being carefully considered by our geomorphology specialists.

Removal of the fish pass. Some of the potential options for the weir and fish pass are connected; if the weir is present, there needs to be a fish pass in place due to our duties to ensure fish passage. The fish pass was designed to work with the weir, so it would have been largely underwater if the weir remained.

An issue concerning the upstream footbridge. Recent assessment carried out by the Local Authority has determined there is no risk to the footbridge.

All comments have been considered in our review of the survey results. In addition to the factors chosen as 'most important' above, some issues came up frequently in the text responses.

One of the most frequent comments was disappointment at the visual appearance of the weir and fish pass, which was seen by respondents as a very important feature to them, and the feeling that this needs to be rectified quickly.

Two other issues often raised were the time which has passed since the weir collapse, and the present safety of the structures.

What happens next?

Thank you to everyone who took the time to tell us their views.

We understand that many in the community are upset about what has happened, and the time taken to resolve it. The fish pass was intended to improve the River Aire for people and wildlife; it was being built as part of our work to aid fish passage. In light of the collapse of the weir, we now need to find the best solution for the current circumstances at Newlay. We want to arrive at a solution which is the most favourable overall for people and the environment, including making the site attractive again, within our constraints. Unfortunately this is not a quick process, but we must make sure we consider everything thoroughly.

We are committed to working as quickly as possible and we will provide regular information in the form of updates to the community. We have already taken steps to improve safety at the fish pass by installing additional fencing to prevent access.

The next stages, each of which could take several months, are;

- Meetings and discussions with stakeholders to inform our appraisal of options, which is already underway.
- Appraise the options thoroughly, including any outline design work that may be required.
- Seek to secure funding for a solution.
- Carry out the detailed design and appoint a contractor prior to any works taking place.

We are continuing to consult with other stakeholders and partners, all of whom have varying interests, requirements and constraints. It will take time to gather all their responses and consider what's needed to make the right decision at Newlay. The results from this survey will be shared with our partners as we work together to identify the most appropriate solution for both the weir and the fish pass. The survey results form one part of everything we will consider when making a decision.

Other factors we need to consider alongside the survey results are :

- We are committed to the Water Framework Directive (WFD). This seeks to actively remove barriers from rivers to improve biodiversity and natural flow regimes.
- We have organisational priorities that we must consider. The two main ones in this situation are

- increase the resilience of people, property, and businesses to the risks of flooding and coastal erosion.
- Protect and improve water, land, and biodiversity.
- We must seek value for money wherever possible in the use of public funds.
- Heritage considerations.
- We must carefully consider the requirements of fish and eels as an important element of the biodiversity of rivers.
- There are Permit requirements for any works which alter the state of the river.
- We have to take account of any legislative factors which may influence decisions.
- The interests, requirements and constraints of the various stakeholders and partners.

We will keep the community updated quarterly, as we progress, and will continue to communicate with relevant partners and organisations to ensure all interested parties are kept informed.

Once again, thank you for taking the time to give us your views.

Newlay Project Team

The Environment Agency

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

Email: enquiries@environment-agency.gov.uk

www.gov.uk/environment-agency

Incident hotline 0800 807060 (24 hours)

Floodline 0345 9881188 (24 hours)

Find out about call charges (<https://www.gov.uk/call-charges>)

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Appendix 1.

Survey respondents

In total 320 responses were received: 2 by post, 1 by direct email and the remainder online. Two test submissions were removed from the online results to ensure they did not influence the outcome.

284 people responded as residents, 8 people responded as river users, for example anglers and 27 people responded as 'other'.

There were 3 submissions outside of the online platform; we have added these to the online data to produce the ranking tables and summaries above.

Formula used to calculate average ranking.

w = weight of ranked position

x = response count for answer of choice

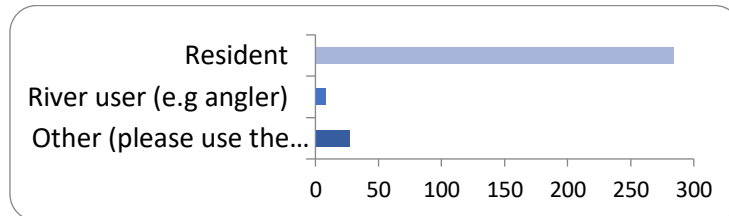
$$\text{Average Ranking} = \frac{x_1w_1 + x_2w_2 + \dots + x_nw_n}{\text{Total Response Count}}$$

Explanation of how ranking is worked out

If half the respondents choose one factor as most important and the other half chose it as least important, that factor's average ranking would fall in the middle, i.e. medium importance. Rankings are given scores which are used to 'weight' responses to account for this. For example, a ranking of 1 scores 10 and a ranking of 10 scores 1. The score is then multiplied by the number of times that factor was chosen. This is then totalled and divided by the total number of responses to give the average ranking.

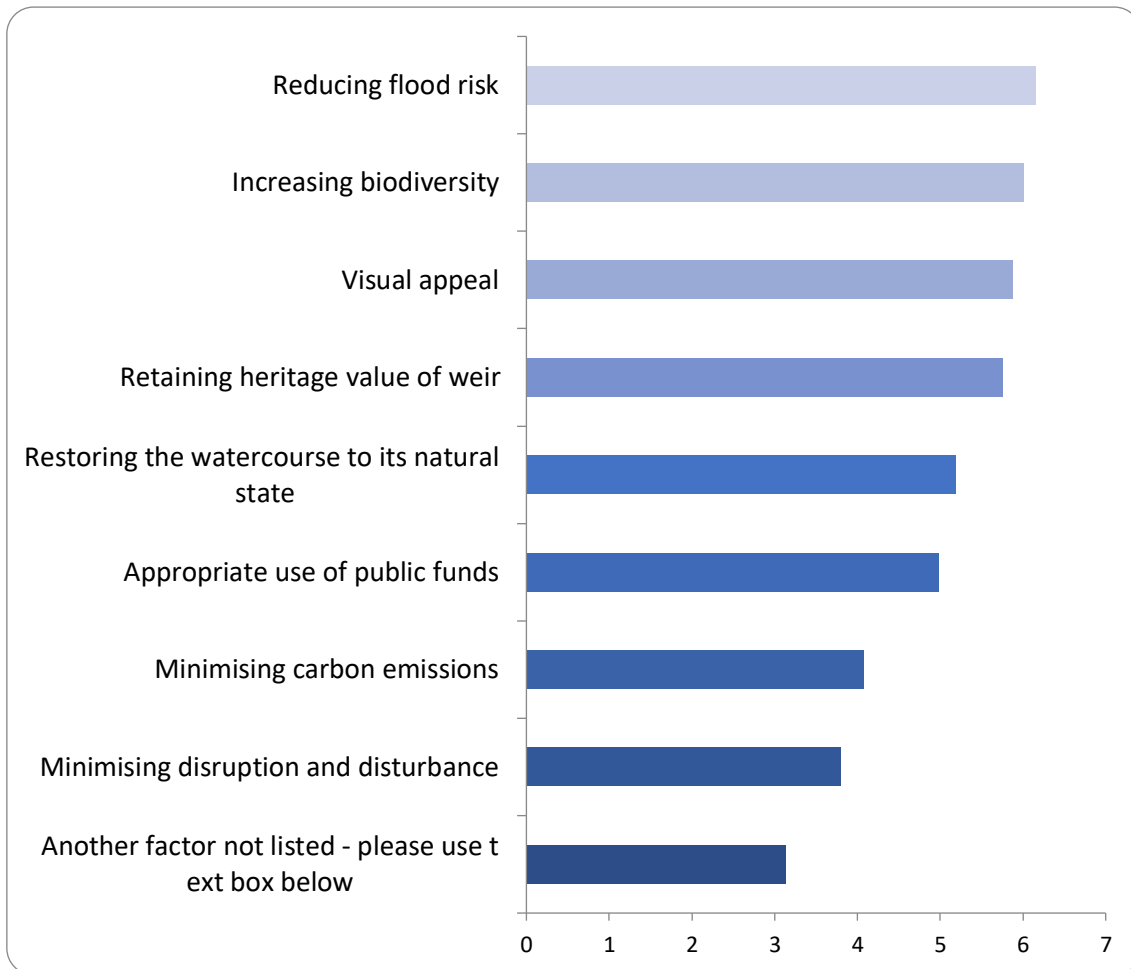
Online survey data

Please tell us in what capacity you are responding. There were 319 responses to this part of the question.



