CLEAN THAMES PLAN

PRIORITY ACTION PLAN FOR A CLEAN THAMES (2024-2030)

PORT OF LONDON AUTHORITY

PRIORITY FOR THE ENVIRONMENT AND COMMUNITIES

Our 2050 Vision is of a clean river, free of sewage, waste and other pollution, supporting greater biodiversity and recreational use.

Healthy rivers are central to biodiversity and to human health and well-being. The tidal Thames is an iconic and critical part of London and the UK's identity. The Thames also provides habitats for a range of wildlife, protection against flooding and a space for recreation and reflection. However figures from the Environment Agency show that along with 86% of England's rivers, the tidal Thames is not meeting its water quality targets as set out in UK legislation and that adopted by the UK such as the Water Framework Directive [1]. Restoring water quality within rivers in the UK is a priority for both the environment and communities that live alongside them.

Since being declared biologically dead in 1957, the tidal Thames has made a considerable recovery. Investment in infrastructure has improved the quality of water allowing the Thames to be home to many protected sites that provide a range of diverse, thriving habitats for numerous species of fish, birds, seals and other animals. ZSL's State of the Thames report shows that water quality in the tidal Thames continues to show promising improvements [2], but with the impacts of climate change clearly apparent, we need to continue this work to safeguard the tidal Thames for future generations.

As a connected river and estuary system, the tidal Thames is a complex ecosystem. Pollution enters the tidal Thames from many sources and often these sources are connected to one another. It is also possible that pollution entering the Thames is transported out into the North Sea further exacerbating the pollution problem in the marine environment. In order to meet the challenge of pollution reduction in a complex system, the Port of London Authority (PLA) works closely with a wide variety of partners and key stakeholders.

To begin holistically tackling this problem in 2014 the PLA convened the Thames Litter Forum. The forum was created with a range of organisations, including NGOs, local authorities and community groups to co-ordinate approaches to tackle litter in the Thames. In 2018, the Thames Litter Strategy was published by the PLA, as part of the Thames Vision, with the Litter Forum. The Strategy set out the context for future action on litter in the Thames and outlined the types of actions that the Thames Litter Forum would work towards over the following five years.

As part of our ongoing dedication as a Trust Port to preserve the tidal Thames the PLA, in collaboration with our partners, is launching the Clean Thames Plan to address all forms of pollution impacting the river.

TACKLING THE KEY SOURCES OF POLLUTION IN THE THAMES

THE KEY PARTNERS DELIVERING ACTIONS TO MEET OUR SHARED VISION OF A CLEAN THAMES:

- Active360
- British Plastics Federation
- British Rowing
- Bywaters
- Cory
- Cross River Partnership
- DP World
- Drinkable Rivers
- Environment Agency
- Essex Wildlife Trust
- Gravesham Borough Council
- GreenSeas Trust
- Hubbub
- HR Wallingford
- London Borough of Hammersmith & Fulham
- London Borough of Newham
- London Borough of Richmond Upon Thames
- London Borough of Tower Hamlets
- Medway Swale Estuary Partnership
- Natural England
- Natural History Museum
- Port of London Authority
- Queen Mary University of London
- River Thames Society
- Royal Holloway London
- South East Rivers Trust
- Thames21
- Thames Estuary Partnership
- Thames Litter Forum
- Thames Rivers Trust
- Tideway
- University of Reading
- Way to Eco
- Zoological Society of London (ZSL)

PROGRESS ON REDUCING LITTER IN THE THAMES

Since launching the Thames Litter Strategy in 2018, there has been significant progress in research, policy and action for water quality along the Thames.

In alignment with key legislative and policy developments, including the Environment Act 2021, the 25 Year Environment Plan, South East Marine Plan 2021 and the Ban on Single Use Plastics in 2023, our strategy has gained substantial momentum. The strategy was divided into four strategic themes: baseline and evidence, combating pathways of litter, removal of existing litter and behavioural change. Together with Thames21, we have been monitoring the abundance and type of litter in the tidal Thames via our litter rapid appraisal surveys. Our goal was to achieve 75% of foreshore graded B (foreshore predominately free from litter) or higher by 2022, and on average between 2018 and 2022, we exceeded this target with 80% of the foreshore earning a B grade or higher.

