

# Lower Mole Flood Alleviation Scheme, Spring 2021 Engagement Report

August 2021



We are the Environment Agency. We protect and improve the environment and make it a better place for people and wildlife.

We operate at the place where environmental change has its greatest impact on people's lives. We reduce the risks to people and properties from flooding; make sure there is enough water for people and wildlife; protect and improve air, land and water quality and apply the environmental standards within which industry can operate.

Acting to reduce climate change and helping people and wildlife adapt to its consequences are at the heart of all that we do.

We cannot do this alone. We work closely with a wide range of partners including government, business, local authorities, other agencies, civil society groups and the communities we serve.

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## **Quality Assurance**

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## 1. Executive summary

Over 5,250 unique visitors accessed our interactive website during our 8-week engagement with the community on the future of the Lower Mole Flood Alleviation Scheme. We would normally meet with the community face to face, which was not possible due to the COVID pandemic restrictions. However, through our online platform we were able to reach larger numbers than we have done during the previous face to face engagement, resulting in a significant amount of feedback. We have published these findings in this report.

The feedback we have received has enabled us to gain a thorough understanding of the community's positions, interests, needs and expectations. We are using this knowledge to develop the options.

#### Six options to update the scheme

The Lower Mole Flood Alleviation Scheme is now approaching the end of its design life and needs to be updated so that it maintains the same standard of flood protection whilst ensuring it is the best scheme for the environment, people and wildlife. There are six main water level control structures (sluice gates) and we need to make decisions on their future.

We have developed six options to update the scheme using feedback from the community in June 2019 and the results from further surveys. We shared these options with the community during this latest engagement exercise in spring 2021:

- Option 1: do nothing.
- Option 2: do minimum.
- Option 3: gate replacement.
- Option 4: Molember gates replaced with fixed crest weirs.
- Option 5: remove all gates, but replace Island Barn sluice gates.
- Option 6: remove all gates, passive flood relief channel with rock ramps.

Please refer to section 2.2 of the report for a detailed description of each option.

#### Our engagement aims and process

The reasons why we engaged with the community in spring 2021 were:

- For stakeholders to further understand the operation of the scheme, the need for change, and the environmental, cost and carbon implications.
- To share the short-list of potential options with the community and wider public, encouraging feedback and conversation between all parties.
- To successfully engage with the community and wider stakeholders to help our project board make decisions about the future of the scheme.
- To develop and strengthen stakeholder relationships.

We decided the best way to engage with the community during the pandemic was through an interactive website, which we launched on 3 February for 8 weeks up to 1 April. We extended the engagement period from 7 to 8 weeks in response to feedback from the community.



Location of water control structures

To publicise the website we carried out a large scale mailing of 6,000 letters to the area around the scheme, displayed several consultation posters along the scheme and worked with Elmbridge Borough Council and Surrey County Council to help raise awareness of the website within the community.

#### Visitors to our website

We received over 5,400 visits to our website over the 8-week engagement period, made by 5,250 unique visitors. We have received:

- 334 survey responses.
- 375 quick poll responses.
- 265 responses to our ideas board.
- 261 questions to our website and inbox.
- 21 map pin responses.

The majority of respondents (86%) had already heard about the plans to update the scheme before visiting our website. Respondents either fully (56%) or partly (42%) understand the scheme and potential options for updating it after visiting our website. We have also connected with members of the community who have not previously commented on the scheme as 74% of respondents have not commented in the past.

#### Support for the scheme

Over half of respondents (54%) stated they strongly support or support the plans to update the scheme. Well over a quarter (29%) of respondents stated they are strongly against or against plans to update the scheme, and under a fifth of respondents (17%) felt neutral about the plans. For further details please refer to section 4.6 of the report.

The greatest support is for Option 3 (236 mentions) compared against the other options. The key reasoning for the community's support for Option 3 being that the option maintained the existing water levels, and offered continued protection of properties from flooding. Option 6 has the second highest support (44 mentions), with the top reasons for support being lower cost and providing the best flood protection. For further details please refer to section 4.7 of the report.

#### Feedback from the community

Respondents informed us about their top priorities for updating the scheme which include:

- Maintaining water levels.
- Maintaining the standard of flood protection.
- Improving and preserving biodiversity, wildlife and the environment.

For further details please refer to section 4.6.1 of the report.

Concerns regarding options which result in lower water levels is the main issue highlighted by respondents. Respondents to the survey are most concerned about the potential impact of water level reduction on:

- Recreational use of the river, river access and local amenity.
- Biodiversity, and the natural environment.
- Aesthetics of the area, and the visual impact.

Other concerns include the impact of lower water levels on property value, property security and privacy, the outflows from the Esher Wastewater Treatment Works and concern about

there being a high drop from the riverside paths and tracks to the River Ember. For further details please refer to section 4.6.2 and section 4.6.3 of the report.

Popular ideas from the ideas board and interactive map included improvements to access along the River Ember and River Mole and the introduction of beavers. We will be looking at the feasibility of implementing the ideas submitted by the respondents in more detail as the scheme progresses. For further details please refer to section 4.9 of the report.

#### Our response to community feedback

We are developing and refining the options by taking into account the feedback from the community, and seeking to mitigate changes in water levels whilst maintaining flood protection. This will include assessing the additional cost of the mitigation measures and the benefits they provide.

In response to feedback regarding lower water levels, we are looking at options to mitigate changes in water levels. As the scheme currently stands, there are sluice gates in place which maintain artificially high water levels in normal conditions, but have to be opened when flows in the river are high. We are investigating the impact of adding passive structures (rock ramps or weirs) to the river to maintain the water levels in options where we are proposing to remove the sluice gates. We are carrying out flood risk modelling to see how this impacts flood risk.

Measures to mitigate concerns regarding visual change and security will be considered in the detailed design, including opportunities for additional planting and fencing. In determining the type and location of the mitigation measures, we would need to ensure they would not increase the risk of flooding.

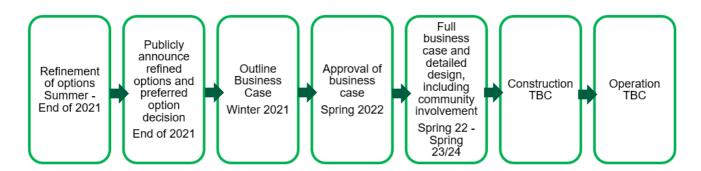
We will include within the cost of our options an allowance for measures to mitigate the concerns raised around visual impact and security. Agreement on the implementation of the measures will be carried out on a case by case basis with residents during the detailed design phase.

#### **Next steps**

Once our options refinement process is completed, we will present the refined options to the Project Board for their consideration and selection of a preferred option. The Project Board includes senior decision makers at the Environment Agency, and they will decide how to proceed with updating the scheme. The Project Board will, as well as looking at cost, review the amount of benefits an option will deliver and the timescales over which those benefits occur. The Project Board will ensure we are integrating community views as well as the environment and economics into the heart of the decision-making process. Assessed factors include, but are not limited to, environmental and amenity impacts and opportunities, legal obligations, health and safety, and carbon implications. This means the Project Board is not bound to just select the option which provides the best economic value for money.

Following the Project Board review at the end of the year, 2021, we will announce the preferred option to be taken forward for Outline Business Case approval. We will also set out the reasons for our decision.

In order for the project to reach the detailed design and then the construction phase, further work, which includes gaining staged approval for funding, is required. As such it is not possible to provide a detailed timeframe for implementation at the present time. We have shown the main stages in the programme going forwards below. For further details please refer to section 6 of the report.



#### **Keeping in touch**

We progresses: will update Citizens Space the our page as scheme https://consult.environment-agency.gov.uk/ksles/lower-mole-flood-alleviation-scheme/. In addition, the project inbox FASProject.LowerMole@environment-agency.gov.uk will still be available for any further questions the community may have. This will still be monitored by our project team.

## 2. Introduction

The aim of this report is to publish our findings following our engagement with the community on our proposals to update the Lower Mole Flood Alleviation Scheme. We also detail how we are using the feedback from the community in the decision making process and our next steps.

## 2.1 Background

The Lower Mole Flood Alleviation Scheme is now approaching the end of its design life and needs to be updated so that it maintains the same standard of flood protection whilst ensuring it is the best scheme for the environment, people and wildlife. There are six main water level control structures (sluice gates) and we need to make decisions on their future.

We began talking to the community about the need to update the scheme in January 2019, presenting our ideas to the public in June of that year. Local residents and other stakeholders informed us that they wanted us to do more work on our proposals. We listened to this feedback and over the winter of 2019 we carried out additional environmental and river depth surveys to help us better understand the Lower Mole. We would usually carry out these surveys at a later stage in the project, however we wanted to respond to public concerns over water levels and wildlife by collecting and sharing the information early.

## 2.2 The six options to update the scheme

We have subsequently developed six options to update the scheme using feedback from the community in June 2019 and the results from further surveys. We shared these options with the community during this latest engagement exercise this spring 2021:

- **Option 1: do nothing.** No work or maintenance to any existing structure or along the river channels.
- **Option 2: do minimum.** There will be reactive maintenance and repairs as structures gradually fail.
- Option 3: gate replacement. This involves the following:
  - **Molember**: Replace 3 of the 4 gates with a fixed crest weir and replace the remaining gate with a new gate. Automate operation of the new gate.
  - o Island Barn: Replace all gates with new gates and automate operation.
  - Viaduct: On one side install a small fixed crest weir and fish pass. Replace all gates with new gates and automate operation (no change in upstream water level).
  - **Zenith & Wilderness**: Remove existing gates, electrical equipment and Zenith walkway. Install new rock ramp fish pass on the existing structure.
  - **Royal Mills**: Replace existing gate with a fixed crest weir at the same level and consider potential for installation of a fish pass.
  - Flood Channel: Repair channel banks.
- Option 4: Molember gates replaced with fixed crest weirs. This involves the following:
  - **Molember**: Replace all gates with a fixed crest weir (fall in upstream water level).

- o **Island Barn**: Replace all gates with new gates and automate operation.
- Viaduct: On one side install a small fixed crest weir and fish pass. Replace all gates with new gates and automate operation (no change in upstream water level).
- **Zenith & Wilderness**: Remove existing gates, electrical equipment and Zenith walkway. Install new rock ramp fish passes on the existing structures.
- **Royal Mills**: Replace existing gate with a fixed crest weir at the same level and consider potential for installation of a fish pass.
- Flood Channel: Repair channel banks.
- Option 5: remove all gates, but replace Island Barn sluice gates. This involves the following:
  - **Molember**: Remove all gates but leave concrete piers in place.
  - **Viaduct**: Remove all gates. Provide rock ramp fish pass. Leave concrete piers and bridge in place.
  - **Royal Mills**: Existing gate removed. Channel will become a backwater that flows during higher flow events.
  - o **Island Barn**: Replace all gates with new gates and automate operation.
  - **Zenith & Wilderness**: Remove existing gates, electrical equipment and Zenith walkway. Install new rock ramp fish passes on the existing structures.
  - **Flood channel**: Repair channel banks. Install berms and groynes to form a low flow channel where required.
- Option 6: remove all gates, passive flood relief channel with rock ramps. This involves the following:
  - **Molember:** Remove all gates but leave concrete piers in place.
  - **Island Barn & Viaduct**: Remove all gates. Leave concrete piers and bridges in place. Provide rock ramp fish pass.
  - **Zenith & Wilderness**: Remove existing gates, electrical equipment and Zenith walkway. Install new rock ramp fish pass at Wilderness and investigate potential for fish passage at Zenith.
  - **Royal Mills**: Existing gate removed. Channel will have low flows unless there is a higher flow event.
  - **Flood channel**: Repair channel banks and install berms and groynes to form a low flow channel where required.

We have developed four options where significant changes would be made to update the current scheme (Options 3, 4, 5 and 6). There are two further options, one to do nothing (Option 1) and the second being to do the minimum (Option 2). It should be noted that the 'Do nothing' option is a requirement of the Department for Environment Food and Rural Affairs (Defra) Flood and Coastal Erosion Risk Management (FCERM) appraisal guidance in order to set a baseline to compare the other options against. 'Do nothing' is not considered a credible option for the scheme. We need to compare other options against 'Do nothing', to justify work to maintain/replace the scheme to ensure the standard of flood risk protection is maintained.

The FCERM appraisal guidance summary webpages can be found here: <u>https://www.gov.uk/guidance/flood-and-coastal-erosion-risk-management-appraisal-guidance</u>.

## 2.3 Our engagement aims

The aims of our engagement with the stakeholder community in spring 2021 were:

- For stakeholders to further understand the operation of the scheme, the need for change, and the environmental, cost and carbon implications.
- To share the short-list of potential options with the community and wider public, encouraging feedback and conversation between all parties.
- To successfully engage with the community and wider stakeholders to help our project board make decisions about the future of the scheme.
- To develop and strengthen stakeholder relationships.

