

Stakeholder Newsletter



Focus on environment

Working in partnership to deliver more natural solutions to address the challenges we face

Our water, whether in a river, sea or underground aquifer, is affected by everyone and everything using it.

Climate change is also having an impact on water availability. We are tackling a number of key challenges by working in partnership with other organisations and landowners, to develop solutions to improve urban and agricultural land management, reduce risks to water quality and river flows, and create sustainable drainage to cope with heavy rain. Here we highlight some of the innovative projects we're working on. Please do get in touch if you would like to know more about our work in this area.



Dr Toby Willison
Director of Quality and Environment

Conservation grants support “Save our Harbours” initiative

The first round of conservation grants focussed on improving habitat networks across Chichester, Langstone and Pagham harbours have been awarded as part of our wider “save our harbours” initiative.

Delivered in collaboration with the Chichester Harbour Conservancy, three initial awards of up to £10,000 each have been made for tree planting on the Stansted Estate (pictured), a hedgerow planting project completed by the Manhood Peninsula Wildlife and Heritage Group and public access improvement project delivered by the RSPB in Pagham. These are the first awards and we hope to offer further awards in 2023/24.



In this edition:

- £2billion to tackle storm overflows
- Battling drought with the South East Rivers Trust
- Increasing the ecological resilience of Lukely Brook
- Supporting farmers with capital grants and advice
- Soil cultivation workshops
- Reducing nitrogen use
- Scouting for weeds
- Environmental Champions Volunteer Day at Moat Farm
- Reducing nitrates by improving soil health
- Creating wetland habitats with the Wildlife Trust

Your feedback matters

Let us know what you thought of this issue. Please email: Stakeholderteam@southernwater.co.uk

£2billion to tackle storm overflows



We have submitted a programme of work to our regulators, based on our [Pathfinder projects](#), to make further improvements as part of a longer term, **£2billion investment to reduce storm overflows to rivers and the coast.**

The programme which would start in 2025 focuses on beaches, rivers, shellfish waters and other environmentally sensitive areas. In addition, we are accelerating investment into the next 2 years to kick start the programme. We will be publishing more details in the coming weeks. Find out what causes storm overflows by watching our [animation](#).

-  **Pan Parishes** – reducing groundwater infiltration
-  **Isle of Wight** – trialling slow-drain water butts
-  **Fairlight** – assessing sustainable drainage solutions
-  **Swalecliffe** – working on slowing the flow
-  **Margate** – reducing hard surfaces
-  **Deal** – reducing local flooding

Battling drought with the South East Rivers Trust

An ambitious, collaborative, multi-farm project focused on holding more water in the landscape so that river flow is more resilient during periods of dry weather is being undertaken with the South East Rivers Trust (SERT). The project is looking at enhancing headwater areas in the Upper Beult catchment to slow the flow and hold more water upstream of one of our key abstractions supplying Bewl water.

Working collaboratively with SERT and five landowners, the project designs are being developed according to ecosystem service outcomes, where our investment will be directly linked to water resilience. Some initial work is now being completed on the farms placing leaky woody dams in wet woodland areas, however even more ambitious wetland enhancement work is planned in the coming year.



Increasing the ecological resilience and quality of Lukely Brook, Plaish, Isle of Wight

Lukely Brook is an important chalk stream that flows through Carisbrooke on the Isle of Wight, providing valuable aquatic habitat, supporting the ecology of Plaish Meadows which is designated as a Site of Interest to Nature Conservation (SINC), and acting as a key public amenity to local residents.

We have been undertaking river habitat enhancement work to make the stream more resilient to environmental change, improve flows and water depths in the stream, and provide increased public amenity value.

Between November and December last year, we undertook construction of an innovative 'Stage Zero' restoration scheme to increase the ecological resilience and quality of the stream. The idea behind the Stage Zero approach is that before human influence, many rivers would have comprised multiple braided channels, rather than a single well-defined channel that has become typical of many watercourses nowadays as a result of historical and present-day management. Under a Stage Zero restoration, the existing channel is partially blocked and/or infilled, pushing water out of the banks and allowing the water to find new pathways through the floodplain, developing new channels, improving connectivity with the floodplain and supporting the development of new ecologically valuable habitat.

This work will allow water to continue to flow through the main channel during lower flows but will cause water to back up and spill out onto the floodplain when flows increase. The resulting 'wetting up' of the floodplain is expected to improve the quality of habitat on Plaish Meadows and is also likely to have secondary benefits such as reduced downstream flood risk.

We have commenced an environmental monitoring programme which will assess the on-going functioning of the scheme over the next 18 months. This includes ecological surveys, water level monitoring and time lapse photography. For further information on our previous and ongoing work on the Lukely Brook visit islandrivers.org.uk



Supporting farmers with capital grants & specialist advice

Reducing losses of soil, nutrients and pesticides from farms can increase farm efficiency and sustainability, whilst helping protect and improve the quality of our drinking water sources.

