

# How can we reduce flooding in north Reading and Lower Caversham?

## Consultation response report

Summer 2018



Flooding in Washington Road,  
Caversham, 1947.

Flooding of River Thames into  
Christchurch Meadows, January  
2003. Environment Agency  
archives (photographer unknown).



## Executive summary

The Environment Agency is working with partners to investigate options to reduce flooding from the River Thames in north Reading and Lower Caversham. Our initial investigations identified 3 potential options. Through this consultation we sought to obtain the local community's initial views to help decide which, if any, of these options we should take forward to detailed design.

We ran this consultation from 26 June until 26 July 2018 and to support it, our staff were present at 3 public drop-ins during this period.

We received 185 responses, either through the consultation site, delivered to our offices, or emailed to us at [reading&cavershamscheme@environment-agency.gov.uk](mailto:reading&cavershamscheme@environment-agency.gov.uk). Individual responses have been published online, where permission has been given, at:

<https://consult.environment-agency.gov.uk/thames/reading-and-caversham-flood-reduction-options>

We asked for your views on the following options:

Option 1. Flood walls and embankments from Nire Road to Christchurch playing fields.

Option 2. Flood walls and embankments from Nire Road to Promenade Road, including some temporary defences.

Option 3. Flood walls and embankments from Nire Road to Promenade Road and Waterman Place to Reading Bridge.

Option 4. No new work, to continue with existing work which includes maintaining rivers and streams and operating weirs and locks

### High level findings

- From the responses we received during this consultation, the favoured option was Option 4, to do no new work. 55% of respondents prioritised this option above the 3 suggested alignments of flood walls and embankments. A high proportion of respondents who favoured Option 4 were from outside the immediate project area and would not see a reduction in their flood risk.
- Many respondents wanted more information before commenting on the proposals. This included the effect of any proposal on communities outside the project area, the appearance and impact of flood walls or embankments and the impact of construction on the local environment.
- Of the options we presented for improving flood protection, we received similar levels of support for Options 1 and 2, with Option 3 the least preferred.
- Lower walls were generally favoured, even if this means a lower standard of flood protection. 42% of respondents preferred not to answer this question.

### Other feedback provided by this consultation

- We received relatively few responses from postcodes within the project area, particularly in Lower Caversham and north Reading.
- Some communities were not aware of our consultation, or did not receive our communications on the drop-ins.

## Next steps

We have decided to re-evaluate the options and carry out more detailed design work. This will allow us to provide the more detailed information that so many respondents have asked for. It will also give us the opportunity to take into consideration the feedback we have already received. We would also like to ensure we gain the views of all affected communities through further engagement.

We will hold a further consultation when this information is available and keep residents informed on progress through regular newsletters and direct engagement.

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## 1. Consultation objectives

North Reading and Lower Caversham have experienced flooding on several occasions in recent years. In 2012 and 2014, low lying areas of Caversham flooded causing some internal flooding to residential and commercial properties. In 2003, many houses were surrounded by floodwater and roads were closed to vehicles for up to 5 days. The bottom image on the title page of this document shows the River Thames overtopping into Christchurch Meadows during the 2003 flood. The last major flood occurred in 1947, when north Reading and Lower Caversham experienced extensive disruption and flood damages, as evidenced by the top image on the title page of Washington Road, Caversham. Although we have not experienced a flood of this magnitude since that time, projections for climate change show that the risk of flooding will increase in the future and we must prepare for this now.

We have been looking at how we can reduce flooding from the River Thames to north Reading and Lower Caversham. We identified several different options, with each benefitting different communities, and with challenges which we would need to overcome. We asked for your views on which, if any, of the options we have been investigating you think we should take forward. We also asked for your feedback and any other ideas that we have not considered.

The feedback from this consultation will be used in combination with technical information, practical restrictions and the funding available to decide how we could reduce flooding in north Reading and Lower Caversham.

## 2. Consultation process

We ran the consultation from 26 June until 26 July 2018. To support it, we held 3 drop-ins in June and July to brief people in affected areas. We held these at the beginning of the consultation period:

- 26 June for affected landowners at Greyfriars Hall in Reading.
- 3 July for the public at Greyfriars Hall in Reading.
- 4 July for the public at The Weller Centre, Amersham Road in Caversham.

We held all our drop-ins from 14:30 to 19:00 to allow residents to attend outside of working hours.

### Consultation promotion

We promoted this consultation in the following ways:

- We posted 5000 flyers in the key benefitting areas.
- We sent 680 letters to directly affected landowners.
- Our drop-ins were advertised on social media through Twitter and Facebook.
- We prepared a news release for local press and media outlets which resulted in coverage on the BBC news website (article published 28 June), Reading Chronicle (28 June), Get Reading (published 1 July), BBC Radio Berkshire (multiple shows including interviews on 29 June and 2 July), BBC South Today (2 July) and BBC Oxford (2 July).

