

Hampshire Water Transfer and Water Recycling Project



Summer 2022 public consultation
Summary of feedback

January 2023



from
**Southern
Water** 

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1. Introduction

Lawrence Gosden, CEO



“Water scarcity and shortfalls driven by climate change, population growth and increasing demand from industry are a reality. It’s a challenge on a global scale, and it’s no different across our region. The situation is particularly stark in Hampshire and last summer we saw the first temporary water use ban (commonly known as a hosepipe ban) in over a decade.”



“Ensuring that we plan for the future, and the anticipated shortfall of 192 million litres of water a day in Hampshire by 2030, is something that we take very seriously. Our Water for Life – Hampshire programme will transform the way we source, treat and supply water, while protecting the county’s rare and sensitive chalk streams. This essential programme will help us reduce the amount of water we take from the environment while maintaining customers’ supplies.”

“We need to find new ways of producing water, such as water recycling, while ramping up more traditional methods of conserving it like reducing leakage and improving water efficiency. We are developing a water supply network that caters for a growing population, as more people move to our region, and a changing climate where longer, drier summers are expected to become more frequent.”

“During summer 2022, we held our Hampshire Water Transfer and Water Recycling Project consultation. Thank you to everyone who took the time to take part and share their views. This document provides a summary of the feedback we received from the consultation, how we are incorporating your feedback into our developing plans as well as the next steps we are taking.”

“Your views are really important to us and will help ensure our solution is sensitive and supportive of the environment and communities we serve. Thank you for taking the time to help us create a water supply network that is ready to face the challenges of today and is able to reliably supply water for many generations to come.”

Lawrence Gosden, Chief Executive Officer, Southern Water.

The Project will help us achieve the following:



Protect sensitive habitats

Our Project will enable us to maintain water supplies while reducing the amount of water taken from Hampshire’s sensitive chalk streams and protecting rare and sensitive habitats.



Create resilience to drought

Our Project will ensure we can maintain essential water supplies when the weather is dry. It could provide up to 90 million litres of water a day into our Hampshire water supply network during a drought.



Future proof our supply

Our Project has the potential to provide future water needs as the population grows and we and neighbouring water companies are required to take less from the natural environment.



2. Why we need new sustainable water sources

The South East of England is designated by the Environment Agency as an area of ‘serious water stress’. This means that demand for water can outstrip supply – especially during a drought.

We have been exploring ways of tackling this problem. In February 2021, we consulted on our proposals to build a desalination plant at Fawley in the New Forest and introduced alternative options, including water transfer and water recycling. Following the 2021 consultation, we assessed the proposals as part of an options appraisal process and concluded that desalination was not deliverable in the proposed location. We are now progressing a combined water transfer and water recycling solution to help address the water supply deficit and improve resilience in Hampshire.

Called the Hampshire Water Transfer and Water Recycling Project, our solution will turn treated wastewater into purified recycled water at a new water recycling plant south of Havant. The recycled water would then be transferred via a new underground pipeline to supplement the spring-fed water that will be stored in the planned Havant Thicket Reservoir.

Another new pipeline would be installed underground to transfer water from the reservoir to our Otterbourne Water Supply Works, some 40 kilometres to the northwest, to be treated to strict drinking water standards ready for supply to homes and businesses.



Not to scale, for indicative purposes only

Water recycling – a new source of water

Water recycling uses advanced treatment techniques to turn treated wastewater into purified water that can be used as source water for treatment to drinking water standard.

While new to the UK, water recycling is a safe, established method of water treatment that has been used around the world for more than 40 years, including Australia, the USA and Singapore.

Southern Water has plans for four water recycling plants across its region in the near future and five other water companies in the country are looking to develop their own plants too and consulting on water recycling as a solution to future water shortages in their draft Water Resource Management Plans.

3. Our consultation

Our six-week consultation ran from 5 July to 16 August 2022.

We explained how the water recycling process works, as well as the site selection process we undertook to identify the proposed location for the water recycling plant. We also explained how we developed the corridors in which the pipelines would be located and identified where zones for above-ground plant, such as pumping stations, could be located.