Under our Farm Capital Grant Scheme farmers and land managers can apply for grants for up to 50% of the cost (capped at £10,000) towards new infrastructure and machinery investment which supports local water quality priorities and helps them achieve best practice. 28 applications were approved in 2022, including infrastructure improvements to separate clean and dirty water, machinery to establish cover crops or enable reduced cultivations and precision farming equipment to enable variable rate nitrogen application.

20 funded specialist advice visits were arranged, including Farm Infrastructure Audits, Pesticide Filling/Washdown Facilities and Biobed/Biofilter Design visits and Soil Health / Soil Management advice visits. The visits are delivered by independent BASIS and FACTS (crop advisory qualifications for pesticide and fertiliser applications) qualified advisers and can be used to inform and support capital grant applications, or to determine a baseline and provide a pathway towards best practice.

Soil cultivation workshops

This January we ran a series of soil cultivation workshops for farmers with renowned cultivation expert Philip Wright.

The workshops were designed to get farmers thinking about soil health and how the use of farm machinery can maintain soil structure and avoid erosion. These workshops form part of our overall approach to encourage best practice on the soils in the catchments that supply our drinking water.



Environmental Champions Volunteer Day at Moat Farm

Southern Water Environmental Champions joined forces with South East Rivers Trust and Kent Wildlife Trust at Moat Farm to support the final stages of the [PROWATER](#) project. Moat Farm, located on the headwaters of the Upper Beult Catchment, forms one of 10 pilot schemes which are being delivered in regions of importance for drinking water production.

Environmental Champions created leaky woody dams, which are a type of natural flood management (NFM). NFM measures help emulate the natural functions of river catchments by slowing the flow and holding back water for longer, so that biodiverse wetlands can develop. They will also reduce downstream flood risk, providing more secure water supply.



Sampling cover crops to reduce nitrogen use

In Thanet, we are implementing a scheme to reduce nitrogen leaching to groundwater.

We've started a project with the Farming and Wildlife Advisory Group (FWAG) to support local farmers. In the first stages FWAG have been busy taken biomass samples from 22 farms growing overwinter cover crops to see how much nitrogen has been captured during the overwinter period. We're also following this up with soil testing on 50 fields in the catchment. The results will help farmers make accurate fertiliser decisions over the forthcoming growing season to help protect our drinking water supplies.



Scouting for weeds

This autumn and winter we've kicked off a new project working with a group of ten farmers in Kent and West Sussex.

Our aim is to see whether innovative drone technology can help identify problem area of weeds on arable farms. Delivered in partnership with Drone Ag, the project kicked off with a series of sessions training farmers on how to use the drones. Going forward we're going to explore whether the technology can help farmers reduce the amount of herbicide that they apply.



Reducing nitrates by improving soil health

Soil organic matter (SOM) is a key driver of soil stability. Improving SOM helps to create good structure and texture which makes soils more moisture retentive, less prone to compaction and erosion. SOM also creates soil fertility so is good for crop health and nutrition. UK government data indicates that over half of organic carbon has been lost from arable soils, which is estimated to cost the economy £1.2 bn/yr.

Our project with [Omacast](#) is measuring, mapping and interpreting carbon stocks within the soil, with the aim to improve soil health (thus reducing the need for adding nitrates), carbon sequestration and water quality within the Western Rother Catchment.

Six participating farms (with a range of soil and farm types) have been scanned (electronic conductivity scanning) and 40 hectares of soil per farm has been sampled and analysed. The National Institute of Agricultural Botany (NIAB), the leading crop trials research organisation in the UK, is analysing and interpreting the data. From the baseline, options to increase carbon stocks will be considered, with NIAB and Omacast providing advice and guidance to help participating farms reach their targets and inform farms in the wider area.

The data from this project will be considered alongside that from the 5-year Soil Health Project currently running in Western Rother, to further understand the potential effects of specific land management activities on soil health and carbon sequestration.

Creating wetland habitats and partnership working with the Wildlife Trust

As part of our Environment Improvement Programme, which is investing in natural processes for water resilience, we are developing a series of collaborative projects in the Western Rother catchment.



These include creating wetland habitats and enhanced public access and recreation, to working collaboratively with the Wildlife Trust and a series of landowners along the river to create an ambitious vision to restore and enhance the ecosystem services of the river. To date this has involved a wildlife survey of the length of the river, which is showing huge potential for wildlife enhancement. We have also held a series of workshops and meetings with landowners and stakeholders as we collaboratively develop a long term plan.

The Western Rother is a key resource and this work is about protecting this resource whilst ensuring we can continue to make the best use of water for customers in North Sussex. Alongside the collaborative plan and habitat enhancements, we'll also be getting full swing into the Ofwat Innovation project 'Catchment Systems Thinking'. This project is also taking place in the Western Rother catchment, where over the summer we're planning a series of workshops to collaboratively develop a citizen science approach to water quality monitoring that we'll be implementing as part of a demo project next year.