## 3. How we engaged with the community

## **3.1** Engaging with the community during the pandemic

As it became evident in 2020 that the COVID pandemic was going to be prolonged, it was clear that our usual method of face to face engagement was not going to be possible. We therefore had to think about how we could not only share this new information with the stakeholder community but also provide a way that we could invite the community to ask questions and give feedback. We decided the best way to engage with the community was through an interactive website.

#### 3.2 Our website launch

On 3 February 2021 we launched an interactive website for 8 weeks, up to 1 April 2021, to inform stakeholders about the need to update the Lower Mole Flood Alleviation Scheme and the six proposed Options. We provided supporting information on our work since our last engagement exercise in June 2019 and our ongoing maintenance work.

To publicise the interactive website, we carried out a large scale mailing of 6,000 letters to the area around the scheme. We also worked with Elmbridge Borough Council and Surrey County Council to help raise awareness of the website within the community. For example, a link to our website was available through the News section of the Elmbridge Borough Council website. Local groups kindly posted links to our webpage on their digital platforms, and we made direct contact with a number of residents' groups, landowners and local businesses. We also put a number of posters along the scheme at access points which advertised our website, and how the community were able to get in touch with us.

## 3.3 Accessibility

Hosting our engagement on a website has meant we have been able to reach a far larger number of people than in previous engagement exercises. We have also found that by having the website open for 8 weeks, members of the public had more time to read all of the information given, which isn't always the case with other engagement methods. We sent out on request 13 hard copies of all the information contained on the website and offered telephone consultations to people who had accessibility issues.

## 3.4 Informing and engaging website visitors

Our home page (figure 1) directed visitors to the following information areas:

- What is the scheme
- Our work so far
- What are the options
- Join the conversation
- Improving the environment on the Lower Mole
- Ongoing maintenance work
- Glossary and frequently asked questions

On our 'Join the conversation' page, we invited visitors to provide feedback through the following channels:

- An interactive map: Enabled stakeholders to add their comments, observations and
- ideas relating to specific locations along the scheme.
- Questions: We invited stakeholders to submit their questions to the project team. We posted our reply on the website to enable others to view the response. We also provided an email address as an alternative channel for questions and feedback.
- Ideas board: We asked stakeholders to tell us their ideas about potential opportunities and improvements that could be incorporated into the scheme.
- Survey: Stakeholders were presented with a series of multiple choice and open text questions about their understanding of the scheme, feelings towards the scheme, option preference and their experience of the engagement process. (Appendix A).
- Quick polls: We asked stakeholders where they heard about the website and asked them to rate the website and ease of navigation.

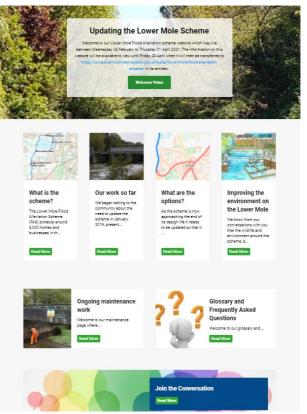


Figure 1: Our home page

## 3.5 Visitors to our website

We received over 5,400 visits to our temporary engagement website over the 8-week engagement period (figure 2), made by 5,250 unique visitors:

- **3,194 aware visitors**. An aware visitor made at least one single visit to our website and so is aware the engagement exercise took place. 12,189 actions were performed by aware visitors (see Appendix C).
- **1,508 informed visitors**. An informed visitor visited more than one page of our website. 1,031 document downloads were performed by informed visitors (see Appendix C).
- **548 engaged visitors**. An engaged visitor participated in one or more of our interactive channels including the interactive map, survey, quick poll, contributed to the ideas or posted a question. 765 actions were performed by engaged visitors (see section 3.6 of the report for further details).

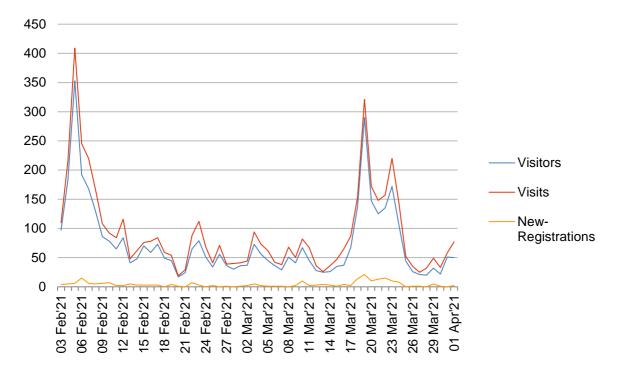
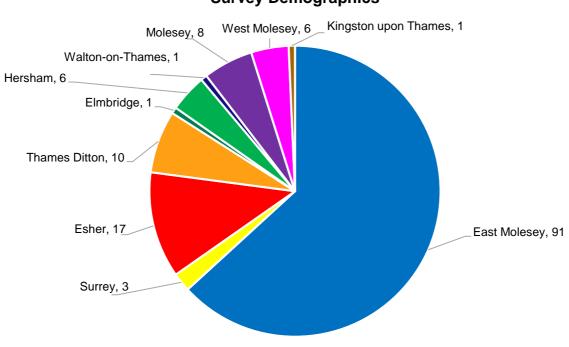


Figure 2: Number of visits, visitors and registrations between 3 February and 1 April 2021

Figure 3 shows the demographic of those who provided feedback on the scheme and options for updating it via our survey. 144 people (out of 334 who responded to the survey) responded to this free text question, where respondents wrote their own answers. 190 people didn't provide demographic details. Most respondents live very close to the scheme, with 91 of them saying they were from East Molesey. Other areas included Esher (17), Thames Ditton (10), Hersham (6) and West Molesey (6). There were also a small number of respondents who said they were from Surrey, Walton-on-Thames, Kingston upon Thames and Elmbridge.



**Survey Demographics** 

Figure 3: The demographic of those who completed the survey

## 3.6 How respondents engaged

The survey and quick polls were the most popular engagement tools (see figure 4). We received 375 quick poll submissions, 333 survey submissions via the website and one paper survey.

For each interactive tool we have recorded both the number of responses received and the number of unique contributors (or unique individuals) submitting responses.

The number of responses is higher than the number of contributors for all interactive tools. For the Q&A, interactive map and ideas board we would expect individuals to submit more than one question, map pin or idea to our website, respectively. The lower number of contributors compared to responses for the survey and quick poll suggests that either some respondents have submitted more than one response or multiple members of a household submitted responses from the same device. For our analysis we have assumed the latter to be the case.

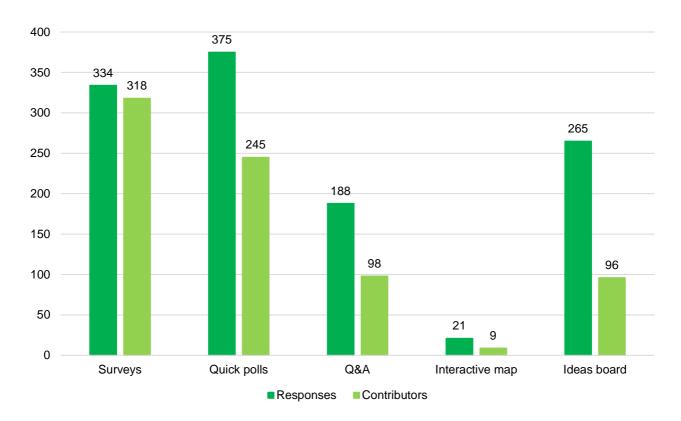


Figure 4: Actions performed by engaged respondents

## 3.7 Popular website pages

Our website was a hive of activity during the 8-week engagement period. The top three website pages viewed by aware and informed visitors, were:

- What are the options? Visited 2,083 times, with 625 document downloads.
- Join the conversation Visited 1,350 times, with 94 document downloads.
- What is the scheme? Visited 1,090 times, with 169 document downloads.

Our welcome video was visited 1,076 times, with 797 views. The option summary pages were also frequently visited. Option 3 and Option 6 were the most visited option summary pages, with 878 and 855 visits, respectively.

The full results table showing the number of website page visits and downloads can be found in Appendix C.

## 3.8 An ongoing engagement process

The website was one part of our ongoing engagement with the community about the future of the scheme. As the project progresses we will ensure that all of our stakeholders are updated and that the lines of communication remain open.

All the information from our interactive website has been transferred to our Citizens Space page which can be accessed via <u>https://consult.environment-agency.gov.uk/ksles/lower-mole-flood-alleviation-scheme/</u> where it will remain for stakeholders to access at all times. This page will be updated on a regular basis as the scheme progresses.

In addition, the project inbox <u>FASProject.LowerMole@environment-agency.gov.uk</u> will still be available for any further questions the community may have. This will be monitored by our project team.

## 4. What we discovered

## 4.1 How we analysed feedback from the community

Responses to multiple choice questions are readily quantified for analysis. However, most of the interactive elements of our website provided respondents with space to write their opinions, ideas, feedback and questions.

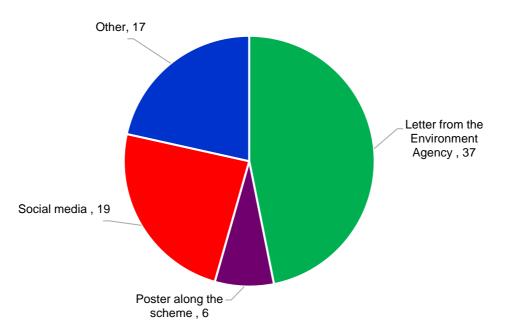
We have used a method known as coding to group common open text responses into overarching themes and related sub-themes. The sub-themes provide more detail on points raised by the community.

We are then able to quantify the data and see how many respondents comment on each theme and related sub-themes. For themes we are able to quantify the number of respondents mentioning the theme. For sub-themes we are able to quantify the number of mentions as a respondent may mention more than one sub-theme within a theme.

Using a coding approach, we are then able to see which themes and sub-themes are most important to respondents.

Please refer to Appendix B for our full coding tables.

## 4.2 How the community found out about our engagement



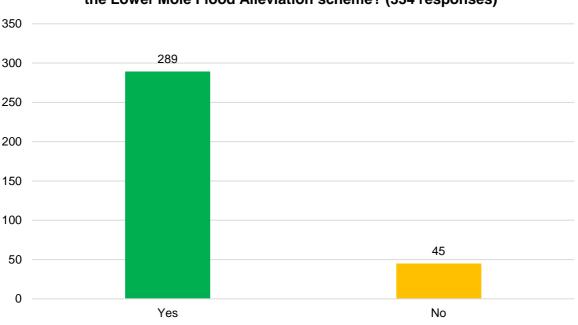
#### How did you hear about this website?

Figure 5: How respondents heard about the website (number of respondents)

79 respondents answered our quick poll question: how did you hear about this website? The most effective way of informing respondents about the website was through sending out letters (37) (figure 5). Using social media platforms was also an effective tool (19). Fewer respondents were engaged through seeing the poster along the scheme (6).

#### 4.3 What the community thought about our engagement approach

The majority of respondents (86%) had already heard about the plans to update the scheme before visiting our website (figure 6).



Question 1: Before today had you heard about the plans to update the Lower Mole Flood Alleviation scheme? (334 responses)

Figure 6: Prior awareness of the scheme

The majority of respondents developed their understanding of the scheme and potential options for updating it after visiting our website (figure 7). Just over half of respondents (56%) felt they now fully understand the scheme and potential options. A further 42% partly understand the scheme and potential options after visiting our website.

#### Question 2: After exploring the website, how well do you understand the scheme and the potential options for updating it? (334 responses)

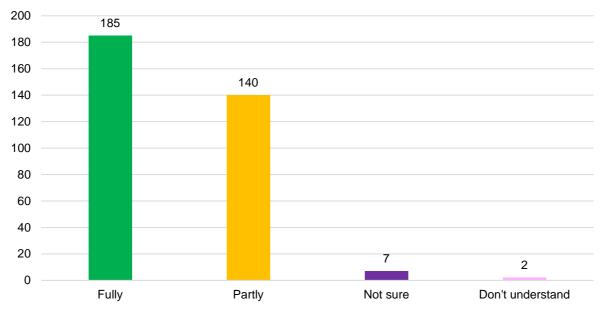
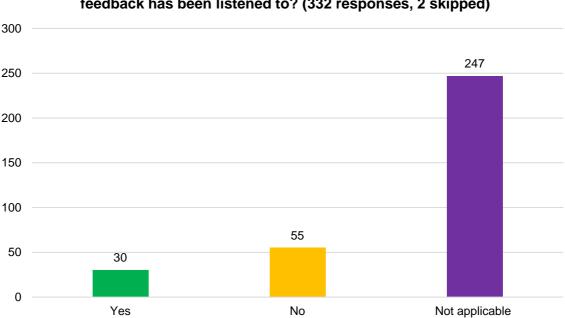


Figure 7: Understanding of the scheme after exploring the website

Our interactive website and extensive advertising has enabled us to connect with members of the community who have not previously commented on the scheme. 74% of respondents have not commented in the past (figure 8), which highlights the larger reach and success of our online engagement.