Map showing location of those who provided their postcode when responding to the question *'Do you support water transfer and water recycling as the proposed solution to the challenge of securing water supplies for the future in Hampshire?'*

-  Preferred pipeline corridor
-  Strongly support
-  Support
-  Neutral
-  Do not support
-  Strongly do not support



How we undertook our consultation



31,826
letters sent

to local homes, businesses, and landowners in the vicinity of the project



Advertised
our consultation

in the Southern Daily Echo, Hampshire Chronicle and Portsmouth News and at local information points



Launched our
consultation
Website



Launched our
Virtual
Exhibition Room

6



in-person
consultation events



3

online
webinars

Hosted copies of
Consultation
Documents



Free
Feedback
Forms



9

deposit
locations



How you responded

 **571**
written responses

878 
in-person
event attendees

 **69**
webinar
attendees

 **9,169**
unique visitors
to consultation website

205 
unique visitors
to virtual exhibition room

Consultation responses categorised by age group and gender where provided

Female	1	3	1	15	39	54	25	6
Male		6	7	13	28	36	13	2
Other				1	1	1		8
Prefer not to say		2	1	1		1	1	1
Age Group	16-24	25-34	35-44	45-54	55-64	65-74	75 or over	Prefer not to say



4. What you told us

We asked your views on the following topics:

- Water transfer and water recycling as the proposed solution to Hampshire's water supply deficit and the options appraisal process we went through to select it
- The location of the water recycling plant and the process we went through to select it
- Our preferred pipeline corridors and the process we went through to develop them
- The identified zones for potential above-ground infrastructure
- Whether you thought there were any areas where construction works would be particularly challenging
- Our consultation approach and any other views on the Project

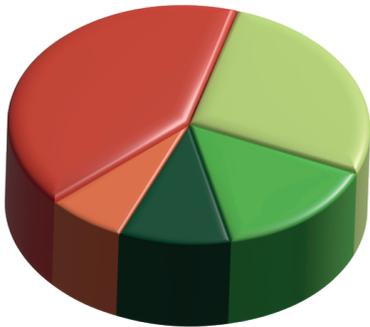
The questions, answers and key themes, including the most common issues that arose in the consultation responses and how we're addressing them, are summarised on the following pages.

We are grateful for the feedback we received, which continues to be considered alongside our studies, surveys and ongoing technical assessments. These will help inform our evolving design proposals for the pipeline route, the water recycling plant and how we will construct the Project.



Water recycling

Do you support water transfer and water recycling as the proposed solution to the challenge of securing water supplies for the future in Hampshire?



476 total respondents

- (27%) Strongly support the proposed solution
- (15%) Support the proposed solution
- (10%) Neither support or oppose the proposed solution
- (7%) Do not support the proposed solution
- (41%) Strongly do not support the proposed solution

What do you think about the options appraisal process we went through to select water transfer and water recycling as the proposed solution?



419 total respondents

- (13%) Strongly support the options appraisal process
- (19%) Support the options appraisal process
- (22%) Neither support or oppose the options appraisal process
- (10%) Do not support the options appraisal process
- (36%) Strongly do not support the options appraisal process

What you told us

The use of recycled water prompted some concerns about the quality of drinking water and potential changes to its taste or smell.

Those in favour of water recycling highlighted the need to safeguard the ecologically important chalk stream rivers in Hampshire and felt that water recycling was the most environmentally sustainable solution to address the county's water shortage.

Of those who did not support our options appraisal process to arrive at water transfer and water recycling as the preferred solution, some did not give their reasons or felt there was a lack of awareness and publicity around the Project. Others said they were unclear on the reasons why desalination was no longer the preferred option.

Our proposal to use the Havant Thicket Reservoir to store the recycled water prompted some concerns from people who felt the reservoir should only be fed by spring water.

The potential environmental impacts of recycled water on biodiversity, wildlife and ecology were also raised as a concern by some respondents.

The majority of respondents were from the Havant area, where there is strong support for the Havant Thicket Reservoir plans and, understandably due to the nature of the proposed source water for the Project, concerns about perceived impact on water quality in the reservoir.

How we're listening and what happens next



Mark Wintringham,
Head of Delivery

"We are committed to providing water for customers which meets the same strict regulatory drinking water standards as it does now. The use of recycled water will not reduce those standards in any way."

"The options appraisal process we undertook resulted in the selection and subsequent development of the preferred solution of water transfer and water recycling - our response to progressing the most sustainable solution and addressing stakeholder feedback."

"This Project is separate from the current plans for the Havant Thicket Reservoir which gained approval at the time when desalination at Fawley was proposed. We are working closely with Portsmouth Water as we develop our Project, especially on the quality of the recycled water that would enter the reservoir. Any water that enters the reservoir (recycled or spring) becomes part of the unique reservoir quality."

"As we further develop our proposals, we will be conducting environmental assessments to identify any environmental impacts and potential mitigation measures required to ensure that the local environment and marine life is protected during the construction and operation of the Project."

