# Hampshire Water Transfer and Water Recycling Project

# **Frequently Asked Questions**

The purpose of this document is to answer a range of questions about the Project.

This document will serve as a one-stop reference point for your concerns and signpost you to further information, should you require it. This document is split into the following categories:

- Water for Life Hampshire
- Water recycling
- Background to the Project
- The Project
- Consultation





# Water for Life - Hampshire

#### Q1 What is Southern Water's Water for Life – Hampshire?

The Hampshire Water Transfer and Water Recycling Project is part of Southern Water's wider Water for Life – Hampshire programme. This multi-million-pound investment will protect the county's sensitive chalk stream habitats while ensuring there is sufficient water for public supply.

Some 85% of the world's chalk streams (rivers fed by underground chalk aquifers) are in the UK – and two of the finest examples, the River Test and the River Itchen, are found in Hampshire. These rivers, along with their aquifers also supply water to more than 750,000 people across the county.

The programme is driven by reductions in the amount of water we can take from these rivers, which means we have a shortfall of some 192 million litres of water a day during a drought at a time when our population is growing and our climate is changing.

We need to find new sustainable sources of water to help keep taps and rivers flowing. The programme will transform the way we source, treat and supply water across the county.

#### Q2 What else is included under the Water for Life – Hampshire programme?

A number of projects are included under the Water for Life – Hampshire programme, due to the size of the shortfall and the need to deploy a range of measures to resolve it. Our integrated approach comprises infrastructure investment, nature-based solutions, land management, significant reductions in leakage (by 15% by 2025, 40% by 2040 and 50% by 2050) and helping customers reduce their water use to 100 litres a day.

### Q3 Why is there a shortfall in water supplies and how big is it?

The shortfall in Hampshire is significant and driven by reductions in abstraction licences in order to protect the sensitive chalk streams of the River Test and the River Itchen during a drought. We have already agreed to reductions in the amount of water we can take from the rivers and signed a legally binding agreement with the Environment Agency to do so.

With further reductions expected – the shortfall could increase to around 192 million litres of water a day by 2030 during a severe drought (this is a drought expected to occur 1-in-200-years but which may occur more frequently, especially as our climate changes). Additionally, the level of drought resilience water companies across the country are required to prepare for will rise to 1-in-500-years in future Water Resources Management Plans.

### Q4 How does the Project fit into the Water for Life – Hampshire programme?

The Project is a key component of the Water for Life – Hampshire programme as it will make up a significant element of the shortfall and enable us to take important steps towards securing water supplies for Hampshire and protecting sensitive chalk streams.

# Q5 Why did Southern Water change its plan to deliver a desalination plant in Fawley?

In early 2021 we consulted on plans for a desalination plant on the Solent at Fawley in the New Forest to turn seawater into drinking water and transfer this via a pipeline to our

Testwood Water Supply Works. We estimated this plant could have provided up to 75 million litres of water per day.

This was originally our preferred strategic resource option to meet the water supply deficit in Hampshire identified in our current Water Resources Management Plan. We also introduced various alternative options in this consultation should the desalination option not prove to deliverable in this location.

We received 180 responses to the consultation. Desalination was not well supported by those who responded, with only 27% agreeing it was an acceptable solution to the water resources challenge in Hampshire, while 60% of respondents considered that water recycling would be an acceptable solution in the event that desalination was not deliverable. The main issue raised was around the potential environmental impact of releasing the desalination by-product of hypersaline water back into the Solent, with a total of 24% of respondents raising this concern.

We assessed the options by considering a range of technical, planning, environmental, and best value criteria, and took the decision that work on desalination should not be progressed in this location. This was supported by our regulators.

More information can be found in Section 2 of the consultation brochure.

# Water recycling

#### Q6 What is water recycling?

Water recycling plants use advanced treatment techniques to convert treated wastewater into highly purified source water. Special membranes are used to remove salts and a range of other impurities. The process includes reverse osmosis, where water is forced through tiny membranes 50,000 times smaller than the width of a human hair, to remove dissolved salts and impurities. In fact, so much is removed from the water that some essential minerals such as calcium and magnesium have to be added back in to achieve the water quality customers are used to.

#### Q7 Is water recycling safe?

Yes, water recycling is a safe, established method of water treatment that is already used elsewhere around the world. In the USA, companies have been recycling wastewater to create a drinking water source for more than 40 years.

Before this Project is implemented, we will work with our regulators to undertake a rigorous system of process control, monitoring and performance assessments.

For more information on the water recycling process please refer to our consultation brochure.

#### Q8 Is water recycling the same as stormwater releases?

No, we are planning to use recycled water to supplement the spring water in the Havant Thicket Reservoir.

