

HAVANT THICKET RESERVOIR

JULY 2023



PORTSMOUTH WATER



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AGENDA



- **Introduction** by Bob Taylor, Chief Executive Officer, Portsmouth Water
- **Context** by Jim Barker, Head of Water Resources, Portsmouth Water
- **Havant Thicket Reservoir** by Ruari Maybank, Project Director, Portsmouth Water
- **Responses to pre-submitted questions**
- **Key concerns and our responses**
- **Alignment works**
- **Any questions**

INTRODUCTION

BY BOB TAYLOR, CHIEF EXECUTIVE
OFFICER, PORTSMOUTH WATER

CONTEXT

BY JIM BARKER, HEAD OF WATER
RESOURCES, PORTSMOUTH WATER

HAVANT THICKET RESERVOIR

- An **environmentally-led project** that will protect rare chalk streams: The River Test and River Itchen.
- Will provide a **new, sustainable source of water**, enabling Southern Water to reduce abstraction from these rivers.
- Project will be **delivered by Portsmouth Water** and **funded via Southern Water's** drinking water customer bills.

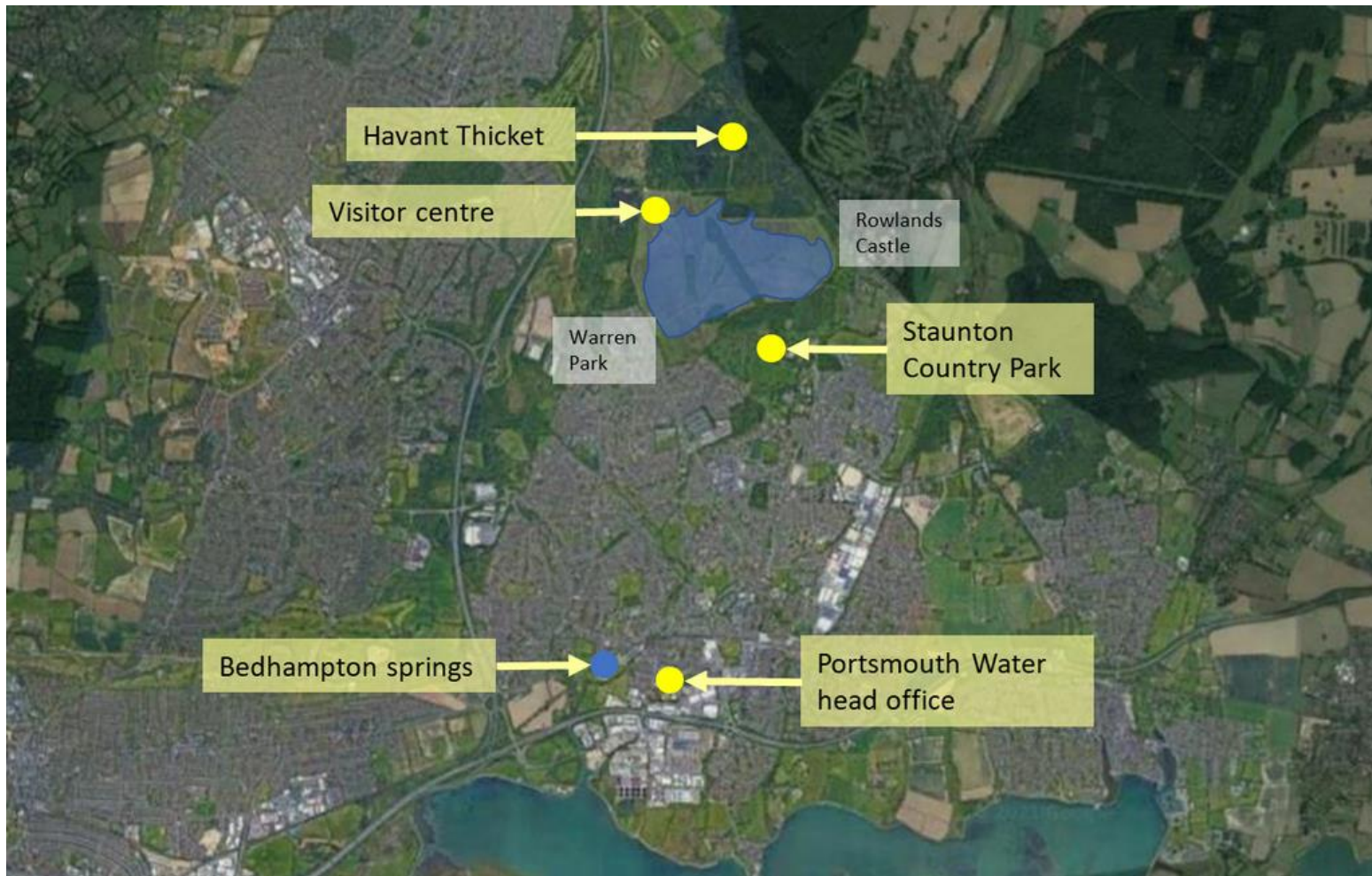


HAVANT THICKET RESERVOIR

- Will hold up to **8.7 billion litres** of water.
