

July 2024

# Improving water and wastewater services on the Isles of Scilly

St Martin's water consultation



## South West Water is proposing a major investment to improve water and wastewater services on the islands. Our vision is simple: thriving communities, protecting precious wildlife and crystal-clear waters, all powered by our dedication to high-quality practices and cutting-edge technology.

Since taking over responsibility for water services on the Isles of Scilly in 2020, we've been assessing the water and have been in discussions with regulatory bodies, including the Drinking Water Inspectorate (DWI) and the Environment Agency.

The DWI has issued improvement notices for the five inhabited islands to improve the quality of the water so that it meets legal requirements. Additionally, the existing water supply is not sufficient to consistently meet summer demand.

On the Isles of Scilly, we own wastewater infrastructure on St Mary's and Tresco only. There is an Environment Agency Local Enforcement Position to improve wastewater services on St Mary's. We'll also be replacing the screening plant on Tresco to ensure it meets permit requirements.

As part of our investment programme, we're also carrying out improvement works to existing water and wastewater services starting this autumn. These don't require planning permission as they are being delivered under permitted development rights, but we'll keep you updated on these works as they progress through our public events, website, newsletters and social media.

Our investment programme isn't just about ticking boxes; it's about creating a legacy of resilience and excellence.

## Our aims

### Clean water

- To provide wholesome and safe drinking water to all island communities
- To maintain a continuous, reliable supply of water that is resistant to drought for the long term
- To deploy modern water treatment technology

### Wastewater

- To improve wastewater treatment on St Mary's and Tresco to meet national regulations
- To reduce spills and enhance the marine environment and water quality
- To improve the resilience and sustainability of the wastewater network



## Our proposal for St Martin's

### Water treatment process

There are many stages of treatment that water goes through before it is safe to send to your tap. In the UK, the production of drinking water is closely regulated by the Drinking Water Inspectorate (DWI). Water treatment plants must adhere to tight regulatory standards and guidelines to ensure the water is wholesome and safe for consumption.

Due to the nature of the water quality issues on the islands, such as higher than acceptable levels of salt and heavy metals, membrane treatment is one of the only options for treating the raw water to meet regulatory requirements.

We'll use a membrane treatment called 'reverse osmosis' to treat the water to ensure it meets drinking water standards. This treatment process pushes water through a fine filter (membrane) to remove salt and other contaminants. The water is then remineralised and pH corrected to provide the highest quality drinking water.

- The process is clean and provides high quality water
- This is practiced globally and is a preferred method of many countries
- This is exemplar water treatment using modern technology
- It's a proven technology already used on St Mary's and Bryher – although these are not currently compliant with the latest standards.

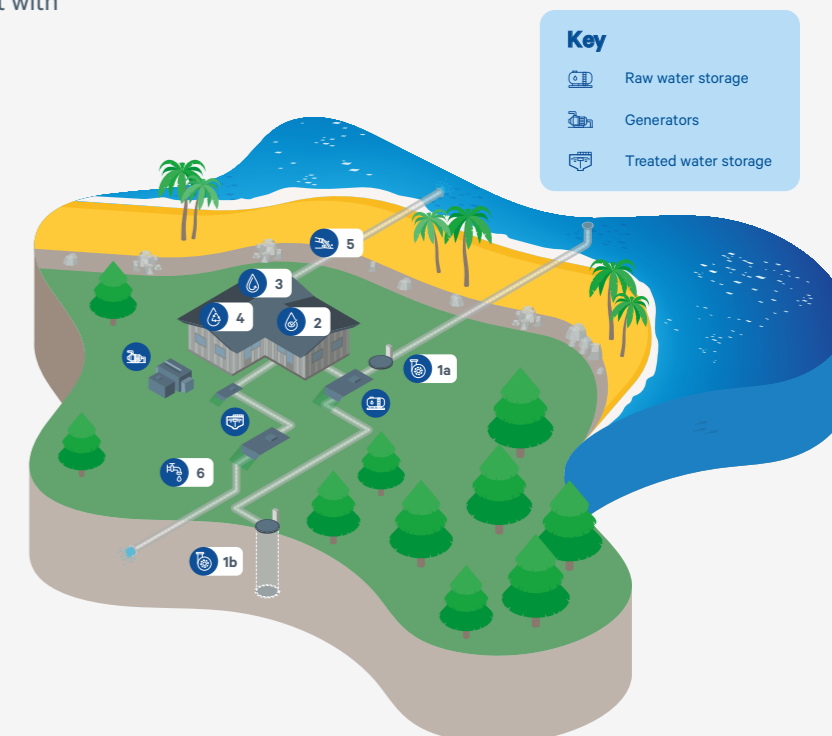
### Water treatment plant

We're proposing a new water treatment plant for St Martin's which will treat seawater and in the future also treat groundwater so we can provide a continuous, reliable supply of clean water for the longer term.