Option	Total	Percent
Resident	284	89.03%
Business	0	0.00%
River user (e.g. angler)	8	2.51%
Other (please use the box below to tell us more)	27	8.46%
Not Answered	0	0.00%

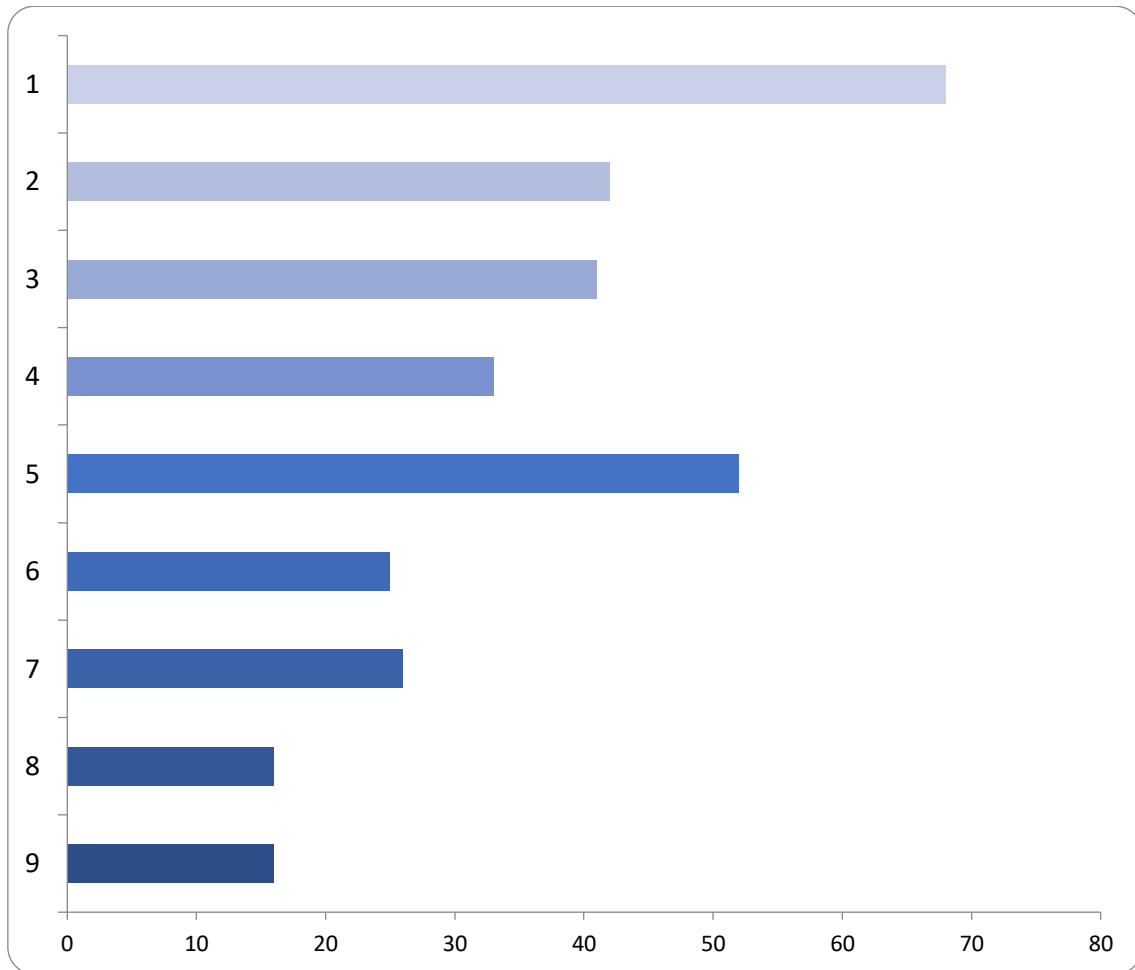
How important are the following issues to you when considering the future of the WEIR - where 1 is 'most important' and 9 is 'least important'



Item	Ranking
Reducing flood risk	6.16
Increasing biodiversity	6.02
Visual appeal	5.87
Retaining heritage value of weir	5.75
Restoring the watercourse to its natural state	5.19
Appropriate use of public funds	4.98
Minimising carbon emissions	4.08
Minimising disruption and disturbance	3.80
Another factor not listed - please use text box below	3.14

Increasing biodiversity

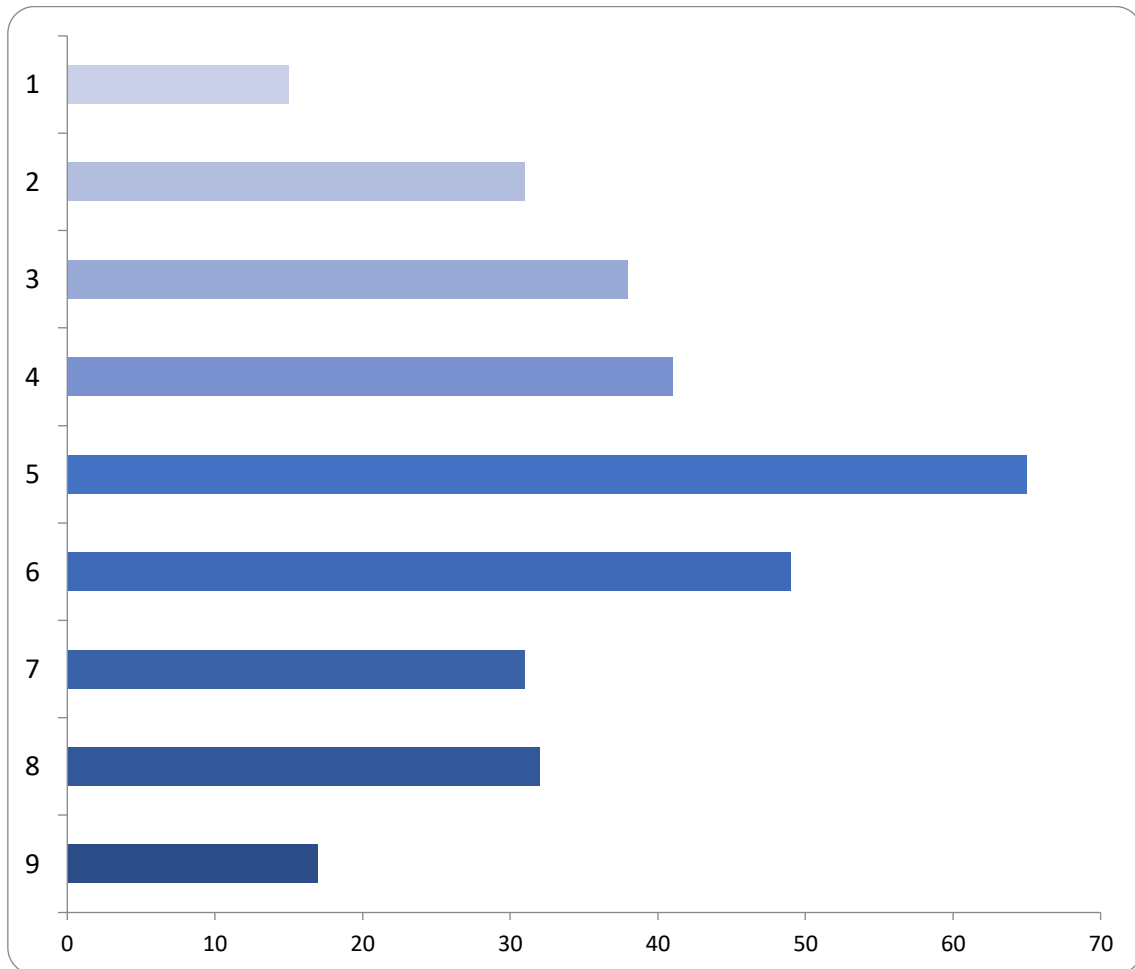
There were 319 responses to this part of the question.