Water recycling plant

What you told us

The water recycling plant's ability to remove impurities such as chemicals, hormones and microbes, was raised as a concern. Some respondents asked for more information on the potential environmental impacts of releasing "reject water" from the water recycling plant into the marine environment and were concerned about any potential impacts on local fisheries.

Others also raised concerns around the sustainability of the water recycling process and the energy and maintenance required to build and operate the plant.

Feedback on the proposed site for the water recycling plant (Site 72) was mixed.

Those in support highlighted its proximity to Budds Farm Wastewater Treatment Works, thus minimising construction impacts and disruption to the local environment.

Those who did not support the site raised concerns about the perceived risk of harmful emissions, odour, and other environmental impacts due to it being a former landfill site.

How we're listening and what happens next



Varsha Wylie,
Principal Process Engineer

"Water recycling uses advanced treatment techniques to remove impurities from treated wastewater."

"As part of the water recycling process, treated wastewater, already extensively cleaned at the wastewater treatment works, passes through four further treatment processes in the water recycling plant, namely micro-filtration, reverse osmosis, advanced oxidation and water conditioning. These processes ensure that dissolved salts, biological and chemical contaminants and remaining impurities, including bacteria and pharmaceuticals, are removed."

"As part of the normal wastewater treatment process, the "reject water" from the water recycling plant will be returned to Budds Farm Wastewater Treatment Works prior to releasing it back into the sea via the existing long sea outfall."

"Careful consideration of energy requirements and carbon emissions during the design and planning stages of the Project will also help us manage and reduce emissions during construction and operation."

"Our proposed site for the water recycling plant (Site 72) was carefully assessed and selected given its suitability and proximity to Budds Farm Wastewater Treatment Works."

What do you think about the process we went through to arrive at the proposed site for the new water recycling plant?



385 total respondents

- (14%) Strongly support the site selection process
- (21%) Support the site selection process
- (30%) Neither support or oppose the site selection process
- (7%) Do not support the site selection process
- (28%) Strongly do not support the site selection process

Do you support our proposal to build a water recycling plant on site 72 south of Havant?

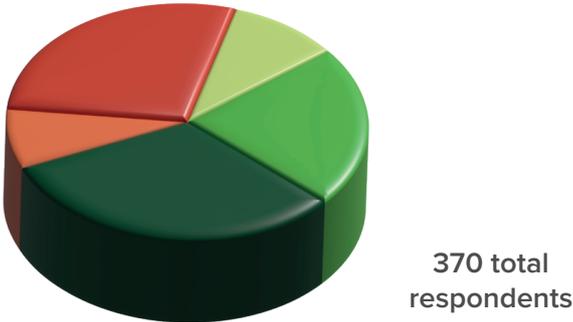


393 total respondents

- (20%) Strongly support the proposal
- (18%) Support the proposal
- (21%) Neither support or oppose the proposal
- (8%) Do not support the proposal
- (33%) Strongly do not support the proposal

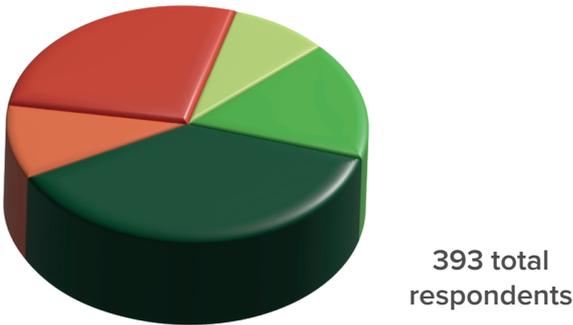
Pipeline corridor and route development

What do you think about the process we went through to arrive at the pipeline corridor sections?



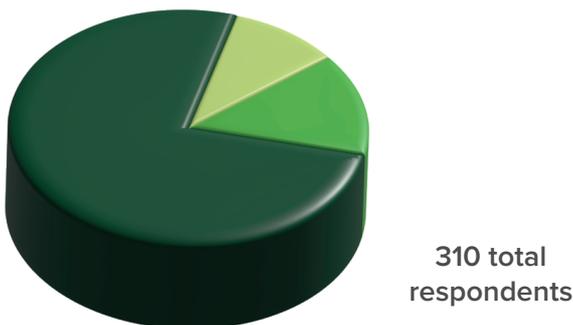
- (10%) Strongly support the process
- (22%) Support the process
- (32%) Neither support or oppose the process
- (8%) Do not support the process
- (28%) Strongly do not support the process

Do you have any views on the pipelines between Budds Farm Wastewater Treatment Works and the water recycling plant?