The COVID-19 pandemic also led to an increased demand for single-use plastics that intensified pressure on river and marine systems. Studies have estimated that more than eight million tons of pandemic-associated plastic waste was generated globally, with more than 25,000 tons entering global oceans [3]. Meanwhile, more members of the public utilised their local green and blue spaces in the UK and built a stronger connection to the river and the wildlife that live within it.

The previous strategy and forum provided a valuable opportunity for partners to share information and lessons learnt in relation to tackling challenges related to inherited litter on the Thames. As we move forward, the PLA remains resolute in its mission to protect and preserve this vital waterway. Therefore, we are taking forward the partnership working approach in our new Clean Thames Plan to tackle the key sources of pollution in the Thames.

PROGRESS ON THE THAMES LITTER STRATEGY ACTIONS

1. Baseline and evidence for informing the strategy

- Litter rapid appraisal surveys complete with Thames21 showing improvement in condition of foreshore from baseline.
- Standardised approach to measure and survey plastic pollution developed by Preventing Plastic Pollution project.
- State of the Thames report published by ZSL highlighting status of water quality in tidal Thames.
- Environmental Audit Committee published report on water quality in English rivers.
- Academic papers published by forum members on topics including microplastics, littering behaviours and wet wipes.
- Environment Agency regulate, monitor and assess water quality in the Thames.

2. Combating pathways of litter into the Thames

- Five local authorities represented at the Thames Litter Forum to engage with the issue of litter entering the river.
- Guidance produced by WRAP for local authorities to improve "binfrastrucutre" of riparian boroughs.
- Thames Environment Fund project led by ZSL exploring pathways of plastic litter into the Thames.
- Installation of a network of 29 drinking fountains as part of the ZSL #OneLess project
- Thames Tideway Tunnel under construction which should reduce sewage-derived pollution entering the river.

3. Removal of existing litter in the Thames

- Over 700 tonnes of river debris (equivalent of 28 loaded garbage trucks) removed from the river by PLA between 2018-2022.
- PLA supported over 400 volunteer foreshore clean ups via the Cleaning the Thames website.
- Removal of approximately 64,000 wet wipes through Thames21's Big Wet Wipe Count over 5 years
- Thames21's Thames River Watch citizen science programme upskilling volunteers to carry out clean ups.
- Thames 2D Model developed to simulate movement of specific litter types in the Thames.
- Review undertaken of potential technologies for removing litter in the upper reaches of the Thames.
- Expansion of network of PLA litter collectors in the river in partnership with DP World.

4. Behavioural change through education and outreach

- Relaunch of PLA Cleaner Thames campaign in 2018.
- ZSL's "Hello London, Goodbye Ocean Plastic" campaign reached five million individuals.
- DP World Oceans Together Forum created in 2018.
- Thames Environment Fund project led by Whale Company and Active360 to reconnect children with the river, its wildlife and the problems affecting them, including litter.
- Thames Environment Fund project led by the AHOY centre educating young people on the impact of litter in the Thames.
- Since 2019 Hubbub have taken more than 5,000 volunteers "Plastic Fishing" in the London Docklands, from school groups to local and international businesses.
- Installation of three BinForGreenSeas in London by GreenSeas Trust

THE CLEAN THAMES MANIFESTO

Tackling sewage pollution through innovative collaboration with the water companies and regulators.

Pollution from storm overflows Combined Storm Overflows (CSOs) and discharges from sewage treatment works is our highest concern. We have been a strong supporter of the Thames Tideway Tunnel and have permitted and licenced its construction. Thames Water estimate a 95% reduction of storm water overflow discharge as a result of the project. We welcome the reduction in sewage discharges the tunnel will bring in London. However, we also expect to see water companies investing in more solutions to reduce sewage discharges.