We received comments from several residents who did not receive any of our communications regarding this consultation. For any further communications on these proposals we will continue to try and ensure we notify all affected residents where possible, including communities outside the immediate project area who may be impacted by construction activities. If you wish to be placed on our mailing list to receive all future communications regarding these proposals, please email us at [reading&cavershamscheme@environment-agency.gov.uk](mailto:reading&cavershamscheme@environment-agency.gov.uk)

### Online consultation

Our consultations are normally held online, ensuring a wide range of people can access them at any time. For this consultation, we also accepted paper and email submissions.

Individual responses have been published online, where permission has been given. Due to the requirements of the General Data Protection Regulations (GDPR) we have to ensure we maintain the anonymity of respondents. As a result, we have removed any identifying information from the public facing records. We have retained this information for further engagement activities.

## 3. Consultation questions

### Your details

In this section we asked why you were responding, how you found out about this consultation and for your postcode. This allows us to understand which sections of the community have responded and which haven't. It also helps us find out which methods of promoting the consultation were most successful.

We asked for your email address so we can provide you with updates on the project, including future newsletters.

We asked for your views on the following options:

**Option 1.** Flood walls and embankments from Nire Road to Christchurch playing fields.

**Option 2.** Flood walls and embankments from Nire Road to Promenade Road, including some temporary defences.

**Option 3.** Flood walls and embankments from Nire Road to Promenade Road and Waterman Place to Reading Bridge.

**Option 4.** No new work, to continue with existing work which includes maintaining rivers and streams and operating weirs and locks.

**Question 1: When you have looked at all the options please list them in order of preference (1 being your most preferred and 4 being your least preferred)**

This question was for us to understand your priorities for reducing flooding and whether the community had a strong preference for any of the options presented.

**Question 2: For each of the options please indicate whether or not you would like us to develop them**

This question sought your views on each of the 3 proposals so we could see whether or not you would like them to be developed, independent of your ranking order.

**Question 3: Would you prefer to have a higher wall which can reduce flooding from major floods or a lower wall that would reduce flooding from minor floods but would not be effective from major floods?**

We recognise that walls and embankments can have an aesthetic impact on the local community. This question was to understand whether the community would prefer higher or lower walls even if lower walls meant they would not be as effective in a major flood.

**Question 4: Please let us know if you have any other ideas you think we should consider and why**

This section allowed respondents to tell us if they had any suggestions or ideas for managing flood risk in north Reading and Caversham.

**Question 5: Any other comments and feedback**

## **4. Consultation results**

This section describes our key findings of this consultation. We received 185 responses, either through our online consultation site, emailed to us, or delivered to our office in Reading.

**In what capacity are you responding to this consultation?**

We received 153 responses from local residents, with 47 landowners also responding. Most landowners were also residents. We also received 14 responses from individuals representing an organisation or group.



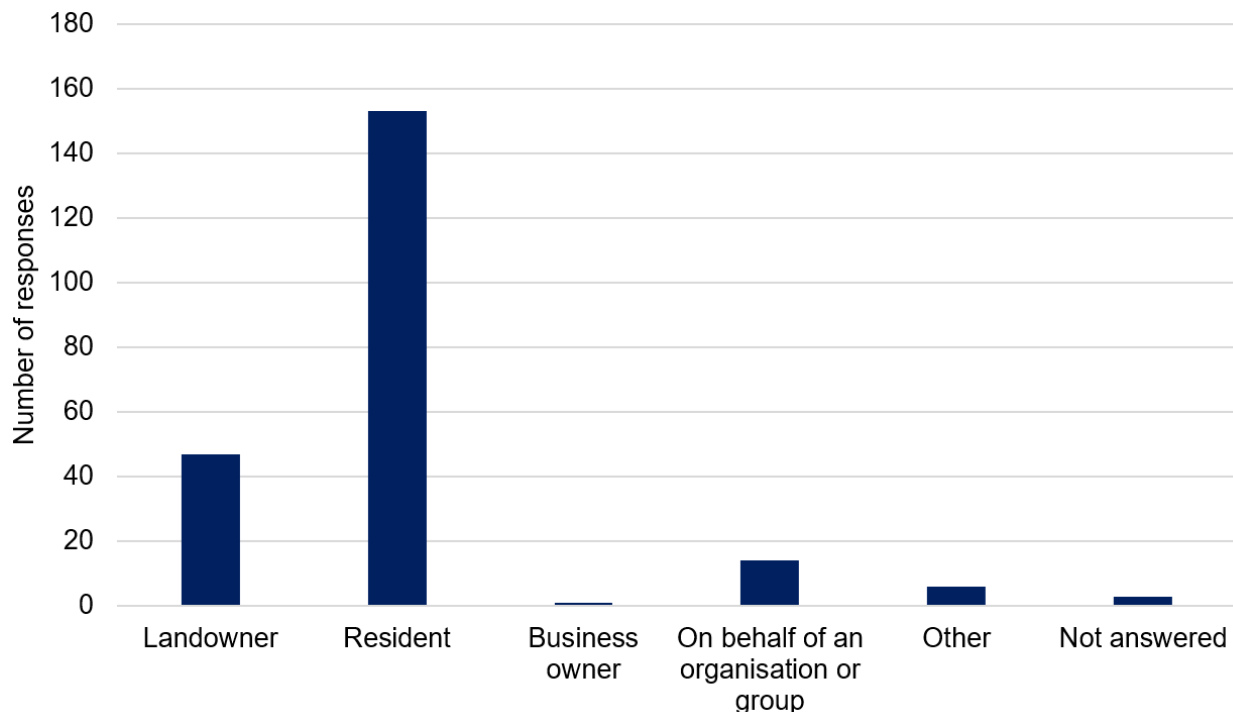


Figure 1. In what capacity are you responding to this consultation?