The water recycling proposals are fundamentally different, and separate, to the current system of stormwater releases which are designed to protect homes from flooding. Stormwater is wastewater that has been heavily diluted by rain. It is sometimes released to the environment to reduce the risk of flooding to homes and businesses.

# Q9 Are you planning on releasing wastewater into the reservoir?

No, the recycled water that would be released to the reservoir would be purified water that has gone through the full wastewater treatment process and then a further series of advanced treatment techniques at the water recycling plant.

# Q10 Where would the recycled water be treated?

The recycled water would be treated at a new water recycling plant proposed to be located south of Havant before being transferred into Havant Thicket Reservoir.

# Q11 How will water recycling be used when we are not in a drought?

The Project is being developed for use in a drought. However, to ensure the continued availability and cleanliness of the water recycling plant and associated pipelines, a continuous 'sweetening flow' of water would be produced and pumped into Havant Thicket Reservoir throughout the year. This ensures that the system is constantly prepared for being used at a higher capacity during drought conditions.

The same daily volume of water would be abstracted from the reservoir to keep the pipeline to Otterbourne Water Supply Works operating effectively.

# Q12 What alternatives are you exploring if Havant Thicket Reservoir cannot be used for water recycling?

In developing our proposals for the Project we have also investigated a back-up option should it not be possible to secure an enhanced use of the new reservoir.

This back-up option would involve pumping the recycled, purified water from the new water recycling plant near to Budds Farm Wastewater Treatment Works directly to a new lake and then to our Otterbourne Water Supply Works for further treatment to become drinking water. It would also use our Peel Common Wastewater Treatment Works as a source for recycled water. As this is a back-up option, we have not developed it to the same level as the Project and so will not consult publicly on this option this summer. Should it be necessary to switch to this back-up option at a future time, we would need to consult on this further.

# The Project

#### Q13 What is the Hampshire Water Transfer and Water Recycling Project?

The Project has been developed to enable us to take less water from the sensitive chalk streams of the River Test and River Itchen during a drought, while maintaining essential supplies.

This involves building:

- New pipelines from the existing Budds Farm Wastewater Treatment Works to the new water recycling plant to supply treated wastewater for recycling.
- A new water recycling plant south of Havant that would produce purified recycled water.
- New pipelines from the new water recycling plant to Havant Thicket Reservoir, to allow the purified recycled water to be stored there.
- New pipelines and associated infrastructure to take water from Havant Thicket Reservoir to the existing water supply works at Otterbourne, where it will be further treated to strict regulatory standards before it is put into the existing water supply system.

The plans are centred on Havant Thicket Reservoir which we are funding and developing in collaboration with Portsmouth Water. This Project is separate from the current, approved plans for Havant Thicket Reservoir.

#### Q14 Why is this Project needed?

The programme is driven by reductions in the amount of water we can take from the Test and Itchen rivers, which means we have a shortfall of some 192 million litres of water a day during a drought.

These ecologically-sensitive chalk streams support a wide variety of species and deserve protection, but they also supply water to more than 750,000 people. We need to find new sustainable sources of water to help keep taps and rivers flowing.

This Project will make up a significant percentage of this deficit, providing 90 million litres of water per day to residents in Hampshire.

# Q15 Why are you using treated wastewater from Budds Farm Wastewater Treatment Works?

The decision to use treated wastewater from Budds Farm Wastewater Treatment Works was taken following an assessment of the available sources in the area to meet the shortfall.

Budds Farm is our biggest wastewater treatment works and its treated wastewater is released out to sea via a 5.7km long sea outfall where it has no further environmental benefit. This means the treated wastewater can be taken and used more wisely and the long sea outfall can be used to transport the reject water produced in water recycling safely out to sea, Additionally, the proximity of Budds Farm to Havant thicket Reservoir, which will provide essential storage for the water produced, means pumping costs of water are

minimised – making the Project more energy-efficient and, ultimately, cheaper for customers.

#### Q16 How is the Project being funded?

The Project is being funded by Southern Water. It interacts with the wider Havant Thicket Reservoir Project which we are funding and developing in an innovative cross-company agreement with Portsmouth Water that will boost resilience and improve the sharing of water supplies across the county.

#### Q17 If approved, how much would the Project affect my water bill?

Like all our costs, funding for operational improvements and maintenance on the water supply side of the business is averaged across water supply customers' bills across our region.

The overall cost of the Project and any impact on future customer bills depends on the final design for the Project, which is continuing to be developed.

As with all our costs and charges to customers, funding for the Project will be subject to approval by our economic regulator, Ofwat, as will the effect, if any, on our water supply customers' bills. We anticipate that Ofwat would spread the cost of construction and operation over the life of the assets once built, which would reduce the impact on bills in any one year.