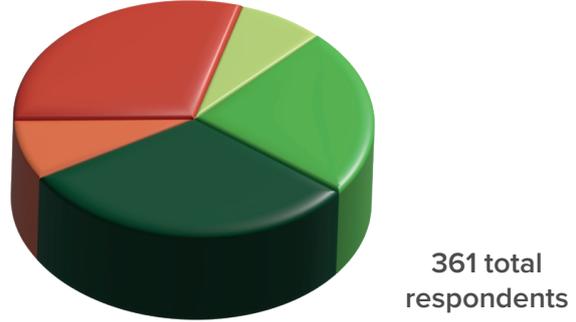
- (9%) Strongly support the pipelines
- (16%) Support the pipelines
- (38%) Neither support or oppose the pipelines
- (10%) Do not support the pipelines
- (27%) Strongly do not support the pipelines

What is your preference between the two pipeline routes in corridor section Z south of Fisher's Pond?



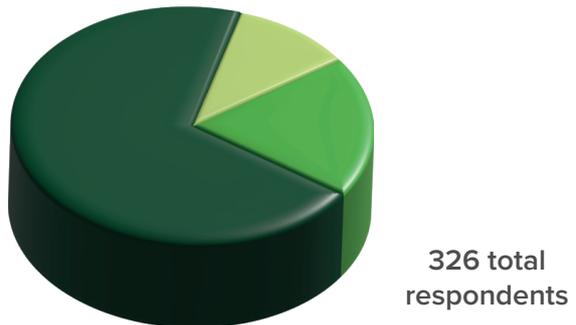
- (10%) Prefer the Northern pipeline route (Z1)
- (14%) Prefer the Southern pipeline route (Z2)
- (76%) No preference of pipeline route

What do you think about our preferred corridor?



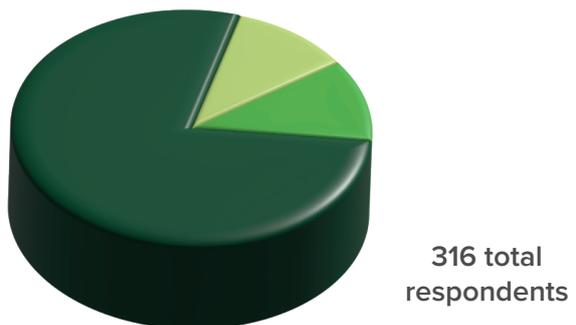
- (8%) Strongly support the preferred corridor
- (23%) Support the preferred corridor
- (31%) Neither support or oppose the preferred corridor
- (8%) Do not support the preferred corridor
- (30%) Strongly do not support the preferred corridor

What is your preference between the two tunnelled pipeline routes in corridor section P?



- (11%) Prefer the Northern pipeline route (P1)
- (19%) Prefer the Southern pipeline route (P2)
- (70%) No preference of pipeline route

What is your preference between the two options in corridor section Z as the pipeline approaches Otterbourne Water Supply Works?



- (11%) Prefer the Northern pipeline route (Z3)
- (11%) Prefer the Southern pipeline route (Z4)
- (78%) No preference of pipeline route

What you told us

Those who supported the process we went through to develop the pipeline corridor sections described it as transparent, well considered, and detailed. Those who did not support it felt they should have been consulted earlier, prior to alternative routes being discounted.

Some agreed that the preferred corridor keeps the potential for disruption to a minimum, while sufficiently avoiding areas of natural beauty.

The potential for disruption to local wildlife habitats and areas of natural beauty, as well as potential visual impacts on the local landscape, were amongst the concerns of those who did not support our preferred corridor. The potential impact on the local road network during construction was also highlighted.

For the pipelines between Budds Farm Wastewater Treatment Works and the proposed water recycling plant, many respondents raised concerns about landfill gas emissions and contaminated water leaking into the sea if the pipeline were to burst.

For corridor section P, we asked people to indicate their preference between two tunnelled route options. Of those who expressed a preference, the majority preferred the southern tunnel route (P2) over the northern tunnel route (P1) and felt that this would minimise impact on residential areas and groundwater sources.

For corridor section Z, we asked people to indicate their preference between two route options south of Fisher's Pond. Of those who expressed a preference, the majority preferred the southern route (Z2) over the northern route (Z1) due to the latter's potential impact on groundwater sources and local traffic network.