#### How did you find out about this consultation?

The most stated method for finding out about the consultation was directly from us. Local organisations and our social media and press releases also informed a number of responses. Where 'Other' was stated the most common reason stated was that respondents heard about the consultation from a neighbour.

We received comments from residents outside the immediate project area who would have liked us to have contacted them directly about the consultation. We will ensure we keep these communities up to date with any further developments.

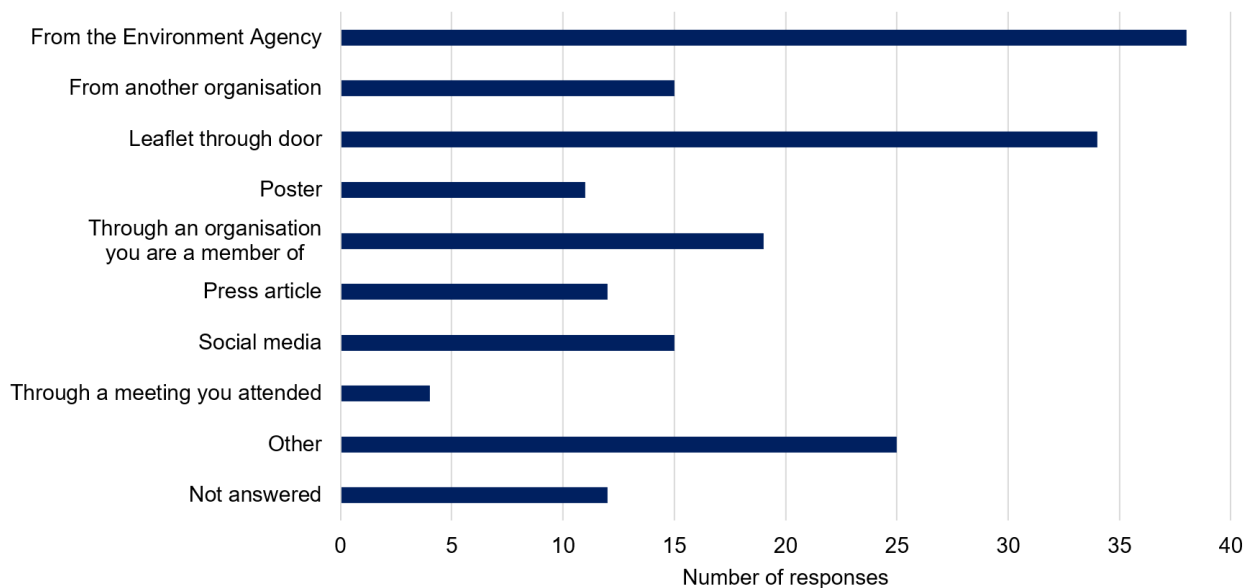


Figure 2. How did you find out about this consultation?

## Location of respondents

We received responses to this consultation from postcodes across Reading and Caversham, with the largest concentration coming from areas outside of the direct project area. The feedback from these communities was that they wanted to make sure the project would not increase flooding to their homes.

We would not implement any option that would increase flood risk to properties outside the area benefitting from reduced flooding. If at any stage in our work we find that our proposals could result in increased flood risk to a community near to or downstream of the scheme, then we would look for ways to change the design to remove this risk. If a solution could not be found, we would not continue with that option.

We had very few responses from residents in the Lower Caversham area, we need to make sure residents here are better engaged with our proposals. In addition, we only received 14 responses from residents in north Reading, to the south of the river.