Option	Total	Percent
1	68	21.32%
2	42	13.17%
3	41	12.85%
4	33	10.34%
5	52	16.30%
6	25	7.84%
7	26	8.15%
8	16	5.02%
9	16	5.02%
Not Answered	0	0.00%

Appropriate use of public funds

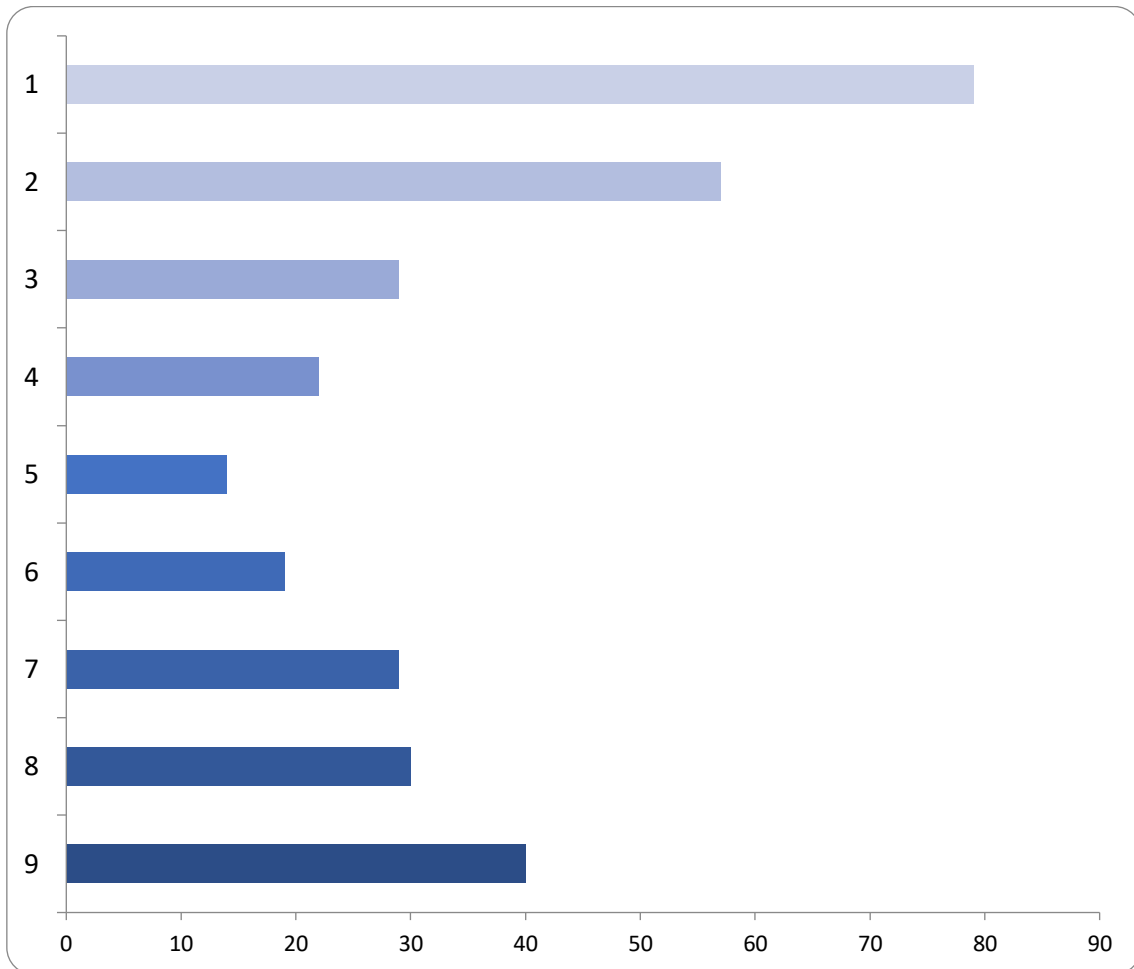
There were 319 responses to this part of the question.



Option	Total	Percent
1	15	4.70%
2	31	9.72%
3	38	11.91%
4	41	12.85%
5	65	20.38%
6	49	15.36%
7	31	9.72%
8	32	10.03%
9	17	5.33%
Not Answered	0	0.00%

Retaining heritage value of weir

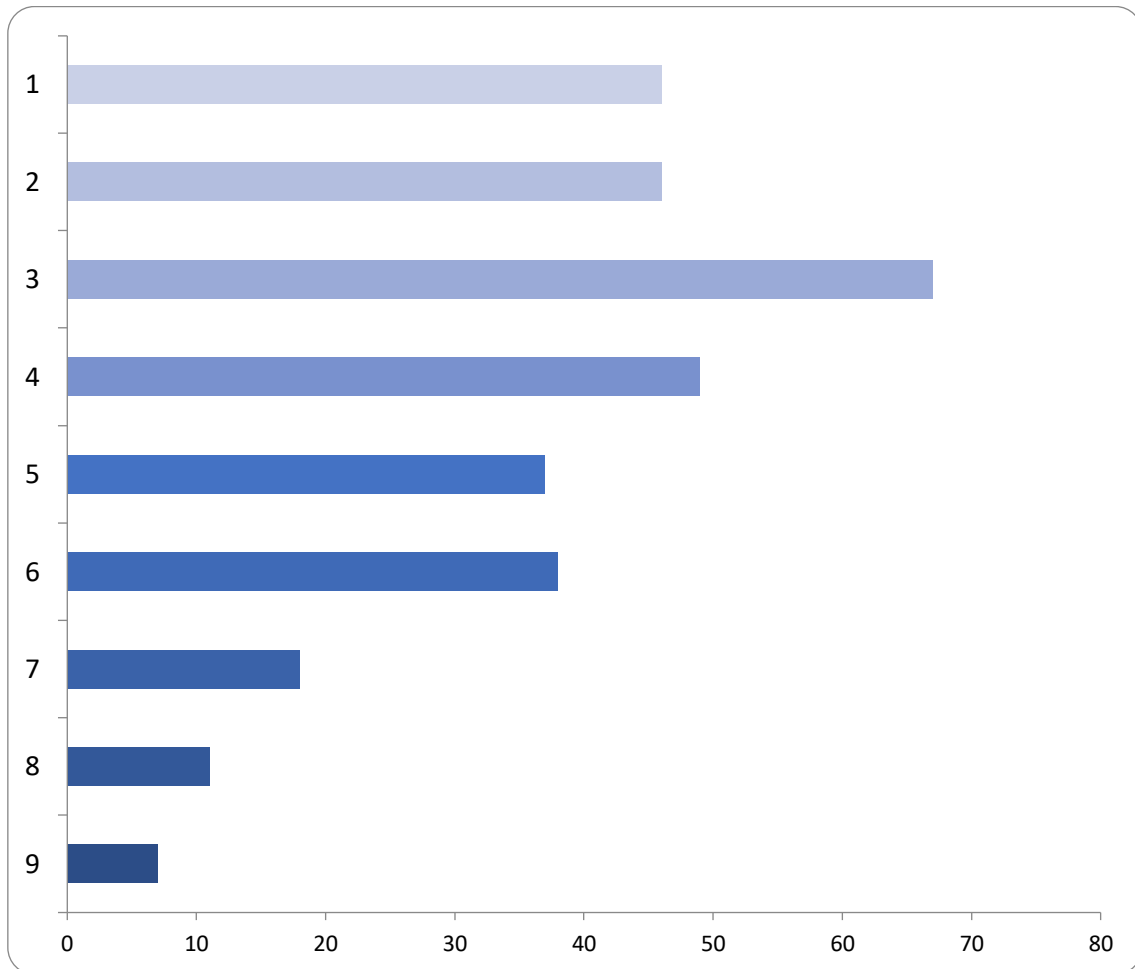
There were 319 responses to this part of the question.