We also asked people to indicate their preference between two route options in corridor section Z as the pipeline approaches Otterbourne Water Supply Works. There was an equal preference from those who responded. Those who preferred option Z4 noted that it would cause less disruption to the South Downs National Park and residential areas of Colden Common, while others felt that option Z3 would have the least environmental impact on rivers and associated floodplains.

How we're listening and what happens next



James Kissack,
Senior Project Design Lead

"At this early stage of the Project, we have shown an indicative pipeline route within our preferred corridor, which has been selected based on the topography (levels) of the land, construction constraints and all the information that has been gathered to date.

"Our approach to route selection was first to identify the broad corridor that performs best from an environmental, engineering and cost perspective before refining our proposals through further assessment and engagement with stakeholders.

"In developing the preferred corridor and indicative pipeline route we have taken into account a range of issues and constraints and, in particular, the need to mitigate impacts on designated areas of natural beauty such as the South Downs National Park. Where impacts cannot be avoided, we will seek to minimise these as far as practicable.

"We are now developing a preferred pipeline route based on the feedback received from this consultation, ongoing engagement and further data collection to support route refinement.

"At our next consultation, everyone will have the chance to feedback on a more refined design of the Project, including the preferred pipeline route and proposed construction areas. The consultation will include more information on the potential environmental and construction impacts and consider how these can be best mitigated.

"We will work closely with local authorities and environmental bodies and listen to the views of our local communities to ensure that any concerns are properly considered as the Project progresses."

Above-ground infrastructure

What do you think about the process we went through to arrive at the proposed site for the high lift pumping station?



338 total respondents

- (11%) Strongly support the process
- (18%) Support the process
- (42%) Neither support or oppose the process
- (5%) Do not support the process
- (24%) Strongly do not support the process

Do you support our proposal to build a high lift pumping station in the proposed location?



337 total respondents

- (14%) Strongly support the location
- (20%) Support the location
- (34%) Neither support or oppose the location
- (6%) Do not support the location
- (26%) Strongly do not support the location

What do you think about the process we went through to arrive at the potential zones for the above-ground plant?



329 total respondents

- (12%) Strongly support the location
- (17%) Support the location
- (43%) Neither support or oppose the location
- (4%) Do not support the location
- (24%) Strongly do not support the location

What you told us

Those who supported the process to determine the proposed site for the high lift pumping station described it as fair, thorough and robust.

Others said they would have liked to have been consulted earlier in the process and felt that not enough alternatives had been considered.

Those who supported the location of the high lift pumping station felt that this was a logical proposal as it will be on the same site as the water recycling plant, thus minimising disruption.

Those who did not support it raised concerns over potential landfill gas emissions from the site and other environmental impacts including dust and noise pollution.

There was also a concern highlighted around the zones identified to locate the above-ground plant and their potential impact on heritage sites.

How we're listening and what happens next

"We welcome your feedback on the above-ground plant needed as part of the Project. We will carry out more detailed assessments of the high lift pumping station alongside the water recycling plant and we will consider the specific siting and impacts of the above-ground plant we showed in the Summer 2022 consultation."



Robert Lawless,
Programme Lead

"As the scheme development work progresses, our engineering designs may identify potential sites for additional above ground plant - we will consult on any new locations proposed at our next consultation as well as the preliminary findings of any potential impacts from the above-ground plant."

Environment and Construction

What you told us

Some respondents were concerned about the construction impacts of the Project and disturbance to local wildlife and environmentally sensitive areas, including sites of historical and cultural interest and conservation areas. The potential visual impact on local landscapes was also a concern.

Potential environmental impacts due to construction works on the proposed site for the water recycling plant (Site 72), as well as impacts on Portsdown Hill and Bedhampton Road were also mentioned as a concern.

Construction traffic and impacts on the local road network, particularly on Park Lane, Middle Park Way, Titchfield Lane and Knowle Road, were also raised by some respondents. Residents of Colden Common sought reassurance that pipeline installation would not exacerbate the existing subsidence issues in the area.

Some respondents felt that preventing disruption to local ecosystems may be challenging but should be a priority, particularly in terms of minimising damage to woodlands and areas of sensitive ecology. Some concerns were also raised over the perceived impacts on Hampshire's underground aquifers during construction.

People living in areas of low ground that sit close to the proposed pipeline route highlighted a perceived risk of localised flooding in the event of a leak.

Concerns were also raised over potential vibration impacts on nearby properties during pipeline installation using tunnelling techniques, while others suggested tunnelling would minimise road and traffic impacts.