In 2023, the PLA convened Thames Water, Anglian Water and Southern Water into an agreement to fast-track investment and reductions in sewage and storm water discharges from overflow points and treatment works in our Clean Thames Manifesto. This is a major step in the right direction and we are pleased to be working closely with the water companies and their regulators to go faster and further for the Thames.

WE HAVE SECURED THE FOLLOWING COMMITMENTS IN OUR CLEAN THAMES MANIFESTO:

1	Thames, Southern and Anglian Water and their regulators have agreed to participate in a strategic working group with the PLA on sewage discharges in the tidal Thames.
2	Thames Water have agreed to work with us to find solutions to the wet wipe accumulations on the foreshore.
3	Thames, Southern and Anglian Water have agreed to work with us to provide near real time information on sewage discharges around all their CSOs, and storm overflows from treatment works by 2024.
4	Ofwat support water companies bringing forward investment proposals which deliver best value and align with their ambitious long-term plans.
5	The Environment Agency support water companies to bring forward delivery of planned projects from their 25-year plans in the next Water industry national environment programme (WINEP).

THAMES VISION 2050

PORT OF LONDON AUTHORITY

THE SEWAGE OUTFLOWS ON THE THAMES BY COMPANY

OUR VISION: A CLEAN THAMES

Reducing all forms of pollution in the river has been one of the PLA's key priorities for many years.

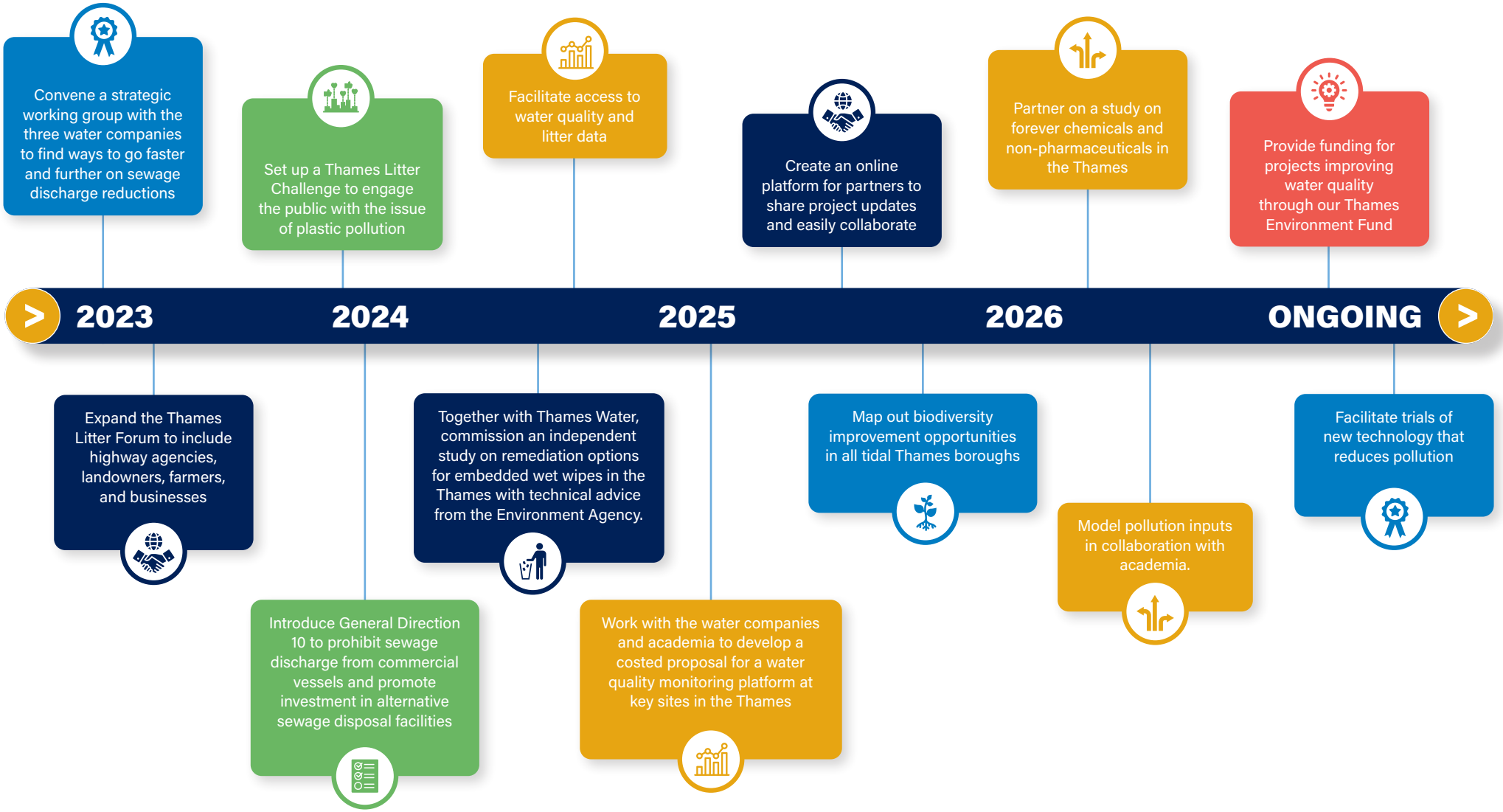
In our role as a Trust Port, we have made progress to reduce pollution in the tidal Thames through actions such as convening the Thames Litter Forum, removing up to 200 tonnes of rubbish each year from the river through our driftwood service, running public awareness campaigns and funding projects through our Thames Environment Fund. However, we want to take this action further by strategically focusing our efforts to bridge the gaps in tackling pollution in the Thames and deliver more benefits to the river. In July 2023, the PLA convened stakeholders and partners from across the tidal Thames in a workshop to discuss how we can achieve the Thames Vision ambition of a Clean Thames. Through this workshop, all stakeholders agreed to ten priority areas for action.

