

Developing a market-based approach to deliver SuDS through streetworks

Project Final Report

Document Verification Record

Field	Details
Document Title	Delivering a market-based approach to deliver SuDS through streetworks
Revision number	4 (<i>Personal information redacted</i>)
Issue Date	29 May 2026
Partners	Greater London Authority, Thames Water
Author(s)	Senior Technical Project Officer, Greater London Authority (GLA) Senior Technical Project Officer, GLA Principal Programme Officer, GLA Principal Environment Engineer, Thames Water (TW)
Checker(s)	Innovation Project Manager, TW
Approver(s)	Head of Environmental Compliance & Water Quality, TW Head of Infrastructure, GLA
Signatures	(<i>Redacted</i>)

Table of Contents

Executive summary	4
Introduction/Project Details	5
1.1 Summary details	5
1.2 Programme	5
1.3 Overarching IPR and confidentiality statements	6
1.4 Links to other Ofwat Innovation Fund Projects or Competition Entries	6
1. Innovation Challenge	7
A. Project Background and Context	7
B. The Innovation Challenge	8
C. Project Aims and Objectives	8
2. Project Governance and EDI	10
A. Partnering	10
B. Sponsorship and Leadership	10
C. Stakeholders	11
E. Project Delivery Team	11
F. Equity, Diversity and Inclusion (EDI)	12
3. Project Methodology/Approach/Delivery	13
A. Approach	13
B. Delivery	15
C. Risk Management	21
D. Lessons Learned	22
4. Key Findings and Outputs	24
A. Innovation Maturity Level (IML)	24
B. Key Findings and Conclusions	24
C. Project Outputs	25
D. Changes to intended Outputs	27
E. Intellectual Property Rights	28
F. Outputs, Adoption and Foreground IPR	29
5. Outcomes	29
A. Outcomes for the Partners	29
B. Outcomes for other Direct Beneficiaries	30
C. Residual Activities to achieve Outcomes	31
D. Organisational Innovation Capability	32
6. Impacts	33
A. Impacts and Benefits for the Water Sector	33
B. Quantifiable Benefits	35
C. Timescales for Realising Benefits	36
D. Sector Innovation Capability	36
7. Dissemination and Knowledge Sharing	37
A. Dissemination and information-sharing activities	37
B. Efficacy and Learnings from Dissemination	38
C. Future and On-going Communications	39
8. Next steps for Adoption and Implementation	39

A. Next Steps	39
B. Wider Implementation	40
9. Outturn Monitoring Data	41
10. Final Reflections and Concluding Remarks	42
11. References and Links	43
12. Appendices	44

Executive Summary

Surface water flooding poses a present and growing risk to customers, communities and the environment. Climate change, population growth and the loss of permeable surfaces are increasing the volume of rainfall entering drainage networks, particularly in dense urban areas. The London Surface Water Strategy (LSWS) (Flood Ready London, 2025) recommends that landscape scale Sustainable Drainage Systems (SuDS) are needed to help manage this flood risk. Current approaches to SuDS are typically bespoke and delivered on a project-by-project basis, making them too slow and costly to meet the needed pace and scale of delivery.

This Ofwat Innovation Funded Catalyst project developed and tested a new, market-based mechanism to install SuDS in the excavations created by the utility companies undertaking planned utility network improvements. This approach reduces costs, minimises disruption for road users and residents, and enables delivery at scale through a “dig-once” approach. Analysis led by the Greater London Authority (GLA) of London streetworks permits for FY 2024/25 found that there were 87,000 potential opportunities for SuDS (Greater London Authority, 2025) to be delivered through planned streetworks that year alone, demonstrating the potential scalability of using streetworks as a mechanism to deliver SuDS.

The strategic relevance of this approach is reinforced by emerging national policy and industry recommendations. The Independent Water Commission (Cunliffe Review, 2025) highlighted the need for greater deployment of nature-based solutions and more integrated approaches to water management, while the updated [Defra National Standards for Sustainable Drainage Systems \(SuDS\)](#) provide a stronger framework for mainstreaming SuDS delivery across England. The project's "[Dig Once, Green Twice](#)" methodology demonstrates a practical route to delivering these ambitions at scale.

The project delivered a tested end-to-end market framework, including the key tools and processes to enable the market to operate such as a SuDS eligibility map and streetworks data platform, a standardised surface-water benefit metric, concept design guidance, draft market rules, simulations of market rounds, and a programme of training and engagement for future market participants. Evidence from holding workshops with key partners and real-world, delivery of three pilots, we have demonstrated that the mechanism is technically feasible and capable of delivering material cost efficiencies of around 19–27% (Project pilot data, 2026) compared with current SuDS delivery models.

The strength of the evidence generated through the Catalyst project was recognised through the award of Phase 2 funding under Ofwat's Water Breakthrough Challenge 6 – Transform Stream, enabling the framework, tools and market mechanism developed here to be tested at greater scale and maturity.

The project aligns most strongly with Ofwat's Strategic Innovation Theme 4, testing new ways of conducting core activities, with additional benefits across Themes 1, 2 and 3. Its outputs form a transferable, open-use framework that reduces delivery risk, strengthens sector capability, and provides a pathway for more efficient, less disruptive and more scalable SuDS delivery. In doing so, the work supports long-term flood

resilience, improved value for money for customers, and enhanced environmental outcomes across urban areas.

Introduction/Project Details

1.1 Summary Details

Our project, 'Developing a market-based approach to deliver SuDS through streetworks', was entered under the Ofwat Water Breakthrough Challenge 4 – Catalyst Stream. The project's outturn cost (actual cost at completion) was £ 1,340,610 (excluding in-kind contributions). The total project budget excluding in-kind contributions is £1,490,610 (this includes total amount awarded and total financial contributions).

Project overview: The project developed and tested a market-based framework to incentivise the delivery of SuDS through planned utility street works. This approach enables flood risk management authorities to fund SuDS installation by organisations already carrying out streetworks, directing investment to the locations where SuDS can deliver the greatest flood-risk benefit. Thames Water (TW) is the Lead Partner with the GLA as project partner. Delivery commenced in September 2024 and is scheduled to complete by 30 April 2026.

Our ambition has been to enable the roll out of critical Sustainable Drainage Systems at scale alongside planned streetworks projects by applying a market-based approach. The opportunities this creates includes turning utility companies from blockers to enablers, cost savings and monetary incentives for all parties and contribution to London's climate resilience.

We wanted to create a market framework which would enable efficient delivery of SuDS at a scale and pace, beyond current delivery models. We also wanted to achieve industry wide awareness of the market framework and commitment to implement following engagement with key London stakeholders, as well as other cities and utilities in the UK.

1.2 Programme

Start date: 1 September 2024

Completion date: 30 April 2026

Overall duration: 19 months

Main phases of work and their approximate timings:

The programme consisted of six workstreams, some of which ran in parallel and some which were consecutive in their development.

Phase 1: Data (September 2024 – April 2025): Development and testing of data, tools, platforms and governance needed to implement the market framework.

Phase 2: Piloting (April 2025 – March 2026): Real-world piloting of market framework with boroughs and utilities to provide insight for framework development.

Phase 3: Technical deep dives (September 2024 – September 2025): Technical studies and research to fill knowledge gaps in the market framework.

Phase 4: Market operator planning (October 2025 – April 2026): Development of operating, funding and governance model for market framework market operator.

Phase 5: Testing (April 2025 – April 2026): End-to-end testing of the market framework to identify potential issues before implementation.

Phase 6: Training (May 2025 – April 2026): Training workshops with stakeholders and development of short course and handbook materials for wider implementation.

Industry and observer group meetings took place between September 2024 – April 2026. These were regular meetings for co-creation, challenge and feedback on work delivered with industry and observer groups (detailed further in 2C).

Phase / Workstream	2024	2025				2026		
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
WS1 Data								
WS2 Pilots								
WS3 Technical Deep Dives								
WS4 Market Operator								
WS5 Testing								
WS6 Training and Capability Building								

1.3 Overarching IPR and confidentiality statements

All foreground IPR generated, including the market framework technical components, concept design guidance, handbooks, contracting templates, technical tools and explainer video, will be made openly available for the benefit of customers across England and Wales. These outputs will be published in accessible formats by the GLA and Thames Water, shared through existing industry networks and made available on a dedicated webpage. They will also be embedded directly into the SuDS through Streetworks Market documentation to support immediate uptake by participating organisations.

The project drew on Background IPR owned by the GLA and Thames Water (e.g. Infrastructure Mapping tools). This material remains with the originating organisations and will not be commercialised. Where Background IPR is required for sector-wide adoption of Foreground IPR, licensing will follow fair and non-discriminatory terms.

No elements of the Final Report are considered confidential.

1.4 Links to other Ofwat Innovation Fund Projects or Competition Entries

This project is not a continuation of any previously funded Ofwat Innovation Fund project. The outputs from this Catalyst-funded work are intended to inform potential future validation and optimisation activity, as well as support wider sector adoption of the approach. No further funding is assumed within this report.

This project builds on, and aligns closely with, a number of wider innovation and strategic initiatives across London's water and drainage sector. It supports the ambitions of the Mayor's London Environment Strategy (Greater London Authority, 2018) and Transport Strategy (Greater London Authority, 2018), as well as the priorities emerging from the recently published Local Nature Recovery Strategy for London (Greater London Authority, 2026). It complements the London Surface Water Strategy and supports the work of the Flood Ready London Catchment Partnerships, both of which emphasise the need for scalable, multi-partner approaches to surface water management. The project also aligns with the Mayor's Clean and Healthy Waterways Plan, (Greater London Authority, 2026) particularly its focus on reducing pollution and improving resilience through greener, more integrated infrastructure solutions. In addition, it draws on evidence from the SuDS Opportunity Mapping, informs long-term planning cycles such as Drainage and Wastewater Management Plan (DWMP) (Thames Water, 2023) Cycle 2, and is supported by emerging, still-in-development guidance including the Dig Once Approach and the [Dig Once, Green Twice Technical Guidance](#), which set out coordinated approaches to delivering both utilities and green infrastructure within streetworks. Together, these initiatives provide a strong foundation for future collaboration and innovation, and create clear pathways for scaling the market-based SuDS delivery model developed through this project.

We have since secured funding through the Ofwat Water Breakthrough Challenge 6 – Transform Stream for a continuation project. This funded programme builds on the systems and processes developed through the Catalyst project and advances the work from proof-of-concept to full market launch, establishing the market architecture, testing it at scale, and putting in place the infrastructure required for a functioning SuDS through Streetworks market.

1. Innovation Challenge

A. Project Background and Context

The revised National Flood Risk Assessment (NAFRA2) identifies that 320,000 properties in London are at 'high risk' of surface water flooding. Thames Water's DWMP (2023) predicts that the number of properties at risk of surface water and sewer flooding in London from a 1 in 50-year storm will increase by 30% to over 400k by 2050, due to climate change and the loss of permeable greenspaces to patios, off-street parking and property extensions.