Of those who had commented in the past, just over a third felt their feedback had been listened to and just under two thirds did not feel listened to (figure 8).



## Question 3: If you have commented in the past do you think your feedback has been listened to? (332 responses, 2 skipped)

Figure 8: How well respondents feel we have listened to their feedback in the past

We asked respondents to explain their answer to Question 3 (If you feel you have commented in the past do you think your feedback has been listened to). We received 171 responses to this question.

Respondents who did not feel listened to felt we were presenting the same options that were presented in June 2019 (11 mentions). Some respondents also expressed a lack of trust in the engagement process and think we have already selected the preferred option (9 mentions).

For example:

All this came up a year or two ago but previous comments seem to have been archived and the same proposals have re-emerged. (Ref E084)

No, because the local residents in this area were very clear and united in their desire for either maintenance of the current structures to be maintained or for new sluice gates to be put in to maintain the river as it is now. This has clearly not been listened to as options roundly rejected by the local community have again resurfaced. (Ref E098)

I do believe that no matter what feedback we give, your decision will be made solely on money and to that affect you have already made up your mind and option 6 will be adapted. (Ref E050)

Conversely a similar number of comments were made by respondents who felt they had been listened to in the past (13 mentions) and feel this engagement process involves residents more in a way that encourages working together (5 mentions). For example:

Following site visit last January and opportunity to comment, we felt the EA listened to local residents by delaying decision on options going forward. (Ref E053)

It all slowed down and you went back to the drawing board showing it has been thought about and now presented in a way that encourages working together. (Ref E002)

We have had lengthy communication with the EA about our interest and concerns about the Mole and certainly feel that we have been listened to. We have also been able to meet EA staff face to face on site. (Ref E072)

Other responses to question 3 included respondents have not commented in the past (66 mentions) or have no further comments (14 mentions). Some respondents have also used question 3 to comment on their concerns about updating the scheme (19 respondents), priorities for updating the scheme (11 respondents) or to provide comments of support or opposition for named options (8 respondents). We will cover these themes later on in the report.

See section 4.3.3 of the report for our response to your feedback.

## 4.3.1 Engagement length and timing

Some respondents to our survey have provided feedback on the engagement process across the different open text questions. (The full survey can be found in Appendix A).

Requests for an extension to the engagement with the community was the most mentioned theme (37 mentions). The need for a face to face engagement and concerns regarding the timing of the engagement during the pandemic was also mentioned (15 mentions).

Please give us an extension of time to look at our options RE the FAS project. (201) This is due to the Covid 19 pandemic. (Ref A156)

I am very concerned that there needs to be more time for this and would therefore ask that the 24th March consultation deadline be extended. (Ref A203)

As this project will have such a large impact on such a large area please can you confirm that no action will be taken until there is an opportunity for more face to face consultation. In the face of the global pandemic this has not been possible and it does not seem appropriate to close the period for questions and comment until face to face conversations have been able to take place. (Ref A222)

See section 4.3.3 of the report for our response to your feedback.

## 4.3.2 Website feedback

#### What are the options?

The most useful page on the website was the 'What are the options?' page with 178 mentions.

The majority of respondents thought the options summaries and presentations were the most useful aspects on this page (91 mentions). They particularly liked *the clear description of the options (Ref H057)* and *the pros and cons sections (Ref H217).* 

Respondents also found the water level along the river mole presentation useful (15 mentions). They liked:

The water level graphs. (Ref H283)

Maps of the water levels now and the description of the depth of the river and the silt deposits at different sites. (Ref H216)

Respondents thought the information sheets were useful too (11 mentions). They liked the *explanatory PDFs* (Ref H288) especially the *Options Full Table PDF* (*Ref H064*) and the *Full Cost Comparison notes* (*Ref H229*).

#### Join the Conversation

The 'Join the Conversation' page was also mentioned as one of the most useful pages on the website with 23 mentions.

Respondents thought the *Interactive Map* was a useful tool (10 mentions) as it *identified where the place names referred to (Ref H272)* 

They also liked the Q&A and comment section (6 mentions) for numerous reasons:

Gave me answers. (Ref H221)

The replies to people's questions. (Ref H321)

I have also used the questions and answer boxes to help me make my own decision while also taking into account the opinion of others. (Ref H317)

#### Positive website comments

We received many general positive comments about the website (106 mentions). Most comments praised the overall website (47 mentions):

Overall structure and sharing of information is excellent. (Ref H036)

All very informative. (Ref H111)

Whole site very helpful. (Ref H115)

Respondents liked the videos and presentations on the website (30 mentions). They said they were *well done. (Ref H241) and very interesting. (Ref H247).* 

Respondents also thought the visual illustrations were useful (20 mentions), in particular, the Visuals of the effect on the water levels. (Ref H171).

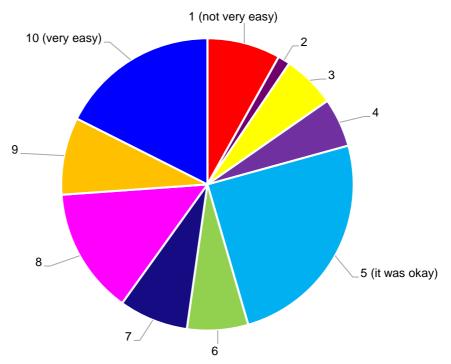
#### **Negative website comments**

19 respondents provided negative feedback about the website. Most of these respondents said that none of it was helpful (8 mentions) or specified an area of the website that was not helpful (8 mentions). Parts of the website respondents criticised include the interactive map, option summaries and presentations.

I found the explanations confusing and was 'blinded by science' - as I'm sure were others. (Ref H084)

The map is confusing and unnecessary. (Ref H187)

Presentations are excessively long, feel like your staff have been given roles they do not fit, and the visuals are poor. More use of drone footage would be easier to visualise. (Ref H316)



#### How easy did you find this website to navigate?

Figure 9: Navigating through the website

Most respondents found the website very easy or simply okay to navigate and 79% rated it a 5 or above out of 10 (figure 9).

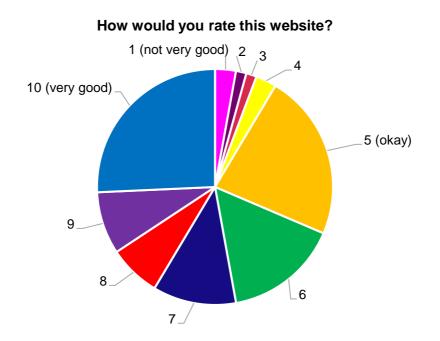


Figure 10: Rating the website

The majority of respondents thought the website was very good or okay and once again rated it a 5 or 10 out of 10 (figure 10). The highest rates after this were all between 6 - 9 out of 10.

#### 4.3.3 Our response to your feedback on our engagement approach

We appreciate the feedback regarding our engagement and interactive website, and will take this feedback on board when we next engage with the community.

Our engagement period was initially 7 weeks. We extended this to 8 weeks following feedback from the community. We also kept our interactive website open after the engagement period to enable the community to continue to explore the information we presented. The information about the scheme is also available to view on our Citizen Space website and we encourage the community to contact us with any further questions or concerns.

The residents and wider community does have an input into which of the options will be chosen to update the scheme. When we look to make a decision on which option to progress further and to start to design in greater detail, a range of factors are taken into consideration and fully reviewed. This includes aspects such as economic costs and benefits, environmental and amenity impacts and opportunities, legal obligations, health and safety and carbon. The feedback from the community has enabled us to gain a thorough understanding of the positions, interests, needs and expectations of the community. This is being used to develop the options. The review of all of this information is carried out by a Project Board, which is made up of senior decision makers at the Environment Agency, and once their review is concluded they will decide how to proceed with updating the scheme.

We will continue to speak with the community, share information and listen to feedback as the project moves forward. No decisions have been made on what option may be taken forward to update the scheme or how the scheme may look in the future.

## 4.4 Top 10 themes summary

Figure 11 shows the top 10 themes mentioned by respondents to our engagement. This includes responses to all interactive parts of our website and so the themes highlighted are wide ranging.

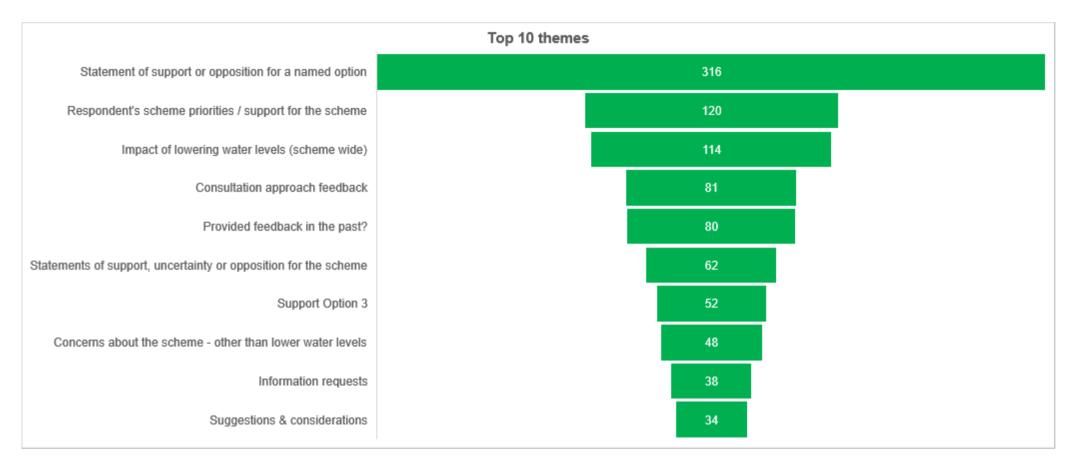


Figure 11: The top 10 themes mentioned by respondents to our engagement

We have presented a high level summary of the top 3 themes in the following sections. There are further details about these themes later in this report.

## 4.4.1 Statements of support or opposition for a named option summary

The 'Statements of support or opposition for a named option' theme received the most mentions (mentioned by 316 respondents). This theme captures comments of support or opposition to the six potential options for updating the scheme. These comments were captured in response to our survey question 7: After reading the information on this website about the options do you have a preference? (See Appendix A for the full survey).

Within this theme, statements of support for Option 3 was by far the most mentioned sub-theme (236 respondents). Typical statements include:

My belief is that Option 3 is the best way forward. (Ref C009)

We support Option 3. (Ref C042)

Option 3 is the only feasible one. (Ref C154)

Support for Option 6 was the next most mentioned sub-theme (44 mentions). Typical statements include:

Yes, absolutely Option 6. (Ref C276)

Yes I would support option 6. (Ref C245)

Option 6 due to the environmental benefits, increased flood protection and lower cost. (Ref C161)

In section 4.7 of the report we will explore the reasons behind the community's option preferences.

#### **4.4.2** Scheme priorities and support for the scheme summary

In the survey responses the community informed us about their scheme priorities. This is the second most mentioned theme in our survey, mentioned by 120 respondents.

The top three priorities raised by the community (with typical examples below) include:

• Maintaining water levels (44 mentions)

I appreciate the need to replace the existing structures before they fail, but keen that the water levels remain unaffected to enable recreational use to continue. (Ref B009)

• Maintaining the standard of flood protection and the importance of resilience to climate change (42 mentions)

The flood alleviation scheme is essential in the prevention of flooding for a large number of high value properties. (Ref B071)

• The importance of improving and/or preserving biodiversity, the environment and benefits to wildlife (33 mentions)

I think if there's a need to update something this should be done preserving the environment and wildlife in first place. The water in the river is important for many animals and organisms that benefit our ecosystem. (Ref B087) In section 4.6.1 of the report we will explore stakeholder's scheme priorities in more detail.

## 4.4.3 Impact of lowering water levels summary

Impacts of lowering water levels was the third most mentioned theme (mentioned by 114 respondents). The main topics raised by the community in relation to this theme (with typical examples below) include:

• Opposition to stated water level changes (50 mentions).

Any option that significantly reduces water levels is unacceptable. (Ref A187)

• Impact of lower water levels on biodiversity (including fish, wildlife and flora) (47 mentions).

Negative impact on wildlife as river will be too shallow to support mature fish and water plants. (Ref A144)

• Impact of lower water levels on recreation (35 mentions).

It's clear that any option which reduce levels will impair amenity and access. (Ref A178)

In section 4.5.1 of the report we will further explore the community's feedback regarding the theme 'impact of lowering water levels.'

## 4.5 What the community wanted to know

We invited the community to ask us questions about the scheme and options for updating it either by submitting questions via the website or emailing the FAS inbox. We received 261 responses, made by 149 individuals, through these channels. We received 188 responses via the website and 73 via email.