How we're listening and what happens next

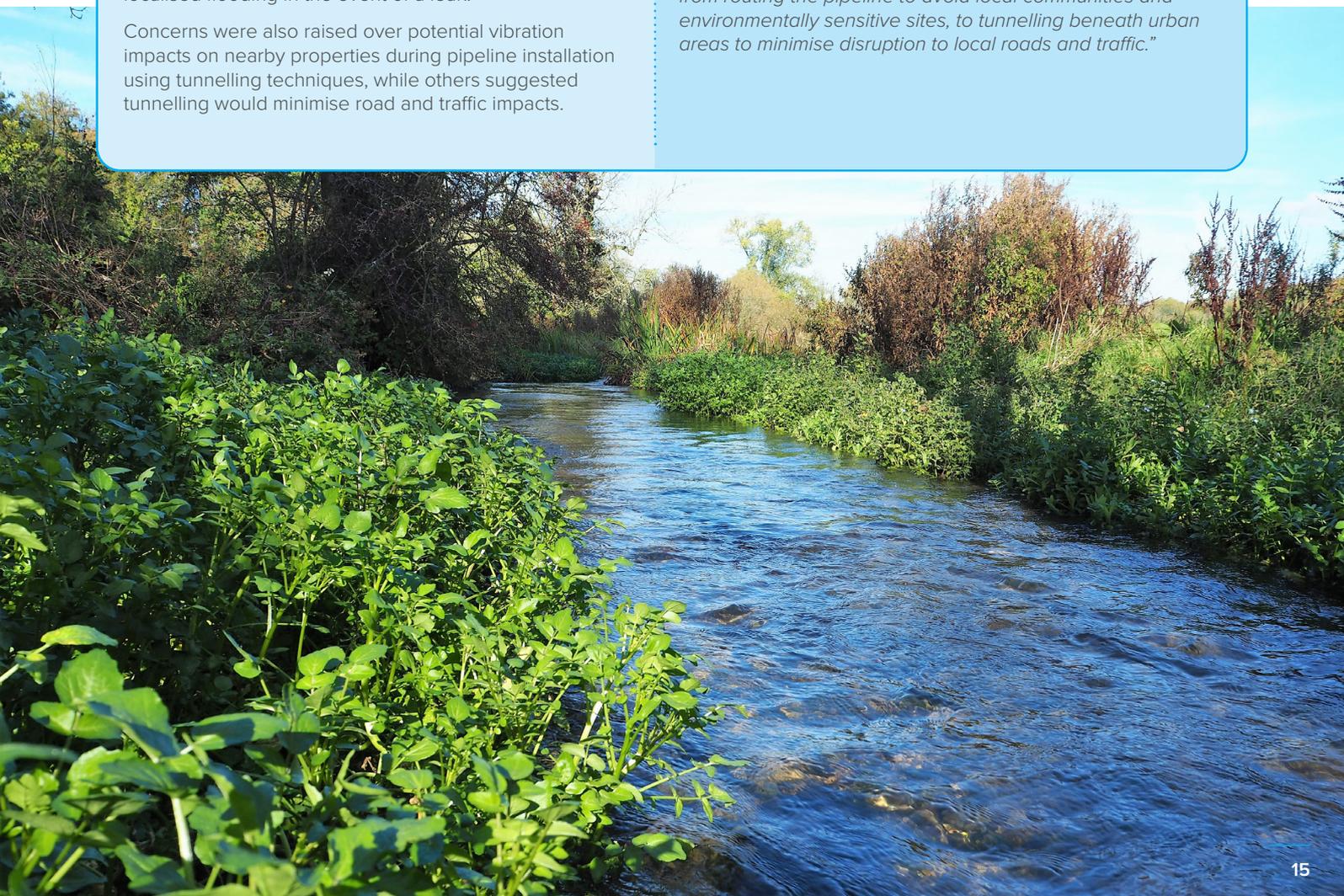
"We will take account of your feedback as we refine our proposals in readiness for our next consultation."

"We continue to progress a variety of environmental surveys, studies and ground investigations to inform our design work and to feed into the extensive environmental and other assessments we are undertaking. These will include a comprehensive assessment of the construction and operational effects of the Project. We will share our progress on these assessments at our next consultation in the form of 'preliminary environmental information'. This information will outline our initial understanding of the Project's impacts and provide details of how we propose to avoid or minimise them."

"We will mitigate as many of these potential impacts as possible through ongoing careful design of our proposals, from routing the pipeline to avoid local communities and environmentally sensitive sites, to tunnelling beneath urban areas to minimise disruption to local roads and traffic."