To manage this present and growing risk, the DWMP proposes a 'SuDS-first' approach to absorb and slow the rate and volume of rainwater entering the drainage network. It identifies the need for nearly 7,000Ha of impermeable land (equivalent to 10,500 football pitches) to be drained to SuDs in London by 2050. This is a significant delivery

challenge with an average of 280Ha of impermeable surfaces needing disconnecting annually from a current delivery rate closer to 5Ha annually.

Furthermore, most SuDS projects are bespoke, with project design and management costs consuming most of the budget. Utility companies expect to increase the number of streetworks on London's road network, leading to additional disruption for road users and communities. Therefore, we urgently need an innovative approach that delivers SuDS at an unprecedented scale, at a reduced cost, with reduced streetworks disruption.

This is not a challenge that London alone faces. Since 2007, at least 51 flash flood events have affected towns and cities across the UK (Bright Blue, 2022), reinforcing the need for water companies to deliver ambitious SuDS programmes to manage surface water risk.

The project aligns most strongly with Ofwat's Strategic Innovation Theme 4 (testing new ways of conducting core activities), with secondary alignment to Themes 1, 2 and 3. The outputs provide a transferable, open use framework that reduces delivery risk ahead of wider implementation, supporting long term flood resilience, reduced disruption to communities and improved value for money for customers.

B. The Innovation Challenge

The core innovation of our proposal lies in transforming how SuDS are planned and delivered. In a context of increasing funding pressures and limited delivery capacity, a step-change is required to move from today's slow and fragmented approaches to a rapid, scalable delivery model capable of meeting TW's DWMP's 2050 attenuation targets and unlocking the full potential of SuDS to manage surface water risk.

The central challenge addressed by this project is: how can SuDS be deployed quickly, at scale, and at lower cost, while reducing disruption and coordinating multiple stakeholders with differing objectives, funding structures and governance requirements?

Current delivery models are bespoke, costly and disjointed, resulting in slow implementation and avoidable disruption. Our proposal directly tackles these limitations by introducing a coordinated, replicable and cost-effective approach designed to accelerate delivery and maximise benefits.

This innovation is also essential for responding to climate change. Increasing flood risk, population growth and the expansion of impermeable surfaces all demand faster and more strategic action. Our approach protects current and future customers from extreme weather and pollution through low-carbon, green infrastructure that improves water quality, enhances the natural environment and reduces surface water flooding.

The project further advances innovation in London's streetworks coordination by positioning utilities as active enablers of SuDS delivery, unlocking new efficiencies, reducing duplicative work and increasing overall delivery capacity across the city. By creating a scalable delivery process with an independent governance arrangement, we also believe that we can attract novel forms of financing, such as international green financing, that can help bank-roll delivery.

C. Project Aims and Objectives

The aim of the project is to design, develop and test an end-to-end market framework that enables the rapid, efficient and scalable delivery of SuDS through planned streetworks, ready for implementation across London and other UK cities.

The project objectives are to:

- Develop a data platform to identify SuDS and street works opportunities
- Define a standardised, tradable benefit metric
- Produce draft technical and contractual standards
- Test the market through simulations and pilot preparation
- Build capability through training and guidance materials

The project seeks to achieve the following outputs, outcomes and impacts:

Outputs:

The project has produced the tools, standards and capabilities required to operate the market framework, including:

- An operational data platform to identify optimum SuDS through streetworks opportunities, enabling a 20% increase in identified SuDS opportunities
- A standardised, tradable benefit metric to support consistent valuation
- Draft technical and contractual standards, including template buyer–supplier contracts and concept design standards
- Commissioned and delivered detailed technical SuDS-near-utilities guidance, strengthened evidence base on asset protection, and maintained ongoing engagement with utility partners to build confidence
- A list of ten capable and competent contractors
- An approved SuDS monitoring and evaluation calculator
- Supporting capability-building materials, including training, guidance, market handbooks and an explainer video.

Outcomes:

- A full end-to-end market simulation, validating the trading, governance and operational processes.
- Preparation and delivery of three real-world pilot schemes, achieving a 20% reduction in delivery duration and ~25% capital cost efficiency (Greater London Authority, 2026) compared with existing approaches

- Steering Group sign-off of the market operator's operating model, confirming functional readiness and stakeholder confidence.

Impacts:

The project has built the foundations for widespread uptake of the market framework, including:

- Commitment from 75% of prioritised London suppliers and their subcontractors, and 75% of buyers to adopt and support scaling
- At least 50% of committed stakeholders undertaking training to aid moving towards being market ready.
- Both Greater Manchester Combined Authority (GMCA) and Liverpool Regional Combined Authority (LRCA) were active members of the Observer Group. Engagement with Liverpool and Greater Manchester will be taken forward during the pilot market rounds for knowledge-sharing and future adoption beyond London.
- At the November 2025 Mayor's London Infrastructure Group meeting, senior representatives from London's utilities, regulators and councils committed to support the next stage of the project securing endorsement from a range of industry bodies.

Together, these outputs, outcomes and impacts support the creation of a robust, scalable market mechanism that accelerates SuDS delivery, reduces disruption and cost, and enhances long-term surface water resilience across the sector.

2. Project Governance and EDI

A. Partnering

Thames Water acted as the Lead Partner, responsible for overall programme management, coordination of delivery activity, and ensuring compliance with Ofwat reporting requirements. As a core delivery partner, the GLA supported the project through its Infrastructure Coordination Service, providing expertise in collaborative streetworks, achieved 75% success rate of stakeholder engagement from London suppliers and their stakeholders, policy alignment, and the practical mechanisms required to coordinate multi-utility works across London.

The joint delivery team followed a clear structure: Thames Water led programme governance and delivery oversight and the GLA supported operational planning and collaborative working methods.

Our partnership arrangements have proved highly effective, strengthening existing relationships between Thames Water and the GLA while also establishing new cross-sector connections. Regular engagement and joint planning sessions supported transparency, early problem-solving, and a shared sense of ownership. No major changes were required to the partnership structure during the project, which helped maintain continuity and momentum.

Partnership working brought significant benefits, encouraging new ways of working, especially around early data sharing, integrated planning, and multi-organisation decision-making. This joint working arrangement also ensured that each partner organisation could bring unique and strategic value to the work programme. Non-financial contributions including staff time, technical expertise, access to tools, and sharing of best practice played a crucial role in enabling smooth delivery and improving the overall quality and impact of the project.

B. Sponsorship and Leadership

The Steering Group, co-chaired by senior leads from the GLA and Thames Water, provided clear strategic direction, rigorous risk management and timely decision-making throughout the project. Its consensus-based approach ensured transparent oversight of budgets, milestones and workstream delivery, and created shared ownership of key decisions. Quarterly Steering Group meetings were structured and effective, enabling formal sign-off at critical points. Workstream leads delivered against agreed scopes, supported by independent technical advisers, and reported consistently through monthly financial reporting and fortnightly progress updates. Day-to-day leadership from the GLA and Thames Water Programme Managers maintained alignment across interdependent activities, ensured pace, and kept senior sponsors engaged. Weekly project team meetings supported collaboration, rapid issue resolution and strong programme discipline, helping to build a cohesive and communicative delivery team.

The project also benefited from strong senior-level sponsorship. The project was endorsed by the Mayor's London Infrastructure Group and embedded in key strategic documents including the London Climate Resilience Review (Greater London Authority, 2024), the London Surface Water Strategy and the forthcoming Clean and Healthy Waterways Plan. Senior leaders championed the work including Thames Water's Strategy and External Affairs Director, the Deputy Mayor for Environment and Energy, and the Deputy Mayor for Planning, Regeneration and the Fire Service.

C. Stakeholders

Key stakeholders comprised a broad coalition of utility companies, local authorities, and industry bodies including the Environment Agency and Transport for London (TfL). These organisations were engaged through two distinct bodies: the Industry Group and the Observer Group. Together, they brought in London Boroughs (Enfield, Lambeth, Camden, Hammersmith & Fulham), major utilities (UK Power Networks, SGN, Cadent Gas, Affinity Water), and organisations across the wider water and energy sectors.

The Industry Group acted as the project's hands-on advisory body. Members were engaged to challenge project deliverables, provide technical expertise, and participate directly in piloting activities. Their involvement ensured the framework remained grounded in operational realities and reflected the needs and constraints of organisations delivering streetworks.

The Observer Group consisted primarily of water companies (Northumbrian Water, Irish water and Severn Trent) and local authorities (Greater Manchester Combined Authority

and Liverpool City Region Combined) whose role was to remain informed, share learning, and support wider future adoption of the market framework. They were engaged to ensure sector alignment, visibility and knowledge transfer, while helping prepare the conditions for replication in other regions.

Engagement was delivered through a structured programme of workshops, industry group sessions, and targeted consultations with technical specialists, policy leads and delivery partners.

This engagement model proved highly effective. Stakeholders validated assumptions, tested emerging outputs, and reviewed pilot plans ensuring the framework was both technically rigorous and ready for scalable implementation. Their contributions strengthened the project's credibility, alignment with sector priorities, and long-term viability by grounding the solution in shared ownership and cross-sector collaboration.

E. Project Delivery Team

The project was delivered by a joint GLA and Thames Water team with clearly defined roles spanning strategic oversight, technical development and coordinated delivery.

Strategic governance was provided by a senior Steering Group including the GLA's Head of Infrastructure, Thames Water's Head of Partnerships, the GLA Streetworks Lead, Thames Water's Collaboration Specialist, and the project's environmental engineering lead which oversaw risks, approved milestones and ensured alignment with organisational priorities.

Operational delivery was led by workstream leads and technical officers across both organisations. The GLA commissioned and managed specialist consultants who developed the project's data tools, carried out technical studies, and supported the refinement and delivery of SuDS pilots, which the GLA also directly managed.

Alongside this, GLA and Thames Water officers coordinated stakeholder engagement, prepared technical outputs, and ensured that piloting, standards development and market design progressed coherently. Delivery was strengthened by the Industry Group, which provided operational challenge and piloting insight, and the Observer Group, which ensured wider sector alignment and knowledge sharing.

Overall, the delivery arrangements proved highly effective. Strong governance supported timely decisions, while the combination of in-house expertise and consultant support enabled high-quality technical outputs. The cross-organisational approach was particularly valuable, bringing together a multidisciplinary skill set that strengthened collaboration and ensured the developing market framework was grounded in practical, real-world insights.

Key lessons learned included the benefit of involving utilities and boroughs early, the importance of dedicated coordination roles to bridge technical and operational considerations, and the value of structured engagement to ensure co-creation, shared ownership and future scalability.

F. Equity, Diversity and Inclusion (EDI)

Our ambition was to create positive, sustainable and transformational change within the water sector, while ensuring that the people involved – and the project's deliverables, contribute to a more equal, diverse and inclusive society.

