



Lower Floods in Waltham Forest Submitted by London Borough of Waltham Forest

> Awards category Community SuDS



Lead or collaborating organisation(s)	Waltham Forest Climate Emergency Team, Waltham Forest Lead Local Flood Authority, Waltham Forest Service Store and the National Flood Forum
Location of SuDS	London Borough of Waltham Forest (two main areas: 1. Fillebrook Catchment including wards: Wood Street, Forest, Upper Walthamstow, Leytonstone
	2. Near Dagenham Brook, including wards: High Street, William Morris, Markhouse, Lea Bridge, Leyton residents in the catchment area

1. SuDS overview

SuDS components used	Self-emptying water butts (specially adapted), rainwater planters, and water saving devices installed in homes	
Size of the scheme and its local context	Household action at neighbourhood scale across three CDAs: Fillebrooke - 482 ha Chestnuts - 102 ha Walthamstow Marshes - 637 ha Total - 1220 ha	
Approximate age of scheme	Installs complete between 2023-2024	
Benefits of the scheme	 960 water butts have been installed in total so far (866 200l and 192 100l) slowing 134,971L from entering the drainage system Reduces quantity of storm water entering drainage network, reducing the likelihood of the sewer network exceeding during storm events Improved local residents awareness of flooding issues Empowered individuals with information on why local flooding has occurred, and how individuals can take simple steps to help tackle flooding Promote building community flood resilience on a catchment wide basis (also collaborating with Thames Water 'Project Capture') Insights into behaviour change / what drives people's will to have a water butt and how best to encourage take up Water saving in the home to conserve the resource (by installing internal water saving devices and encouraging use of rainwater from water butts to water gardens, instead of using potable water and therefore more environmentally friendly, reducing the use of highly processed main water supply) 	

Briefly describe the scheme	Residents in high flood risk areas were offered water saving devices and self-emptying water butts/ rain planters between September 2023 and April 2024. More than 900 installs are currently complete, the overall target of 1000 is expected to be reached by the end of April 2024. 960 water butts have been installed in total so far (866 200I and 192 100I) slowing 134,971L from entering the sewage network during storm events, reducing the risk of the local network surcharging.
	The projects targets areas that have previously flooded and upstream of these areas, aiming to cluster units to maximise the impact.
	The project took a community-led approach to encourage participation working closely with local resident Flood Action Groups, in collaboration with the National Flood Forum. Communications included a range of printed and digital media to encourage residents to sign up. Street-to- street door knocking encouraged further sign ups in target areas and this approach proved to be very effective.
	Service Store were appointed to deliver the installs and do door- knocking. The team created an adapted water butt which has a slow release to automatically empty, maximising the effectiveness in a heavy rain event. These were installed at residents' homes, and a number of larger buildings including a restaurant and cricket club.
	Internal water-saving devices were also offered to residents, including: kitchen tap aerator, cistern displacement, and shower flow regulator.

2. SuDS details

No	Question	Answer
1	What difference has this scheme made to the local community or area?	This scheme has worked directly with local Flood Action Groups and the National Flood Forum, strengthening the relationships between them and the council, and supporting the work they are doing in their local areas to reduce flood risk. Using a community led approach to promote the scheme has helped the community be better connected around flood action. Individuals have been empowered to help themselves and their neighbours. The initiative has also helped raise awareness of what household actions can be taken to tackle flooding and turn that community enthusiasm into local community led action that reduces flood risks in the area and that makes a real change to flood risk in the borough.

2	What is exceptional about this scheme beyond a standard	There was a focus on both an individual and collective approact to the issue of flooding, with installations in residents gardens across a local catchment area.	
	approach?	We were able to install a large number of water butts in a very short period of time. A diverse approach to engagement was taken. We believe this was a contributor to better participation levels based on comparisons to other projects.	
		Allowing residents to help drive the direction of the project and promote (word of mouth, WhatsApp) led to high, quick uptake and more installations achieved.	
		The project is entirely scalable in other areas with 2 specific characteristics: areas that have previously been affected by flooding and that have some form of established community group to engage through.	
3	How much work went into getting this scheme realised?	 The project has been a collaborative effort with the community at the heart, involving LBWF climate team, LBWF Lead Local Flood Authority, the National Flood Forum, Thames Water and resident flood action groups. The project team started this with the mindset of a 'pilot project' – knowing we would need to be adaptable. Particular examples of lessons learnt include: 	
		 Delivery partner originally set out to undertake surveys and installations in a follow-up visit. But we eventually found that one visit was often enough when equipped with extra materials on hand. More installations were completed by offering 	
		 convenient installation times for residents - outside of the 9-5pm working day and at weekends. Clustering installations onto particular roads, and door- knocking on neighbours to offer the scheme, allowed for very efficient installation and reduction in travel time between houses 	
		Delivery partner time included dedicated support on the customer service desk and in-person operatives installing in people's homes.	