We responded to all questions we received. We published our responses to questions raised through the website on the 'Join the conversation' page and our responses were accessible to all visitors. Queries raised by email were responded to in a private email exchange.

Figure 12 shows the themes raised by the community in their questions to the inbox and website and the number of mentions for each theme. The top three themes mentioned by the community are:

- Impact of lowering water levels (scheme wide)
- Engagement feedback
- Support or oppose a named option(s) or the scheme in general

These themes are mirrored in stakeholder responses to our survey. In section 4.3 of the report we present the main engagement feedback provided by the community and our response to this feedback. Further details on the other two themes is provided in section 4.5.1 of the report (impact of lowering water levels) and section 4.7 (option preferences).

Other themes from our analysis are: information requests, scheme suggestions and considerations, comments regarding the validity of the decision making process, the impact of updates to the scheme on flood risk and concerns regarding scheme management and maintenance.

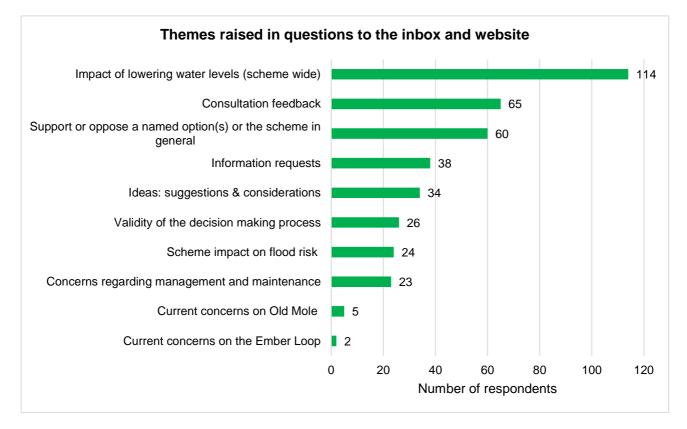


Figure 12: Themes raised in the community's questions to the inbox and website

## 4.5.1 Impact of lowering water levels questions

The impact of lowering water levels (scheme wide) was the most mentioned theme (114 mentions). Several topics were raised by the community in relation to the impact of lowering water levels including opposition to lower water levels, and concerns regarding impacts on biodiversity, recreation, safety, aesthetics and increased concentration of treated wastewater in the river. Figure 13 presents the question topics raised and their respective number of mentions.

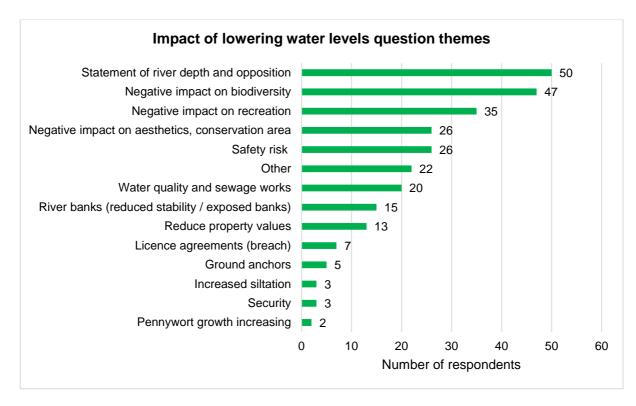
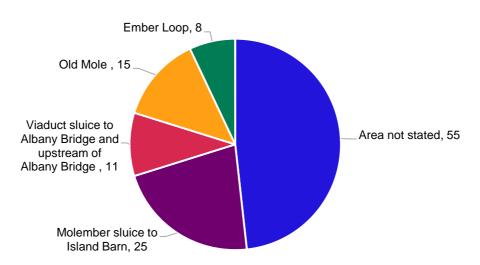


Figure 13: Topics raised by the community in relation to queries regarding lowering water levels

Over half of the respondents detailed the location they were referring to when sending queries to the inbox and website regarding options which lower water levels (figure 14). Of these respondents, most referred to the impact of lowering water levels in the Molember area.



Location of respondents questioning the impact of lower water levels

Figure 14: Location of respondents questioning the impact of lower water levels

The top themes regarding lowering water levels where a location has been stated is shown in table 1.

 
 Table 1: Top three question themes regarding lowering water levels where a location has been stated (number of mentions in brackets)

Molember sluice to Island Barn 25 respondents	Viaduct sluice to Albany Bridge and upstream of Albany Bridge 11 respondents	Old Mole 15 respondents	Ember Loop 8 respondents
Impact on recreation and amenity (13) Statement of river depth and opposition to change (12) Impact on aesthetic of the area / conservation area (10)	Statement of river depth and opposition to change (7) Impact on aesthetic of the area (6) Impact on recreation and amenity (4) mentions Impact on biodiversity (4)	Statement of river depth and opposition to change (10) Impact on biodiversity (5) Impact on recreation and amenity (3)	Concern regarding lower water levels (6) Impact on biodiversity (4) Reduce property values (1)

As shown in table 1, respondents were mainly interested in knowing the impacts of lowering water levels on:

#### • Recreation and amenity

Stakeholders are concerned about the impact of lower water levels on the use of the river for boating, canoeing, paddle boarding and wild swimming. Examples of comments and questions from the community:

You clearly lean towards a low cost solution (503) but have been unable to tell those who live alongside the concrete upstream of Molember sluice what you intend to do to replace the removal of amenity. (Ref A226)

I and many riparian owners who have a small boat or canoe will be unable to launch it. (Ref A075)

The river is currently used by residents for recreational use, particularly with canoes and rowing boats. What is your honest assessment of the impact of options 6 and 5 on this during the height of summer when the level of the river can be expected to be at its lowest, not just for the main channel but for the Old Mole? (Ref A132)

#### • Biodiversity

Stakeholders are concerned about the impact of lowering water levels on the existing habitats which support a variety of flora and fauna in the area. Examples of comments and questions from the community:

We are also concerned about the impact on wildlife. The River Ember is home to a very large variety of coarse fish including carp, chubb, dace and pike. If the river level is reduced to the extent that is envisaged by the EA, none of the larger fish will be able to survive. (Ref A255)

At present, we have at least 16 species of fish in the Old Mole, including rare Stone Loach, Bull head, Swan Mussels. Has analysis been done on the effect of their breeding in the shallow gravel etc. (that they may use) if water levels change? (Ref A178)

How will the natural environment or biodiversity of the Ember Loop be improved under option 6 and how does it give priority to natural solutions? This part of the Ember will be turned from a 6 metre wide river into a trickle. (Ref A233)

#### • Aesthetic of the area

Stakeholders are concerned how the aesthetic of the area will change with lower water levels, with particular concern around exposing the concrete channel of the River Ember. Some respondents are concerned about how lower water levels in the River Mole will impact on the character of the East Molesey Bridge Road conservation area. Examples of comments from the community:

We did not agree with the hard landscaped canal at its outset but at least its ugliness is relieved by the water level. Lowering levels to expose this sheet pile and concrete corridor will stop its use as an amenity without improving the wildlife habitat. (Ref A226)

The river will become a canal and an eyesore. (Ref A120)

It will be a wide mud bank with a stream of water mostly static and occasionally dribbling along. The river banks will collapse and the river/stream will be awful to look at. (Ref A059)

Respondents to our survey also reiterated their concerns regarding the potential impacts of lower water levels when we asked them how they feel about the scheme (see section 4.6.2 of the report for more details).

## 4.5.2 Support or opposition for a named option or the scheme

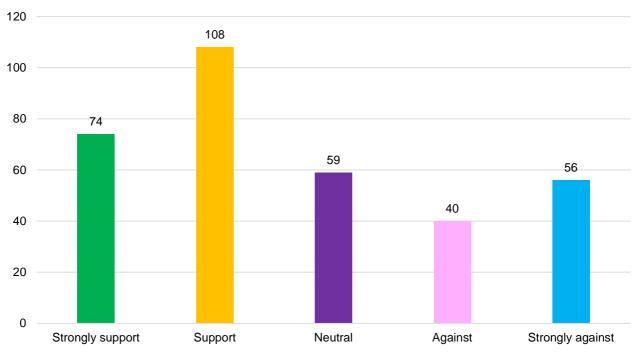
In question 7 of our survey, we asked the community if they had an option preference (Question 7: After reading the information on this website about the options do you have a preference?). (See section 4.7 of the report for more details). We found that respondents used the opportunity for questions to the inbox and website to reinforce their support for Option 3 (34 mentions) and opposition to Option 6 (20 mentions).

In section 4.7 of the report we will explore the reasons behind the community's option preferences.

## 4.6 How the community feels about the scheme

We found that respondents' understanding of 'the scheme' varied. Understandings of 'the scheme' included 'the current scheme', 'the updated scheme', 'Option 3: gate replacement' or 'Option 6: remove all gates, passive flood relief channel with rock ramps'. We apologise for any confusion caused when answering questions about 'the scheme' and will ensure the subject matter referred to in future surveys is clearly defined.

Over half of respondents (54%) stated they strongly support or support the plans to update the scheme (figure 15). Well over a quarter (29%) of respondents stated they are strongly against or against plans to update the scheme, and under a fifth of respondents (17%) felt neutral about the plans.



Question 5: What best describes your feelings towards the plans to update the scheme? (334 responses)

Figure 15: How respondents to the survey feel about the scheme

We asked respondents to write about how they feel about the scheme, question 6 (see Appendix A: Survey questions). We received 289 responses to this question. The top three themes mentioned by respondents include:

- Scheme priorities and support for the scheme (120 respondents) (see section 4.4.2 of the report).
- **Concerns about the scheme** (112 respondents), particularly the impact of lower water levels (87 respondents).
- General statements of support, uncertainty or opposition for the scheme (87 respondents).

We will look at the top two themes in more detail in section 4.6.1 and 4.6.2 of the report. The way respondents feel about the scheme is represented in figure 15, which reflects the spread of statements of support, uncertainty and opposition stated in responses to question 6.

Other themes from our analysis are: statement of support or opposition for a named option, engagement feedback, comments of support for Option 3 and comments of support or opposition for Option 6.

## 4.6.1 Scheme priorities and support for the scheme

The top three priorities for updating the scheme include the need to:

- Maintain water levels (44 mentions).
- Maintain the standard of flood protection (42 mentions).
- Improve and preserve biodiversity, wildlife and the environment (33 mentions).

The main reasons why respondents want to maintain water levels are for:

• Recreational use and access (20 mentions).

The recreational opportunities provided by the current scheme is a key reason for respondents wanting water levels to remain as they are. For example:

We love the river as it is with the amenity it provides for access and boats. (Ref B184)

The River Mole is such a part of the community and provides access to water activities for the whole community. (Ref B239)

Important to maintain flood defences without harming visual amenity/recreation/wider benefits of the river. (Ref B264)

• No stated reason (15 mentions).

Some respondents did not provide a reason why they want water levels to be maintained as they currently are. For example:

I would like you to follow an option which will result in no drop in water level. (Ref B173)

I believe water levels should be maintained. (Ref B237)

It should be maintained as-is (or the infrastructure modernised where appropriate) to maintain current river levels. (Ref B285)

• Wildlife and biodiversity (9 mentions).

Some respondents believe the water levels need to be maintained to protect the wildlife supported by the River Ember, River Mole and Ember Loop. For example:

The current level of the Mole should be maintained as a natural habitat for birds, swans and wildlife. (Ref B138)

I felt strongly that the river levels should be maintained all year round to protect wildlife. (Ref B163)

It's vital the water levels are maintained for wildlife including species that depend on the insect life such as endangered bat species who feed on the breeding insects. (Ref B222)

Respondents also told us that maintaining the standard of flood protection is important (42 mentions) where protecting homes from flooding is a key priority. Some respondents stress the importance of flood protection due to climate change and resulting extreme weather events.