EDI principles were embedded throughout the project, shaping how we designed the work and how we collaborated as a team. We strengthened inclusive behaviours across the team through corporate EDI training, helping ensure our decisions reflected a broad range of needs.

Although the project team did not achieve the gender balance we originally aimed for, we have reflected on this collectively, identified ways to improve, and committed to addressing this more effectively in the next phase of the project.

We created accessible materials and offered varied engagement formats, including online tools (such as Mural), transcripts and meeting recordings. Effectiveness was assessed through participation levels in training sessions and by reviewing the quality and breadth of feedback submitted through feedback forms.

EDI is a core consideration within all GLA procurement processes. During kick-off meetings with contractors, we emphasised EDI expectations and required teams to document EDI considerations in all stakeholder engagements, culminating in a final report at the end of each workstream.

Feedback from the St Andrews Road pilot scheme in Croydon highlighted the need for clearer, earlier and more joined-up communications with residents. This insight directly informed the Buyer and Supplier Handbooks, where expectations around communication and local coordination have now been strengthened.

Key learnings included the value of early planning, clear accountability and tailored engagement. In future phases, we aim to embed EDI considerations earlier during project team set-up, enhance monitoring of representation, and further strengthen our approach to community engagement to improve inclusivity and overall impact.

3. Project Methodology/Approach/Delivery

A. Approach

The delivery approach for this project was built around four core components: data, co-creation, piloting, and capability development. This structure enabled the team to generate the knowledge, systems, and stakeholder readiness required to support a functioning real-world market, while also increasing the confidence and capability of future market participants.

This approach was the most appropriate because the project set out to design and test a market model with no existing UK precedent. The combination of applied research, structured co-creation, and real-world piloting ensured that proposals were both technically robust and practically viable. This reduced implementation risk, validated key design assumptions early, and ensured the market model reflected real operational

constraints rather than theoretical assumptions. Embedding capability development throughout made the approach innovative by ensuring stakeholders were not just consulted, but actively equipped to participate in, and scale, a future market.

Given the highly innovative nature of this project, and the significant departures from business-as-usual delivery, this methodology was essential to creating the right conditions for future piloting and full implementation. Six workstreams were established to deliver this twin-track focus on market design and market readiness.

Below is a summary of the methodologies applied and how they aligned with the project's six workstreams.

Each methodology applied was intentionally linked to the workstreams where it was most relevant. As a result, some methodologies align with multiple workstreams, while others align with a single, dedicated workstream.

Applied research

Bridged theory and practice by addressing core knowledge gaps and producing publications essential to the market framework.

Aligned phases/workstreams:

- P1 – Data
- P3 – Technical deep dives

Co-creation

Co-developed key outputs with the project's industry groups, ensuring the market framework reflected real-world operational needs and building stakeholder confidence in implementing the market at scale.

Aligned phases/workstreams:

- P1 – Data
- P3 – Technical deep dives
- P4 – Market operator planning
- P5 – Testing

Piloting

Delivered live, real-world pilots with different streetworks promoters to test proposed innovations and market mechanisms, generating practical insights and setting a precedent for delivery within the UK infrastructure sector.

Aligned phase/workstream:

- P2 – Piloting

Capability development and organisational change

Developed targeted training, guidance, and supporting materials to equip stakeholders with the necessary skills and confidence to participate in market pilots and eventual implementation.

Aligned workstream:

- **P6 – Training and capability building**

B. Delivery

In practice our actual delivery aligned well with our original plan for the project.

Overall, we were able to achieve our overarching ambition for the project as well as the main project objectives within the original timeframes set out for the project.

Below, we have summarised where there were minor deviations to the original project plan, however these were not major enough to impact delivery of the overall project outcomes and ambition.

Ultimately this means that, as planned, we are now in the position to pilot implementation of the market at scale in London between 2026–2031 and support roll out in other UK cities.

The section below provides reflections on actual delivery against original project timeframes and milestones.

- **Industry and observer group meetings (09/2024 – 04/2026)**

Regular meetings for co-creation, challenge and feedback on work delivered with industry and observer groups.

Milestones: 9 x industry group meetings; 5 x observer group meetings.

To manage stakeholder fatigue and facilitate more in-depth discussion we separated market engagement into categories of potential buyers, suppliers and observers. These sessions were delivered on a needs basis as outputs were generated across the programme.

Communications and engagement changes from holding only industry group and observer groups to holding industry and observer groups together and more targeted meetings split between buyers and suppliers to get more in-depth discussion and feedback.

- **P1: Data (09/ 2024 – 04/2025)**

Development and testing of data, tools, platforms and governance needed to implement the market framework.

Milestones: Alpha data platform developed; Initial opportunity round identified.

The project delivered a full geospatial workflow and three versions of a data platform for defining Eligible and Bidding Areas, including segmentation of the market extent, multi-stage eligibility triage, development of ModelBuilder tools, ground-truthing of spatial outputs, and creation of a hybrid bidding framework based on Transport for London's hex-grid GIS system. Delivery remained largely on programme and within scope, though we adapted our approach as data limitations and discrepancies emerged during analysis and field validation such as unexpected on-street conditions requiring workflow refinements. These adaptations improved accuracy, strengthened the final datasets, and enhanced the reproducibility and scalability.

The key required outputs of the platform and datasets were delivered on time. Final reports were delivered with a short delay (circa 2 months) compared to programme timeline. This was due to the need to test key outputs such as eligible and bidding area mapping multiple times with market buyers and suppliers.

Budget: The original approved budget for P1 was £195,000. Of this, £145,879 was expended by Thames Water and the GLA in delivering the agreed workstream outputs. This resulted in an underspend of £49,121.

The underspend was reallocated within the overall approved project budget envelope to support delivery of priority activities in subsequent workstreams. This reallocation did not alter the agreed project scope, outputs or value-for-money proposition and remained within the total approved budget.

- **P2: Piloting (04/2025 – 05/2026)**

Real-world piloting of market framework with boroughs and utilities to provide insight for framework development.

Milestones: 3 x utility led SuDS pilots complete.

Delivered: Three pilots were delivered in the London Boroughs of Merton, Croydon and Kingston upon Thames.

Elements of the market were successfully tested, including the single contractor model, utility-driven delivery, use of eligible area mapping, the importance of standardised designs, and scheme accreditation using the Reduction in Surface Water Volume (RSWV) calculator tool. Lessons learned have been recorded and cover topics such as early community engagement, asset build-over constraints, and maintenance liability. As a result, two additional opportunities for SuDS and streetworks collaborations have emerged and will be taken forward outside the Ofwat-funded programme through the wider GLA streetworks collaboration programme.

Budget: The approved budget for P2 was £30,000. Actual expenditure totalled £147,823 resulting in a variance of (£107,823) above the original workstream allocation.

This variance was managed through the approved project risk and contingency allowance. The total project budget envelope was not exceeded, and no additional funding was requested.

The Merton pilot cost £120,840.74, while the Croydon pilot cost £26,982.68. The higher cost in Merton reflects the complex SuDS technical challenges encountered during delivery. In contrast, Croydon was delivered at a significantly lower cost, benefiting from the lessons learned during the Merton pilot.

A further reduction in cost can be seen in the Kingston upon Thames pilot, which totalled £18,155.65. This project was supported by additional funding from Kingston upon Thames Council, who recognised the need for SuDS to mitigate surface water flooding in their area and acknowledged the importance of collaborative working. Thames Water has agreed to reimburse Kingston upon Thames Council £9,077.83 for this project.

During the design development phase for Kingston upon Thames, a tree pit was initially proposed to maximise urban greening and deliver wider environmental outcomes. However, site investigations identified shallow underground utility assets, constraining excavation depth and presenting a delivery and asset risk. Demonstrating adaptability in delivery, the design was refined to incorporate a shrub-based planting solution. This approach ensured that green infrastructure benefits were still realised, supporting biodiversity, amenity, and surface water management, while mitigating construction risk, safeguarding existing infrastructure, and maintaining best value for customers.

Overall, the variation in pilot costs reflects the location-dependent nature of urban SuDS delivery. Final pilot sites were selected based on opportunity alignment and stakeholder readiness, meaning costs were influenced not only by technical complexity but also by site-specific factors. Construction and coordination costs across London vary significantly depending on borough characteristics such as traffic sensitivity, utility interfaces and local constraints, all of which could not be fully quantified at project inception.

All three pilots were successfully delivered and proved the single-contractor model (i.e. the utility company using one contractor to conduct the maintenance works and then reinstate with SuDS). Together, they provided critical evidence on delivery model efficiency and coordination. The pilots also validated the eligible area mapping, which had been developed by the time these schemes were mobilising.

- P3: Technical deep dives (09/ 2024 – 09/2025)**

This includes developing methodologies for assessing and accrediting the benefits of market-delivered SuDS, establishing a framework for market registries, and preparing template contracts supported by strategies for navigating statutory constraints.

Milestones: Accreditation methodology; concept design standards; maintenance costings; market registry framework; qualified suppliers' framework; market template contracts; statutory constraints research.

Technical studies and research delivered on time and to a good quality. Some adaptations were required to better respond to the market need:

Accreditation: We chose this approach because it created the essential framework for a high-quality SuDS market, including a single, standard unit for trading (RSWV). This

approach ensured consistency, transparency and scientific rigour in quantifying the environmental service delivered by SuDS interventions, drawing on lessons learned from other global environmental markets.

The innovation lay in adapting best-practice market features (crediting, accreditation, transparent methodologies, precautionary principles and market registries) to the SuDS and streetworks context. The work developed a new, outcome-linked, volumetric metric – the RSWV, measured in m³ – that captured the effective hydrological benefit of SuDS by combining static volume, catchment area, drain-down rate and infiltration potential into a single, quantifiable unit. Alongside a calculation methodology and a simple Excel tool was developed for suppliers to calculate RSWV of schemes put forward.

Market registries framework: We developed a clear, evidence-based framework for how a SuDS through Streetworks market registry should operate and be governed. This work was needed to ensure the market has a reliable, high-integrity system for recording SuDS assets, tracking credits, and supporting transparent transactions. To do this, we reviewed existing environmental registries, analysed Local Lead Flood Authorities (LLFA) asset registers, and set out the technical requirements for data collection, storage, validation and oversight. The framework also defines the roles, processes and system architecture required for a trusted, scalable registry that can underpin future market rounds.

Delivery largely followed the planned programme and budget, though we refined our approach as we uncovered significant variability and inconsistency in current registries. This required deeper analytical work and additional stakeholder engagement, which ultimately strengthened the evidence base and improved the robustness of the final framework.

Contracting: A full legal review and set of recommendations for the SuDS through Streetworks Market, including the definition of contracting requirements, the development of legal principles and architecture, and the creation of draft Heads of Terms for four core agreements. It also completed a desktop review of comparable environmental market contracts and identified market-specific contracting risks. Delivery broadly followed programme and budget, though we adapted our approach as insights from external markets and stakeholder engagements revealed more complex legal interdependencies than initially expected. This required deeper review and refinement, ultimately strengthening the robustness and practicality of the proposed contracting arrangements to take forward.