4	Is this scheme part of a masterplan or integrated into other initiatives?	The Council has taken a direct household action approach on projects related to improving energy efficiency, which is where this project started.
		The Council is leading and supporting a range of other flood mitigation projects and initiatives, which includes a boroughwide surface water hydraulic modelling programme to identify strategic flood mitigation schemes, large scale SuDS in open spaces to reduce flood risk to homes and integrating SuDS into Highway projects.
		Lower Floods works alongside borough wide flood mitigation schemes, developing an integrated strategy between Lead Local Flood Authority and the Climate Change Team to build community flood resilience, drive community action and manage flood risk in the borough.
		In response to the flooding in summer 2021/2022, this project addresses one of the measures set out in <u>the boroughs Section</u> <u>19 report</u> . To "install appropriate measures to increase overall network capacity and build more resilient communitiesto attenuate rainfall in homes and properties and a collective approach across catchments will provide a far greater benefit to mitigating some of the flood risk"
5	What value does this scheme provide to the local area and beyond?	Flooding events in 2021 caused damage in excess of £16.4m. This is one initiative that will reduce the likelihood of flood water from sewer network exceedance entering properties in future. By preventing damage to property which is specifically homes, we can help reduce disruption to people and families when extreme flooding events occur in future.
		There is a known inequality with regards to social deprivation and people worst affected by flooding, and deprivation also constrains community preparedness. By helping build community resilience in the way this project has been delivered in collaboration with community groups, this can collectively support those who may be typically worst affected by flooding.
		Sharing findings and outcomes with other boroughs and RMA's, GLA, LoDEG (London Drainage Engineers Group) to share best practice and promote take up across the Thames Region.
6	What challenges/problems needed to be addressed to realise this scheme?	Creating a usable unit (water butt) at an affordable price – adapting an off-the shelf low-cost unit made sure the project could be rolled-out at scale to many different types of homes.
		How to share the offer with residents and explain the benefits effectively to get the community to sign up and promote community buy in.
		Technical installation challenges e.g. cast-iron pipes, space available for units, shared down pipes.
		Keeping interest between communicating about the projects, booking installs and delivery: required a fast response time.

7	How does the scheme address related issues such as water scarcity, nutrient neutrality, or biodiversity net gain?	The water saving devices installed within the buildings all reduce the quantity of water being used within the home. 6350L is saved per day on average, from the devices: tap aerators, cistern displacement, shower head aerator / flow regulator.	
		Direct benefit of water butts and rain planters is also sustainable use of rainwater to water gardens, which many residents reported as one of the reasons they were interested in the scheme.	
		Rain planter units also benefit biodiversity by creating more spaces for planting in gardens and mini habitat.	
8	Is learning from the scheme continually captured and communicated? Please	Sharing lessons learned from scheme with other boroughs and RMA's via EA and catchment partnerships, Thames RFCC, LoDEG, GLA, London Councils, National Flood Forum and Thames Water.	
give examples.	We have had two reflection points in the projects so far: after the pilot on two roads and then after the first area of installations (Fillebrook Catchment area) before we rolled out a second phase of the project. This led to some improvements in the delivery and communications, however we were constantly improving the processes as described above.		
		The collaboration with Thames Water's 'Project Capture' that was running in parallel in the borough also provided insights and findings that helped shape the project, as lessons learned were shared between the teams at several points.	
		Surveys were sent out at the end of each phase which has given useful feedback to build into decisions.	
		Summary of the project will be communicated back to participants and to Waltham Forest residents via social media, Council website and newsletters.	

9	What approaches/measures are taken to ensure the scheme is properly managed and	Weekly meetings with the various partners to update on progress, report any snags and make any adjustments as necessary Feedback from residents was gathered directly by email, WhatsApp and surveys	
	maintained?	Collaborated with Thames Water to learn from Project Capture – complemented one another and shared learning (technical aspects, engagement aspects) throughout to inform project design	
		One of the reasons for the success of the project – being able to respond to community needs quickly, deliver over short time frame, build momentum	
		Service Store gave explanation for how to use the water butt at the point of delivery, and this information was on a leaflet, so residents can manage the units themselves	
10	Have you collected any feedback on your scheme? What do people say about it? Can you provide any quotes?	Survey results showed that people were very pleased with the outcomes of the projects (124/132) reported they were satisfied (30) or very satisfied (95) with the information and (109/132) were very satisfied with the installation.	
		We received very positive feedback from the Flood Action Groups that were involved which was communicated in person, by email and at group meetings.	
		Service Store also received many Trust pilot reviews about the Lower Floods Installation, a couple of examples here:	
		Excellent water butt fitting "A huge thanks to Sayed who came and fitted a water butt for us. He explained everything and then fitted a slimline water butt within 15 mins. Really friendly and polite, such a great service"	
		Water butt- top marks! "We had a Water butt fitted in our rear garden and the service couldn't be bettered. The very polite, efficient and considerate fitter arrived at a very reasonable hour; we talked briefly about where it would best be put and then he just got on with it. Within twenty minutes he was done, explained how it worked and then left. Really appreciated that he used shoe covers whenever he went through the house. Top marks for a great service"	

3. Supporting materials

Image (low resolution)	Caption	Image credit
	Adapted water butt installed in a resident home	
	Planter unit installed in a resident home	

<image/>	Adapted water butt installed in a local independent restaurant (The Lacey Nook) which has experienced flooding. The rain water will also be used for food growing onsite.	
<image/> <text><text><text><text><text><text><text><text></text></text></text></text></text></text></text></text>	Lower Floods promotional flyers	
 drain pipe <		