10 AGREED PRIORITY AREAS TO ACHIEVE A CLEAN THAMES

1. Seek opportunities for nature restoration
2. Collect, use & share meaningful data and research
3. Engage with the public to access, understand and value the river
4. Create funding opportunities to enable innovation and technological development
5. Partner with businesses to co-develop best management practices to reduce pollution
6. Thames is an evidence-based exemplar for solutions to river pollution in the UK
7. Combat pollution pathways into the river
8. Co-produce holistic and enforceable legislation
9. Understand the plastic lifecycle to tackle sources of litter
10. Remove existing litter in the river

OUR VISION: A CLEAN THAMES

In the Clean Thames Plan, the PLA have committed to delivering actions that will drive forward positive change to support the progress being achieved by our partners along the Thames. Through these actions, we aim to deliver further progress to achieve our vision of a Clean Thames.



THE CLEAN THAMES PARTNERSHIP

Tackling the issue of pollution in the Thames requires holistic action from the many organisations and networks involved in, and already striving to improve water quality in the river.

Our partners have shared their priority work to improve water quality, that will be achieved by 2030, to meet our shared vision of a Clean Thames:

1 Seek opportunities for nature restoration

Encourage Nature Based Solutions and create further areas for habitat enhancements that benefit the ecosystem through filtering pollutants and reducing erosion.

ORGANISATION	ACTION
Catchment Partnerships	Develop catchment plans to identify effective restoration opportunities .
Environment Agency	Leading the TE2100 work to convene and empower others to shape their Riverside Strategy.
Essex Wildlife Trust	Increase biodiversity and restore habitats on the Thames that lead to a positive impact on water quality.
Port of London Authority	Map out opportunities to increase biodiversity in line with Net Gain requirements in the tidal Thames.
Queen Mary University of London	Research into river and estuary biodiversity and restoration opportunities.
ZSL	Relaunching the London River Restoration Action Plan and developing an opportunity map. Building the Transforming the Thames – coastal habitat restoration plan with partners.

