

**Community Centric Rainwater Management
Submitted by Thames Water**

**Awards category
Regeneration and retrofit – private properties**



Lead or collaborating organisation(s)	Thames Water, Our Rainwater, Groundworks, Waltham Forest Council, Lambeth Council, Farming and Wildlife Advisory Group
Location of SuDS	<p>Waltham Forest (E11): Esther Road, Wadley Road, Greenway Avenue (E17).</p> <p>Lambeth (SW8): Crimsworth Road, Goldsbrough Road, Thorpach Road.</p> <p>Cirencester (GL7): Church St, Watermoor Rd, City Bank View, Queens St, Chesterton Lane, Lavender Lane.</p>

1. SuDS overview

SuDS components used	Waterbutt planters
Size of the scheme and its local context	14 residential streets across three separate communities (north London, south London and Cirencester). Total of 74 waterbutts managing runoff from a combined area of 1800m ² .
Approximate age of scheme (years)	<1 year
Benefits of the scheme	<ul style="list-style-type: none"> - Flood risk management - rainwater harvesting - amenity - sewer capacity - biodiversity - climate change adaptation - pumping and treating wastewater - education
Briefly describe the scheme	<p>Community roll out of passive draining waterbutt planters on residential properties across 3 communities in an urban (London) and rural (Thames Valley) setting. The project explored ways of encouraging residential communities to adopt rainwater capture, to help 'slow the flow' of rainwater entering sewers, engaging residents to be part of the solution to CSOs and flooding. The waterbutts are unique and designed with two tanks; a 30L internal tank providing water for reuse, and a 235L tank with a restricted outlet that provides passive storage, ensuring storage is available for the next event. They also provide biodiversity and amenity enhancements through the provision of in-built planting trays on top.</p> <p>The scheme leveraged digital innovation by using an online platform to facilitate the uptake of waterbutts. Householders were encouraged to register their interest, and then schedule its installation at a time that suited them. Both online and in-person community engagement approaches were used to raise awareness of the waterbutt scheme, tailored to the specific communities. The use of a digital platform contributed to a streamlined onboarding experience for householders by leveraging technology to simplify and enhance the process.</p> <p>The project was part funded by Thames Water and Ofwat's Water Breakthrough Challenge.</p>

2. SuDS details

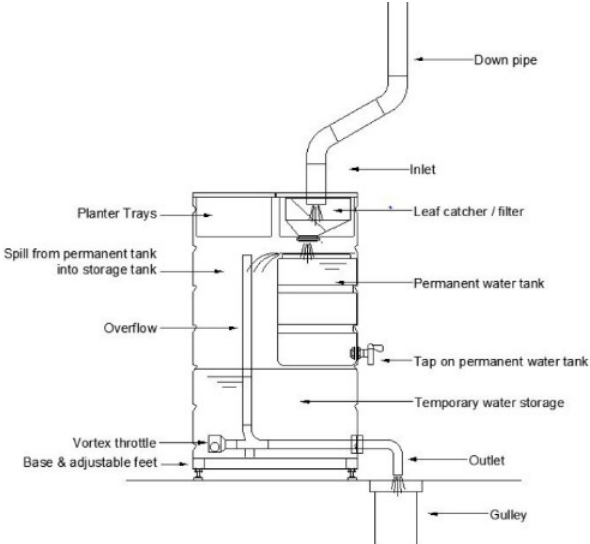

No	Question	
1	What difference has this scheme made to the local community or area?	<p>Runoff from 1800m² is now attenuated, equating to approximately 17,390L of rainwater being passively attenuated, helping to reduce peak flows by up to 70%. Additionally, 2,220L of rainwater is now reused instead of draining to the sewer. It has empowered householders and communities to take action and to feel part of the solution to their local issues (flooding or CSO impact).</p> <p>The waterbutts have planting trays on top, which residents used to plant flowers, fruit or vegetables, increasing biodiversity and enhancing the amenity of their neighbourhood.</p>
2	What is exceptional about this scheme beyond a standard approach?	<p>This project represented the first deployment of an innovative new online platform that enables engagement and sign-ups across communities, tapping into community engagement channels (e.g. whatsapp groups) and community champions (e.g. flood action groups) to promote the scheme and help it to achieve scale. By harnessing the capabilities of digital technology, we are able to drive action and make measurable impacts in addressing the challenges of a changing climate.</p> <p>The deployment of a multi-benefit waterbutt planter, that incorporates water re-use, stormwater management and biodiversity in a single, compact unit.</p>

3	How much work went into getting this scheme realised?	<p>Engagement with over 500 individual households across 14 residential streets in 3 different locations. 74 individual properties, each representing a single stakeholder to be engaged, and each property's private drainage representing its own unique setup and challenge.</p> <p>In person activities were arranged to promote scheme and educate residents, including a Community engagement day and door knocking.</p> <p>Development of the digital platform and regular updates and revisions to improve its interface and usability.</p> <p>Logistics management required for delivery, storage and installation of all waterbutts across 3 locations.</p>
4	Is this scheme part of a masterplan or integrated into other initiatives?	<p>Part of Thames Water's Surface Water Management Programme (SWMP), providing £3M for projects across the Thames region. The SWMP aims to build capacity and develop learning for delivering SuDS at a community scale, in addition to delivering multi-beneficial SuDS that reduce demand on the sewerage system and create public value.</p> <p>In Waltham Forest, the project formed part of the wider councils work for managing flood risk in the Lost River Fillebrook catchment.</p> <p>Delivered under Ofwat's Innovation Fund, which awards funding to projects that will provide innovative water company-led solutions that will bring benefits to customers, society and the environment.</p>