Other respondents state the importance of choosing a scheme which improves and preserves wildlife and the river environment, and the importance of local wildlife in people's lives (33 mentions). Many respondents state there is a balance to be found between protecting wildlife whilst also maintaining flood protection and ensuring ongoing recreational use. For example:

I'm very interested in improving spaces for nature so this scheme is a great opportunity to improve existing habitats. (Ref B003)

I find it exciting to restore river to more natural state while increasing environmental benefits. (Ref B012)

It's important that the scheme protects our neighbourhood to increased extreme weather and also improve biodiversity and recreation along the rivers. (Ref B015)

The priority is to preserve the local habitat for wildlife whilst also protecting local homes from flooding to the best extent possible. (Ref B144)

Important the right balance is found between maintaining defences, protecting wildlife and ensuring ongoing recreational use. (Ref B182)

## 4.6.2 Concerns about the scheme

112 respondents stated they have some concerns about the scheme when asked how they feel about the plans to update the scheme. Concerns regarding options which result in lower water levels is the main concern highlighted by respondents (87 respondents). We have categorised these concerns into the following sub-themes (shown in descending order of number of mentions). Respondents to the survey are concerned about the possible negative impact of water level reduction on:

- Recreational use of the river, river access and local amenity (30 mentions). Many respondents state how their use and enjoyment of the river for boating, canoeing, paddle boarding, wild swimming and fishing would be negatively impacted by any option which lowers water levels. Some state how this will have a negative impact on their quality of life.
- **Biodiversity and the natural environment** (26 mentions). Many respondents believe that the existing flora and fauna (including fish and water bird populations) would be negatively impacted by a permanent reduction in water levels which would destroy existing habitats. The impact on protected trees on the river bank has also been mentioned.
- Aesthetics of the area, and the visual impact (14 mentions). Exposing the engineered concrete channel of the River Ember is a concern to some respondents stating this will impact on their 'visual pleasure' of the area, make the area look 'less appealing' and be an 'eyesore'. Some respondents also express concern over the River Mole and Ember becoming a 'muddy stream' or 'ditch'.
- **Property value** (9 mentions). A common concern is any option which lowers water levels could lead to a lowering of property prices. This is a key concern for residents whose properties back on to the River Ember and River Mole due to the change in visual aspect and access to the river associated with lower water levels.

- Security (5 mentions) and privacy (1 mention). Some respondents are concerned that a river with lower water levels may become navigable to people on foot (via the exposed banks) and are concerned this may be used as an opportunity to breach property security by accessing properties via the river. Concerns regarding the impact on insurance premiums has also been noted. There is also mention of a reduction in privacy for houses backing on to the river if lower water levels encourages people to walk along the exposed river banks.
- Outflows from the Esher Wastewater Treatment Works (5 mentions). This is a theme which was commonly mentioned in the community's questions to the inbox and website (20 mentions) (see section 4.5 of the report). The Thames Water Esher Wastewater Treatment Works has a discharge point adjacent to the confluence of the River Mole and River Ember. Some respondents are concerned that with lower water levels, there will be less water available to dilute the effluent from the wastewater treatment works, leading to higher concentrations of effluent in the river.
- **Safety** (3 mentions). Should an option be chosen which lowers water levels, there is some concern about there being a high drop from the towpath to the River Ember. In particular, there is a concern this will present a health and safety hazard to older people, children and pets.
- **Ground anchors** (3 mentions). There is some concern about the impact of lower water levels on destabilising the ground anchors supporting the metal walls of the Ember Channel. There is a concern that this would then destabilise adjoining land and property.

Some respondents did not provide a reason for their concern regarding the impact of lowering water levels on the area (24 mentions).

48 respondents have stated other concerns about the scheme without mentioning impacts related to lower water levels. The most mentioned concerns include impacts of any change in the scheme on: wildlife (15 mentions), the standard of flood protection (14 mentions) and visual changes to the area (13 mentions).

#### 4.6.3 Our response to your concerns

#### • Recreational use of the river, river access and local amenity

We're very aware that residents living alongside the channel will be concerned about how it may look if water levels were reduced, and how it would affect recreational activities. We understand that many residents and those from the local area do use the River Ember for activities such as paddle boarding and canoeing.

As the project moves forward, and once a decision on the future of the scheme has been agreed, it is possible that we could explore the expansion of recreational use and to understand where it may be possible to introduce items such as steps to allow better access to the river.

If an option was progressed that meant lower water levels, we would work very closely with residents to design a scheme that would address concerns and provide mitigation for potential impacts.

#### • Biodiversity and the natural environment

In terms of the environment, the Lower Mole Flood Alleviation Scheme was primarily designed to protect property from flooding when it was first built, and did not consider ways for biodiversity and wildlife to flourish along the channel. Whilst the river now contains a variety of species, it does not have abundant variability in habitat and offers a uniform environment, therefore the species diversity is quite low.

With modern techniques we could create a scheme that still provides protection against flooding, which is the main objective of this project, whilst seeking ways to allow the river to function more naturally and allowing a more diverse habitat for river species and wildlife.

Through the feedback we have received, we are aware how much local resident's value and enjoy the river wildlife and there is concern that the options which give rise to water level lowering (Options 5 and 6) will have a negative impact on biodiversity. Our project team includes environmental specialists and using their knowledge and from ecological work carried out to date as part of the considerations to update the scheme, improvements to the overall biodiversity of the river are considered feasible.

Whilst it is likely that without mitigation the proposals will have some negative environmental effects at some locations (such as the side channels), the overall view is that Options 5 and 6 allow the river to function in a more natural way. This includes opening up for fish and eel passage and allowing more diverse habitat for aquatic species (including invertebrates, fish and plants) and terrestrial species, for example bats and birds.

We have shared our initial design concepts with a number of wildlife groups as part of the early engagement process for this project. We will continue to work with these groups as the project progresses and will seek their views and feedback. The ecologists and geomorphologists within the project team will use information provided by these wildlife groups, as well as the feedback from residents, as part of any decision making for the updating of the scheme.

#### • Aesthetics of the area, and the visual impact

We know residents are concerned about how the channel may look if water levels are reduced. If an option is selected that reduces water levels we will work very closely with residents to explore opportunities to make visual improvements to the way the scheme looks and to help mitigate this issue. However, it is expected that over time exposed banks and any exposed river bed would naturally vegetate with native species.

See section 6.1 of the report for our proposed mitigation measures.

#### • Standard of flood protection

Our main priority is to maintain the standard of protection against flooding the scheme currently offers to householders and businesses. The enlarged river channel provides additional capacity for the high flows in the river during periods of prolonged and heavy rainfall. The sluice gates were installed during the construction of the channel for amenity and recreation purposes. The gates remain closed on a day-to-day basis to retain a fixed water level, but in times of high flow, they are opened to allow the water to pass, if they were to remain shut the risk to flooding would increase.

Should an option be chosen which proposed the removal of the sluice gates, the flood relief channel would continue to convey flood flows as it was designed to do. The flows from the River Mole and River Ember reaching the River Thames would not change and the combined flood risk from the River Mole and River Thames would not increase. In addition, if gates were removed the capacity of the channel would be increased as water would no longer be stored in the channel upstream of the gates and therefore higher flows could be accommodated within the channel. This would reduce flood risk compared to the present day situation.

#### • Property value

We recognise this is a serious issue for many homeowners on the channel. We can confirm that property owners do have the right to claim compensation for any damage or loss arising from our flood risk management works. Evidence would be required to justify and prove any claim which will be assessed in accordance with the Water Resources Act (1991).

#### • Security and privacy

Security is an important factor and remains a key consideration in the development of options. We will consider improving fencing along parts of the scheme that are under our ownership to manage public access.

However, we also need to consider the impact further fencing would have on how the scheme looks, how the area is used for amenity purposes and to ensure that any additional fencing does not have any impact on the ability of the channel to convey high flows or increase the risk to flooding by catching debris.

Moving forward, we will seek to achieve the right balance between security, amenity and aesthetics, without compromising the scheme's primary function of reducing flood risk.

#### • Outflows from the Esher Wastewater Treatment Works

We are engaging with Thames Water to enhance our understanding of the impact of treated effluent in the Lower Mole from the different options.

Thames Water have informed us that their Asset Planners have taken a high level view on our proposals and do not foresee this having a major impact on the concentration of treated wastewater in the river. As the project moves forward, Thames Water wish to assess the increased visibility of their discharge outfall point from Esher Wastewater Treatment Works, and the impact of lower water levels on river bank erosion should their outfall point be exposed.

An environmental assessment will be carried out and water quality will be one of the topic areas covered, including discharge from the wastewater treatment works. Further discussions with Thames Water will be held as necessary.

Should the volume of the receiving water body change, then there may be a need for Thames Water to have their current Discharge Permit reviewed to align with the change flow / volume regime in the river.

#### • Safety

Safety is a priority for us. We're aware through our previous discussions that safety is a key issue with residents as well. Whichever option is chosen we would work closely with residents as we carry out further assessments, sharing information and working together on potential mitigation that can be carried out as part of the updating of the scheme.

A Public Safety Risk Assessment will be completed once an option has been selected and we would seek not to increase any risk to residents and the public. Mitigation measures would be put in place if any potential increases in risk were identified.

#### • Ground anchors

We are aware of the presence of ground anchors and concerns around their functionality if an option is selected that impacts water levels. We have not yet begun structural and geotechnical

surveys and analysis, but this work would be carried out during the detailed design stage of the project should an option be selected which could lead to a change of water level.

# 4.7 **Option preferences**

We asked respondents if after reading our information about the options do they have a preference. 327 respondents answered this question. The top 5 response themes are:

- Statements of support or opposition for a named option, 316 respondents.
- Reasons for Option 3 support, 52 respondents.
- Reasons for Option 6 support, 18 respondents.
- Reasons for Option 6 opposition, 14 respondents.
- Reasons for Option 5 opposition, 13 respondents.

316 respondents stated their option preferences. Respondents have used this question to tell us about options they oppose as well as their preferences. We found some respondents have stated support or opposition for more than one option. Figure 16 shows the number of mentions of support and opposition for Options 1 to 6 and the overall scheme.

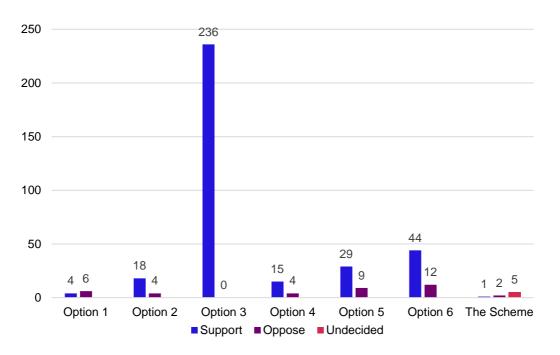


Figure 16: Support v oppose: Options 1 to 6

The greatest support is for Option 3 (236 mentions) compared against the other options. The key reasoning for the community's support for Option 3 being that the option maintains the existing water levels (30 mentions) and offers continued protection of properties from flooding (20 mentions). Option 6 has the second highest support (44 mentions), with the top reasons for support being lower cost (11 mentions) and providing the best flood protection (8 mentions).

Table 2 summarises the main reasons why respondents support or oppose options 3, 4, 5 and 6. Respondents did not provide reasons for their support for Options 1 or 2. Options 1 and 2 not being suitable or being in the community's interest is the main reason why respondents oppose these options.

	Option 3	Option 4	Option 5	Option 6
Support	Maintains water levels and water flow (30) Maintains flood defence, importance of keeping sluice gates in place (20) Prevents damaging existing ecosystems, provides ecological enhancements (18) Reasonably priced (13) Minimal change in the visual amenity (12)	In favour but likely too expensive and won't get approved (1)	Provides the best flood protection (4) Maintains current water levels (4) Impact on recreational activities (4) Prevent damaging existing ecosystems (2) Low cost (1)	Low cost (11) Provides the best flood protection (8) Prevent damaging existing ecosystem, provide ecological enhancements (7)
Oppose	No comments opposing option 3	Oppose the reduction in water levels (4) Negative impact of lower water levels on biodiversity and ecosystems (2) Impact on the Old Mole (close to Zenith Weir) (2)	Concerns regarding river depth, risk of river running dry (5) Impact alongside the Old Mole channel close to Zenith Weir (3) Impact on Viaduct sluice to Albany Bridge and upstream of Albany Bridge (2) Negative impact on recreation use (2) Negative impact of water level reduction on the environment / biodiversity / ecosystem (2)	Concerns regarding river depth, risk of river running dry (7) Negative impact of the water level reduction on the environment / biodiversity / ecosystem (3) Impact alongside the Old Mole channel close to Zenith Weir (3)

#### Table 2: Reasons for opposition or support for Options 3, 4, 5 and 6 (number of mentions in brackets)

We have looked at levels of support and opposition for Option 3 and Option 6 on a week by week basis over the 8-week engagement period (figure 17). There is a very clear spike in the level of support for Option 3 in week 7 (18 - 24 March) with 146 comments of support for Option 3. No respondents have stated they oppose Option 3.

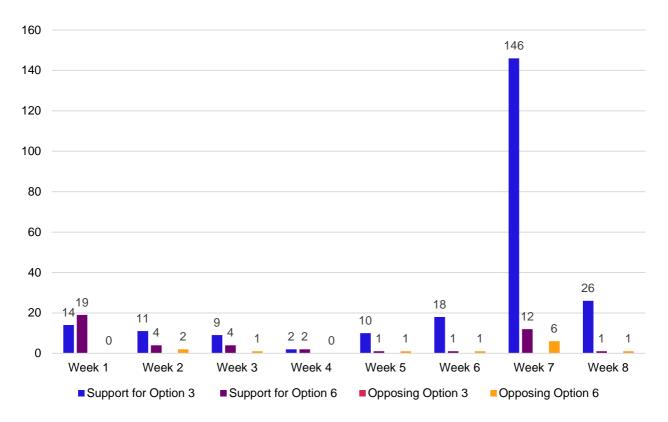


Figure 17: Support and opposition for Options 3 and 6, week by week

# 4.8 Further comments

At the end of our survey we asked respondents if they have any additional comments. 178 respondents answered this question. Respondents have used this as an opportunity to reinforce points made in response to earlier questions or to state they have no further comments (31 mentions). A summary of the top three themes is shown below, reflecting the final take home points respondents wanted to leave us with.