#### Q18 What approvals will be required for the Project?

The Project has been officially deemed a development of national significance because of its scale, complexity (requiring multiple powers and consents for its delivery) and the contribution it would make to the Government's environmental objectives and policy priorities. That means that we need to obtain a 'Development Consent Order' for the Project, which is a type of planning approval determined by the Secretary of State for Environment, Food and Rural Affairs, rather than from the local planning authorities.

A Development Consent Order is a type of statutory planning process that also allows several other powers to be sought at once, for example compulsory purchase or temporary access rights over land. More detail on the process can be found on the Planning Inspectorate's website <a href="https://doi.org/10.1007/jhanninginspectorate.gov.uk">The process | National Infrastructure Planning (planninginspectorate.gov.uk)</a>.

# Q19 How are you considering the potential effects the Project could have on the environment?

A range of studies and investigations are ongoing as part of the consenting process for the Project. We will prepare a Preliminary Environmental Information Report which will form part of our next stage of consultation in 2023. This document will report the preliminary findings on any likely significant environmental impacts of the Project based on the information available at the time and is designed to inform consultees' responses to the next consultation.

We will continue to undertake environmental assessments and the main Environmental Impact Assessment will be documented in an Environmental Statement that will be submitted as part of the Development Consent Order application.

#### Q20 Will I be able to see the pipelines?

It is anticipated that the vast majority of our infrastructure will be underground once construction has been completed and the Project is operational. However, our proposals include some above-ground infrastructure. This includes the new water recycling plant in south Havant, pumping stations and break pressure tanks.

#### Q21 How will you install the pipelines?

We will install the majority of the pipeline using an open-cut excavation method where a trench is dug, the pipeline is laid at the bottom and earth is put back into the trench to bury the pipeline. Where we have to cross major roads, railway lines and rivers we will look at what are called trenchless methods such as tunnelling or pipe jacking.

We will minimise disruption as much as we can and will engage with local communities on how we will undertake the works, use local roads and manage our construction activities.

Further information on pipeline installation methods is set out in Section 3 of the consultation brochure.

#### Q22 How long will construction take?

Subject to obtaining consent, we are planning to start work constructing this Project in 2025, with the earliest completion anticipated to be 2030. As with any large project of this nature, this is subject to change.

#### Q23 How will construction affect me?

Most people across Hampshire are unlikely to be directly affected by the construction of the Project.

If you live close to the proposed new pipelines or associated infrastructure, we will have contacted you already regarding our proposals as there may be elements of the work that could have an impact on you.

As the design of the Project continues to develop, we will be working closely with local communities and potentially affected landowners, as well as stakeholders such as local authorities to identify and avoid, reduce and mitigate against any disruption the construction phase may cause where possible. More information will be available as part of our next consultation scheduled for 2023.

#### Consultation

#### Q24 When does the consultation take place?

The consultation opens on 5 July and closes on 16 August 2022.

# Q25 Are you holding in-person events?

Yes, there will be six consultation events where you can meet members of the project team and view consultation materials.

Wednesday 6 July Saturday 9 July

2pm - 8pm 10am - 4pm

Havant Bishops Waltham

Leigh Park Community Centre Jubilee Hall

Dunsbury Way Little Shore Lane
Havant Bishops Waltham

PO9 5BG SO32 1ED

Friday 15 July Saturday 16 July 2pm – 8pm 10am – 4pm

Wickham Havant

Wickham Community Centre Meridian Shopping Centre

Mill Lane Elm Lane Wickham Havant PO17 5AL PO9 1UN

Thursday 21 July Friday 22 July 2pm – 8pm 2pm – 8pm

Southwick Colden Common

Southwick D-Day Memorial Hall Colden Common Community Centre

Priory Road Saint Vigor Way
Southwick Colden Common

PO17 6ED SO21 1UU

#### Q26 Are you holding webinars?

We are hosting three webinars using the Microsoft Teams platform (accessible on a web browser). These will take place between 7pm and 8:30pm on the following dates:

- Tuesday 26 July
- Wednesday 3 August
- Thursday 11 August

Email <u>HampshireWTWRP@southernwater.co.uk</u> to register your place.

#### Q27 How can I find out more about the Project?

We have produced a suite of documents with information about the consultation, the key one being the Hampshire Water Transfer and Water Recycling Project Consultation Brochure.

We have also produced a summary of how the Project has been developed so far, called the Scheme Development Summary. We also have a Book of Maps which show the corridor sections that we have identified and evaluated.

This Frequently Asked Questions document intends to help answer common questions about the Project.