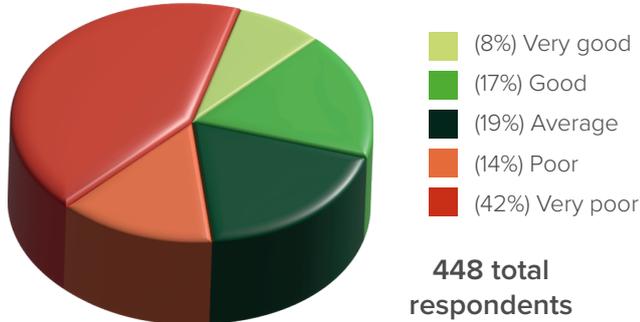


Nicola Catt,
Principal Environmental
Advisor

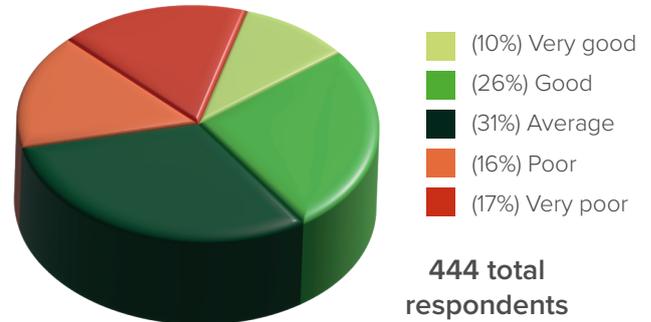


Consultation

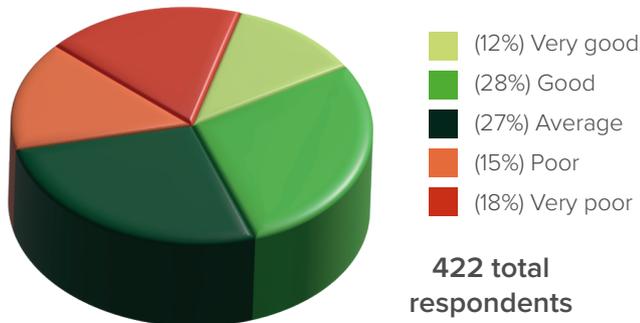
Promotion – was the consultation promoted well?



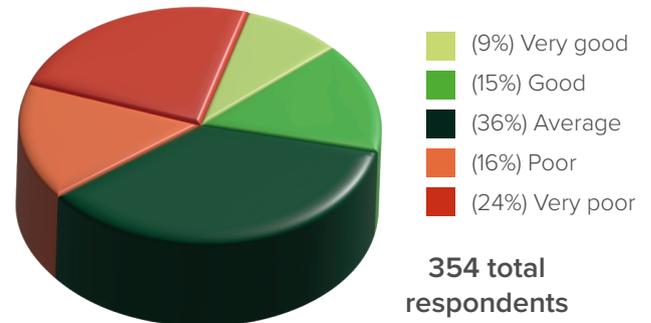
Materials – were they easy to understand?



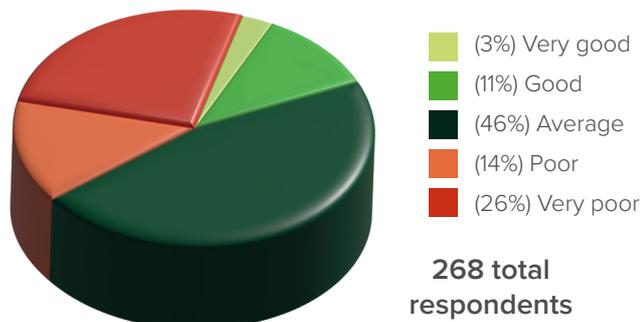
Information – was enough information made available for you to respond?



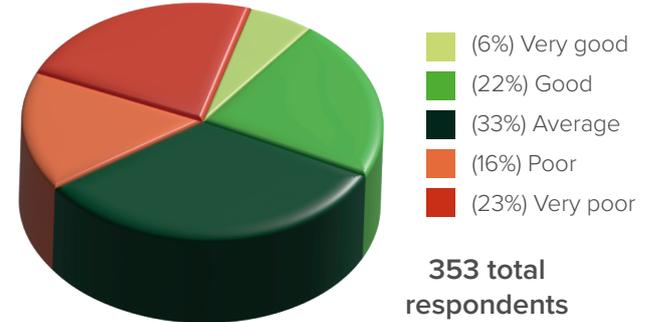
Events – were the events of good quality and suitably located?



Webinars – were the webinars of good quality and well run?