2 Collect, use & share meaningful data and research

Develop a deeper understanding of the dynamics and impacts of pollution in the Thames through a collaborative monitoring approach.

ORGANISATION	ACTION
British Rowing/ River Action/ Aquascope	Collaborative project focusing on water quality testing and monitoring at key sites in the tidal Thames.
Drinkable Rivers	Run an ambitious citizen science programme enabling the public to monitor the health of the river.
Environment Agency	Monitor tidal Thames water bodies against WFD requirements and provide published water quality data.
Kings College London	Baseline of evidence and water quality data to evaluate impact of Thames Tideway Tunnel.
Port of London Authority	Work with the water companies and academia to develop a costed proposal for a water quality monitoring platform at key sites in the Thames
Royal Holloway University of London/ Natural History Museum	Baseline evidence for impact of plastic pollutants on biota within the Thames and elsewhere.
Thames Water	Develop baseline of evidence for both water quality and sewage derived litter to evaluate impact of Thames Tideway Tunnel
Thames21	Run citizen science litter monitoring programmes and Hammersmith Big Wet Wipe Count. Collect and share this data on pollution.
University of Reading	Undertake monitoring and modelling of contaminants in the Thames catchment.
ZSL	Develop the 2nd State of the Thames report update from that published in 2021.

3 Engage with the public to access, understand and value the river

Enhance understanding and perception of the importance of the river through education and outreach.

ORGANISATION	ACTION
Active 360 and In The Drink	Use clean-ups to develop awareness of problem and engagement collaborations on pollution.
Bywaters	Run education and engagement programme with local schools and universities on plastic pollution.
DP World	Run staff educational outreach and raise awareness of plastic pollution in schools.
Essex Wildlife Trust	Achieve aim of 1 in 4 by 2030 – 1 in 4 people act for wildlife or nature. Work to restore public connections to the river through volunteering.
GreenSeas Trust	Run school education visits on plastic pollution.
London Borough of Hammersmith and Fulham	Develop clean, accessible river walks within borough.
London Borough of Richmond Upon Thames	Support recreational use of and access to river within borough.
Port of London Authority	Set up a Thames Litter Challenge to engage the public with the issue of plastic pollution
River Thames Society	Engage the public and members about the Thames through publication of magazine and website.
Thames Rivers Trust	Develop public awareness campaign in line with the opening of the Thames Tideway Tunnel.
Thames21	Improve engagement with the river through online resources, improving public access to the river and citizen connections.

4 Seek funding opportunities to enable innovation and technological development

Seek out funding and partnership opportunities that support innovative solutions to monitor and tackle pollution.

ORGANISATION	ACTION
British Plastics Federation	Promote UKRI funding through funding portal.
DP World/ Port of London Authority	Partnership collaboration to develop new litter collector for lower Thames estuary
Port of London Authority	Provide funding for projects improving water quality through the Thames Environment Fund

> “The British Plastics Federation is pleased to continue supporting this project. Understanding the behaviour behind littering is essential as we move towards a circular economy, as no material should ultimately end up in the Thames or anywhere else in the natural environment. ”
>
> **British Plastics Federation**

5 Partner with businesses to co-develop best management practices to reduce pollution

Collaboratively develop and implement effective management practices that significantly reduce pollution.

ORGANISATION	ACTION
British Plastics Federation	Developing education and training resources on plastics for public and industry. Promote the Operation Clean Sweep (OCS) program which provides guidelines to help plastics industry operations managers reduce the loss of plastics, flakes and powder to the environment.
British Rowing	Sharing best practice with sports clubs in the Thames.
Cory Group	Reducing plastics in waste.
Cross River Partnership	Support Thames focussed organisations on environmental improvement projects where possible.
DP World	Run Ocean Together Forum which brings businesses together to remove single use plastics from their operations. Working to remove single use plastics from their supply chain.
In the Drink	Support bar industry along the Thames to reduce single use plastic .
Port of London Authority	Expand the Thames Litter Forum to include highway agencies, landowners, farmers and businesses. Create an online platform for partners to share project updates and easily collaborate.
Your Tidal Thames Catchment Partnership	Create further opportunities for collaboration and partnership to improve the river in line with the WFD goals.
ZSL	Working with Thames Water and Heathrow to develop best management practices.