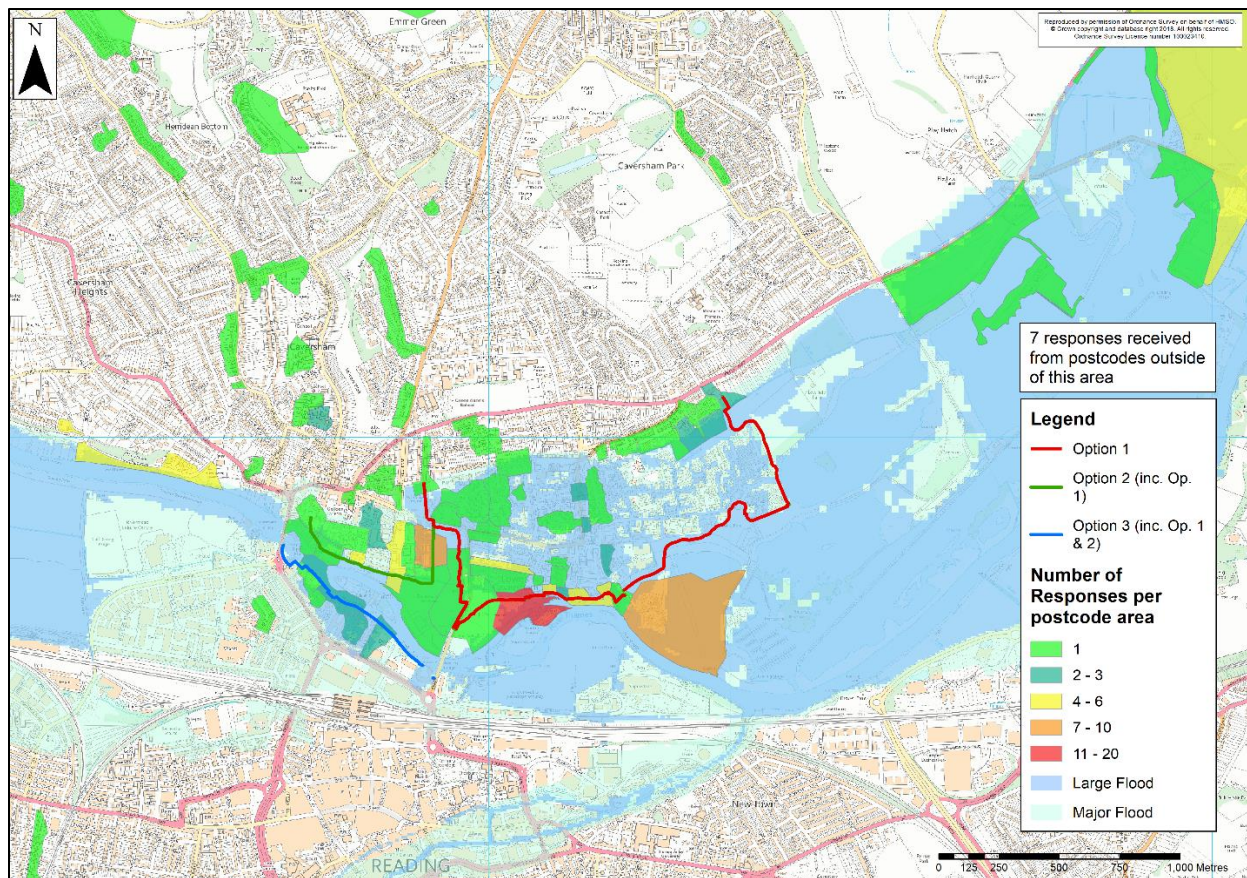


Figure 3. Map showing the location and number of responses received from a particular postcode area. Green shows postcode areas where we received less than 3 responses, yellow 4 to 6 responses, orange 7 to 10 responses and red 11 to 20 responses.

### Question 1: When you have looked at all the options, please list them in order of preference

Of the 4 options we presented, the most favoured option was Option 4 – to continue with the existing maintenance work to rivers and streams and operation of weirs and locks in the area.



55% (102) of responses we received ranked this as their preferred option. A further 16% of respondents did not answer this question. There were 4 main reasons for respondents preferring this option over the 3 proposals we presented for improving flood protection. These were:

- A high number of the residents who preferred Option 4 live outside the project area and raised questions about the impact the scheme could have on them.
- The environmental impact of the proposals e.g. tree removal.
- Perceptions of the visual impact of flood walls and embankments.
- Insufficient available information to accurately rank the proposals.

We have explored these topics further in Section 5 of this report.