#### Q28 How can I feed back on the Project?

We have produced a questionnaire for you to complete. All questions are optional. However, the more you tell us your views about the Project the better it is for us to consider how we will take forward our proposals for the Project.

The questionnaire is available online at <a href="https://HampshireWTWRP.commonplace.is">https://HampshireWTWRP.commonplace.is</a>. If you are unable to respond online you can ring us on 0330 303 0368 to ask us to post a questionnaire and a Freepost envelope to your house.

You do not have to answer the questions. You can email HampshireWTWRP@southernwater.co.uk and send us your views.

You can also post your letters to us and put FREEPOST HAMPSHIRE WTWRP CONSULTATION on the front of the envelope and you won't need a stamp.

#### Q29 Where can I read more about the Project?

On the Project webpage you can download the consultation documents, look at maps in your area showing details of the Project, visit a virtual exhibition and send us feedback via the online questionnaire.

You can also visit the locations below to read reference copies of the consultation materials and pick up a copy of the questionnaire and a Freepost envelope.

Deposit location	Address	Opening times	
Bishops Waltham Library	Free Street Bishop's Waltham Southampton SO32 1EE	Monday Tuesday Wednesday Thursday Friday Saturday Sunday	Closed 1-5pm 9:30am-1:30pm Closed 1-5pm 9:30am-1:30pm Closed
Chandler's Ford Library	Oakmount Road Chandler's Ford Eastleigh SO53 2LH	Monday Tuesday Wednesday Thursday Friday Saturday Sunday	9:30am-5pm 9:30am-5pm 9:30am-5pm 9:30am-5pm 9:30am-1:30pm 9:30am-5pm Closed
Cosham Library	Spur Road Cosham Portsmouth PO6 3EB	Monday Tuesday Wednesday Thursday Friday Saturday Sunday	9:30am-6pm 9:30am-6pm 9:30am-5pm 9:30am-6pm 9:30am-5pm 10am-3:30pm Closed
Eastleigh Library	The Swan Centre Eastleigh SO50 5SF	Monday Tuesday Wednesday Thursday Friday Saturday Sunday	9:30am-1:30pm 9:30am-5pm Closed 9:30am-5pm 9:30am-5pm 9:30am-5pm Closed
Fair Oak Community Library	Campbell Way Upham Eastleigh SO50 7AX	Monday Tuesday Wednesday Thursday Friday Saturday Sunday	9:30am-1pm 2-5pm 9:30am-5pm 2-5pm 9:30am-1pm 9:30am-1pm Closed
Havant Borough Council	Public Service Plaza Civic Centre Road Havant PO9 2AX	Monday Tuesday Wednesday Thursday Friday Saturday Sunday	9am-5pm 9am-5pm 9am-5pm 9am-5pm 9am-5pm Closed Closed
Leigh Park Library	50 Park Parade Leigh Park Havant PO9 5AB	Monday Tuesday Wednesday Thursday Friday Saturday Sunday	Closed 9:30am–5pm Closed 9:30am–5pm 9:30am–5pm 9:30am–13:30pm Closed

Deposit location	Address	Opening times	
Paulsgrove Library	Marsden Road Portsmouth PO6 4JB	Monday Tuesday Wednesday Thursday Friday Saturday Sunday	9:30am-12:30pm & 1:30-5pm Closed 9:30am-12:30pm & 1:30-5pm 9:30am-12:30pm & 1:30-5pm 9:30am-12:30pm & 1:30-5pm 10am-3:30pm Closed
Portchester Community Hub	2 New Parade West Street Portchester Fareham PO16 9UY	Monday Tuesday Wednesday Thursday Friday Saturday Sunday	9:30am-4:15pm 9:30am-4:15pm 9:30am-4:15pm 9:30am-4:15pm 9:30am-4:15pm 9:30am-12pm Closed

#### Q30 How will you use my response?

Your response will be considered with the other consultation feedback we receive and will inform how we develop the Project going forward.

Your views will let us know what you think about:

- Water recycling as a solution to deal with the problem of water supplies for the future in Hampshire.
- The process we went through to select the corridor areas within which all the pipeline routes, above-ground infrastructure and potential construction areas required for the Project could be located.
- The process we went through to select our proposed location for the water recycling plant.

# Q31 What happens after the consultation closes on 16 August?

After the consultation we will consider all the responses received. These responses, along with outputs from our survey work and assessments, will inform the further development of the Project.

One of the next key milestones will be a further public consultation in 2023 prior to a submission of our application for a Development Consent Order later in the year. We encourage you to register to receive updates about the Project, for example we will send you details of how you can take part in the next consultation.