Statutory constraints: A concise review of the statutory and regulatory framework affecting SuDS delivery through streetworks, including a longlist of legal considerations, validated through stakeholder workshops, and proposed solutions to enable a scalable SuDS through Streetworks Market. It also set out the approval pathways required, pre- and post-market statutory processes (i.e. approvals and permits required before and after a market round), and recommended a pre-market approval approach for the pilot. Delivery broadly followed programme and budget,

though we adapted our method as workshops revealed more complex constraints than desk research alone. This necessitated deeper engagement and iterative refinement, ultimately improving the practicality and robustness of the recommended solutions and approaches.

Design standards: Concept designs were delivered for five SuDS typologies (rain gardens, tree pits, permeable paving, filter drains, swales). This work package had to adapt its approach from how it was initially briefed. At the outset, we believed a prescriptive standard for each of the SuDS typologies was the preferred approach to achieving consistent delivery of high-quality SuDS in the market. Following literature review and international experience of Arup's technical team, it was recommended that instead we should follow a less prescriptive approach. The Concept Design Guidance was produced alongside Design Considerations which instead better enables Suppliers to participate in the Market without the need to prepare a detailed design prior to gaining certainty of funding.

Maintenance: A full maintenance requirements framework and costing methodology for all five SuDS types in the Market, including literature review, gap analysis, development of detailed maintenance schedules, and creation of a bottom-up costing approach, supported by Quantity Surveyor-verified unit rates. Delivery remained broadly on programme, though we adapted our approach when evidence showed existing costing data was outdated, inconsistent, or too generic, requiring a bespoke bottom-up methodology and the development of a new Maintenance Cost Tool along with targeted engagement with Local Authority Officers in our Industry Group. These adaptations improved accuracy, ensured costs reflect real maintenance needs, and strengthened the basis for calculating commuted sums and long-term RSWV maintenance in the Market.

Qualified suppliers list: One of the deliverables identified in the scope for work package 3 (technical deep dives), under the qualified suppliers work package was a list of qualified suppliers that meet the minimum technical and behaviour standards, including expectations around safety, professionalism, community impact, communication, accountability and ethical practice. Following the early stages of market design in other work streams of the programme, it was identified that such a deliverable would limit entry to the market. The market is designed to enable many suppliers to access it, based on their experience and the compliance of their submission (this is further set out in the supplier capability and assurance process). As this process is implemented at various stages of the market to assess the ability for suppliers to participate. Therefore, a list of qualified suppliers was not required.

Budget: The approved budget for P3 was £230,000. Final expenditure totalled £249,957, resulting in a variance of (£19,957) above the original allocation.

This variance was managed within the approved project risk and contingency allowance. The total approved project budget was not exceeded.

An additional £9,970 was required by a contractor due to changes in the anticipated duration and scope of the service order. As the market framework matured, further refinement and technical iteration were necessary to ensure the robustness and quality of deliverables, particularly in relation to design guidance and contractual

documentation. This additional input strengthened the final outputs and improved implementation readiness.

Despite the modest workstream variance, the technical deep dives delivered the required evidence base and materially reduced delivery risk for future implementation.

P4: Market operator planning (10/ 2025 – 03/2026)

This phase focused on developing the operating, funding, and governance model for the Market Framework's Market Operator. Work covered both the pilot operator and the design of the final operator model.

Milestones: Market operator model framework complete (Pilot and final market operator).

Delivered:

- Technical Report for the Pilot Market Operator

A comprehensive technical report was produced to define the requirements, functions and operational processes for the pilot and final market operator. The report sets out the proposed data flows, roles and responsibilities, and performance expectations needed to support the market framework. It also includes an assessment of operational risks and dependencies, along with recommendations for transition towards the final market operator model.

- Independent Economic and Policy Review of the SuDS Through Streetworks Market

An independent review was commissioned and completed to examine the economic rationale, policy environment and market conditions for the SuDS through Streetworks market mechanism. The review evaluated the potential benefits, costs and impacts of the model, identified barriers, and assessed alignment with wider policy objectives such as climate resilience and sustainable drainage. Recommendations were provided on how best to structure incentives, governance, and regulatory levers to support a well-functioning market.

Budget: The approved budget for P4 was £90,000. Final expenditure totalled £89,500, resulting in a variance of (£500) below the original allocation.

P5: Testing (04/ 2025 – 03/2026)

End-to-end testing of the market framework has been undertaken to surface potential issues ahead of implementation and to clearly demonstrate the benefits of the SuDS through Streetworks Market, helping to build wider buy-in.

Testing began in May 2025 with a simulated market round in one London borough, using existing tools and digital platforms. This exercise reinforced the financial case for the market, showing that delivering SuDS through this approach could generate cost savings of almost 30%. Testing has continued throughout the programme, with focused activities embedded in the training workshops for Buyers and Suppliers, and through hands-on exercises designed to translate market theory into practice.

Milestones: Testing complete.

Budget: The approved budget for P5 was £10,000. Final expenditure totalled £0, resulting in a variance of £10,000 above the original allocation and this was absorbed into other workstreams (i.e. Workstream 4 and Workstream 6).

P6: Training and Capability Building (10/ 2025 – 04/2026)

This phase focused on equipping stakeholders with the knowledge and tools needed to support effective implementation of the Market Framework.

Activities included delivering six targeted training workshops for Buyers and Suppliers and developing supporting materials such as handbooks and an explainer video to improve understanding, readiness and engagement for the market.

Milestones: Training workshops delivered, training materials complete, market handbook complete, explainer video produced.

Delivered:

- Six training workshops delivered for buyers and suppliers

A series of three structured workshops were held with buyers and suppliers respectively to support market readiness, build shared understanding of roles and responsibilities, and familiarise participants with the operational processes of the market framework.

- Explainer video
The video provides a clear overview of how the SuDS through Streetworks market functions. It is designed for broad use across stakeholder groups, including external partners.
- Handbooks for buyers and suppliers
Two tailored handbooks have been developed to provide step-by-step guidance for organisations engaging with the market. The handbooks cover processes, requirements, contact points, governance, and practical guidance to support ongoing participation.

Budget: The approved budget for P6 was £90,000. Final expenditure totalled £83,965, resulting in a variance of £6,035 above the original allocation.

C. Risk Management

Risks were actively managed throughout the programme through Steering Group oversight, quarterly Steering Group meetings, and a structured approach to issue escalation. Key strategic risks, particularly around buyer readiness, procurement constraints, and stakeholder engagement, were mitigated through scope refinement, standardised processes, clearer design rules, and enhanced training and communications.

Weekly 30-minute project team meetings provided an effective mechanism for early risk identification and rapid resolution. The organised agenda and disciplined format ensured that emerging issues were dealt with quickly rather than left to grow into programme-level blockers. This avoided lengthy email chains, enabled “real-time” decision-making, and helped maintain programme momentum.

In addition to programme-level risks, a number of specific delivery risks emerged during the project, summarised below along with the mitigations taken:

Key delivery risks and mitigations

Risk: Delay to completion of the SuDS Opportunity Map impacting the data platform

Mitigation: Assessed impacts of the delay, confirmed ability to integrate the map later without major rework, and used mapping previously completed in six boroughs as a proxy dataset.

Risk: Delay in initial recruitment of programme managers for GLA and Thames Water.

Mitigation: Explored secondment options, prioritised critical tasks around existing capacity, and maintained regular programme updates to manage dependencies.

Risk: Cyber-attacks and IT system disruptions affecting delivery and procurements.

Mitigation: Implemented cyber-secure behaviours, developed incident-response and contingency plans, and maintained clear communication with partners and stakeholders during disruptions.

Risk: Securing funding and identifying aligned work programmes for pilot schemes

Mitigation: Explored Thames Regional Flood and Coastal Committee (RFCC) funding, internal underspend options, and continued proactive engagement with local authorities and utilities to surface collaborative opportunities. Our contingency budget and underspend allowed the project to finance two pilot schemes. As mentioned above the third pilot was financed by Kingston upon Thames Council.

Risk: Utilities blocking SuDS delivery near their assets due to technical concerns.

Mitigation: Commissioned and delivered detailed technical SuDS-near-utilities guidance, strengthened evidence base on asset protection, and maintained ongoing engagement with utility partners to build confidence.

Risk: GLA resourcing pressures due to two staff departures.

Mitigation: Recruitment of a Grade 9 on a six-month contract; active reprioritisation across remaining team members.

Overall, risks were managed proactively, and mitigation actions ensured continuity across workstreams. Where delivery challenges did occur, they prompted constructive adaptations – such as strengthening technical standards, improving governance processes, and enhancing communication – that ultimately improved the robustness and implementation of the market framework.

D. Lessons Learned

We have categorised our learnings into three key areas.

1. Technical and data lessons

- Data limitations – We have encountered discrepancies in data such as unexpected on-street conditions which required workflow refinements when working with data.
- Benefit metrics – Early agreement on performance metrics (like the RSWV unit) is essential for market operability and buyer confidence
- Standardisation vs. Flexibility – While common rules enable scalability we learned that a less prescriptive approach to concept design actually better enables supplier participation
- Shared valuation framework – Co-developed methods for quantifying scheme benefits and maintenance payments strengthened decision-making and ensured greater transparency.

2. Operational and delivery lessons

- Cost variability – We discovered that SuDS construction costs in London vary significantly based on traffic sensitivity, utility interfaces, and borough-specific constraints.
- Asset maintenance – Lessons recorded from the pilots highlight the importance of addressing asset build-over constraints and long-term maintenance liability early in the process.
- Earlier and more detailed investigation of below-ground conditions – The shallow utility assets encountered in one of the pilots demonstrated that assumptions about underground infrastructure can lead to design risks if not validated during early feasibility stages.
- The "Dig-Once" model – The pilots validated that a single contractor model (handling both utility repairs and SuDS) is feasible but requires intensive coordination.

- Buyer variability – Operational practices, funding rules and procurement approaches differ widely across organisations; technical feasibility alone is insufficient without adapting delivery models to this variability.

3. Strategic and stakeholder lessons

- Stakeholder fatigue – We adapted our approach by separating engagement into categories (buyers, suppliers, observers) to facilitate more in-depth discussion.
- Innovation as change management – A major finding was that successful implementation relies as much on navigating different organisational and funding cultures as it does on technical design.
- Early engagement – We have identified that starting structured engagement earlier and providing tailored, bespoke materials for buyers would have improved uptake.
- Stakeholder alignment requires sustained effort – Effective SuDS delivery depends on structured, ongoing engagement across utilities, boroughs, designers, contractors and adopters.
- Communication as an enabler – Clear, iterative communication of the market model, pilot purpose and expected outcomes reduced friction and improved alignment.
- Time for alignment – Innovation takes longer than anticipated due to the coordination required across multiple actors and statutory regimes.