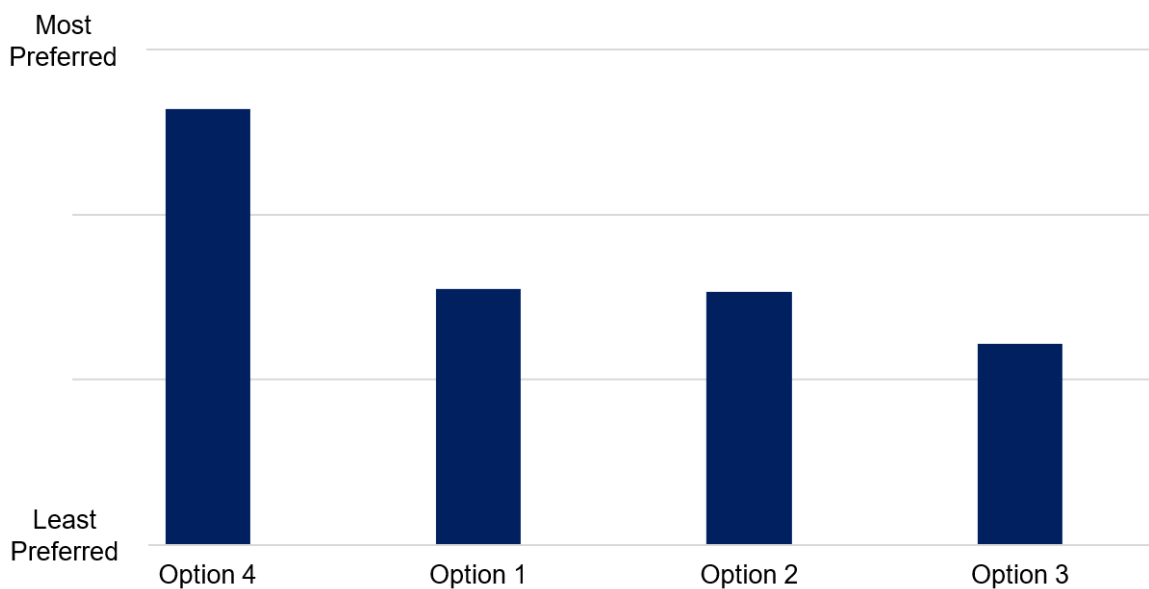


Figure 4. Question 1 – How respondents ranked their preferences

To enable us to understand how different areas ranked our proposals, we have looked at the preferences of respondents and the postcodes where they live. Most respondents who responded from outside the project area preferred Option 4. Residents from within the 3 benefitting areas were fairly split between the 4 options presented.

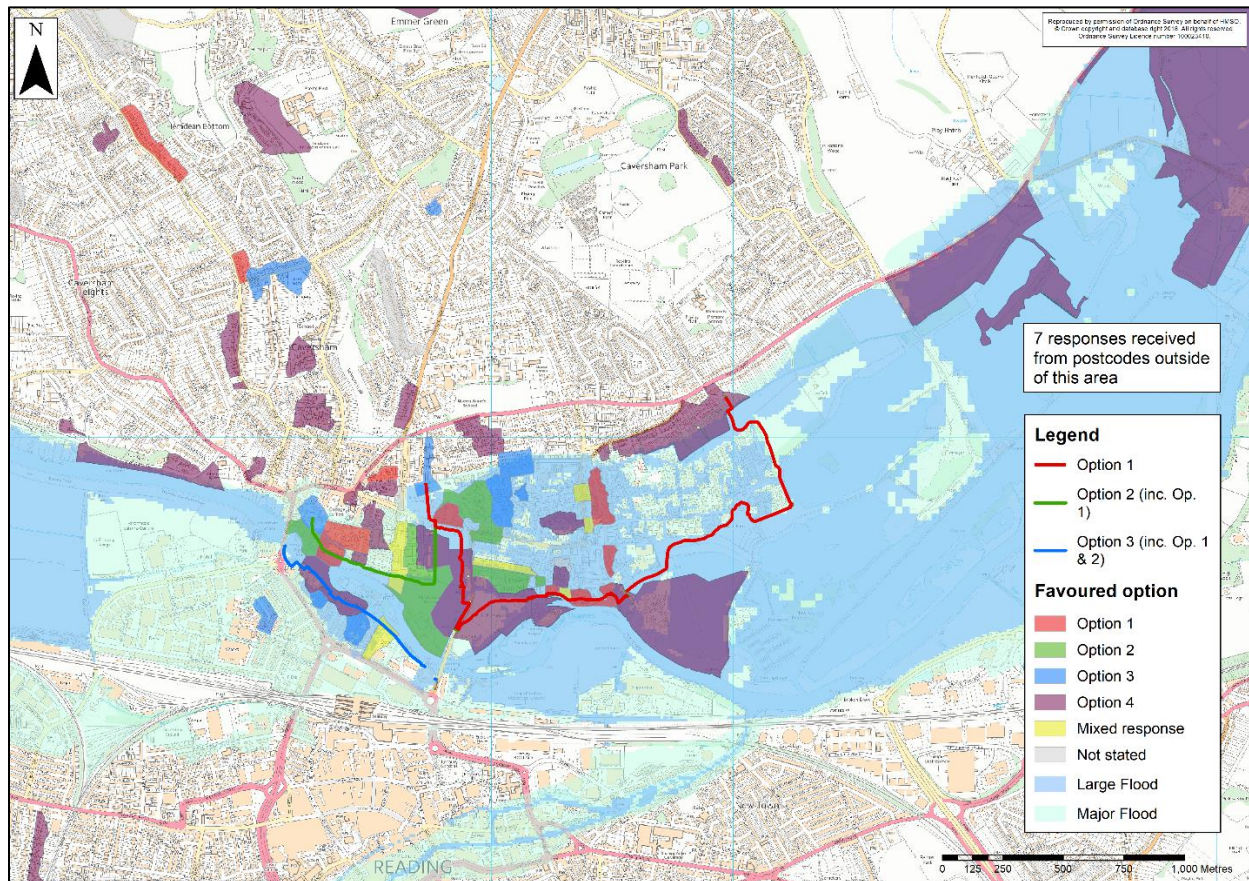


Figure 5. Map showing the most preferred option for each postcode where responses were received. Red indicates a preference for Option 1, green Option 2, blue Option 3, purple Option 4, yellow where there was no preference and grey where a preferred option was not stated.