67 respondents reiterated their scheme priorities to:

- Preserve and/or improve biodiversity/wildlife/environment (20 mentions).
- Improve recreational access along the rivers (boating/walking/cycling), including specific suggestions (15 mentions).
- Improve aesthetics, including specific suggestions (7 mentions).

39 respondents highlighted their concerns about the scheme, namely concerns about the negative impact of options which lower water levels including:

• Negative impacts of lowering the water levels on wellbeing and people's lives (13 mentions).

- Negative impacts of lowering the water levels on biodiversity and wildlife (12 mentions).
- Negative impacts of lowering the water levels on aesthetics (7 mentions).

50 respondents provided feedback on our engagement approach. This again reflects feedback provided earlier on in our survey when we asked if respondents feel they have been listened to in the past. (See section 4.3 of the report).

#### 4.9 Community ideas and suggestions

In this section, we wanted respondents to tell us what potential opportunities and improvements they would like to see to the area as part of any future updates to the scheme. We received 50 ideas in total, but some respondents used this as an area to comment on option preference or to state they would like water levels to be retained rather than providing an opportunity for the area (figure 18).

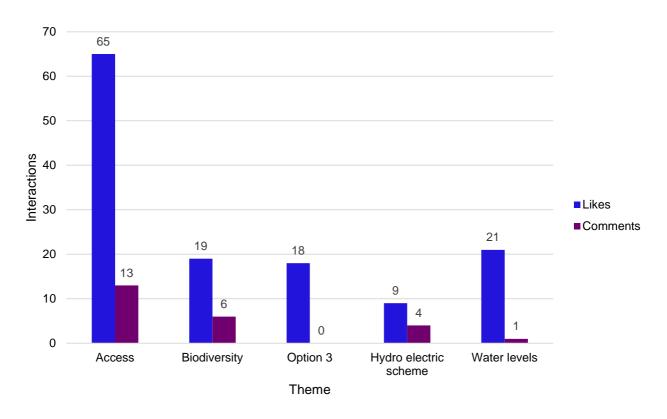


Figure 18: Popular idea themes: number of comments and likes

Ideas around improving access proved to be the most popular with 65 likes and 13 comments. This was followed by ideas on water levels (21 likes, with 1 comment), biodiversity (19 like, 6 comments), supporting Option 3 (18 likes, 0 comments) and hydroelectric scheme ideas (9 likes, 4 comments).

#### Access ideas included:

I would like to be able to walk or cycle along the Ember riverbank all the way from Molesey to Esher. Currently some sections are blocked. (23 likes)

#### Provide access along the whole scheme (17 likes)

#### **Biodiversity ideas included:**

Retain water levels (15 likes) It is important to retain this very special natural habitat. So maintaining existing water levels is crucial. (2 likes)

Beaver Reintroduction (11 likes)

**Option 3** comments were all about supporting option 3, rather than any ideas for this option.

**Hydroelectric scheme idea** was to do with replacing the sluice gates with hydroelectricity generation (9 likes).

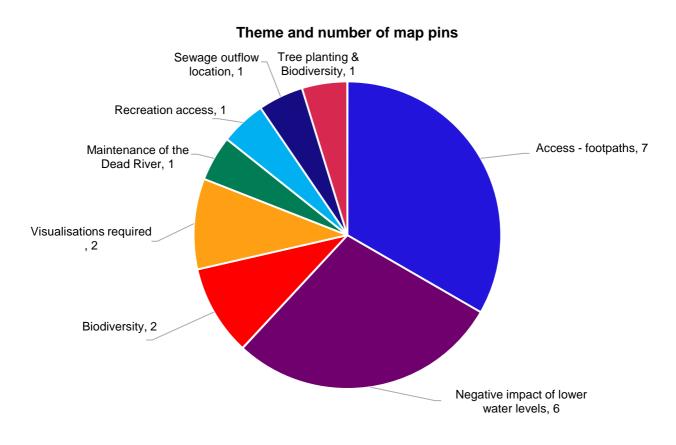


Figure 19: Theme and number of map pins

We received 21 map pins (figure 19). Similarly, to the ideas section, the most popular comments on the map were in relation to access, with 7 mentions. This was closely followed by comments about the negative impacts of water levels (6 mentions). There were also a couple of comments about biodiversity and a request for visualisations.

#### Access - footpaths comments included:

The existing bridge in this area could be adapted for pedestrian access? Create footpath proceeding north along the east side of The Mole? Possible site for footbridge - links Molesey Heath to extended area.

#### Comments about the negative impacts of water levels included:

If any option other than 3 is taken, the old Mole will not receive water. The River Mole cannot be allowed to reduce in height or dry up as it would have a significant impact on wildlife, local environment and recreation. Level needs to be sustained along old Mole to protect habitat for existing wildlife.

#### **Biodiversity comments included:**

It is an essential ecosystem in the local area which aids in diversity. Every effort / best endeavours must be made to retain this permanently.

#### Comment about visualisations required included:

Can we have some visualisation images of the Ember Loop for each of the options?

#### 4.9.1 Our response to the community's ideas

We are carefully reviewing the community's ideas and suggestions incorporating them where possible into our options. Following Defra's Flood and Coastal Erosion Risk Management appraisal guidance, we will also consider other factors in the refinement process such as economic costs and benefits, environmental and amenity impacts and opportunities, legal obligations, health and safety and carbon. We will announce any updates at the end of the year, 2021.

#### • Biodiversity

Many of the comments received were in relation to maintaining water levels to retain existing habitats. Any option which removes sluice gates from the River Ember will need to address impacts from changes in water levels. The project is aiming to achieve overall net gain in biodiversity throughout the Lower Mole, and in doing so will consider the river system as a whole. Changes in water levels will be considered in our environmental assessment work, which will be carried out as the project progresses. Should an option be chosen that will result in a drop in water levels, we would need to demonstrate that we can either reduce any negative impact from this, such as finding a way to maintain a flow of water into side channels, or by offsetting what is lost by creating compensatory habitat.

#### • Access

Whilst some sections of the access track adjacent to the river are available for public recreational access, unfortunately it is not currently possible to walk the entire length of the Ember and Mole channel downstream of Hersham.

This is due to a number of reasons. Firstly, the Environment Agency does not own all the land alongside the channels, therefore to give permission to provide access is not wholly our decision. Secondly, the access tracks downstream of Esher Road are only available to those residents who hold Amenity Licenses. Finally, our land at Spa Meadow is an operational depot, which is also used to store equipment and therefore needs to be locked for public safety and security reasons.

As we progress decisions on the future of the scheme we are very open to exploring access options with other landowners.

#### • Hydropower

There are some constraints to installing hydropower schemes on this stretch of river. Over the past 15 years we have held high level discussions with residents and commercial developers regarding the potential use of hydropower. The previous discussions considered all the sites along the River Ember. It was highlighted that the best option for a potential hydropower scheme would most likely be Viaduct or Royal Mills, as these structures have the greatest

change in height from upstream to down (head difference), in the region of 3.3m. Both of these sites were not taken forward due to one or more of the following:

- Royal Mills is not under our ownership and would involve an additional party in the scheme as well as the structure owner's consent.
- The structure at Royal Mills is considerably older (built in the 1950's) than Viaduct so it would be expensive to construct and/or modify it for hydropower.
- The River Mole has a considerable range of flows along its length and does not provide strong flows all year round.
- During the summer months, very little flow would be available to pass over Viaduct in order to generate power.
- Any turbine or Archimedes screws could lead to a reduction in the flood discharge. Maintaining the current standard of protection the scheme currently offers against flooding is the main priority for this scheme.

# 5. Summary and conclusions

Over our 8-week engagement period we have received significant interest and feedback on the options to update the Lower Mole Flood Alleviation Scheme. Our website received 5,400 hits made by 5,250 unique visitors. We received over 1,000 pieces of feedback from the website and project inbox.

Stakeholder responses highlighted that there is support for updating the scheme. From our analysis of these responses to the different options, the greatest support was generated for Option 3 compared against the other options. The key reasoning for stakeholder support for Option 3 being that the option maintained the existing water levels and offered continued protection of properties from flooding. Option 6 had the second highest support, with the top reasons for support being lower cost and providing the best flood protection.

We have noted particular themes of support, interest, ideas and areas of concern. For example, there was support for maintaining water levels and maintaining the standard of flood protection. Themes of interest included, preserving the environment and securing recreation use. Popular ideas from the ideas board and interactive map included improvements to access along the Lower Mole and the introduction of beavers. We will be looking at the feasibility of implementing the ideas submitted in more detail as the scheme progresses.

From the survey responses we have noted that many respondents have raised concerns regarding the impact of lower water levels and this correlates with the feedback we received from our 2019 engagement. However, these responses have helped us to understand these concerns in more detail, and to determine what refinements to our options we should consider. Of particular note were concerns that the river would run dry, and with lower water levels, a general sentiment that this would lead to a loss of recreational opportunities and reduction in local biodiversity. Other themes that have come from our analysis are concerns over the visual impact of lowering water levels, concerns over safety, effluent in the river, property values and security.

Following your feedback, we are exploring additional works that we can add into our refined options analysis. These additional works would help mitigate some of the concerns the community have raised. Mitigation options being considered include measures to ensure continued flow into the Ember Loop and Old River Mole, and measures to reduce water level change in the main River Ember flood relief channel for Options 5 and 6. These measures would help to limit the visual impact of lowered water levels, help retain recreation opportunities and enhance biodiversity (see section 6 of the report for our next steps).

We would like to thank everyone who has contributed to our engagement process. The feedback we have received from the community is part of the decision process to take this project forward. We will continue to speak with the community, share information and listen to feedback as the project progresses.

#### 6. What are the next steps?

We will use the stakeholder feedback, from our engagement with the community in spring 2021, to help us refine the options. We will also consider other factors in the refinement process such as economic costs and benefits, environmental and amenity impacts and opportunities, legal obligations, health and safety, and carbon.

#### 6.1 Our proposed mitigation measures

We are developing the options by taking into account the feedback from the engagement with the community and seeking to mitigate changes in water levels whilst maintaining flood protection. This will include assessing the additional cost of the mitigation measures and the benefits they provide.

The main concern highlighted by respondents (87 respondents) was with those options which would result in lowering of water levels. In response to this feedback we are looking at options to mitigate changes in water levels to maintain flows in the Old Mole and Ember Loop and reduce the amount of water level change in the main channel.

As the scheme currently stands there are sluice gates in place which maintain artificially high water levels in normal conditions, but have to be opened when flows in the river are high. These sluice gates are active structures as they can be opened and closed. We are investigating the impact of adding passive structures to the river to maintain the water levels in options where we are proposing to remove the sluice gates. Passive structures are permanent stationary structures, such as rock ramps or weirs, which do not require regular maintenance as they do not have moving parts. We are carrying out flood risk modelling work to see how the replacement of sluice gates with passive structures impacts flood risk. We will not take forward any options which increase flood risk.

Measures to mitigate concerns regarding visual change and security will be considered in the detailed design. In determining the type and location of the mitigation measures, we would need to ensure they would not increase the risk of flooding.

We will include within the cost of our options an allowance for measures to mitigate the concerns raised around visual impact and security. Agreement on the implementation of the measures will be carried out on a case by case basis with residents during the detailed design phase.

# 6.2 Ongoing engagement

Working in partnership with others is important in our decision making for the updating of the scheme.

We will be working with key stakeholders including Surrey County Council and Elmbridge Borough Council during the options refinement process, ensuring they are updated on the decision making process as we go forwards.

We will also be liaising with wildlife groups as we refine the options and will seek their feedback on our proposed mitigation measures. The ecologists and geomorphologists within the project team will use information provided by these wildlife groups, as part of any decision making for the updating of the scheme. We will also continue to engage with the community. We will inform the community of our preferred option at the end of the year, 2021, and in the following year seek feedback on our detailed designs.

# 6.3 Our Project Board's decision making process

Once our option refinement process is completed, we will then present the refined options to the Project Board for their consideration and selection of a preferred option. The Project Board includes senior decision makers at the Environment Agency, and they will decide how to proceed with updating the scheme.