Option	Total	Percent
1	79	24.76%
2	57	17.87%
3	29	9.09%
4	22	6.90%
5	14	4.39%
6	19	5.96%
7	29	9.09%
8	30	9.40%
9	40	12.54%
Not Answered	0	0.00%

Reducing flood risk

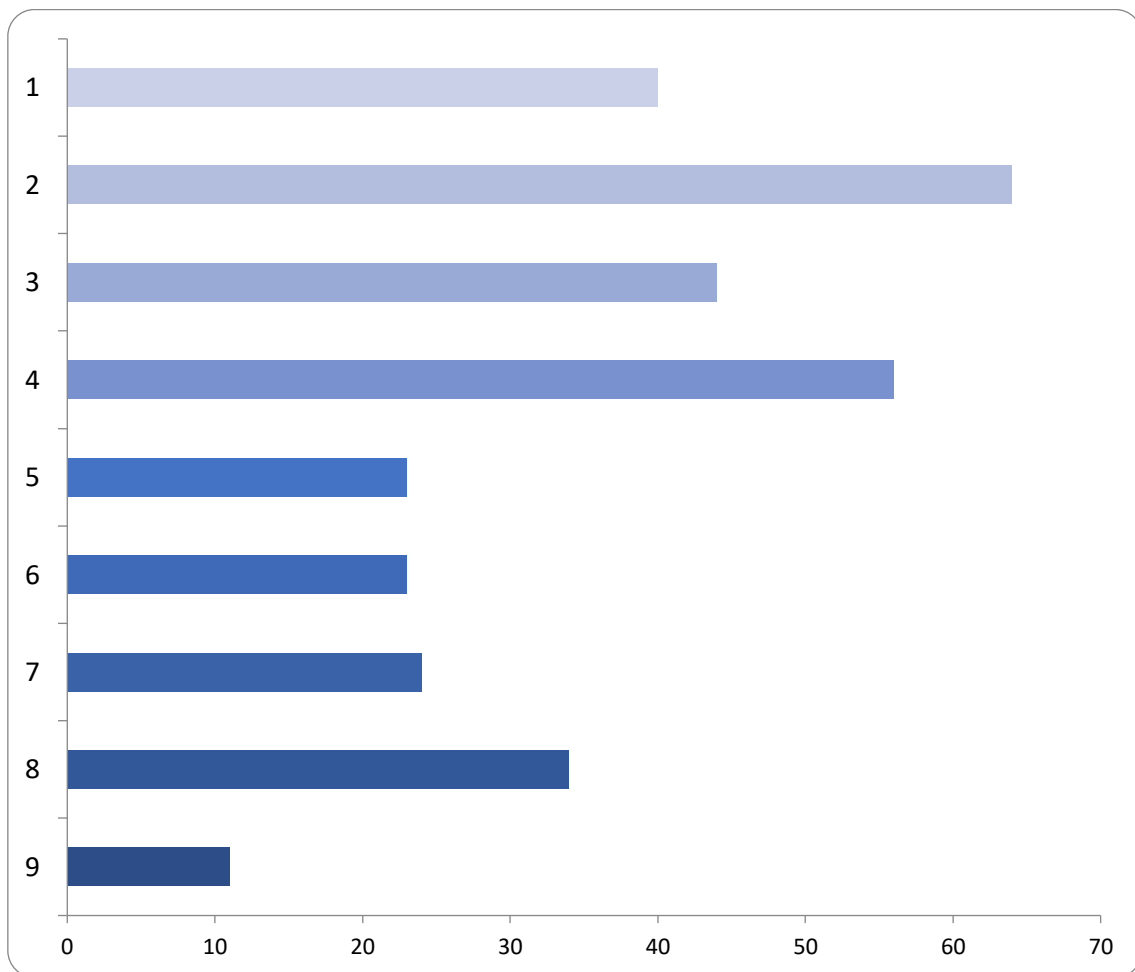
There were 319 responses to this part of the question.



Option	Total	Percent
1	46	14.42%
2	46	14.42%
3	67	21.00%
4	49	15.36%
5	37	11.60%
6	38	11.91%
7	18	5.64%
8	11	3.45%
9	7	2.19%
Not Answered	0	0.00%

Visual appeal

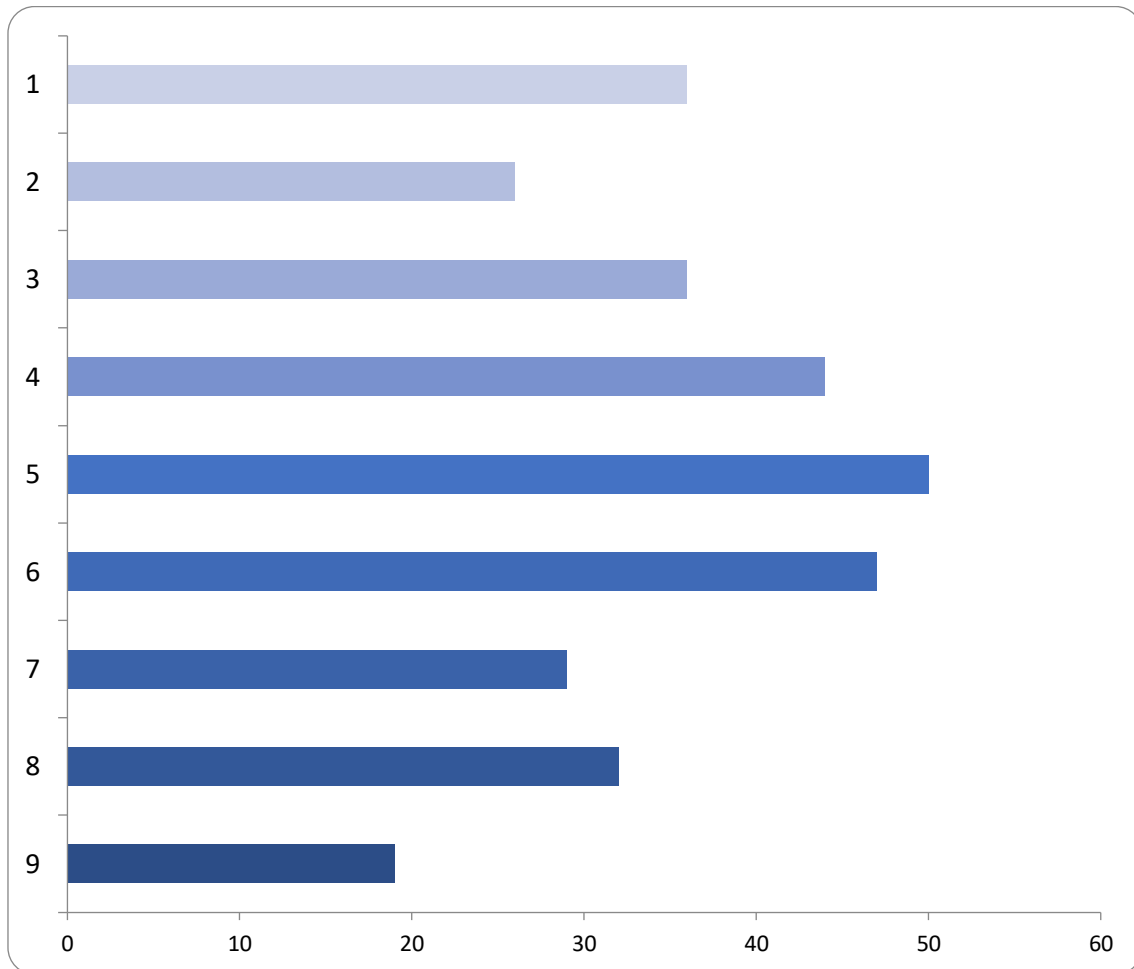
There were 319 responses to this part of the question.