**Question 2: For each of the options please indicate whether or not you would like us to develop them**

The responses we received to this question follow a similar pattern to Question 1, with the most popular response being to not develop any of the options we presented. For the 3 options proposed, Option 1 was slightly favoured with 33% of respondents either neutral or wanting this option to be developed and 55% not wanting us to develop this further. For Option 2, 32% of respondents were positive or neutral and 57% did not want us to develop this option further. For Option 3, 27% were in favour or neutral and 60% did not want this option developed further. Some respondents decided not to answer this question.

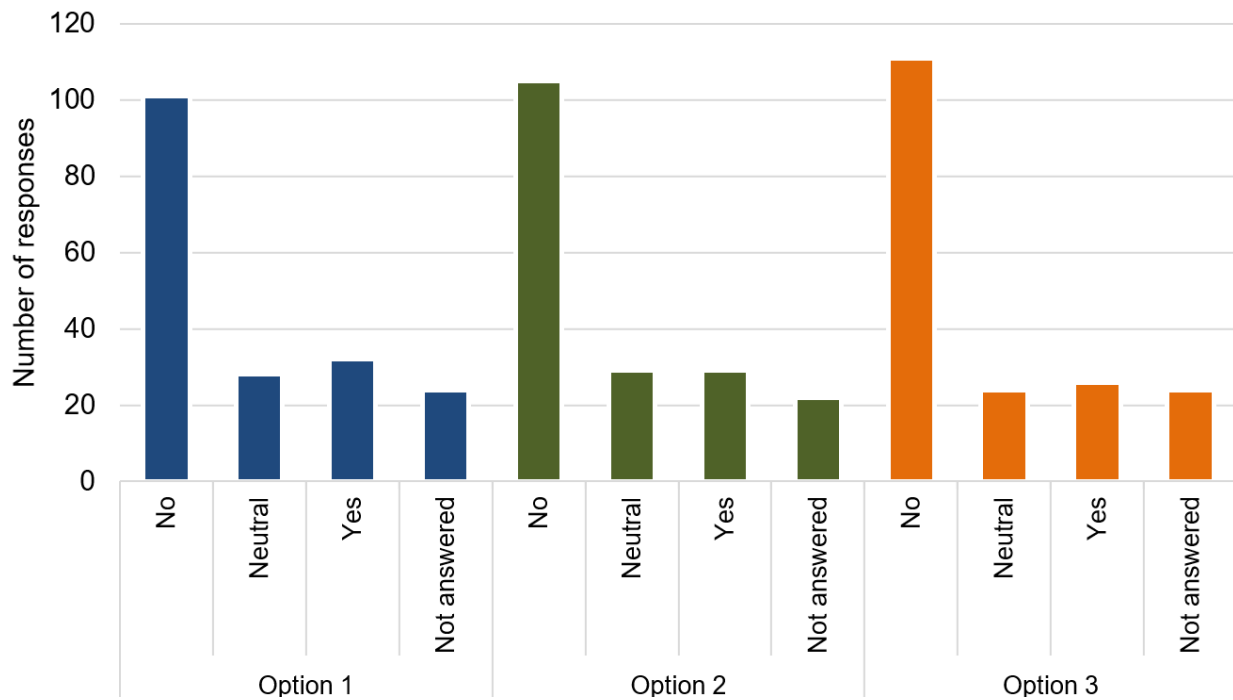


Figure 6. Question 2 - Would you like us to develop these options further?

**Question 3: Would you prefer to have a higher wall which can reduce flooding from major floods, or a lower wall that would reduce flooding from minor floods but would not be effective from major floods?**

44% of responses we received did not answer this question, with some respondents stating the reason for this being because they did not want any new flood walls or embankments to be constructed. 32% of responses favoured lower walls, with 24% opting for higher, more effective walls.