Website – was the consultation website easy to use and information presented in an engaging way?



What you told us

While some respondents reported that they felt well engaged and that sufficient information was available to understand our proposals, others expressed that they would have liked the consultation period to be longer, broader in scope, and with more detailed information on environmental impacts and impacts on landowners.

There were also some respondents who found the consultation brochure to be too long, and the information provided too complex, while others felt that there was a lack of detail on the maps presented.

How we're listening and what happens next

"Our approach to our next public consultation will be published in a Statement of Community Consultation.

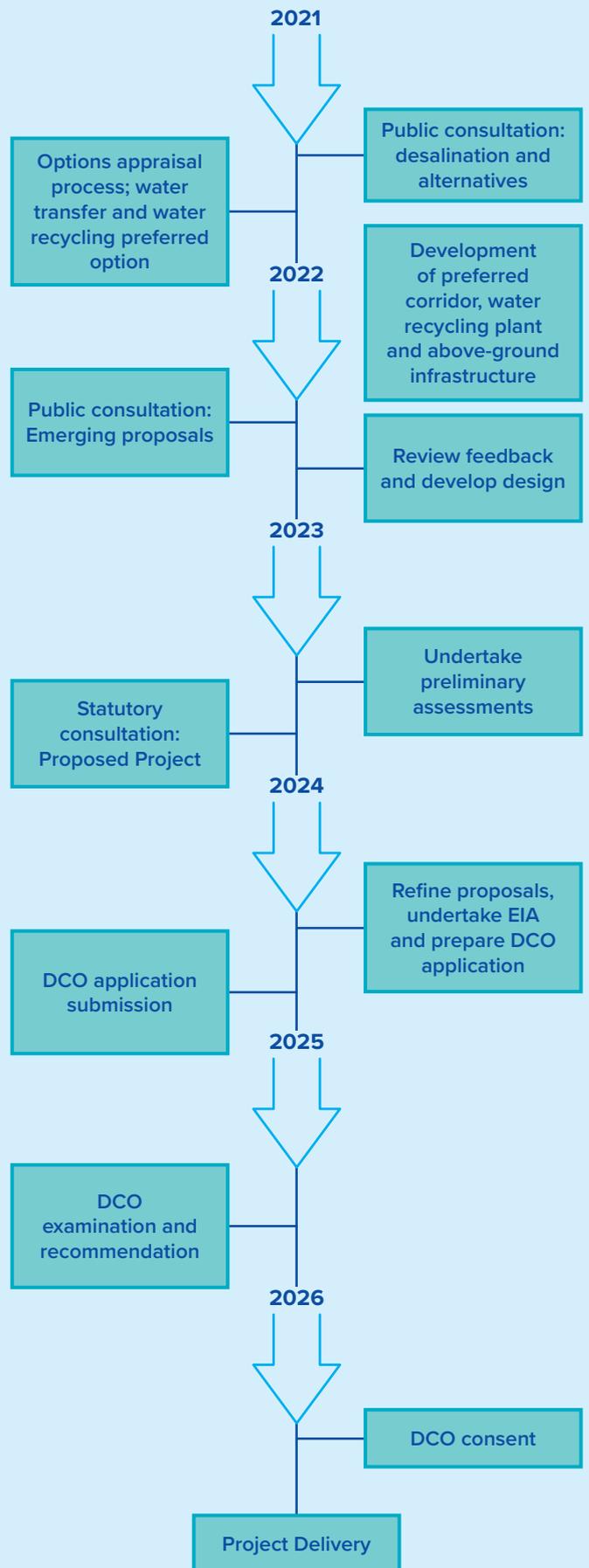
We will provide engagement materials for a variety of audiences and give information on preliminary environmental assessments, outlining the likely impacts of the Project and potential mitigation."

5. Next steps

We are continuing to develop our proposals to refine the design of the Project using feedback we have received from this consultation, ongoing engagement with stakeholders and our environmental studies.

We anticipate holding our next consultation on the Project in late 2023, which will set out further details on:

- The water recycling plant
- The preferred pipeline routes and proposed installation methods
- Locations of proposed construction compounds and temporary working areas
- Proposed locations of the above-ground infrastructure, including pumping stations and break pressure tanks
- Preliminary environmental information and potential mitigation measures



How to contact us



Writing to us at FREEPOST HAMPSHIRE WTWRP CONSULTATION



Emailing us at HampshireWTWRP@southernwater.co.uk



Visiting our website at
<https://www.southernwater.co.uk/water-for-life-hampshire-consultations>



Following us on Twitter @SouthernWater



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