4. Organisational Capability

- Bridging roles – We have found that dedicated coordination roles are necessary to bridge the gap between technical design and operational reality.
- Cross-sector synergy – The project demonstrated that turning utilities from "blockers to enablers" creates significant cost savings and climate resilience benefits.
- Keeping the end-state in view – Regularly stepping back from detailed work enabled teams to stay aligned with the intended business-as-usual operating model.
- Constructive challenge – Involving colleagues outside the core team provided critical feedback, reduced bias and strengthened outputs.
- Tailored support – Training, guidance and communications that can be adapted to each buyer's needs significantly improve uptake and readiness.

4. Key Findings and Outputs

A. Innovation Maturity Level (IML)

The innovation progressed from development and verification at project start to identifying practical routes to market and develop training.

At project inception, the innovation was assessed at IML 3 (Development and verification), reflecting a stage where the core concept and methodologies had been defined and were undergoing refinement and testing in near-real-world conditions.

While the project reached the IML level anticipated at inception, the pathway involved more development work than initially expected. Over the 18-month delivery period, the team refined and integrated several technical components including the benefit methodologies, data platforms and piloting, which strengthened the evidence base and robustness of the final outputs. In parallel, extensive engagement with utilities, boroughs, regulators, and contractors was undertaken to build understanding, test assumptions, and secure buy-in. This collaborative process took time but was essential in moving the innovation confidently up the maturity scale and ensuring it is ready for real-world implementation.

By project completion, the innovation had progressed to IML 4 (Validation and optimisation). At this stage, the project has delivered a validated, integrated and optimised framework, supported by a strengthened evidence base and clearly defined pathways to implementation and scale. This includes mature methodologies, supporting data infrastructure, and initial piloting to demonstrate applicability in real-world contexts.

This iterative and collaborative approach has strengthened both the technical credibility and deliverability of the innovation. While it required additional effort, it has ensured that the solution is not only theoretically sound but also practically implementable, with a clear line of sight to real-world deployment and scaling.

B. Key Findings and Conclusions

The project demonstrated that a market-based approach to delivering SuDS through street works is technically viable, scalable, and capable of delivering material efficiencies when underpinned by strong standardisation and confidence and capability building for buyers and suppliers. Across the 18-month programme, the technical architecture of the model was developed, tested and validated, resulting in an implementation-ready framework. This phase of work validated and confirmed the potential of a market-based approach, providing the confidence and evidence base to proceed with applying for the Ofwat Water Breakthrough Challenge: Transform Stream funding.

A core finding is that standardisation is fundamental to achieving consistent, efficient high-quality SuDS delivery at scale. Through the concept design guidance and accreditation standard, the project established clear and repeatable siting and sizing rules for all five SuDS typologies (swales, raingardens, tree pits, filter drains and permeable paving) alongside accreditation specifications needed for reliable RSWV calculation. This showed that consistent design, assessment and bidding can be achieved when guided by defined technical requirements.

The work also confirmed that long-term SuDS performance depends on predictable maintenance funding. Boroughs (as the 'Buyers') weren't prepared to take on new SuDS without committed maintenance funding and Thames Water also needed to ensure that the functional benefits (RSWV) would be maintained. The development of detailed maintenance schedules and a bottom-up costing methodology, provides the clarity and confidence required by Highways Authorities to adopt and approve assets. This represents a significant shift from traditional SuDS delivery, where maintenance responsibilities and funding models are often ambiguous.

Another key finding is that supplier capability must be actively managed to maintain market integrity. The project identified uneven capability across the current supply chain and addressed this through a role-based supplier assurance model that defines the competencies required for designers, contractors and managers. This enables conditional participation, such as training, partnering or higher-level supervision, supporting market growth while protecting quality.

The development of a shared accreditation standard was also a major conclusion of the work. By co-defining benefit metrics, RSWV valuation methods and the approach to maintenance payments, the project created a consistent and transparent basis for buyers and suppliers, strengthening decision-making and enabling future registry and audit functions.

While the project focused on aligning utilities, boroughs and contractors, we recognise that sustained alignment and clear communication are equally important with communities, especially as the model moves into piloting. Collaborative SuDS delivery relies on structured, ongoing engagement rather than one-off briefings, ensuring all partners share a consistent understanding of the market model and its implications. Although community involvement was not incorporated in this project, its importance is clear: early, transparent engagement with residents can build trust, surface local knowledge, and reduce friction during delivery. Embedding the community into future market rounds will help de-risk rollout and support smoother, efficient implementation.

Finally, the project confirmed that while standardisation is essential for scale, it must be paired with controlled flexibility to accommodate the diverse operational, procurement and funding environments of different buyers. Overall, the project has validated that the SuDS through Streetworks Market is technically robust, operationally feasible and ready for real-world piloting, with the potential to deliver more SuDS, faster, at lower whole-life cost and with consistent performance.

C. Project Outputs

P1 Data:

- Alpha version of a data platform with three views – one view for suppliers showing eligible areas, one view for buyers showing the bidding areas and the market operator view allowing functionality for the matching of supply and demand.
- Technical report on analytical tools setting out recommendations to support market buyers to participate confidently in the SuDS through Streetworks Market. It addressed two linked challenges: how to evaluate SuDS benefits across varied urban and catchment contexts, and how to use that understanding to justify investment and secure funding without needing site-specific detail.
- Technical report setting out the technical workflow used to identify and map the eligible and bidding areas for the SuDS through Streetworks Market including the data, criteria and spatial methods used to define where SuDS can be delivered and where buyers can signal priorities.
- Technical report setting out the data governance and platform management framework for the SuDS through Streetworks Market, defining the policies, standards and

processes needed to ensure accurate, secure and consistent spatial data across the eligibility, bidding and portal systems.

P2 Piloting:

- Three pilot schemes have been prepared and delivered:
 - One raingarden on Lower Green West Road, London Borough of Merton
 - Two raingardens on St Andrews Road, London Borough of Croydon
 - One shrub planted on Richmond Road, London Borough of Kingston upon Thames

All outputs generated through the project, including pilot scheme documentation, designs, delivery evidence and associated project materials, are securely maintained by Thames Water and the GLA. These outputs are available upon request and can be obtained by contacting Thames Water and/or the GLA.

- One scheme is currently in the planning stage:
 - One rain garden and permeable paving on Windmill Road, London Borough of Hounslow
- Tested and validated the single contractor model. I.e. the same contractor doing the utility repairs and the SuDS reinstatement.
- Process recorded and lessons learned documented and RSWV calculations carried out.

P3 Technical Deep Dives:

- Technical report on the SuDS accreditation standard – defining how Reduction in Surface Water Volume (RSWV) is quantified, verified, and used as the tradable unit underpinning a high-integrity SuDS market for London.
- Technical report defining the design, requirements and best-practice framework for a market registry, setting out how participants, projects and credits should be recorded, tracked and governed to ensure transparency, auditability and compliance across the market lifecycle.
- Technical report setting out the contracting requirements, legal architecture and recommended agreement structures needed for the SuDS through Streetworks Market defining how project, credit, adoption and market-level contracts should allocate responsibilities and manage risks to ensure legally robust, efficient and scalable market operation.
- Technical report summarising the statutory and regulatory considerations affecting SuDS delivery through streetworks and sets out the approvals, constraints and solutions needed to enable a scalable, streamlined SuDS through Streetworks Market within London's existing legal framework.
- A SuDS concept design guidance document providing guidance to suppliers for selecting an eligible SuDS type and appropriately siting the SuDS within an Eligible Area.

- SuDS design considerations for five SuDS types (swales, permeable paving, filter drains, raingardens and tree pits), providing specific guidance for each SuDS type to assist the supplier in preparing the concept design.
- SuDS Information Requirements for five SuDS types (swales, permeable paving, filter drains, raingardens and treepits), sets out the technical information a supplier must provide to the market operator about a proposed SuDS feature to enable the Market Operator to calculate the expected Reduction in Surface Water Volume (RSWV) for the SuDS feature in accordance with the RSWV Accreditation Standard.
- SuDS maintenance cost calculator. An Excel based tool that allows the market operator to apply a standardised approach to calculating maintenance costs for any SuDS project entering into the market.
- A two-stage supplier capability and assurance process, applied at project registration and registering supply and demand.
- Supplier role descriptions (Designer, Contractor or Manager) and defined competencies for each role.

P4 Market Operator:

- Detailed market operator report covering roles, processes, system requirements, legal structure, risks and digital infrastructure needs. Includes an initial financial forecast and recommended long-term funding model for the future operator.
- Technical report defining the interim market operator for pilot market rounds including core functions, workflows, risk mitigation and cost forecast.

P5 Testing:

- A market simulation in one London Borough showcasing the cost efficiencies achieved by using different bidding approaches. Produced data, maps and a tool to evidence the cost saving benefit of the market-based approach. This was limited to one London Borough because this borough had sufficient data to perform the simulation.

P6 Training and Capability Building

- A series of six industry group workshops (three for buyers and three for suppliers) and resultant resources.
- A FAQ document.
- Market handbooks tailored for buyers and suppliers to serve as a guide for market participation in the pilot market rounds.
- An explainer video for further external comms and engagement and to assist bringing the project to life visually.

D. Changes to Intended Outputs

At project initiation, the intention was to develop a prescriptive suite of objective SuDS design standards and specifications that utilities could apply directly when proposing SuDS through the market. As the programme progressed, it became clear that such a detailed, up-front specification would create barriers to participation, impose unnecessary design costs before market success was known, and slow down the ability of utilities to engage at scale. In response, the approach to SuDS design was reframed into two distinct phases 1. concept design and 2. detailed design – allowing approvals, design effort and cost to be aligned with the market process. Concept designs were established as a new output, supported by a standardised set of ‘eligible project types’ and accompanying concept design guidance. This enables utilities to identify suitable SuDS opportunities alongside planned streetworks, obtain an accredited RSWV value, cost the likely works, and register their projects in the market without having to undertake full detailed design. These concept designs are then used by the market operator to secure in-principle agreement from the Highways Authority and other regulators ahead of running a market round, giving suppliers confidence that their proposals are broadly acceptable before committing resources. This represents a significant change from the original expectation of highly prescriptive design standards, but it more effectively supports market participation, reduces up-front cost, and reflects the early-stage nature of project identification.

As work progressed, it also became clear that the second phase (detailed designs) could not rely on design guidance from individual Boroughs or Highways Authorities as originally assumed. Many Boroughs do not have their own SuDS design guidance, and where guidance does exist, it is inconsistent, highly varied, and not well suited to supporting a pan-London market mechanism. To enable a market to operate efficiently and at scale, a consistent approach to detailed design, approval, and delivery is required. This led to the identification of a need for London-wide detailed design guidance, intended to form a Schedule to the SuDS Design and Build Contract used by successful suppliers. However, developing this guidance in full was beyond the scope and budget of this project phase, and therefore the work has been carried forward as a recommended next step to support future implementation.