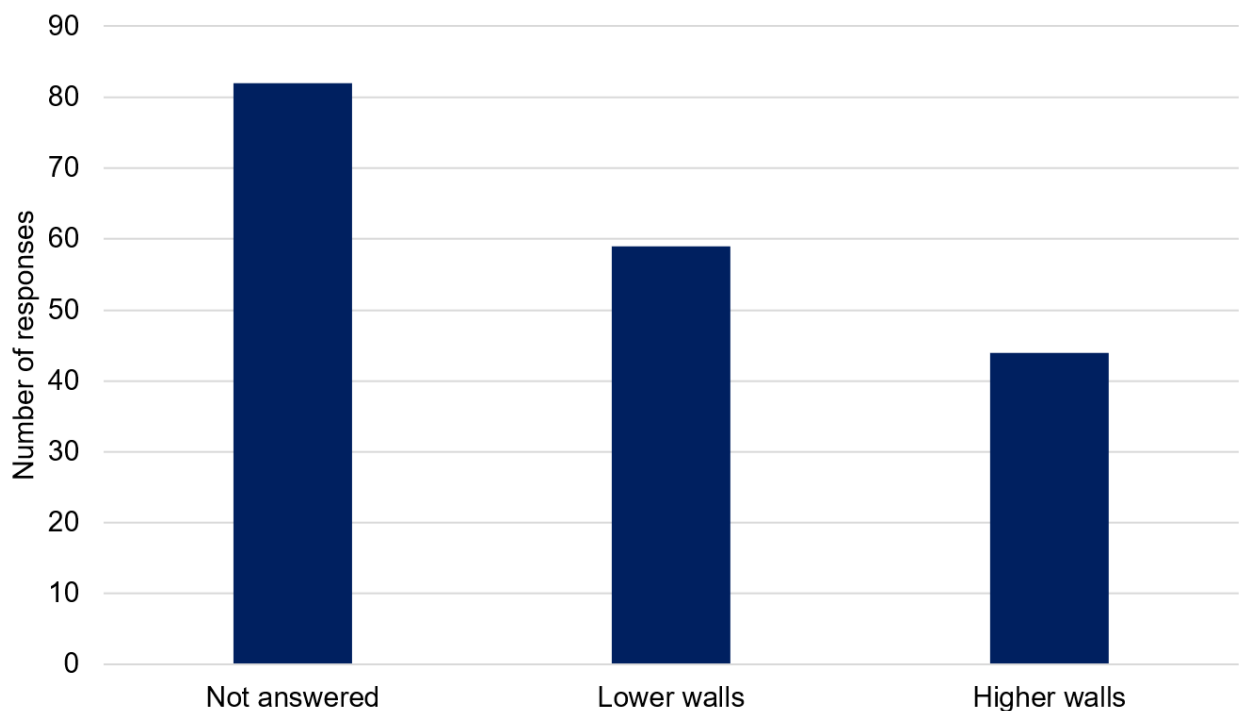


Figure 7. Question 3 – Would you prefer more effective, higher walls or less effective, lower walls?

## 5. Feedback and other comments received

In questions 4 and 5 we asked for your comments on our proposals. We will thoroughly consider your responses when deciding which, if any, of the options we take forward to reduce flooding in north Reading and Lower Caversham. We have summarised your feedback into 15 key areas. The 3 most frequently expressed are listed first, along with how we aim to address them if the project is progressed further. This is followed by other topics which were raised.

### **Risk to communities outside the immediate project area**

Many respondents commented on the potential impact to communities outside the project area resulting from changes to the floodplain.

We will not develop any option that would increase flood risk to properties outside the area we are working in. We work to reduce flooding, not to transfer it from one community to another. If at any stage in our work we find that our proposed work could result in increasing flood risk to a community near to or downstream of the scheme, then we would look for ways to change the design to remove this risk. If we cannot find a solution to reduce flooding without increasing risk to other communities then we will not continue with that option and will have to consider different options. It may be that none of the options we are now sharing become possible and we have to look at alternative solutions.

If we continue to develop any of these options, we will work closely with communities both within and outside the project area.

### **Tree removal and environmental impacts**

If we continue with any of these proposals, we would minimise the impact of construction on the existing local environment. In addition, we always aim to enhance the existing environment and create new habitat. We would avoid removal of trees wherever possible, particularly where trees are rare or add value to the existing environment. It is not always possible to avoid tree removal. Where it is necessary as part of the project, we would ensure sufficient habitat and tree provision is provided locally. We would also work closely with Reading Borough Council to ensure the project supports the local plan in delivering an enhanced environment and improved recreational facilities.

### **Unnatural look of flood walls or embankments and maintaining views and privacy**

If we continue to develop any of these options, we would evaluate the impact of any new flood wall or embankment. We will consider the specific points raised during this consultation. We would aim to design walls and embankments to blend in to the local environment as far as possible. Where flood walls are required, we would make every effort to source materials that complement the existing surroundings.

### **Other feedback and comments**

#### **Historic flooding in the Reading and Caversham area – has it been that bad?**

Several floods have affected north Reading and Lower Caversham in recent years, including in 2003 and 2013/14. As well as some homes flooding, considerable disruption to roads and other services was experienced. These recent floods were much smaller than the flooding experienced in 1947. Projections for future changes in our climate suggest that flooding will



could become more regular and severe and we are seeking to take action now to prevent a repeat, or worse, of the 1947 flood.

### **Lack of detailed information (including cost, height/nature of walls in specific locations)**

We wanted your views on our initial ideas at the earliest opportunity so that we could consider it if we develop a more detailed proposal. As a result of this approach, some detail was not available. If we continue to develop any of these options further, we will develop more detailed plans which we will share with the public at future consultations.

### **Effect on sewerage services**

Some respondents asked whether flood walls would cause a detrimental impact on the sewer network. We have consulted with Thames Water in drawing up these proposals and if we progress any of these options further, we will continue this collaboration to ensure there is no negative impact on the sewer network.

### **Future maintenance liabilities**

If we continue to develop any of these proposals further, we will need to understand the total cost of the scheme including the cost of future maintenance. We would work with partners to discuss the operation and maintenance and, where possible, we would look for ways to incorporate low maintenance solutions. We will not be able to proceed with a project without demonstrating how future maintenance liabilities will be funded.