The site for the treatment plant would be at the western end of the island at Lower Town, with seawater intakes on the end of the Lower Town Quay. We aim to have the new water treatment plant operational in early 2026.

The main features of the new water treatment plant are:

- A Reverse Osmosis (RO) Water Treatment Works which comprises a new site and associated building and infrastructure at Lower Town
- Seawater Intake and Brine Discharge Structure (consisting of a concrete chamber at the end of the Quay to house an intake screen and brine outfall) at Lower Town Quay
- A new below-ground pumping station at Karma Hotel to pump flows from the intake to the Water Treatment Works
- New Treated Water Storage Tank and Booster Station at a new site north of Middle Town
- Installation of approximately 1km of below-ground 150mm pipework.





## Key considerations

The Isles of Scilly is a precious archipelago, with its pristine coastal waters and environment providing home to a unique blend of nature and wildlife, exceptional heritage, and nationally important habitats and landscapes.

Their status as a National Landscape and conservation area reflects the national importance and the vital contribution these islands make to wildlife, climate and our wellbeing.

We're committed to ensuring that our investment programme complements and protects this status. Taking water out of the environment is strictly controlled - we have to take enough to meet demand, whilst keeping enough in the environment to maintain wildlife and habitats.

We're carefully designing our proposals to ensure that we respect the landscape and minimise our impact on protected areas, wildlife and habitats, local heritage and communities during construction and operation.

Our investment programme offers an opportunity to enhance the environment and we are committed to a minimum of 10% biodiversity net gain for the new water treatment plant on St Martin's.

We've carried out a number of surveys to inform our plans so far – you may have seen some of our surveyors on the island. Further surveys will be carried out and technical reports will be included within our planning application. The following pages outline some of the key considerations and how they have shaped the development of our proposals.

### Environmental designations

We're carefully designing our proposals to ensure that we respect the landscape and mitigate impacts on environmental designations as much as possible.

The proposed intake and outfall structure is located within two European Designated Sites:

- the Isles of Scilly Special Protection Area (SPA),
- the Isles of Scilly Complex Special Area of Conservation (SAC).

These designations cover all of the sea around the Isles of Scilly and therefore cannot be avoided. However, through consultation with Natural England the proposed intake and outfall structures have been positioned outside of the St Martin's Sedimentary Shore Site of Special Scientific Interest (SSSI) to minimise impacts. Additionally, the terrestrial aspects of the scheme have been carefully designed to avoid any statutory environmental designations.

The design has been heavily influenced by extensive marine and terrestrial field surveys and desk studies to avoid adverse impacts to habitats and species and to identify the required mitigation measures. We are continuing to work closely with Natural England, the Marine Management Organisation, the Environment Agency and the Isles of Scilly Wildlife Trust as we develop our proposals.

### Site selection

We identified three different areas on the island as sites for potential water treatment works and five potential seawater intake locations. These sites were assessed against a range of criteria, including: environmental designations, elevation (which affects efficiency), flood risk, noise, landscape and visual impact, access and constructability. We've proposed Lower Town as the location which best meets the criteria.

### Landscape and visual

There is already dense vegetation around the site. This will be retained as far as possible to act as screening to protect the view from the beach and footpaths. We'll also provide additional planting such as trees and hedgerows to screen the site from the majority of viewpoints. A Landscape and Visual Impact Assessment has been carried out and will be submitted as part of the planning application.

### Noise

We're carrying out noise assessments, where we take a baseline noise level at the proposed location and surrounding area to assess against the expected noise from the proposed operational equipment and construction activities. Where mitigations are needed, we'll factor these into our detailed design – such as acoustic insulation on our buildings.

### Heritage

We have completed a Heritage Impact Assessment (HIA) which found that there are no designated heritage assets or sites recorded in the Historic Environment Records (HER) within any of the site areas or pipe routes. We'll continue to closely monitor, analyse and report any archaeology findings as we progress.

### Sustainability

Across South West Water we're committed to sustainable solutions. We have a target to reach net zero in our operations by 2030.

As part of our programme of works, we're exploring how we can provide environmental enhancements and sustainable solutions for the water treatment plant on St Martin's.