A further important change to the intended outputs arose within the Market Operator workstream (P4). Initially, the project focused on defining the operating and governance model for a future fully independent Market Operator. As the delivery model matured, it became evident that the pilot rounds (2027 onwards) would require an interim Market Operator, delivered by the GLA and TW, while the independent entity is established. This shift required the workstream to expand significantly, incorporating analysis of both long-term and interim operating models, resource plans, governance arrangements, risk management needs, and organisational capabilities. It also necessitated the development of a funding case and financial forecast to support a bid for further external funding. This was a major addition to the intended outputs but is essential to ensuring continuity of market operation, enabling pilot rounds to run successfully, and laying the foundations for future scale-up.

E. Intellectual Property Rights

The final IPR position remains consistent with our original submission. Foreground IPR generated through this project – comprising the market framework, guidance and tools – will be made available for the benefit of all customers in England and Wales under the default IPR position. The project relied on background IPR owned by the GLA and Thames Water, which will not be commercialised, and no changes to this approach have arisen. Where background IPR is required to enable full use of the Foreground IPR, any necessary licensing will follow the default IPR terms. No new background IPR dependencies have emerged, and no deviations from the agreed position are required.

F. Outputs, Adoption and Foreground IPR

The Foreground IPR generated through this project, including the technical components of the market framework, concept design guidance, market operating model materials, and supporting tools such as handbooks and the explainer video, will be made openly available to the sector in line with the default IPR terms of the Winners Agreement. In practical terms, these outputs will be published by the GLA and Thames Water in accessible formats (e.g., guidance documents, technical reports, templates and tools) and shared directly with utilities, local authorities, LLFAs and other stakeholders through existing industry networks, forums and a dedicated webpage. The Foreground IPR will also be integrated into the SuDS through Streetworks Market documentation used during the pilot rounds, ensuring that participating organisations can adopt and apply it immediately. No restrictions will be placed on its reuse, and organisations across England and Wales will be free to incorporate the materials into their local processes, procurement approaches or design standards. Where background IPR is required to support adoption, it will be licensed on fair and reasonable terms.

5. Outcomes

A. Outcomes for the Partners

Partners developed shared capability in market-based SuDS delivery and improved understanding of cross organisational constraints and enablers.

Over the course of the project, Thames Water and the GLA worked collaboratively to deliver a set of ambitious outcomes designed to validate a new market model, streamline delivery processes, and strengthen operational readiness for future multi-utility coordination. Overall, the partnership delivered strong progress against the original intentions, with valuable achievements and learning even where activities are still in progress.

The project delivered strong progress against its intended outcomes. A full end-to-end market simulation was completed, successfully validating the proposed trading, governance, and operational processes. This work also highlighted practical refinements needed around data and system interfaces, strengthening the overall model.

Three pilot schemes were prepared and delivered and another is in the planning stage. Across all pilots there is clear improvements in planning efficiency and cross-utility coordination. While full efficiency targets (20% time reduction and 25% capital cost savings) are will be validated over April using the Monitoring and Evaluation (M&E) tool, the pilots generated valuable learning on sequencing, data requirements, and operational alignment, which will support future scalability.

The Steering Group signed off the market operator's operating model, confirming functional readiness and broad stakeholder confidence.

Partnership working between Thames Water and the GLA was a major success factor. Thames Water led programme governance, while the GLA contributed expertise in collaborative streetworks and operational planning. The structure remained stable throughout, enabling consistent delivery and strong momentum.

Overall, the project strengthened cross-sector relationships, improved integrated planning approaches, and delivered both the intended outputs and substantial learning to support future implementation.

B. Outcomes for other Direct Beneficiaries

The project has delivered a set of validated outcomes that directly benefit water company customers, local communities, the wider public and the environment. These outcomes align strongly with Ofwat's strategic innovation themes and the project's intended beneficiary groups.

Intended Beneficiaries

- Water company customers facing rising flood risk, including risk of unaffordable or limited insurance cover and negative property value effects, and increasing disruption from streetworks.
- Local communities and road users in areas where SuDS will be installed.
- Society and the wider public, who benefit from improved public spaces and reduced heat impacts.
- The environment and natural systems, through enhanced drainage and biodiversity.
- The water sector, through improved efficiency, coordination and capability.

Realised Benefits

- For customers: A tested framework that will enable reduced flood risk, lower delivery costs, and less disruption through a coordinated approach.
- For society: A pathway to greener, safer and more pleasant streets, with urban cooling and improved wellbeing.
- For the environment: Verified methods that support better surface-water management, lower pollution risks, increased biodiversity and reduced embodied carbon.

- For the sector: A validated, scalable market model that strengthens cross-utility collaboration and supports long-term operational resilience.

Alignment with Ofwat's Strategic Innovation Themes

The innovation most strongly supports:

- Theme 4: New ways of delivering core activities through a market-based SuDS model.
- Theme 1: Climate adaptation, by enabling faster delivery of flood-risk mitigation.
- Theme 2: Environmental protection, through nature-based drainage.
- Theme 3: Long-term resilience, through improved supply-chain capability and planning efficiency.

C. Residual Activities to achieve Outcomes

The intended outcomes of the SuDS through Streetworks Market programme have been substantially advanced, however several residual activities remain essential to secure the programme's long-term objectives. The project has successfully delivered the conceptual and technical foundations for a functioning market – establishing design and accreditation standards, eligible area mapping, contracting frameworks, and an emerging evidence base. However, the transition from a technically sound design to an operationally viable market requires further work.

A key residual activity is securing formal buyer commitments, particularly from Thames Water and Local Authorities. While Thames Water shows strong conceptual alignment, its commitment is not yet embedded within AMP funding processes, and Local Authorities face financial, institutional, and procurement barriers that require targeted support. The GLA will need to lead structured governance mechanisms to resolve these issues, supported by Boroughs, the Environment Agency, utilities, and Thames RFCC.

A second critical area is establishing the legal basis, governance structure, and funding model for the Market Operator, which currently does not exist as a constituted entity. Without clarity on ownership, powers, enforcement functions and data-handling responsibilities, the market cannot operate. The GLA and legal partners will need to develop this in the next phase of the work.

A further residual activity concerns maintenance responsibilities and long-term funding, which remain undefined and pose a risk to market integrity. Highways teams, parks teams and utilities have differing interpretations of maintenance liability, and no long-term funding mechanism is yet in place. Developing robust Adoption Agreements, performance bonds, or ring-fenced maintenance funds will be necessary before scaling delivery.

Additional residual activities include preparing asset-specific technical guidance for utility asset managers; completing pre-approved Borough design templates to reduce planning delays; operationalising verification and monitoring frameworks; and

preparing buyer-relevant value translation tools so that Local Authorities can link RSWV outputs to flood risk, property protection and insurance benefits.

Finally, community-level resistance represents a material delivery risk. A comprehensive engagement strategy, tailored to local political contexts and addressing concerns such as parking loss, disruption, and aesthetics, needs to be embedded within Phase 3. Across all residual activities, responsibility sits primarily with the GLA as programme convener, working closely with Thames Water, utilities, Boroughs, the Flood Ready London partnership and the Thames RFCC. The main risks relate to institutional coordination failures, unclear legal authority, unfunded maintenance liabilities, and insufficient buyer readiness. Addressing these residual actions is essential to achieving full programme outcomes and enabling a credible, scalable SuDS market in London.

To support progression from programme development to implementation, these residual activities will be taken forward through the recently secured Transform funding. Building on the foundations established, this next phase of work will focus on addressing key implementation challenges, including governance arrangements, buyer readiness, stakeholder engagement, maintenance responsibilities, market operation and delivery mechanisms. This provides a clear pathway for progressing the programme's recommendations and ensuring that the technical, commercial and institutional conditions required for wider market adoption and scaling can be established.

D. Organisational Innovation Capability

Overall, the project strengthened organisational capability in market design, data led decision making and collaborative delivery.

Thames Water:

Through the development of a complete technical framework for the SuDS through Streetworks Market – including Concept Design Guidance (WS3.2), RSWV accreditation information requirements (WS3.3), a supplier assurance model (WS3.5), and a lifecycle maintenance costing methodology (WS3.5) – Thames Water has built new internal competencies and embedded structured processes that did not previously exist.

The project has enhanced Thames Water's technical design capability by creating detailed, standardised design considerations for each eligible SuDS type, enabling consistent, concept-stage assessment and sizing across the organisation (WS3.2). It has also built engineering and asset assurance capability through the establishment of accreditation-grade input specifications for all SuDS components, allowing Thames Water to evaluate third-party concept designs using a clear, repeatable evidence base (WS3.3).

Capability has further increased in the areas of supplier assurance and market governance, with Thames Water leading the development of a two-stage supplier competency assessment framework covering design, construction and contract management roles, together with conditional participation pathways to support supply-chain upskilling across London (WS3.5)

the creation of a comprehensive maintenance and lifecycle costing approach, including activity schedules, QS-derived cost rates and a Present-Value-based commuted sum methodology, has built internal capacity in long-term SuDS asset planning, enabling Thames Water to work more effectively with adopting authorities (WS3.5).

GLA:

The project has built significant innovation capability within the GLA by strengthening its capacity to coordinate multi-utility delivery, embed SuDS expertise, and lead cross-sector market development. These capabilities were developed through hands-on involvement in technical design, data development, piloting and multi-party engagement.

- Strengthened collaborative delivery capability

The GLA enhanced its ability to coordinate complex, cross-utility programmes. Regular joint planning, pilot preparation and stakeholder engagement improved the GLA's capability to manage multi-agency interfaces and support innovative, "dig-once" delivery models.

- Expanded SuDS technical knowledge and planning capability

Active participation in developing SuDS design guidance, benefit methodologies and concept-stage requirements built the GLA's internal understanding of SuDS standards, delivery risks and long-term maintenance needs. This now enables the organisation to engage more effectively in climate adaptation and water management programmes.

- Enhanced capability in market governance and operating-model design

By co-developing elements of the market operator model, including governance structures, buyer-supplier roles and coordination processes, the GLA gained new experience in designing market mechanisms that are fair, scalable and compatible with local-authority functions.

- Upskilling of GLA ICS delivery staff

GLA officers gained practical experience in technical development, pilot delivery and SuDS-focused engagement with boroughs, utilities and contractors. This has increased long-term organisational capacity to coordinate innovative infrastructure programmes.

6. Impacts

A. Impacts and Benefits for the Water Sector

At project commencement, we expected this Catalyst phase to deliver three short-term impacts:

1. the creation of an immediately implementable market framework
2. sector-wide awareness of that framework
3. early commitment from London stakeholders (and interest from other UK cities) to support future implementation

These expectations provided the foundation for the project's early focus on technical standards, operational testing and stakeholder alignment.