### **Groundwater flooding**

We received questions about whether water coming from the ground would become stuck behind the proposed walls. Flooding in north Reading and Lower Caversham is associated with a number of different sources including surface water, groundwater, and flooding directly from rivers. If we develop a scheme, we will investigate all sources of flooding. We would consider where the water is coming from, the route it takes, and where it will go. We would not proceed with a project which increased the risk of groundwater, or surface water flooding to properties.

### **Dredging and watercourse management**

In some areas dredging can be an important part of maintenance but is not enough on its own to reduce major flooding from the River Thames.

We consider each location carefully and carry out dredging where we know it will make a difference. We must be sure it will reduce flooding to local homes and businesses and won't increase flood risk downstream.

Dredging the River Thames would not sufficiently reduce flood risk in this area. In many cases, dredging isn't the best long-term solution because the river can quickly silt up again. Studies have indicated the River Thames is largely self-regulating, with any siltation in low flow conditions being removed naturally during higher flows.

Dredging can be costly, disruptive and environmentally damaging and would require frequent re-dredging as the natural tendency of all rivers after dredging is to deposit silt and return to their more natural state.

### **Disruption during construction**

Whilst some disturbance during construction is unfortunately unavoidable, should we continue with any of these proposals we will look to minimise this wherever possible. We can reduce disturbance by considering factors such as, the time of year we work, other events and construction work happening, the hours we work, where materials comes from and the time it takes to build the scheme. We would work closely with our partners to minimise any impact on

local residents and recreational users of the area. We will share further detail on how we propose to manage disruption if a project is developed.

### **Access when flood gates are closed**

If we were to proceed with a project, this could require flood gates or similar removable defences. We would look at where access would be needed during a flood and work with our partners, including emergency responders, to facilitate this. In many cases, access routes would be closed in a flood due to deep or fast flowing water and the provision of a flood gate helps keep other roads accessible.

### **Mooring and boat access**

If we develop these proposals further, we will work with partners to ensure that existing access points to the river are retained during normal flow conditions. Were we to progress with a project which included the installation of flood gates, these would only be closed in the event of a flood, at which point safe access to boats would most likely no longer be possible.

### **Confluence of Christchurch Ditch, sometimes known locally as Gos Brook**

We received several questions about whether water would back up behind flood walls and embankments because of the River Thames and Christchurch Ditch confluence, near Heron Island. We would not progress any project that increased the flood risk from the Christchurch Ditch. If we take any of these proposals forward, this will include detailing how this will be managed.

## **6. What happens next**

We recognise that the majority of respondents to this consultation did not want us to develop these proposals further. We have provided responses to specific feedback received in the preceding section of this document and we will be considering these carefully as we move forward. We need to carry out some further investigatory work before deciding whether to progress a project to reduce flooding to north Reading and Lower Caversham. There are several key reasons for this:

- We shared our plans at an early stage so we could understand people's views and incorporate feedback into any design that we might take forward. However, many respondents felt we had provided insufficient detail on these proposals to enable them to make an informed decision.
- Large sections of the community, especially those who would directly benefit from the proposals, did not respond. We need to reach out to these communities and ensure their views are also considered.
- We received a high proportion of responses from residents outside the project area due to perceived detrimental impacts to them. We will not progress a project in one area which increases flood risk to properties in another.

We will carry out further work to find out if we can modify some of the options, taking into account the feedback we have received. We also need to continue development of these designs, so we can provide you with more detailed information. Further work we will carry out includes:

- More **detailed design** work to clarify flood wall and embankment locations, how they would look and how high these could be along their length.
- Assessing **technical restrictions**. As we develop the design, we may discover physical restrictions that have not shown up during our initial investigations. These could include space available for construction, size of foundations required, archaeological findings, endangered species, to name a few. Any such findings could mean that we have to change the detail of the option or even consider a different option.
- Estimating the **cost** of the project, including future maintenance requirements, and the funding available. Any option we develop would be partly funded by central government, but there is still a need to find more funding, for example from organisations and businesses that will benefit.
- **Wildlife and landscape enhancements**. If we develop an option, we will take wildlife and landscape into consideration. We will always compensate for any habitat and species that has been unavoidably impacted and wherever possible we aim to improve landscape and habitat.
- Determining potential **planning application** requirements.
- As a result of this consultation we have been able to identify community groups we should be working with further. Points raised vary from community to community and we will be seeking further communication to

We will keep residents updated with the progress of these proposals through our newsletter and from active community engagement. There will be further opportunities for you to comment on any updated proposals. If you wish to be placed on our mailing list to receive any future communications or newsletters please email us at: [reading&cavershamscheme@environment-agency.gov.uk](mailto:reading&cavershamscheme@environment-agency.gov.uk).

## 7. Publishing your responses

Where permission has been given to do so, we have published individual consultation responses on our website. These can be accessed at:

<https://consult.environment-agency.gov.uk/thames/reading-and-caversham-flood-reduction-options>

Due to the requirements of the General Data Protection Regulations (GDPR) we have to ensure we maintain the anonymity of respondents. As a result, we have removed any identifying information from the public facing records of responses. We have retained this information for further engagement activities.