Option	Total	Percent
1	40	12.54%
2	64	20.06%
3	44	13.79%
4	56	17.55%
5	23	7.21%
6	23	7.21%
7	24	7.52%
8	34	10.66%
9	11	3.45%
Not Answered	0	0.00%

Restoring the watercourse to its natural state

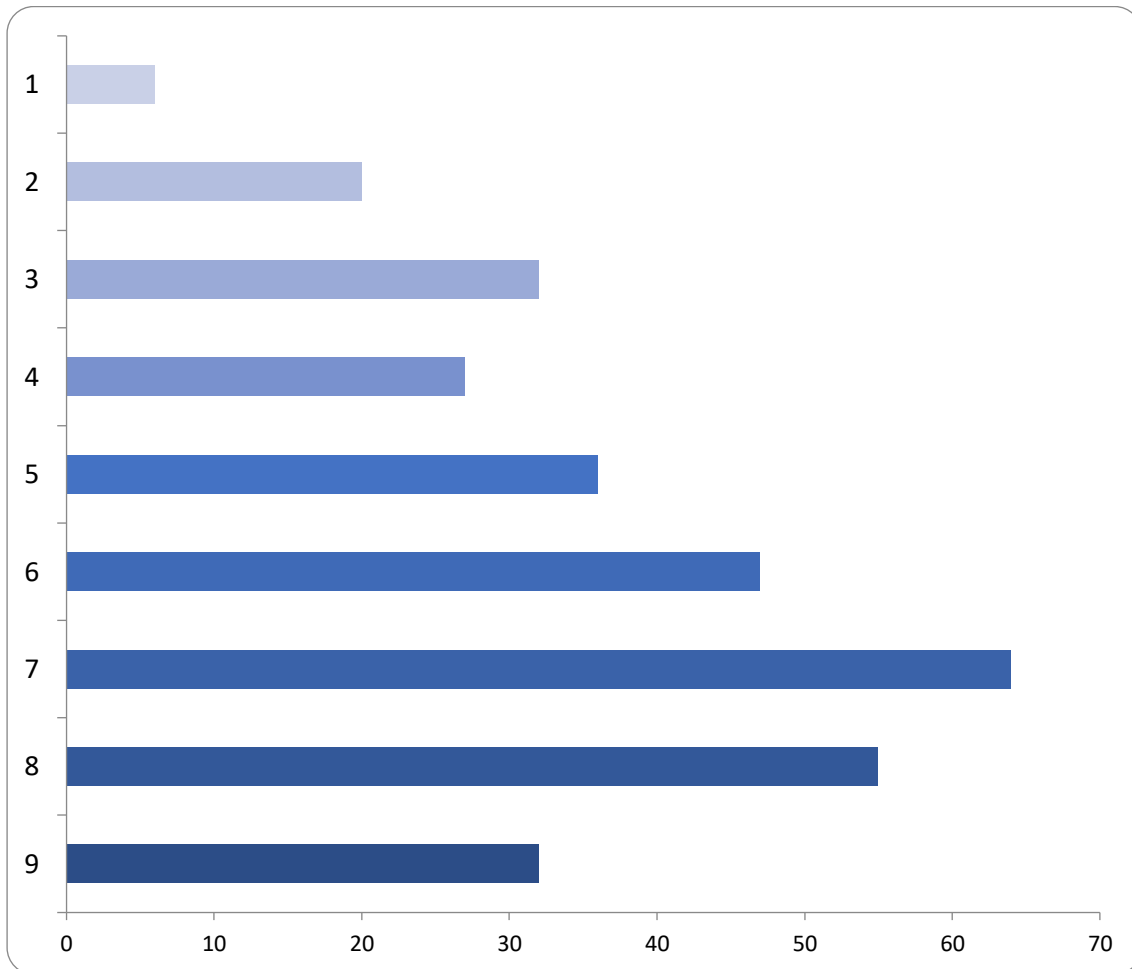
There were 319 responses to this part of the question.



Option	Total	Percent
1	36	11.29%
2	26	8.15%
3	36	11.29%
4	44	13.79%
5	50	15.67%
6	47	14.73%
7	29	9.09%
8	32	10.03%
9	19	5.96%
Not Answered	0	0.00%

Minimising carbon emissions

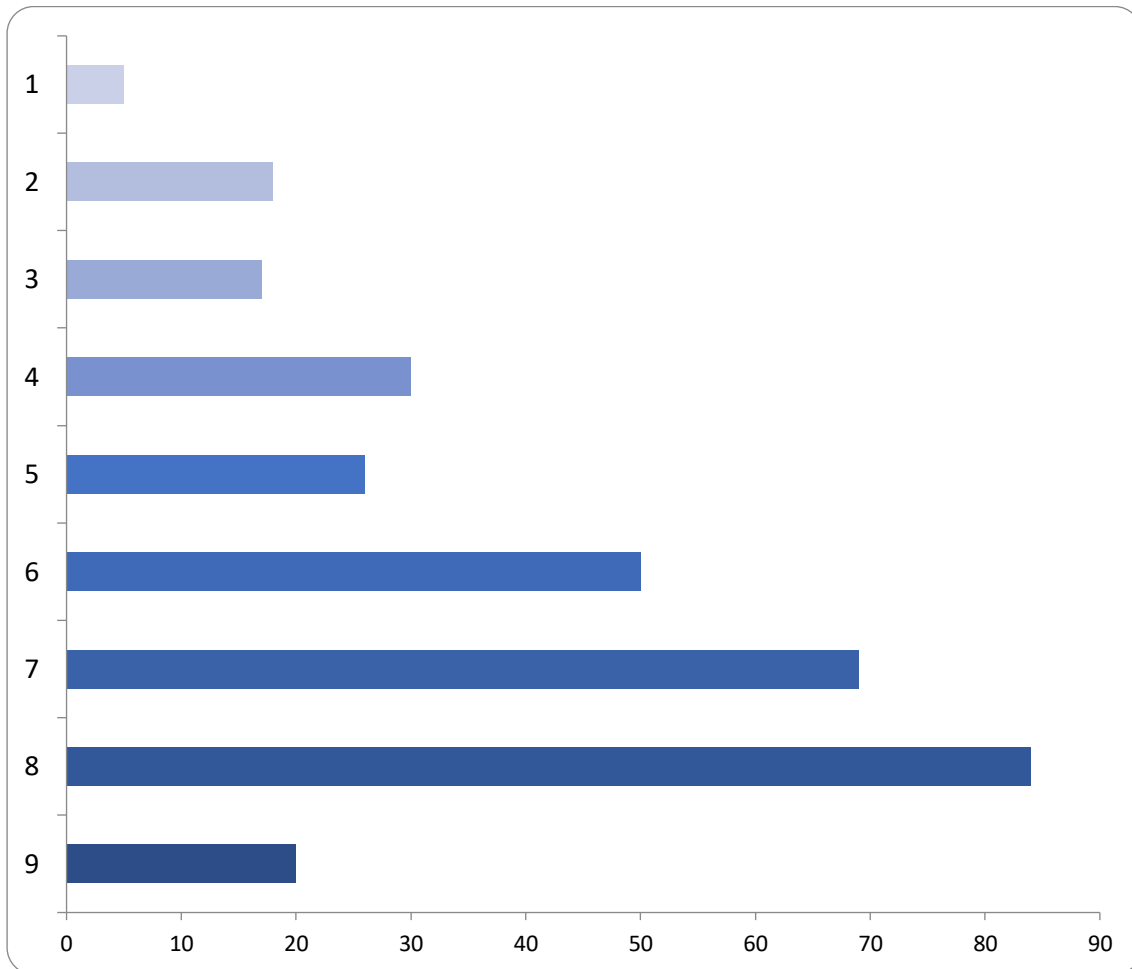
There were 319 responses to this part of the question.