- Be capable of supplying **21 million litres** per day.
- Current plans involve filling Havant Thicket Reservoir with surplus water from the **Bedhampton Springs**.



HAVANT THICKET RESERVOIR



ENVIRONMENTAL MITIGATION

- Monitored the site since **2005** and understand how to relocate species in the safest possible ways.
- Created new habitats including installing around **200 bat and 300 dormice boxes** in nearby woodland.
- Translocated **reptiles, macroinvertebrates and macrophytes.**



ENVIRONMENTAL COMPENSATION

- Project will deliver a significant **environmental net gain** for the area.
- We're planting and improving more than **200 hectares** of woodland and wood pasture.
- Going **above and beyond** the commitments made in our planning application.
- **Planting new trees** on site and **enhancing established woodland** in Southleigh Forest, Havant Thicket as well as an 80-hectare re-wilding project.



RESPONSES TO QUESTIONS

BY BOB TAYLOR, CHIEF EXECUTIVE OFFICER,
PORTSMOUTH WATER

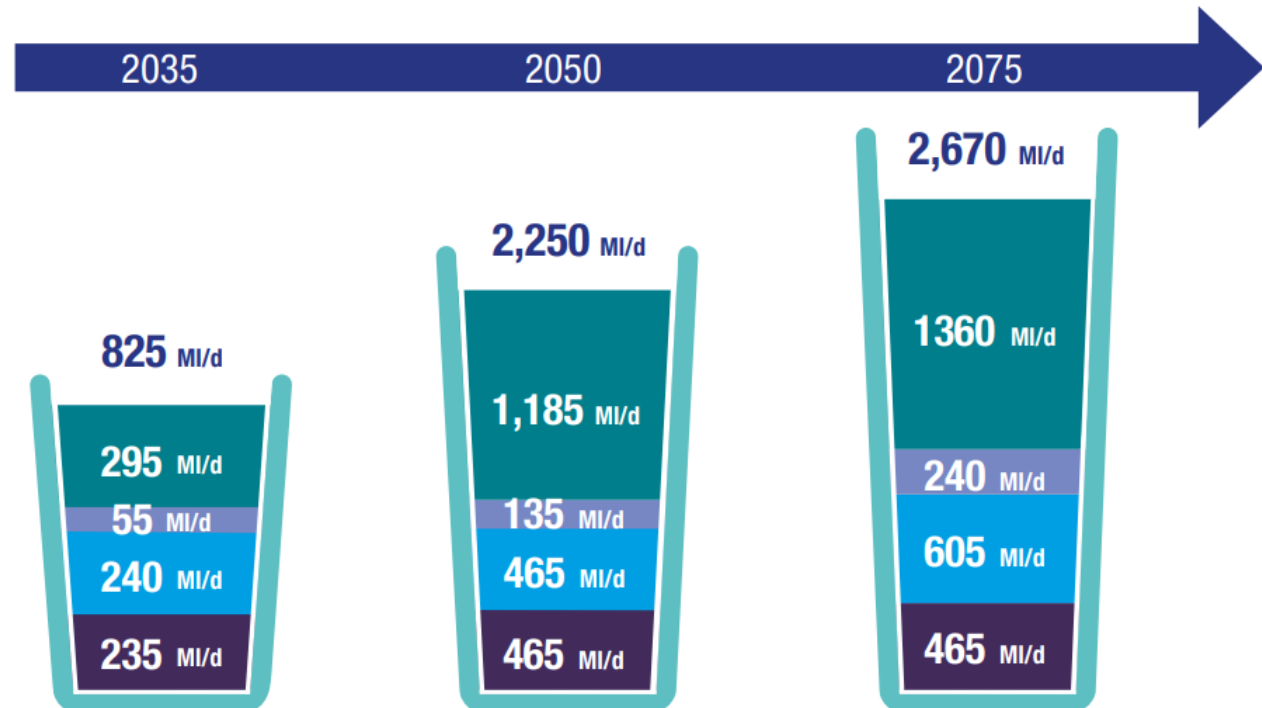
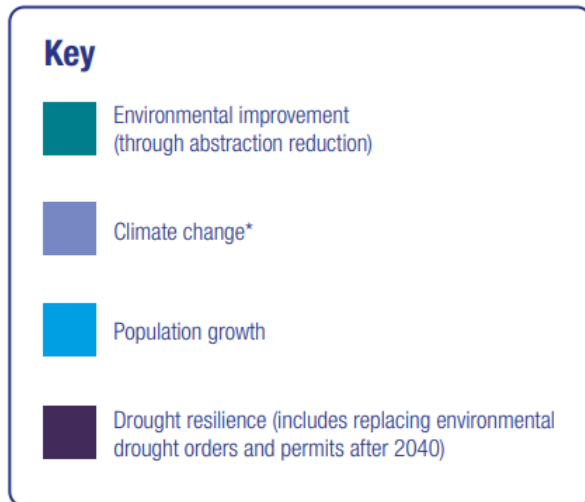
WATER RECYCLING