The Project Board will, as well as looking at cost, review the amount of benefits an option will deliver and the timescales over which those benefits occur. The Project Board will ensure that we are integrating community views as well as the environment and economics into the heart of the decision-making process. Both monetised and non-monetised benefits will be taken into account when assessing if the benefits outweigh the costs. Assessed factors include, but are not limited to, environmental and amenity impacts and opportunities, legal obligations, health and safety, and carbon implications. This means the Project Board is not bound to just select the option which provides the best economic value for money.

The project will then need to be recommended for approval by the Large Projects Review Group (LPRG). This is a group independent from the Project Board which provides assurance and confidence that the project will achieve the planned benefits and outcomes and adhere to HM Treasury guidelines.

# 6.4 Our timeline

We will publicly announce a preferred option, and the reasons for selecting this option, at the end of the year, 2021. In order for the project to reach the detailed design and then construction phase, further work, which includes gaining staged approval for funding, is required. As such it is not possible to provide a detailed timeframe for implementation at the present time. We have shown the main stages in the programme going forwards below (figure 20).

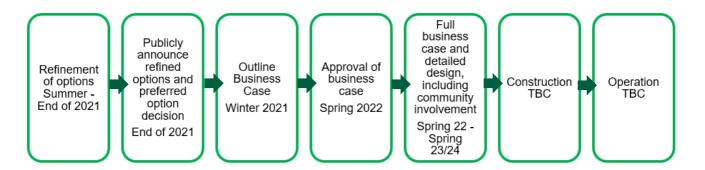


Figure 20: Main stages of the programme going forwards

Following the announcement of the preferred option to update the scheme, we will seek approval of the Outline Business Case (OBC). Following approval of the OBC we will then progress with the Full Business Case (FBC) and detailed design for the preferred option, which we estimate will take a couple of years. The detailed design process will include stakeholder

and community involvement, and during which plans, specifications and construction costs will be refined.

Construction will take place after the FBC has been approved, but commencement will be subject to the availability of funding. The time frames that have been suggested are our best estimates at this the present time but are subject to change as the project develops.

We will update our Citizens Space page as the scheme progresses:

<u>https://consult.environment-agency.gov.uk/ksles/lower-mole-flood-alleviation-scheme/</u>. In addition the project inbox <u>FASProject.LowerMole@environment-agency.gov.uk</u> will still be available for any further questions the community may have. This will still be monitored by our project team.

# **Appendix A. Survey questions**

- 1. Before today had you heard about the plans to update the Lower Mole FAS?
  - Yes
  - 🛛 No
- 2. After exploring the website, how well do you understand the scheme and the potential options for updating it?
  - □ Fully
  - □ Partly
  - □ Not sure
  - Don't understand
- 3. If you have commented in the past do you think your feedback has been listened to?
  - Yes
  - 🛛 No
  - Not applicable
- 4. Please explain your answer to Question 3: *If you have commented in the past do you think your feedback has been listened to?*
- 5. What best describes your feelings towards the plans to update the scheme?
  - Strongly support
  - Support
  - Neutral
  - □ Against
  - □ Strongly against
- 6. Please use this space to write about how you feel about the scheme.
- 7. After reading the information on this website about the options do you have a preference?
- 8. What sections of the website did you find most helpful in explaining the scheme?
- 9. Do you have any additional comments?

# Appendix B. Coding framework

Inbox and website questions

Theme / Sub theme	Totals (number of respondents for main theme / mentions for sub-themes)
Consultation approach	65
Extension / engagement period too short	37
Website feedback	22
Other	18
Need face to face engagement / criticise timing of engagement during pandemic / accessibility	15
Engagement the same as previous engagement with the community/Lack of stakeholder influence over the final decision	9
Misleading information (excluding cost)	9
Timeframe for the decision making process	8
Statements of support or opposition for a named option	60
Support for Option 3	34
Oppose the scheme	21
Opposing Option 6	20
Opposing Option 5	12
Opposing Option 4	7
Support for the scheme	4
Opposing Option 1	3
Support for Option 4	3
Support Option 2	3
Support for Option 1	2
Opposing Option 2	2
Support for Option 6	2
Opposing Option 3	2
Impact of lowering water levels (area not identified / stated)	55
Biodiversity, fish, wildlife, flora - including negative impacts	26
Safety risk	19
River depth - including oppose reduction in water levels	15

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Ember Loop (excluding pennywort management)	3
Clean river bed	2
Opening up paths (Public and towpaths)	2
Mitigation measures	2
Pennywort management	2
Validity of the decision making process	26
Validity of the data used	15
Concerns regarding cost data	12
Motivation behind decision making process	7
Other	6
Impact of lowering water levels (Molember sluice to Island Barn - Ember channel)	25
Recreation use (boats, kayaks) / access / amenity - including hindering recreational use	13
River depth - including oppose reduction in water levels	12
Aesthetics / conservation area - including negative impacts	10
Biodiversity, fish, wildlife, flora - including negative impacts	8
Other	7
Water quality and wastewater works: Negative impact on water quality / negative impact due to discharge from wastewater works	7
Safety risk	5
Licence agreements - including breach of agreement	2
Reduce property values / negative impact on property	2
River banks (inc <i>reduced</i> stability / exposed banks)	1
Increased siltation	1
Scheme impact on flood risk	24

Ability of the scheme to respond to flooding	14
events / Scheme impacts on flood risk	
Removal of the flood gates	13
removal of the need gates	
Other	5
	Ŭ
Impact on flood risk downstream of Molember	4
and interaction with the Thames	
Concerns regarding management &	23
maintenance	
Litter/fly tipping	9
	9
Trees/vegetation	7
Tees/vegetation	1
Doppywort Inaction not identified	5
Pennywort - location not identified	5
Flow rate	4
Riparian/land ownership	3
Scheme impact on the Old Mole (not to	15
include Viaduct sluice to Albany Bridge and	
upstream of Albany Bridge')	
River depth / reduction in water levels - including	10
oppose reduction in water levels	
Biodiversity, fish, wildlife, flora - including	5
negative impacts	
Recreation use (boats, kayaks) / access /	3
amenity - including hindering recreational use	о́
Pennywort growth increasing	2
Other	2
Other	2
River banks (inc reduced stability / exposed	1
banks)	
Safety risk	1
Water quality and wastewater works: Negative	1
impact on water quality / negative impact due to	
discharge from wastewater works	
Impact of lowering water levels on River	11
Mole (Viaduct sluice to Albany Bridge and	
upstream of Albany Bridge)	
River depth - including oppose reduction in	7
water levels	
Aesthetics / conservation area - including	6
negative impacts	

Biodiversity, fish, wildlife, flora - including negative impacts	4
Licence agreements - including breach of agreement	0
Recreation use (boats, kayaks) / access / amenity - including hindering recreational use	4
Reduce property values / negative impact on property	3
River banks (inc <i>reduced</i> stability / exposed banks)	3
Security	2
Increased siltation	2
Other	2
Safety risk	1
Scheme impact on the Ember Loop	8
Scheme impact on the Ember LoopConcern regarding reduction in water levels only	<b>8</b> 6
Concern regarding reduction in water levels only Negative impact on biodiversity / wildlife / flora -	6
Concern regarding reduction in water levels only Negative impact on biodiversity / wildlife / flora - in relation to lower water levels Reduce property values / negative impact on	6 4
Concern regarding reduction in water levels only Negative impact on biodiversity / wildlife / flora - in relation to lower water levels Reduce property values / negative impact on property	6 4 1
Concern regarding reduction in water levels only Negative impact on biodiversity / wildlife / flora - in relation to lower water levels Reduce property values / negative impact on property Current concerns on Old Mole	6 4 1 5
Concern regarding reduction in water levels only Negative impact on biodiversity / wildlife / flora - in relation to lower water levels Reduce property values / negative impact on property Current concerns on Old Mole Low flow rate / low water levels	6 4 1 5 3
Concern regarding reduction in water levels only Negative impact on biodiversity / wildlife / flora - in relation to lower water levels Reduce property values / negative impact on property Current concerns on Old Mole Low flow rate / low water levels Pennywort / pennywort growth increasing	6 4 1 5 3 3
Concern regarding reduction in water levels only Negative impact on biodiversity / wildlife / flora - in relation to lower water levels Reduce property values / negative impact on property Current concerns on Old Mole Low flow rate / low water levels Pennywort / pennywort growth increasing Other	6 4 1 5 3 3 2

# Feelings about the scheme

Theme	Number of respondents (theme) / mentions (sub- theme)
Respondent's scheme priorities / support for the scheme	120
Maintain standard of flood protection / importance of flood alleviation / resilience to climate change	42
Importance of improving and/or preserving biodiversity / environment, benefits to wildlife	33

Maintenance of current scheme is important / maintenance only is needed	25
Maintain current water levels to enable recreational use to continue / access to the river	20
Maintain current water levels (no reason stated)	15
Maintain current water levels to enable wildlife/biodiversity to continue to thrive	9
Mental health benefits of the river/nature (especially during COVID)	8
Aesthetics - Existing river is not attractive/need for improvement	7
Support for naturalisation	7
Maintain current aesthetics	7
Support replacing gates	6
Safety is important	5
Keep costs down	5
Scheme impact on Molember Stretch (Molember sluice to Island Barn - Ember channel)	3
Scheme impact on the Old Mole (not to include Viaduct sluice to Albany Bridge and upstream of Albany Bridge)	3
Access to footpaths / public access	2
Other	2
Scheme impact on River Mole (area around Viaduct sluice to Albany Bridge and upstream of Albany Bridge)	1
Scheme impact on the Ember Loop	1
Concerns about the scheme - impact of lower water levels	87
Negative impact of water level reduction on recreation use (boats, kayaks) / access / amenity - including hindering recreational use	30
Negative impact of water level reduction on the environment / biodiversity / ecosystem	26
Concerned about negative impact of lowering water levels / impact on flow (no specific impact mentioned)	24

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53 28
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28 6
28 6 4
28 6 4 <b>48</b>
28 6 4 <b>48</b> 15
28 6 4 <b>48</b> 15 13
28         6         4         48         15         13         14

Statements of support or opposition for a	53
named option	
Support for Option 3	33
Opposing Option 5	13
Opposing Option 6	13
Support for Option 6	6
Opposing Option 4	5
Opposing Option 1	5
Other	5
Opposing Option 2	3
Support for Option 5	3
Support Option 2	3
Support for Option 1	2
Support for Option 4	1
Consultation Approach / feedback	28
Lack of trust in the engagement process / Questioning the validity of data	11
Positive comments regarding the engagement process	8
Information is difficult to understand	4
Other	4
Consulting during a pandemic is inappropriate	2
Engagement period not long enough	1
Oppose the scheme	25
Resistant to any change / strongly against	17
Other	6
The scheme breaks the historic agreement and reason the Scheme was implemented in the first place	3
Support option 3	10
Maintains current water levels	5
	5 3
Maintains current water levels	

Maintain standard of flood protection / importance of flood alleviation	2
Other	2
Oppose option 6	8
Bias in the presentation of options (specifically option 6)	4
Negative impact on local residents quality of life	3
Negative impact (of lower water levels) on biodiversity/wildlife/ environment	3
Other	2
Scheme impact on the Ember Loop	1
Community suggestions	6
Improve access e.g. to the river and open new paths	4
Other	4
·	4 3
Other	
Other Support option 6	3
Other Support option 6 Improves biodiversity/wildlife/naturalisation	<b>3</b> 2

# **Option preferences**

Theme / Sub theme	Totals (number of respondents for main theme / mentions for sub-themes)
Statements of support or opposition for a named option	316
Support for Option 3	236
Support for Option 6	44
Support Option 5	29
Support Option 2	18
Support for Option 4	15
Opposing Option 6	12
Opposing Option 5	9
Opposing Option 1	6
Undecided / no preference	5

Support Option 1	4
Opposing Option 4	4
Opposing Option 2	4
Oppose the scheme	2
Support for the scheme	1
Support option 3	52
Maintain water levels / water flows	30
Maintain flood defence / Importance of keeping sluice gates in place	20
Prevent damaging existing ecosystem / provide ecological enhancements	18
Reasonably priced	13
Minimal change in visual amenity	12
No change in recreational use	9
Other	4
Maintains / improves water quality	3
Impact on the Old Mole channel close to Zenith Weir (not to include Viaduct Sluice to Albany Bridge and upstream of Albany Bridge)	2
Impact on the Ember Loop	2
Impact on Molember sluice to Island Barn - Ember channel	1
Support for Option 6	18
Low cost	11
Provide best flood protection	8
Prevent damaging existing ecosystem / provide ecological enhancements	7
Other	7
Impact on recreational activities	1
Oppose 6	14
River depth / Risk of river running dry	7
Negative impact of water level reduction on the environment / biodiversity / ecosystem	3