Option	Total	Percent
1	6	1.88%
2	20	6.27%
3	32	10.03%
4	27	8.46%
5	36	11.29%
6	47	14.73%
7	64	20.06%
8	55	17.24%
9	32	10.03%
Not Answered	0	0.00%

Minimising disruption and disturbance

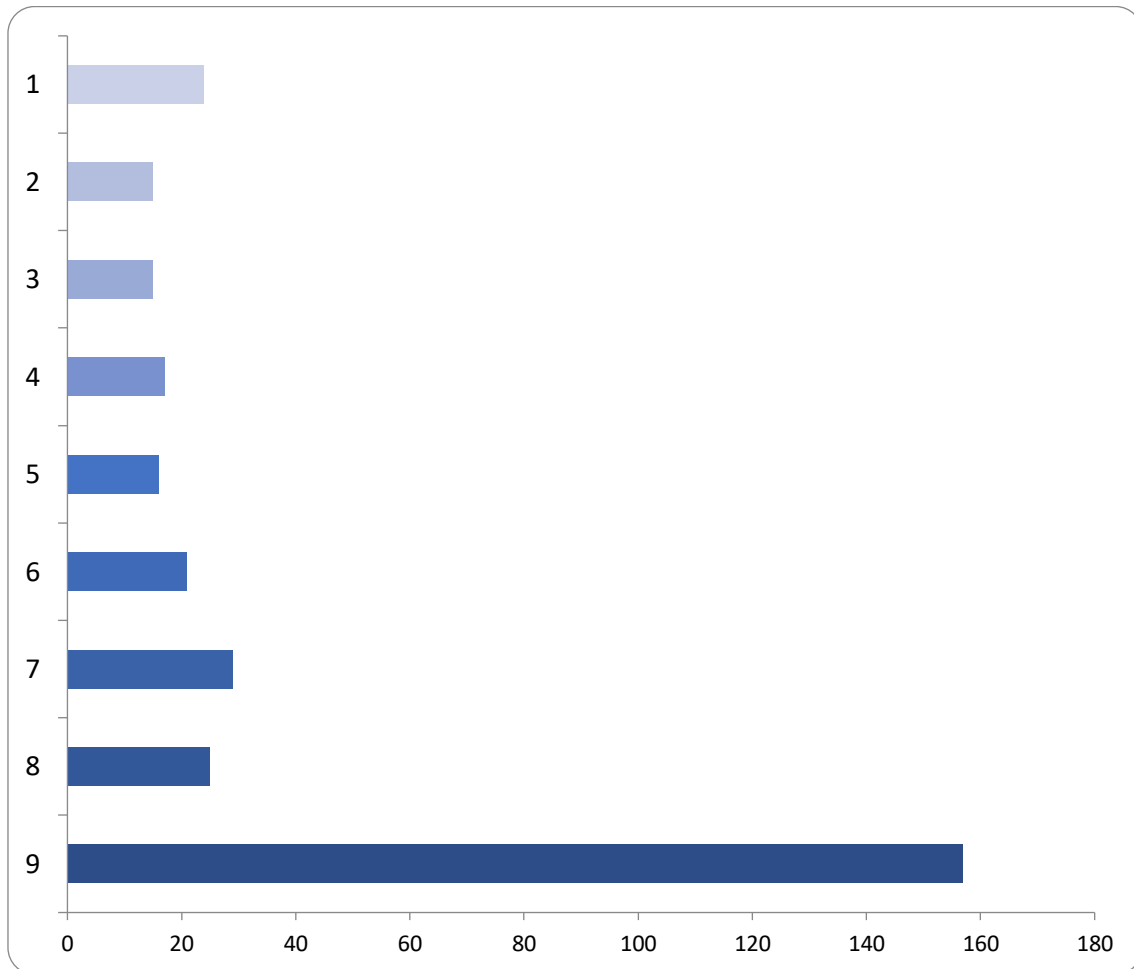
There were 319 responses to this part of the question.



Option	Total	Percent
1	5	1.57%
2	18	5.64%
3	17	5.33%
4	30	9.40%
5	26	8.15%
6	50	15.67%
7	69	21.63%
8	84	26.33%
9	20	6.27%
Not Answered	0	0.00%

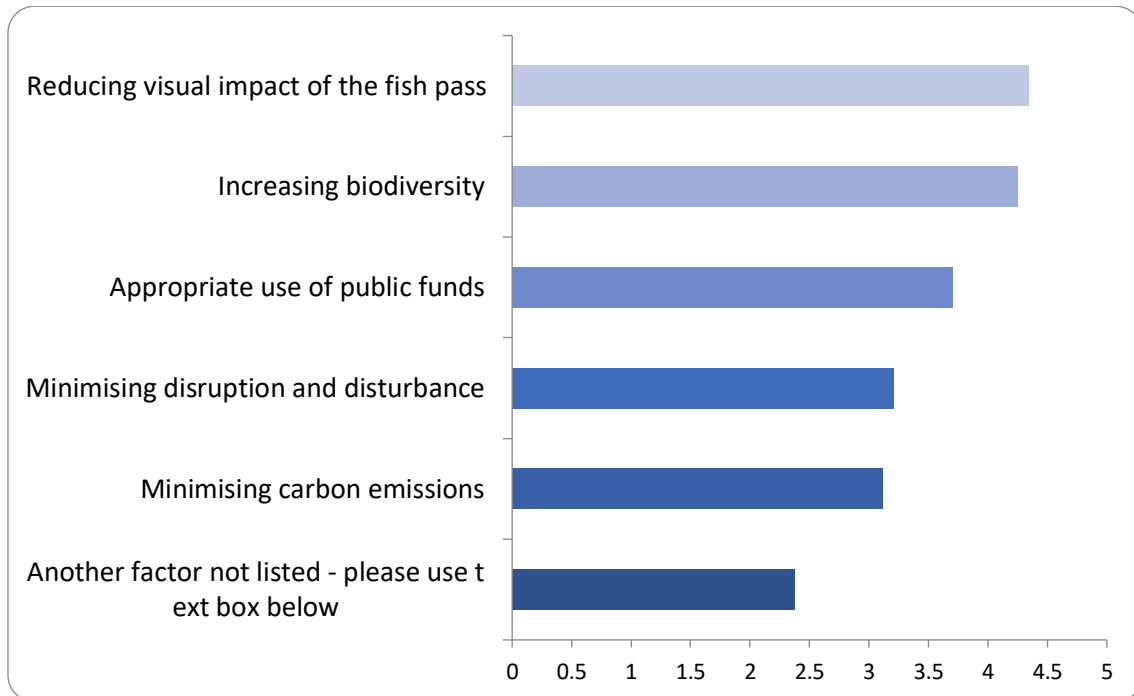
Another factor not listed

There were 319 responses to this part of the question.



Option	Total	Percent
1	24	7.52%
2	15	4.70%
3	15	4.70%
4	17	5.33%
5	16	5.02%
6	21	6.58%
7	29	9.09%
8	25	7.84%
9	157	49.22%
Not Answered	0	0.00%