- Water recycling is a **well-established and widely-used water treatment process** that speeds up the natural water cycle to provide a **sustainable source of clean, safe drinking water.**
- The technology is **common elsewhere in the world.**
- Portsmouth Water would remain in **full control of quality and flow of water** into and out of the reservoir.



WHY IS WATER RECYCLING NEEDED?

- Water is **scarce in the South-East**, yet the impacts of **climate change and population growth are increasing**.



*Climate change represents how much water will no longer be available from our existing water sources. The impacts of climate change are also included in the three other areas.

WHY IS WATER RECYCLING NEEDED?

- Water resources planning is **no longer a local water company issue**.
- The **South-East is a critical location** for several major schemes.
- To protect and restore the natural environment, **licensed abstractions from rivers and boreholes will also reduce**, which will reduce the supply capacity of most water companies.



WHY WAS WATER RECYCLING NOT IN THE ORIGINAL PLANNING APPLICATION?

- Information was shared about water recycling during the original planning process.
- During the **Planning Committees**, members raised questions about the scheme.
- Information was also shared with **Havant Borough Council's Planning Committee**.
- Much information was publicised ahead of both Planning Committees via **Southern Water's consultation** which ran until 16th April 2021.



COULD STORMWATER OR UNTREATED WASTEWATER END UP IN THE RESERVOIR?

- **No, the water recycling process would be completely separate from the stormwater releases.**
- These only occur when the wastewater treatment plant is running at full capacity, and storage tanks are full.
- **Stormwater could never end up in Havant Thicket Reservoir or the drinking water network** because the recycling plant takes its water source from the end of the treatment process.
- **Portsmouth Water will be in sole control** of the water entering and leaving the reservoir.



WHAT WOULD BE THE IMPACT ON THE ENVIRONMENT AT HAVANT THICKET RESERVOIR?

- We anticipate there would be **no impact on the environment** at the reservoir if the water recycling scheme went ahead.
- Initial studies suggest that **recycled water entering the reservoir would be cleaner** than the spring water source.
- Our support for the water recycling scheme is **absolutely dependent on there being no detrimental impact** on the environment.



WHAT WOULD BE THE IMPACT ON PORTSMOUTH WATER CUSTOMERS?

- If the plans went ahead, Portsmouth Water customers' **water would nearly always come from Bedhampton springs.**
- Our customers would only receive some recycled water mixed with spring water in **drought or emergency** scenarios.
- Recycled water could only be used as a source for drinking water if it meets **the very strict legal standards** set out by the Drinking Water Inspectorate.



WHY CHOOSE WATER RECYCLING

COMPARED TO OTHER WATER RESOURCES OPTIONS?