We have been reviewing how we can minimise the ongoing operational energy use of the proposed water treatment facility and we believe that we are progressing with the lowest energy intensive solution available to us.

We're considering a range of options for sustainability, these include:

- Use of low- and zero-carbon technologies
- Renewable energy use, such as solar panels, heat exchange and water turbines
- Measures to maximise water efficiency
- Recycled materials for construction
- Minimising import of materials to the island
- Use of prefabricated elements of the proposed scheme.

Further details of this and all other assessments and proposed mitigations will be submitted with our planning application.



## Creating a positive legacy for generations to come

These proposals are part of South West Water's major investment in the Isles of Scilly.

This investment will enable us to:

- Reduce pollution
- Protect the islands' pristine coastal waters
- Protect and enhance the islands' precious wildlife and natural environment
- Provide innovative sustainable solutions to the islands' water quality issues
- Keep bills fair for you.

Across all of our improvements works, we will be sympathetic to the unique nature of the islands and seek to minimise impacts on all habitats, wildlife and communities during construction and operation.

### Community and economic benefits

We will work closely with stakeholders and residents to identify areas where we can invest into the community to maximise the benefits of the programme.

We're exploring working with local schools, creating internships and are looking to hire as well as create new highly skilled jobs through the construction phase and the ongoing operations of the new water and wastewater treatment plants. As well as creating jobs, improving water quality will support tourism.

## Construction

### Construction proposals and mitigations

Construction for the water treatment plant is expected to start in early 2025 and finish in early 2026.

We're exploring a range of measures to minimise construction impacts including:

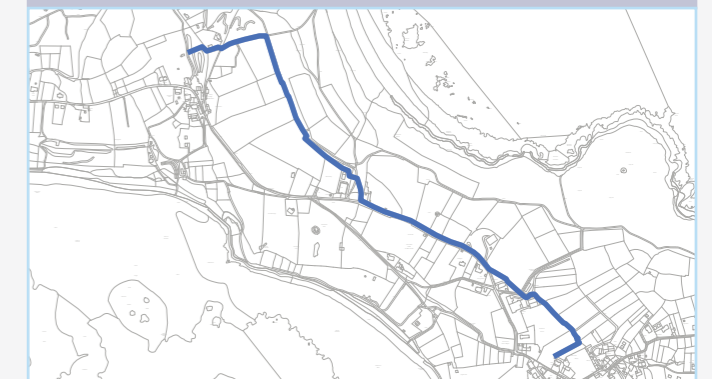
- Working hours to be agreed with Council of the Isles of Scilly prior to construction
- Sound fencing to minimise noise from the construction site and a low-noise emission plant
- Management of dust and emissions to reduce impacts to air quality
- Low impact plant and tooling to manage noise, vibration and light to reduce disturbance to people and habitats
- Works will be timed to avoid breeding bird season where possible
- Toolbox talks with contractors on site to explain environmental constraints.

Details will be set out in our application which will include a Construction Environmental Management Plan (CEMP), a Construction Traffic Management Plan (CTMP) and a Site Waste Management Plan (SWMP).

### New water pipeline

We're installing a 1.3 km pressurised water distribution pipeline across the island from Middle Town to Higher Town to improve water quality in Higher Town. This is being constructed under permitted development rights under the Town and Country Planning Act. Due to the sensitive and protected areas on the Isles of Scilly, we have carried out an assessment of environmental impacts and engaged with the Council to secure a 'screening opinion' before any work can proceed. Construction of the pipeline will start this autumn and is expected to finish by the end of the year.

New water pipeline route





# We want to hear from you

We want to bring local residents and our customers on this journey with us and ensure that we are addressing concerns and taking on board feedback where possible.

Information about these proposals and an online feedback form is available on our website, along with information about the wider investment programme.

Please visit [www.southwestwater.co.uk/isles-of-scilly](http://www.southwestwater.co.uk/isles-of-scilly) or scan the QR code.



You can also email your feedback to us at [IoSProject@southwestwater.co.uk](mailto:IoSProject@southwestwater.co.uk), write to us at **FREEPOST – SWW Isles of Scilly Improvement Works**, or complete a form at our public event and hand it to the team.

**Please respond by 16th August 2024.**

## Next steps

We'll analyse all feedback received which will help inform and shape our planning application.

As part of our application, we'll be submitting a Statement of Community Involvement (SCI) which will detail how we have engaged with the local community and, where possible, how we have taken on board feedback that we have received.

We'll submit each application to the Council of the Isles of Scilly.