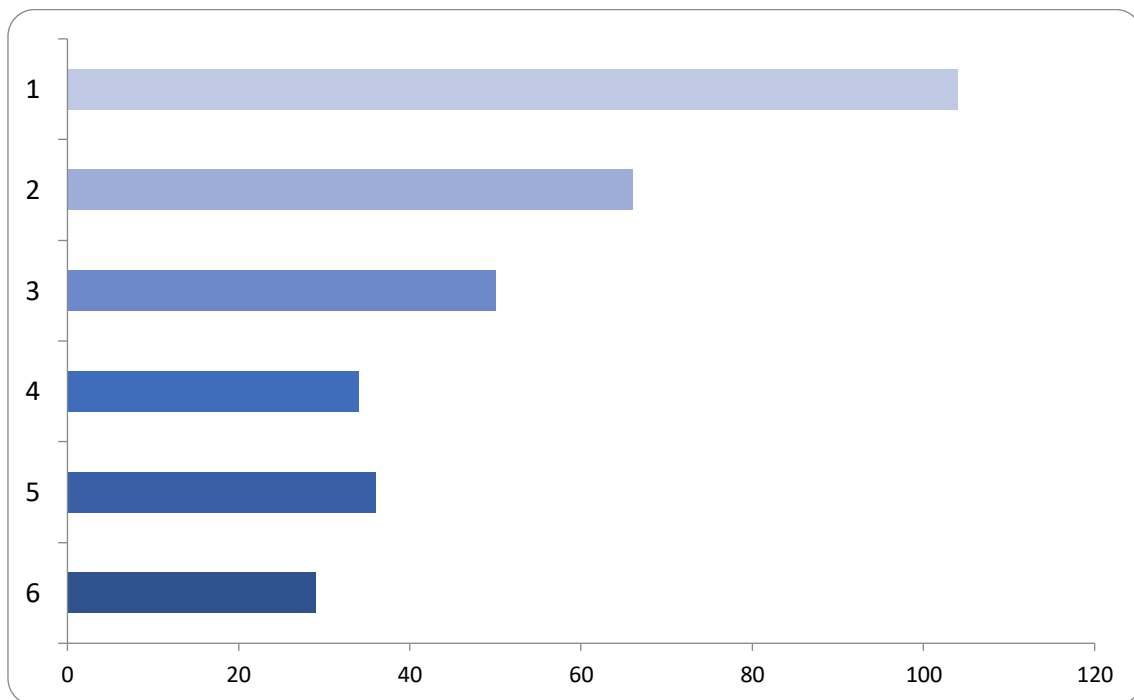
How important are the following issues to you when considering the future of the FISH PASS - where 1 is 'most important' and 6 is 'least important'.



Item	Ranking
Reducing visual impact of the fish pass	4.34
Increasing biodiversity	4.25
Appropriate use of public funds	3.70
Minimising disruption and disturbance	3.20
Minimising carbon emissions	3.12
Another factor not listed - please use text box below	2.38

Increasing biodiversity

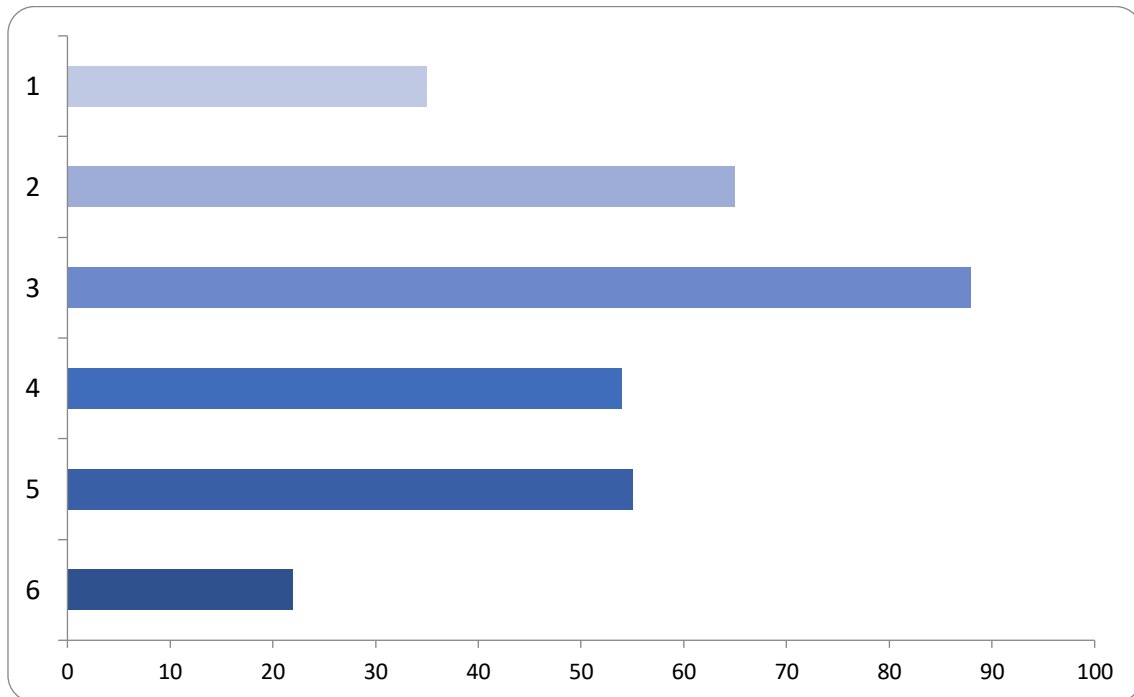
There were 319 responses to this part of the question.



Option	Total	Percent
1	104	32.60%
2	66	20.69%
3	50	15.67%
4	34	10.66%
5	36	11.29%
6	29	9.09%
Not Answered	0	0.00%

Appropriate use of public funds

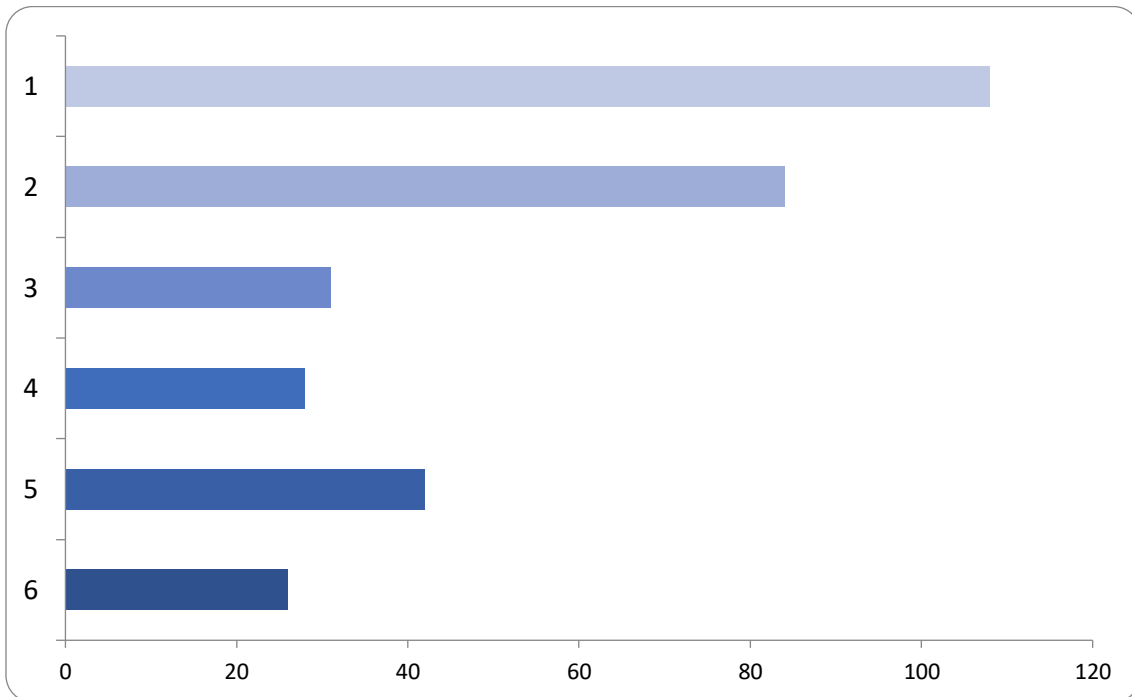
There were 319 responses to this part of the question.