- Once the reservoir is built and the surplus water from Bedhampton springs used, the only other sustainable sources of water available in the South-East are **seawater and treated wastewater**.
- Southern Water's initial plan to build a **desalination plant was rejected** for many reasons including its high carbon footprint.
- **Reducing leakage and water consumption** are key to both companies' long term plans but new sources of water are still required.



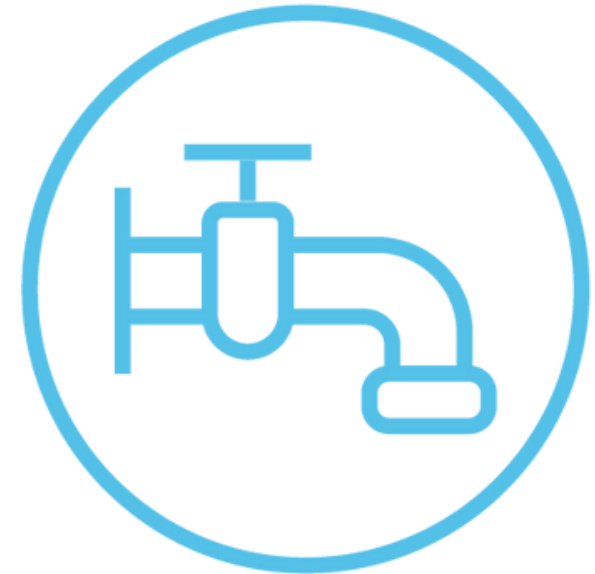
WHAT'S THE ENVIRONMENTAL IMPACT OF WATER RECYCLING?

- Water recycling compares favourably with desalination, with regards to **carbon emissions and energy consumption.**
- In 2020 and 2021 Southern Water carried out an options appraisal process to confirm whether the desalination proposal was the right solution.
- It emerged as the **least preferable option.**
- The Hampshire Water Transfer and Water Recycling Project was the most preferable option with regards to **carbon and environmental impact.**



WILL USING RECYCLED WATER AS A SOURCE CHANGE THE TASTE?

- The main factor influencing taste is the reservoir being is **open to the elements**.
- **Algal blooms** can sometimes affect the taste of the water.
- The level of **nitrates and phosphates** affects the likelihood of algal blooms developing.
- **Nitrates are lower in recycled water than spring water**, so diluting spring water with recycled water will help prevent algae from growing.
- Issues relating to taste can be controlled at our **Farlington treatment works** if needed.



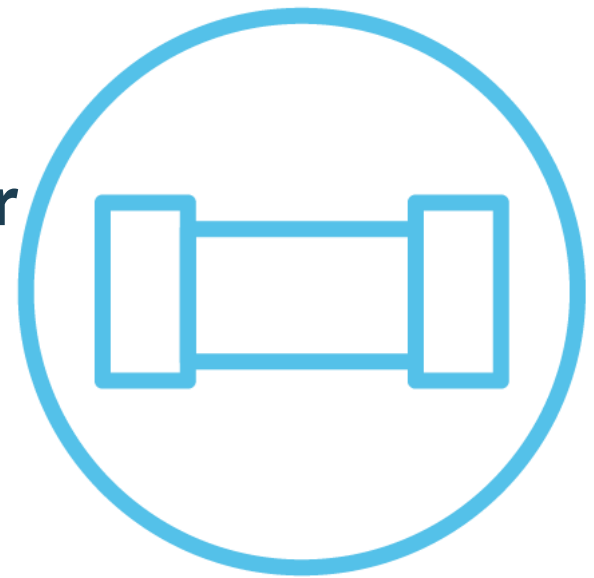
WHAT IS THE COST OF THE WATER RECYCLING SCHEME?

- The Hampshire Water Transfer and Water Recycling Scheme is expected to cost **more than £800m to build.**
- The scheme will be paid for by **Southern Water** and will be reflected in the bills of their drinking water customers.
- **Portsmouth Water customers** will not see an increase in their bills as a result of the scheme.



ALIGNMENT WORKS

- We will be seeking planning permission for **additional capacity in the pipes** supplying water to and from the reservoir.
- This change will **futureproof the reservoir** with the potential to deliver even greater **environmental benefits**.
- **Ofwat supports this approach**, agreeing that it is in the best interests of Southern Water's drinking water **customers**, reducing impact on the **environment** and disruption to our local **community**.



**THANK YOU FOR
LISTENING**



QUESTION AND ANSWER

