

# CASE STUDY



from  
Southern  
Water.

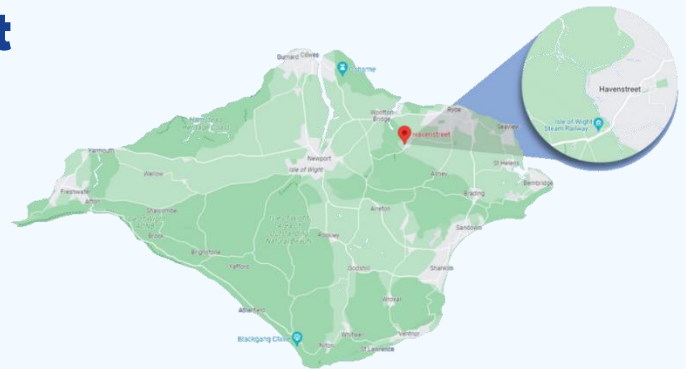
## Using slow-drain water butts to slow the flow in Havenstreet

### Background

Havenstreet is a small village on the Isle of Wight with 4000 residents. It has one pumping station and a combined sewer which releases into Blackbridge Brook, a Site of Special Scientific Interest ([SSSI](#)).

Havenstreet is located within an Area of Outstanding Natural Beauty (AONB) and a [Unesco Biosphere Reserve](#), which means extra care must be taken to protect biodiversity and ecology.

Data has shown that 15-minute bursts of rain were the main cause of this pumping station becoming overwhelmed, leading to storm overflow releases. We couldn't stop the rain, so to prevent this we wanted to find a way to 'slow the flow' of rainwater running off roofs in the village and into the system.



### Our approach

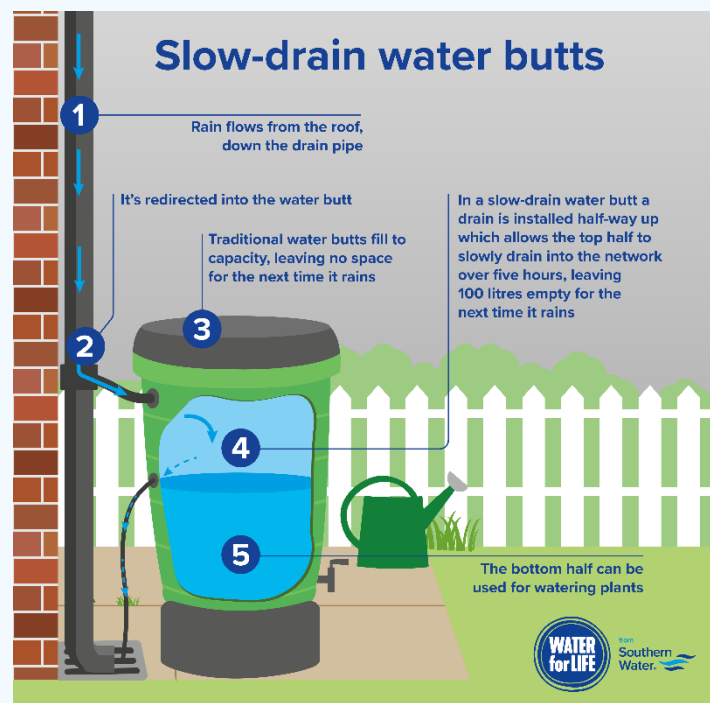
- **Residents:** After sending information letters, we went door-to-door to engage with local homeowners to talk about the project, and offer to install free slow-drain water butts for them.
- **Parish Council:** We worked with the town Parish Council which helped us publicise the project and increase uptake. This proved successful with 132 properties (71%) accepting the offer.
- **Local Contractors:** We hired six labourers through a local contractor to install the water butts, delivering a bespoke service as well as providing work in an area where unemployment is high.



### Slow-drain explained

1. Rain flows from the roof, down the drainpipe.
2. The rainwater is redirected into the water butt.
3. Traditional water butts fill to capacity, leaving no space for the next time it rains.
4. In a slow-drain water butt, a pipe is installed halfway up which allows the top half to slowly drain into the network over five hours, leaving 100 litres of space available for the next time it rains.

Everyone is familiar with water butts and their uses, which makes them the perfect sustainable drainage solution for a mass roll-out. Slow-drain water butts are a new type of water collector, and they're a game changer when it comes to water management.





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Regular water butts fill up and need to be manually drained, or they will overflow leading to a muddy or even flooded garden. When full, they lose their ability to manage the flow of water and reduce rainwater runoff.

Slow-drain water butts do not have this issue. They feature a pipe fitted halfway up the water butt to slowly drain excess water at a pace the network can manage, while leaving plenty of water left for use on the garden. Basically, they slowly drain themselves as and when they need to.

This not only prevents the water butt from filling and spilling, but it also reduces the rainwater runoff that can lead to storm overflows.

## Outcome

In August 2022 the offer of a slow-drain water butt was accepted by 132 customers in Havenstreet, and as a result we saw a 70% reduction in the use of the local storm overflow.

We're now offering households in Fishbourne, Wootton, [Gurnard and Cowes](#) a slow-drain water butt to scale up the initiative and accelerate our efforts to reduce storm overflows on the Isle of Wight.



## Advantages

- Reduced storm overflows.
- Greater awareness of our initiative to slow the flow of rainwater.
- Increased customer satisfaction and confidence.

## Costs

The project costs, including the water butts, installations, labour and communication, was under £20,000. In comparison, to achieve less than 10 releases per year, a storage tank of 60m<sup>3</sup> would be required in the area, costing over £120,000 for the tank itself, as well as the additional cost of purchasing and maintaining the land.



## Contact details

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