Impact alongside the Old Mole channel close to	3
Zenith Weir (not to include Viaduct Sluice to Albany Bridge and upstream of Albany Bridge)	
Negative impact on recreation use (boats, kayaks) / access / amenity - including hindering recreational use	2
Impact on Viaduct Sluice to Albany Bridge and upstream of Albany Bridge	2
Other	2
Opposing Option 5	13
River depth / Risk of river running dry	5
Other	5
Impact alongside the Old Mole channel close to Zenith Weir (not to include Viaduct Sluice to Albany Bridge and upstream of Albany Bridge)	3
Negative impact on recreation use (boats, kayaks) / access / amenity - including hindering recreational use	2
Negative impact of water level reduction on the environment / biodiversity / ecosystem	2
Impact on Viaduct Sluice to Albany Bridge and upstream of Albany Bridge	2
Support option 5	11
Provide best flood protection	4
Maintain current water levels	4
Impact on recreational activities	4
Prevent damaging existing ecosystem / provide ecological enhancements	2
Other	2
Minimal impact on the area's aesthetics	2
Low cost	1
Support for the scheme - option number not stated	9
Options that maintain the current water levels	6

Options delivering the same or increased level	3
of flood protection	
Options with greatest benefit for biodiversity and preserves the natural habitat	1
Other	1
Oppose the scheme - option number not stated	8
Other	8
Opposing Option 1	7
No interest / not suitable	5
Other	1
Impact alongside the Old Mole channel close to Zenith Weir (not to include Viaduct Sluice to Albany Bridge and upstream of Albany Bridge)	1
Opposing Option 4	7
Lower water levels / negative impact on flow	4
Impact alongside the Old Mole channel close to Zenith Weir (not to include Viaduct Sluice to Albany Bridge and upstream of Albany Bridge)	2
Negative impact of water level reduction on the environment / biodiversity / ecosystem	2
	2 6
environment / biodiversity / ecosystem	
environment / biodiversity / ecosystem Opposing Option 2	6
environment / biodiversity / ecosystem Opposing Option 2 No interest / not suitable	<b>6</b> 3
environment / biodiversity / ecosystem Opposing Option 2 No interest / not suitable Other Impact alongside the Old Mole channel close to Zenith Weir (not to include Viaduct Sluice to	6 3 2
environment / biodiversity / ecosystem Opposing Option 2 No interest / not suitable Other Impact alongside the Old Mole channel close to Zenith Weir (not to include Viaduct Sluice to Albany Bridge and upstream of Albany Bridge)	6         3         2         1
environment / biodiversity / ecosystem Opposing Option 2 No interest / not suitable Other Impact alongside the Old Mole channel close to Zenith Weir (not to include Viaduct Sluice to Albany Bridge and upstream of Albany Bridge) Community suggestions	6 3 2 1 6
environment / biodiversity / ecosystem Opposing Option 2 No interest / not suitable Other Impact alongside the Old Mole channel close to Zenith Weir (not to include Viaduct Sluice to Albany Bridge and upstream of Albany Bridge) Community suggestions Ideas and suggestions	6         3         2         1         6         3
environment / biodiversity / ecosystem Opposing Option 2 No interest / not suitable Other Impact alongside the Old Mole channel close to Zenith Weir (not to include Viaduct Sluice to Albany Bridge and upstream of Albany Bridge) Community suggestions Ideas and suggestions Improving access / recreation	6         3         2         1         6         3         3         3         3
environment / biodiversity / ecosystem Opposing Option 2 No interest / not suitable Other Impact alongside the Old Mole channel close to Zenith Weir (not to include Viaduct Sluice to Albany Bridge and upstream of Albany Bridge) Community suggestions Ideas and suggestions Improving access / recreation Planting and landscaping	6         3         2         1         6         3         3         3         2         2
environment / biodiversity / ecosystem Opposing Option 2 No interest / not suitable Other Impact alongside the Old Mole channel close to Zenith Weir (not to include Viaduct Sluice to Albany Bridge and upstream of Albany Bridge) Community suggestions Ideas and suggestions Improving access / recreation Planting and landscaping Engagement approach	6 3 2 1 6 3 3 3 2 3 3 3 3 3
environment / biodiversity / ecosystem Opposing Option 2 No interest / not suitable Other Impact alongside the Old Mole channel close to Zenith Weir (not to include Viaduct Sluice to Albany Bridge and upstream of Albany Bridge) Community suggestions Ideas and suggestions Improving access / recreation Planting and landscaping Engagement approach Website feedback	6         3         2         1         6         3         3         2         3         3         3         3         3         3         3         3         3         3
environment / biodiversity / ecosystem Opposing Option 2 No interest / not suitable Other Impact alongside the Old Mole channel close to Zenith Weir (not to include Viaduct Sluice to Albany Bridge and upstream of Albany Bridge) Community suggestions Ideas and suggestions Improving access / recreation Planting and landscaping Engagement approach Website feedback Support option 4	6         3         2         1         6         3         3         2         3         3         3         3         3         3         3         3         3         3         3         3
environment / biodiversity / ecosystem Opposing Option 2 No interest / not suitable Other Impact alongside the Old Mole channel close to Zenith Weir (not to include Viaduct Sluice to Albany Bridge and upstream of Albany Bridge) Community suggestions Ideas and suggestions Ideas and suggestions Improving access / recreation Planting and landscaping Engagement approach Website feedback Support option 4 Other	6         3         2         1         6         3         3         2         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3

Impact alongside the Old Mole channel close to	1
Zenith Weir (not to include Viaduct Sluice to	
Albany Bridge and upstream of Albany Bridge)	

# Do you have any additional comments?

Theme	Number of respondents / mentions
Engagement approach	81
No further comments	31
Lack of trust in the engagement approach/misleading visuals/EA has a preferred option	12
Other	8
Positive comments regarding the engagement process	6
Request for information	6
More analysis needs to be done/ not enough analysis has been done	6
Need to increase stakeholder involvement in the scheme & decision making process develops	4
Request for further engagement with the community	4
Information/Website is difficult to understand	4
Engagement period not long enough	3
Need to increase awareness of the scheme/plans	1
Scheme priorities	67
Preserve and/or improve biodiversity/wildlife/environment	20
Improve recreational access along the rivers (boating/walking/cycling), including specific suggestions	15
Must not be a money saving exercise	8
Other	8
Addressing the issue of pennywort	7
Improve aesthetics, including specific suggestions	7
Importance for future generations/children to enjoy the river/ future proofing	6

Maintain standard of flood protection / importance of flood alleviation	4
Maintain water levels (no reasons stated)	4
Ongoing maintenance is required/important	4
Take climate change into consideration	3
Scheme impact on the Ember Loop	3
Scheme impact on the Old Mole (not to include Viaduct Sluice to Albany Bridge and upstream of Albany Bridge)	2
Minimise disruption during construction period	1
Maintain current water levels for recreational use	1
Concerns about the scheme	39
Negative impacts of lowering the water levels on wellbeing / people's lives	13
Negative impacts of lowering the water levels on wildlife	12
Negative impacts of lowering the water levels (no reason stated) / oppose lowering water levels	7
Negative impacts of lowering the water levels on aesthetics	7
Other	6
Negative impact of lowering water levels on recreation	3
Concerned about the standard of flood protection provided by the scheme and potential increase in flood risk	3
Scheme impact on River Mole (area around Viaduct Sluice to Albany Bridge and upstream of Albany Bridge)	3
Lower water levels cause security concerns	2
Doesn't account for varying perspectives of riparian's	2
Lower water levels negatively impact property value	1
Scheme impact on the Old Mole (not to include Viaduct Sluice to Albany Bridge and upstream of Albany Bridge)	1
Statements of support or opposition for a named option	30

Oppose Option 6	5
Oppose the Scheme	5
Oppose Option 5	4
Support for Option 2	2
Support for Option 6	2
Other	2
Oppose Option 4	1
Undecided about the options/scheme	1
Support the Scheme	1
Support Option 5	1

# Please explain your answer to question 3

Theme	Number of respondents / mentions
Provided feedback in the past?	80
Not commented in the past	66
Not been consulted in the past/heard about the scheme before	5
Have not seen any feedback/Not sure whether feedback has been listened to	5
Other	3
Expect comments/feedback to be considered	2
Request for further engagement with the community	1
Negative feedback on the engagement approach	31
Feel their feedback has been ignored and re- presenting the same options as before	11
Lack of trust in the EA and what they are planning//EA has a preferred option	9
Didn't receive an answer to their question/s	6
Options have not changed since the last time we engaged with the community	4
Lack of engagement with certain groups within the community	2
Other	2
Information/Website is difficult to understand	1
Not enough information/detail on the website	1

Positive feedback on the consultation	21
approach	
Feel their feedback has been listened to (e.g. by delaying decision on options)	13
This engagement involves residents more/Engagement now works in a way that encourages working together	5
EA done a thorough job of communicating/Feel sufficiently informed about the scheme/options	4
There are now other/alternative options	2
Other	1
Concerns about the scheme	19
Oppose lowering the water levels/ Concern about the negative impacts of lowering the water levels (no reason stated) / oppose lowering water levels	8
Lower water levels cause damage to properties and negatively impact property value	3
Negative impacts of lowering the water levels on aesthetics	3
Negative impacts of lowering the water levels on recreational activities	3
Negative impacts of lowering the water levels on wildlife / environment	2
Concerned about the standard of flood protection provided by the scheme and potential increase in flood risk	2
Scheme impact on Molember Stretch (Molember sluice to Island Barn - Ember channel)	2
Scheme impact on River Mole (area around Viaduct Sluice to Albany Bridge and upstream of Albany Bridge)	2
Other	2
Concerned about the negative impact of effluent discharge	1
Scheme impact on the Old Mole (not to include Viaduct Sluice to Albany Bridge and upstream of Albany Bridge)	1
No further comments	14
Not applicable/No comment	14
Scheme priorities	11

Preserve and/or improve biodiversity/wildlife/environment	4
Keep status quo/Maintain existing set up	3
Improve aesthetics, including specific suggestions	2
Other	2
Importance for future generations/children to enjoy the river/ future proofing	1
Support naturalisation	1
General feelings and feedback on the options/scheme	8
Support for Option 3	3
Other	2
Support Option 5	1
Support for Option 6	1
Undecided about the options/scheme	1

# What sections of the website did you find most helpful in explaining the scheme

What are the options? page	178
Options summaries and presentations	91
General	71
Water level along the river mole presentation	15
Options table	11
Information Sheets	6
General positive comments	106
All of the website	47
Video / presentation was useful	30
Visual illustrations were useful	20
Other	11
Join the Conversation	23
Interactive Map	10
Comments section/Q&A	6
Questions	5
Ideas Board	1

Interactive Map Guide	1
Negative comments	19
Area of website specified	8
None of the website	8
Other/suggested improvements	3
Other	15
N/A / Not Answered	15
Main Daga	12
Main Page	12
General	6
Welcome Video	6
Glossary and FAQ	5
General	5
What is the Scheme?	8
General	6
Information Sheets	1
Photos	1
1968 Floods - Video	1
Undertaking routine maintenance work - Video	1
Our work so far	2
Survey reports	2

#### **Ideas board**

Theme	Likes	Comments
Access	65	13
Biodiversity	19	6
Option 3	18	0
Hydroelectric scheme	9	4
Water levels	21	1

# Map pins

Theme	Number of map pins
Access - footpaths	7
Negative impact of lower water levels	6

Biodiversity	2
Visualisations required	2
Maintenance of the Dead River	1
Recreation access	1
Effluent outflow location from the Esher wastewater treatment works	1
Tree planting & Biodiversity	1

# Appendix C. Number of website page visits and document downloads

Number of visits to a website page or tool by aware visitors

Aware Actions (totals across all projects)	12189
	Visited a
Project name	project or tool
	page
What are the options?	2083
Join the conversation	1350
What is the scheme?	1090
Welcome Video	1076
Option 3: Gate Replacement	878
Option 6: Remove all gates, passive flood relief channel with rock ramps	855
Option 5 Remove all gates but replace Island Barn Sluice gates	813
Option 2: Do minimum	772
Option 4: Molember Gates replaced with fixed crest weirs	751
Option 1: Do nothing	726
Improving the environment on the Lower Mole	514
Our work so far	484
Glossary and Frequently Asked Questions	216
Ongoing Maintenance work	187
FAQ's - Project Overview	79
FAQ's - Water Levels, Landscape and Aesthetics	72
FAQ's - Recreation and Amenity	50
FAQ's - General Information	38
Factsheet - Impoundments	35
Factsheet - Fish Passage	33
FAQ's - Environment	26
Factsheet - Carbon	24
Glossary	19
FAQ's - Safety and Security	18

Number of downloads performed by informed visitors

Informed Actions (resource totals across all projects)	1031
	Downloaded
Project name	a document
Join the conversation	94
What are the options?	625
What is the scheme?	169
Our work so far	86
Ongoing Maintenance work	24
Improving the environment on the Lower Mole	25
Factsheet - Impoundments	2
Factsheet - Carbon	3
Factsheet - Fish Passage	3