Immediate benefits the project has achieved include:

Strengthened technical foundations for SuDS delivery:

The project has delivered a comprehensive suite of design standards, accreditation methodologies (RSWV), GIS-based eligible-area tools, draft contract templates and registry architecture. Together, these reduce optimism bias, improve predictability and enhance transparency in SuDS design and delivery – providing the building blocks needed for consistent, scalable delivery.

Operational learning through pilots:

Three completed pilots have demonstrated the feasibility of bundling SuDS with planned streetworks. These pilots have provided concrete evidence of avoided disruption, cost efficiencies and the effectiveness of the eligible-areas model.

Improved institutional coordination:

Engagement across Thames Water, LLFAs, Local Authorities, TfL, utilities, contractors and community partners has validated the programme concept and strengthened alignment around core design and delivery principles. This reflects clear progress from the project outset, when relationships, governance routes and shared understanding were less well-established.

The medium to long-term benefits of the project that are anticipated are:

The creation of a functioning SuDS Market Operator:

We are now in a position to establish the legal authority, governance structure and funding model for a market operator to coordinate standards, procurement, verification and credit issuance. This is essential to achieving long-term scalability and a consistent, trusted route for SuDS deployment.

Accelerated and more predictable SuDS delivery at lower cost:

By combining pre-approved design templates, standardised contracting and eligible-area targeting, the market mechanism is expected to:

- reduce design and approval timelines (within 3 years)
- enable bundling with planned utilities streetworks (within 3 years)
- support participation from a diverse supplier base
- reduce cost per m³ of RSWV delivered

Reduced traffic disruption and community impact:

Bundling SuDS with planned streetworks minimises additional excavations, reducing disruption for communities and local businesses while enabling more surface water to be managed at source.

Economically optimised delivery:

Over time, the market mechanism and supply–demand modelling are expected to maximise RSWV per pound invested. This could also unlock new funding sources and broaden the remit of the market — enabling SuDS to be integrated wherever urban improvements occur (e.g., resurfacing a car park generating RSWV credits). These benefits mirror the wider value of the SuDS through Streetworks Market, which is designed to:

- accelerate SuDS delivery and improve flood resilience for communities
- offer suppliers a stable, fair and cost-efficient delivery route
- ensure buyers achieve best value through targeted, verified outputs
- create shared efficiencies across the sector via consistent processes and data
- provide the transparency and scalability needed to deliver hundreds of SuDS projects across London

Longer-term impacts and how our understanding has evolved

Longer-term impacts such as full market deployment, a strengthened supply chain, reduced SuDS-related streetworks and national replication were always expected to follow once a market was formally established.

Through delivery, we have gained a clearer understanding of the institutional, legal and operational conditions required to convert design-stage outputs into these sector-wide

benefits. Several barriers including buyer-side readiness, fragmented Borough structures, procurement constraints, uncertainty around long-term maintenance responsibilities, and the need for a formal governance mechanism and Market Operator legal basis, have proven more significant than anticipated.

As a result, our expectations for when and how benefits such as widespread participation, supply-chain upskilling, reduced disruption and national replication will materialise have shifted. Realising these impacts requires resolving structural constraints that sit beyond the scope of this Catalyst phase.

This evolution in understanding does not alter the long-term value proposition. Instead, it clarifies the sequence of prerequisites needed to unlock the full benefits in subsequent phases.

B. Quantifiable Benefits

The project has demonstrated a range of quantifiable benefits. Market simulations in London Borough of Enfield indicated significant cost efficiencies. We tested how effectively supply and demand could be matched across the area. Modelling showed up to 27% savings compared to conventional approaches.

The programme also generated measurable environmental outcomes through the delivery of SuDS schemes. From the two sites where data is currently available, a combined RSWV of 5.9 m³ was achieved (as of 30 April 2026).

Future schemes are expected to achieve higher RSWV as design parameters are optimised, including the use of larger (e.g. protected 10mm) orifices, maximising contributing catchment areas through strategic SuDS placement, and ensuring interventions are sufficiently sized to capture flows without overflow.

On average communities benefitted from 35 days saved (Greater London Authority, 2026) from disruption because of delivering SuDS through the collaborative approach.

In addition, the project strengthened sector capability: two contractors (JDT and JSM) were upskilled in SuDS delivery, four boroughs increased their capability as market buyers, and six utilities and contractors enhanced their readiness as market suppliers. Together, these benefits demonstrate emerging cost, environmental, and capacity gains as the market develops.

C. Timescales for Realising Benefits

The environmental, cost, capacity and community benefits identified through the project are expected to be realised progressively over the next several years as the market transitions from design to operational delivery. Cost efficiencies of 19–26% as recognised through the Enfield simulation are anticipated to materialise from the first pilot market round, once buyer commitments, pre-approved design templates and supplier assurance processes are in place. These early efficiencies could begin to be realised within 12–24 months, aligned with pilot market rounds delivery.

Environmental benefits, such as RSWV gains from SuDS installations, will accrue immediately upon construction of each scheme, with full performance verified over 1–10 years through the proposed monitoring framework.

Community and customer benefits in the form of reduced surface water flooding, fewer disruption events, improved public realm, and lower likelihood of sewer capacity issues, will emerge incrementally as SuDS coverage increases, with visible improvements expected from the first pilot market round and wider cumulative benefits materialising over 3–5 years as delivery scales.

Capability benefits, including upskilling of contractors and boroughs, have already commenced and will continue to strengthen as suppliers participate in pilot market rounds, with sector-wide maturation expected over the next 2–4 years. Overall, the full suite of benefits is expected to scale as the market becomes operational, governance structures mature, and delivery increases across London.

D. Sector Innovation Capability

This project has contributed to a step-change in sector-wide capability by creating the core technical, governance and economic foundations for a scalable, outcomes-based approach to urban surface water management. By developing a common set of design standards, accreditation inputs, and lifecycle maintenance and costing principles, the project has established a shared operating model that other water companies and city-regional governing bodies can readily adopt.

The project has helped shift the cultural baseline from SuDS being perceived as bespoke one-off interventions to being treated as verifiable, credit-generating assets whose performance can be valued, contracted and assured. By introducing transparent RSWV measurement and a structured supplier assurance framework, the project normalises an accountable and market-aware mindset, aligned with Ofwat's ambitions for environmental performance markets and cross-sector innovation.

Our work also strengthens sector delivery capacity by articulating the competency expectations for designers, contractors and managers helping to support a more diverse and resilient delivery mechanism and reduces reliance on a small pool of SuDS specialists, an important enabler if the sector is to scale surface water removal at pace.

Overall, the project has helped lay the groundwork for a repeatable model of regulated, performance-based SuDS delivery that can be replicated beyond London.

Actions that contributed to this sector-wide capability uplift included:

- Co-design with multiple stakeholder groups, building confidence in the standards and reducing fragmentation across Borough highways, planning and flood-risk teams
- Engagement with utilities and their contractor supply chains – helping them understand how SuDS can be embedded within existing streetworks programmes and what technical adjustments would be required

- Piloting and ground-truthing activities – demonstrated the practical feasibility of what is currently an innovative delivery model and generated operational learning that can be shared across the sector
- Developing digital, geospatial and registry features, introducing the sector to modernised data and verification approaches aligned with best practice in other environmental markets

7. Dissemination and Knowledge Sharing

A. Dissemination and information-sharing activities

Conferences and exhibitions

- Presented project insights at Futurebuild Conference (March 2025).
- Shared learning at CIWEM Urban Drainage Group conferences in 2024 and 2025.
- Joined a panel at the Reset Connect Conference (2025).
- Featured in the Building Centre exhibition *WATER: Resilience & Innovation for the Built Environment*, with participation in a panel discussion.

Industry and Observer Group engagement

- City Hall Project Launch Event (Dec 2024) to introduce aims, partners, early concepts and programme of works.
- Delivered six capability-building workshops for buyers and suppliers to support market readiness.
- Ongoing technical dialogue with the Industry and Observer Groups, including review sessions and iterative feedback on technical development.

Webinars

- Hosted a mid-project webinar to share progress with Industry and Observer group and other relevant stakeholders.
- Post-project webinar scheduled for May 2026 to communicate final outputs and next-steps.

External briefings and meetings

- Presented project learnings to the C40 Flood Network.
- Provided quarterly updates to LoDEG (London Drainage Engineers Group).
- Took part in an Ofwat Innovation Team “show and tell” to share emerging insights.

Awards and wider promotion

- Submitted to the 2026 Susdrain SuDS Awards, showcasing the innovation and benefits of the “dig once” single-contractor SuDS pilot schemes.

Overall, dissemination activity was broadly consistent with our original plans, which anticipated a blend of conferences, industry group workshops, and webinars. In practice, engagement exceeded expectations in both scale and diversity, particularly through the number of capability-building sessions delivered and the range of external networks reached. This helped ensure strong industry awareness, improved understanding of the market framework, and early buy-in from potential market participants.

B. Efficacy and Learnings from Dissemination

Our dissemination and knowledge-sharing activities have been effective in building shared understanding across stakeholders and strengthening the technical outputs of the SuDS through Streetworks Market. Workshops with the Industry Group, alongside circulation of deliverables ensured the technical components of the market were grounded in real operational conditions. Early engagement with boroughs, utilities and contractors helped us distinguish perceived from genuine barriers, such as adoption, maintenance and permitting constraints, and co-develop practical mitigation measures to support market participation.

The key lessons relate to communication and stakeholder engagement. We learned that alignment requires sustained, iterative engagement rather than one-off briefings, and that regular, clear explanation of the market model, pilot purpose and implications is essential to prevent misinterpretation. Actively seeking constructive challenge from the industry group proved invaluable for identifying blind spots and stress-testing assumptions. We also found that tailored communication is critical: buyers and delivery partners work within different constraints, so engagement materials and messages must be adapted without losing consistency. Finally, starting engagement earlier and building in routine touchpoints would strengthen future dissemination activities.

C. Future and On-going Communications

May 2026

- **Observer Group webinar (hosted via CIWEM):**
Broad, high-level dissemination of the project’s outputs across all work packages/phases, including an accessible overview of the market concept.
(Audience: Wider professional water/environment community and observer group.)
- **Industry Group webinar (hosted by Thames Water Innovation):**
London-focused session for likely market participants (buyers, suppliers and contractors) taking them through the handbooks, next steps and expected timelines.
(Audience: Direct participants in the future market.)

June / July 2026

Publication of outputs and resources:

Selected project outputs (including guidance and supporting materials) will soon be made available on the [GLA website](#) and the Thames Water Innovation webpage. These websites will act as the primary access point for stakeholders. Where appropriate, key learnings will also be integrated into wider industry guidance and future programme delivery.

The project resources referenced in this report are currently being prepared for publication. Both the GLA and Thames Water are progressing internal governance and accessibility assurance processes to ensure all materials meet required standards before they are made publicly available.

The corresponding Thames Water webpage is currently being finalised and the link will be shared once available.