5	What value does this scheme provide to the local area and beyond?	<p>Developed a blueprint available to any organisation wishing to roll out similar initiatives, helping to establish good practices when it comes to effective community engagement to achieve SuDS at scale.</p> <p>Improving community understanding of surface water flooding and benefits of rainwater harvesting.</p> <p>Improving understanding of the importance of capturing water.</p> <p>Engaging communities to take collective and positive action in relation to reducing CSOs.</p> <p>For distributed storage of waterbutts to have an impact they must be deployed at scale, which has been a challenge for the first step of the SuDS hierarchy. This project has helped to show this is possible.</p>
6	What challenges/problems needed to be addressed to realise this scheme?	<p>Awareness: raising householder understanding of flood risk and climate-related issues to drive engagement.</p> <p>Engagement: Crafting effective strategies to encourage widespread householder sign-up and sustained participation in the scheme, including building a greater community understanding of the collective impact across a catchment.</p> <p>Accessibility: Overcoming restrictions associated with different property types to ensure the solution was accessible and applicable for a wide range of households.</p> <p>Education: Helping householders understand the concept of "slowing the flow" and how an attenuation device differs from a traditional waterbutt, which is typically only associated as a water saving device.</p>
7	How does the scheme address related issues such as water scarcity, nutrient neutrality, or biodiversity net gain?	<p>The waterbutts individually are multi-purpose; they provide 30L for reuse, they act as a passive attenuation device (235L), and they provide a small area on top for planting. In this sense their contribution is small, but they play their part in helping to tackle water scarcity and increase biodiversity.</p>

8	Is learning from the scheme continually captured and communicated? Please give examples.	The project is required to report back to Ofwat quarterly, and to share lessons learned with the wider industry. A blueprint will be shared publicly in May 2024 to as many organisations as possible via the Spring Innovation platform for water companies and via the Susdrain website. The blueprint provides a summary of the findings of this project, as well as providing a step by step guide from engagement through to installation.
9	What approaches/measures are taken to ensure the scheme is properly managed and maintained?	<p>As part of the engagement process, the need for and benefits of the waterbutts were explained to residents through the promotional material or in person via door-to-door or community engagement events, and during installations.</p> <p>Enforcing maintenance of a privately owned drainage feature is challenging, but this project has achieved this by educating and engaging residents.</p> <p>The waterbutt is also designed to be low maintenance by selecting the optimal orifice size; not too small (prone to blockages) and not too large (reducing the effectiveness of the storage). The waterbutt is also fitted with an easy to clean leaf catcher.</p>
10	Have you collected any feedback on your scheme? What do people say about it? Can you provide any quotes?	<p>Householder feedback collected on the platform demonstrated awareness and understanding of why such projects are needed, particularly in areas that experience frequent surface water flooding.</p> <p>Residents provided useful insights relating to space limitations and suggest offering capture devices in multiple sizes.</p> <p>Overall, residents expressed a positive sentiment towards the scheme highlighting ease of signing up and how they are now using their planters to grow herbs, flowers, and watering plants.</p> <p><i>“Brilliant. Super-efficient and I am delighted with my water butt.”</i></p> <p><i>“Great idea and service”</i></p> <p><i>“Roll out the scheme again so more people can benefit”</i></p>

3. Supporting materials

Image (low resolution)	Caption	Image credit
	<p>Schematic drawing of the internal arrangement of the waterbutt planter, showing internal permanent water tank, vortex flow throttle, and planter trays on top.</p>	<p>Thames Water</p>
	<p>A photo of the waterbutt planter installed in a space constrained area at the front of a residents property in Lambeth, where the downpipe originally connected into the combined sewer.</p>	<p>Groundworks</p>



A photo of a waterbutt planter installed at a residents house in Lambeth, demonstrating use of the increased biodiversity it provides.

Groundworks



Tomatoes being grown by a resident in the planter trays on top of their waterbutt planter.

Groundworks



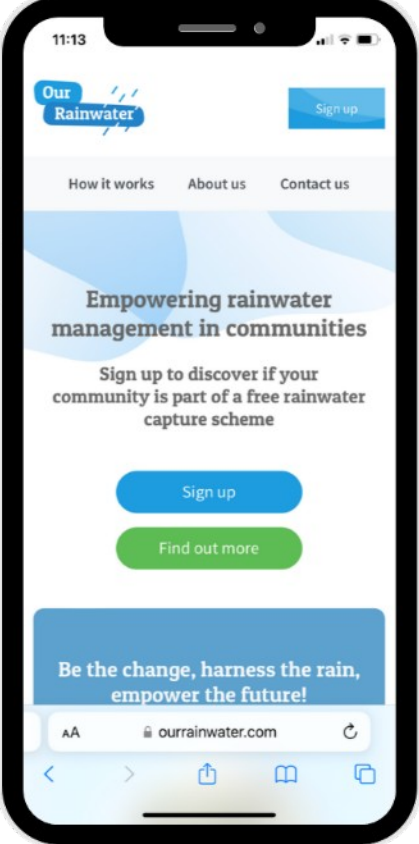
The community engagement day event held in Crimsworth Road, May 2023.

Our Rainwater



Example of the flyer used on social media to promote the initiative to residents in Cirencester.

Our Rainwater

	<p>Example view of the online platform</p>	<p>Our Rainwater</p>
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