Option	Total	Percent
1	35	10.97%
2	65	20.38%
3	88	27.59%
4	54	16.93%
5	55	17.24%
6	22	6.90%
Not Answered	0	0.00%

Reducing visual impact of the fish pass

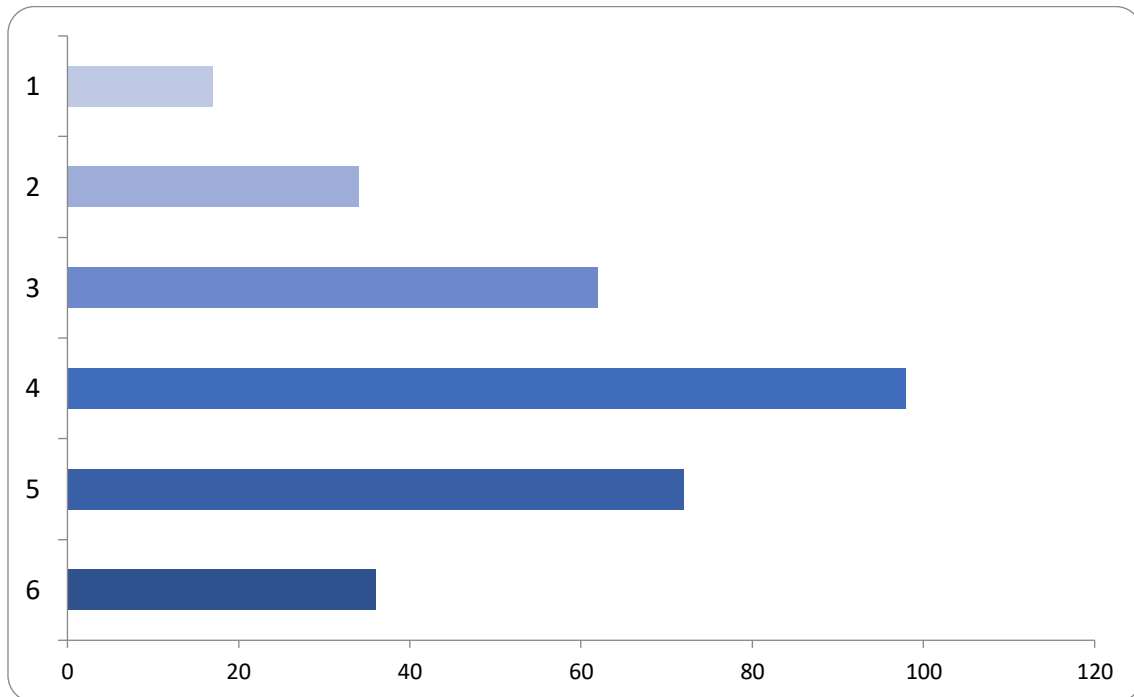
There were 319 responses to this part of the question.



Option	Total	Percent
1	108	33.86%
2	84	26.33%
3	31	9.72%
4	28	8.78%
5	42	13.17%
6	26	8.15%
Not Answered	0	0.00%

Minimising carbon emissions

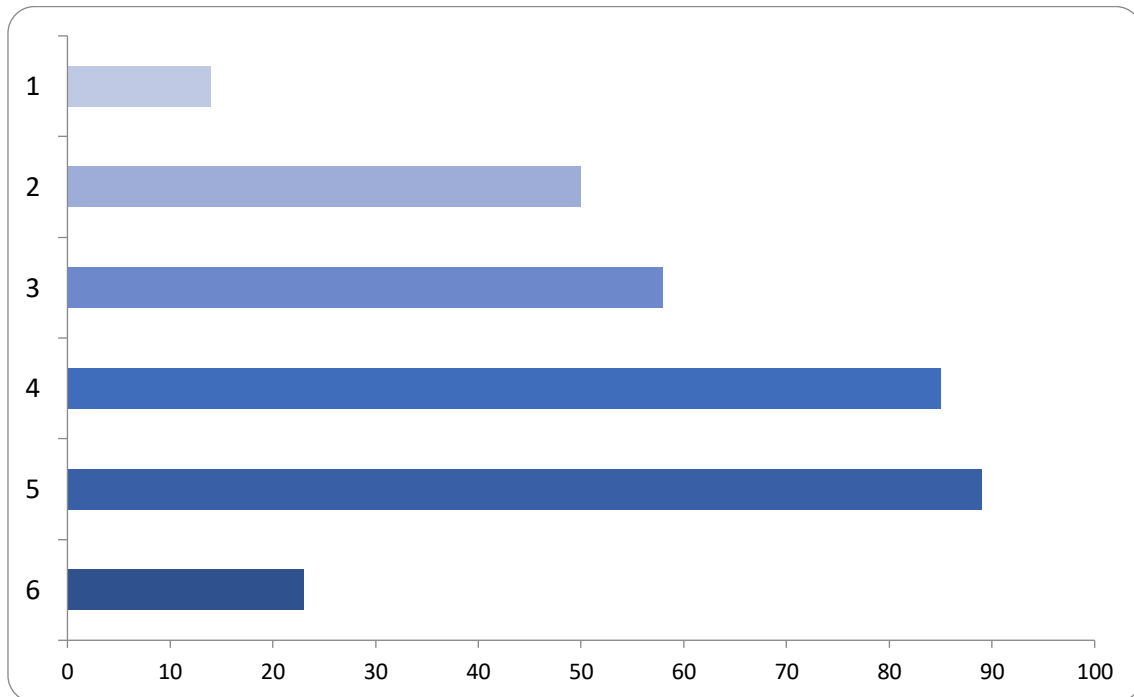
There were 319 responses to this part of the question.



Option	Total	Percent
1	17	5.33%
2	34	10.66%
3	62	19.44%
4	98	30.72%
5	72	22.57%
6	36	11.29%
Not Answered	0	0.00%

Minimising disruption and disturbance

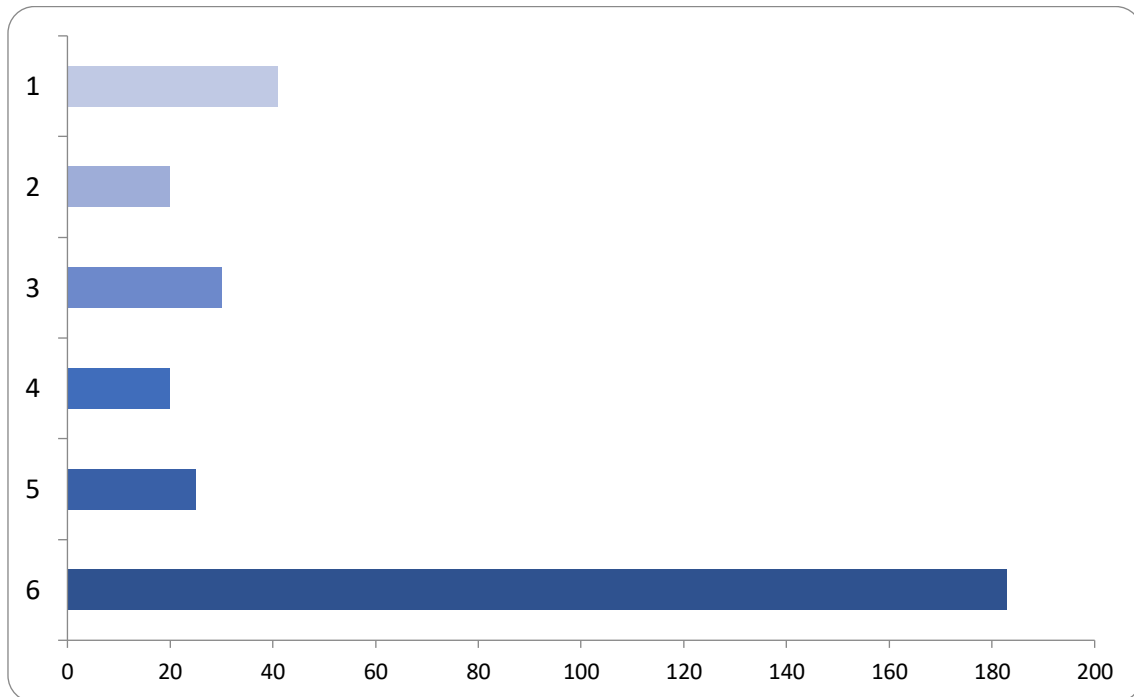
There were 319 responses to this part of the question.



Option	Total	Percent
1	14	4.39%
2	50	15.67%
3	58	18.18%
4	85	26.65%
5	89	27.90%
6	23	7.21%
Not Answered	0	0.00%

Another factor not listed

There were 319 responses to this part of the question.



Option	Total	Percent
1	41	12.85%
2	20	6.27%
3	30	9.40%
4	20	6.27%
5	25	7.84%
6	183	57.37%
Not Answered	0	0.00%