- **Publication of selected project outputs** on the Thames Water Innovation webpage to support wider access, transparency and reuse.
- **Joint press release** coordinated between the Mayor's Office and Thames Water communications teams to amplify visibility and signal strategic alignment.
- **Social media activity** on Thames Water and GLA platforms (channels tbc) to broaden reach, highlight key messages and direct stakeholders towards the published materials.

8. Next Steps for Adoption and Implementation

A. Next Steps

Our next steps focus on translating the project's outputs into a fully operational, scalable SuDS through Streetworks Market, ensuring that the outcomes achieved during this phase lead directly to long-term adoption and measurable impact.

The next phase will focus on onboarding market participants, putting in place the governance arrangements, and preparing for the first pilot market rounds. This includes transitioning partners from awareness to active participation by using the handbooks, templates and guidance developed through this project, and ensuring boroughs, utilities and contractors are fully supported to take part in the operational testing of the SuDS through Streetworks Market. The GLA and TW will jointly coordinate this mobilisation, supported by engagement officers who will run onboarding workshops, issue updated materials and maintain close contact with participating buyers and suppliers across the 15 priority boroughs.

Alongside onboarding, we will formalise the market governance structure needed for pilot delivery. The Interim Market Operator will oversee finalisation of the market rules,

legal instruments, allocation procedures, and the verification and accreditation processes. This phase also involves operationalising the data and trading platforms developed during this project, ensuring technical readiness for bidding, matching, registration and performance monitoring.

During the same period, work will begin on preparing pilot market rounds in the Central and Lee catchments. Activities include confirming funding commitments from buyers (e.g., Thames Water, Boroughs, Thames RFCC), finalising the spatial prioritisation for each catchment, updating SuDS opportunity datasets, and supporting suppliers to assess feasibility and prepare indicative bids. This preparation is essential to ensure the first market round runs smoothly, generates credible evidence and allows the mechanism to be tested end-to-end.

Beyond the immediate mobilisation, the next steps focus on translating learning from the pilot rounds into a citywide implementation strategy. Evidence on costs, efficiencies, delivery times, RSWV credits and supply chain behaviour will be consolidated into a full business case for pan-London rollout. In parallel, Thames Water will use the evaluation evidence to inform its PR29 enhancement case, seeking to secure long-term funding to act as a principal buyer in future market rounds.

Finally, the scaling and transferability work initiated through this project will continue. The Manchester feasibility study, delivered with GMCA, will set out the roadmap for adapting the model to a different local context, while the Cities Forum will support wider engagement with Liverpool, Bristol and other interested cities. This ensures the tools, standards and market architecture developed here can be adopted elsewhere, enabling longer-term systemic change in SuDS delivery nationally.

B. Wider Implementation

The project has been designed from the outset to be scalable and replicable across the water sector. Its core methodology, combining standardised SuDS design, data-driven opportunity mapping, and a market mechanism that aligns streetworks with surface-water priorities, can be adopted by any water company or Lead Local Flood Authority.

All outputs (design standards, RSWV accreditation method, contract templates, registry architecture, data tools and market rules) are designed so that other cities can implement the approach with limited adaptation. The model leverages streetworks programmes that exist nationwide, making it widely transferable.

Our vision for implementation has two stages:

1. Pan-London rollout using the Market Operator model, consolidated funding and a trained supply chain.
2. Expansion to other UK cities, supported by a scalable blueprint, training materials and feasibility work with adopter cities across the UK

The project provides a standardised and efficient approach that addresses barriers faced across the water sector: fragmented responsibilities, inconsistent design, limited funding routes and insufficient delivery capacity. By offering a ready-to-use delivery model and evidence from pilots, it enables other organisations to rapidly adopt the framework to meet DWMP ambitions and accelerate climate adaptation.

A dedicated Market Operator, transferable digital tools, and standardised verification enable the solution to grow into:

- a multi-city, multi-buyer SuDS market, and
- a broader platform for integrating nature-based solutions into urban infrastructure programmes.

This ensures the work can be expanded at scale, replicated by other organisations, and embedded into business-as-usual delivery across the UK.

9. Outturn Monitoring Data

Project Start Date	1 September 2024
Project Technical Completion Date	30 April 2026
Total Original Project Budget (per Winners Agreement) Total funding awarded + total financial contributions from partners (excluding the financial value of any in-kind contributions).	£ 1,490,610
Total Amount of Funding Awarded by Ofwat (per Winners Agreement) Amount of funding initially awarded by Ofwat.	£ 1,340,610
Originally Planned Partner Financial Contributions (per Winners Agreement) Financial contributions that were planned from partners at the outset of the project.	£150k (120k financial contribution from Thames Water shareholders, 30k financial contribution from the GLA)
Finalised Amount of Funding Awarded by Ofwat Finalised amount of funding awarded by Ofwat, where this has been increased through approved Project Change Requests (note this applies to a minority of projects and only for specific reasons).	£1,340,610
Finalised Partner Financial Contributions Finalised amount of financial contributions required from partners to cover the project costs.	£150,000

10. Final Reflections and Concluding Remarks

This Catalyst project demonstrates the value of innovation funding in reducing delivery risk for complex, multistakeholder challenges. By focusing on practical testing, standardisation and capability building, the project has established a credible foundation for transformational change in SuDS delivery.

This project has demonstrated the value of collaborative innovation in addressing the scale and urgency of surface water management challenges. Through the Ofwat Innovation Fund, we were able to bring together a wide network of partners including utilities, local authorities, regulators and industry bodies to jointly design and test a new market-based approach to embedding SuDS within planned streetworks. This collaborative structure enabled us to develop a shared understanding of the barriers to scaled SuDS delivery and to co-create practical, implementable solutions grounded in real operational needs.

The project has strengthened the capability of all partners. Thames Water and the GLA now have a clearer, evidence-based framework for delivering SuDS more efficiently and at greater scale, supported by new tools, design standards, governance arrangements and supply chain development. The structured engagement model has also reinforced lasting relationships across the sector, demonstrating that a coordinated, data-led and market-driven approach can unlock efficiencies and benefits that individual organisations cannot achieve alone.

Our experience of the Ofwat Innovation Fund has been positive and enabling. The funding gave us the flexibility to explore new concepts, take informed risks and engage widely across organisations that would not ordinarily collaborate at this depth. The emphasis on learning, transparency and sector-wide benefit was well aligned with the nature of the challenge we set out to address.

Looking ahead, the outlook for this work is strong. With growing interest from partners beyond London including other UK cities and national utilities observing the project there is clear appetite to build on the foundations established here. As the market framework continues to mature through piloting and refinement, we expect it to provide a scalable model capable of helping water companies and local authorities accelerate SuDS delivery, reduce disruption, and strengthen their long-term climate resilience.

Overall, this project has laid the groundwork for a transformative shift in how SuDS can be delivered across urban areas. The knowledge, capability and partnerships developed through the Ofwat Innovation Fund will continue to support the sector as it moves toward faster, more coordinated and more affordable approaches to managing surface water for the benefit of customers, communities and the environment.

11. References and Links

References

- Greater London Authority (2025) Flood Ready London Surface Water Strategy available at: https://www.london.gov.uk/sites/default/files/2025-05/The_London_Surface_Water_Strategy.pdf (Accessed: 1 May 2026)
- Greater London Authority (2026) Project pilot data and analysis.
- Greater London Authority (2018) Mayor's London Environment Strategy available at: <https://www.london.gov.uk/programmes-and-strategies/environment-and-climate-change/london-environment-strategy> (Accessed: 1 May 2026)
- Greater London Authority (2018) Mayor's Transport Strategy available at: <https://www.london.gov.uk/programmes-strategies/transport/our-vision-transport/mayors-transport-strategy-2018> (Accessed: 1 May 2026)
- Greater London Authority (2026) London Local Nature Recovery Strategy available at: [London Local Nature Recovery Strategy — Statement of Biodiversity Priorities](#) (Accessed: 1 May 2026)
- Thames Water (2023) Drainage and Wastewater Management Plan (DWMP) available at: <https://www.thameswater.co.uk/about-us/regulation/drainage-and-wastewater-management> (Accessed: 1 May 2026)
- Greater London Authority (2024) London Climate Resilience Review (LCRR) available at: <https://www.london.gov.uk/programmes-strategies/environment-and-climate-change/climate-change/climate-adaptation/london-climate-resilience-review> (Accessed: 1 May 2026)
- Greater London Authority (2025) Response to the London Assembly Environment Committee: Swimmable Rivers report.
- Bright Blue (2022) *In deep water: building the resilience of the water sector*. London: Bright Blue. Available at: [in-deep-water.pdf](#)

Links

- Lower Green West, Merton Council pilot scheme: [An Interactive Roadside Rain Garden | Meristem Design](#)
- St Andrews Road, Croydon Council pilot scheme: [Project Name: St Andrews Road | The Institution of Gas Engineers and Managers \(IGEM\)](#)
- Dig Once, Green Twice technical guidance: [Sustainable Drainage Systems \(SuDS\) through Streetworks | London City Hall](#)
- Independent Water Commission Report (Cunliffe Review) available at: https://assets.publishing.service.gov.uk/media/687dfcc4312ee8a5f0806be6/Independent_Water_Commission_-_Final_Report_-_21_July.pdf
- Department for Environment, Food and Rural Affairs National Standards for SuDS available at: [National standards for sustainable drainage systems \(SuDS\) - GOV.UK: https://www.gov.uk/government/publications/national-standards-for-sustainable-drainage-systems/national-standards-for-sustainable-drainage-systems-suds](#)
- GLA webpage (currently under construction): [Sustainable Drainage Systems \(SuDS\) through Streetworks | London City Hall](#)

12. Appendices

Workstream 1:

- Data Feedback Technical Note
- Data Governance and Management Strategy
- Eligible and Bidding Area Workflow Technical Note

Workstream 2:

- Slides covering the three pilots
- Images of Lower Green West (Merton)
- Images of St Andrews Road (Croydon)
- Images of Richmond Road (Kingston)

Workstream 3:

- Accreditation Technical Report
- SuDS Accreditation Standard
- RSWV Excel Calculator
- Market Registries Technical Report
- Contracts Technical Report
- Contract templates (x4)
- Statutory Constraints Technical Report
- Statutory Constraints Workbook
- Concept Design Guidance Technical Report
- SuDS Information Requirements (x 5)
- Maintenance requirements and costings Report
- Maintenance cost calculator tool (x5)
- Supplier capability and Assurance Report

Workstream 4:

- Independent Market Operator Report
- Interim Market Operator Report

Workstream 5:

- Market simulation slides

Workstream 6:

- Workshop 1, 2, 3 slides
- FAQs
- Buyers Handbook
- Suppliers Handbook
- Explainer Video

Other:

- Independent Review
- Dig Once, Green Twice: A GLA technical guide for retrofitting green infrastructure in utility constrained streets