6 Thames is an evidence-based exemplar for sustainable solutions to river pollution in the UK

Position the Thames as a model showcasing empirically supported solutions for combating river pollution nationwide in the UK.

ORGANISATION	ACTION
London Borough of Hammersmith and Fulham	Co-produce climate emergency strategy and develop sustainable drainage schemes for borough. Greening grey infrastructure.
Port of London Authority	Convene a strategic working group with the three water companies on the Thames to find ways to go faster and further on sewage discharge reductions. Facilitate the trial of new technology that reduces pollution
Thames Water & Tideway	Bringing new Thames Tideway Tunnel super sewer into operation by 2025.

> “We are happy to see the Clean Thames Plan published and we look forward to working with partners to create a better river Thames for people and wildlife through our role as a regulator and an advisor.“
>
> **Environment Agency**

7 Combat pollution pathways into the river

Identify and take action to tackle the sources and hotspots of pollution into the river.

ORGANISATION	ACTION
Cory Group	Develop infrastructure to pump blackwater from vessels ashore.
Environment Agency	Continue to regulate activities under the Environmental Permitting Regulations.
Essex Wildlife Trust	Deliver a plastics project investigating the journey of plastic from tidal rivers into the marine environment along the Essex Coast. Partnership with Thames21 and RiverCare.
Gravesham Borough Council	Increase bin and riverside litter collections. Increase recycling and reduce waste. Develop clean, accessible river walks within the borough to compliment ongoing development along the Thames.
GreenSeas Trust	Production of bins that are placed on the riverside.
Kings College London	Research properties for new approaches to mitigating pollution including spatial analysis, terrestrial focus and material analysis.
London Borough of Newham	Increase recycling and reduce residual waste within the borough. Within the local plan, all development should enable separation of foul and surface flows and incorporate SuDS that reduce surface water run-off.
London Borough of Richmond Upon Thames	Putting pressure on water companies to address storm tank overflows and be more engaged with local concerns within the borough.
London Borough of Tower Hamlets	Improving waste management practices within borough to prevent escape of litter
Port of London Authority	Model pollution inputs in collaboration with academia. Deliver and track the actions set out under the Clean Thames Manifesto.
Queen Mary University of London	Research diffuse pollution sources and management (sediment, contaminated land, landfill).
Thames21	Tackling road run-off through development of a risk characterisation and SuDS decision model. Raising awareness and challenging authorities on sewage pollution.
Wandsworth Borough Council	Increasing bins and riverside litter collections in the borough.
ZSL	Deliver ‘Outfall Safari’s’ across the tidal Thames tributaries to identify polluting discharges through misconnections.

8 Co-produce holistic and enforceable legislation

Advocate for legislation and policies that are robust, effective, and place a high priority on environmental protection.

ORGANISATION	ACTION
British Plastics Federation	Continue dialogues with government on plastic in industry through hosting annual Parliamentary Reception. Contribute to UN Global Treaty for plastic pollution and prioritise legislation for Deposit Return Scheme and Extended Producer Responsibility for packaging.
London Borough of Richmond Upon Thames	Lobby for the Environment Act 2021 outcomes including Deposit Return Scheme.
Marine Management Organisation	Engage stakeholders to develop vision for the South East Marine Plan area. Develop spatial policy for marine boundaries with marine litter and water quality policies.
Port of London Authority	Introduce General Direction 10 to prohibit sewage discharge from commercial vessels and promote investment in alternative sewage disposal facilities

> “At British Rowing we welcome the PLA’s Clean Thames Plan and look forward to working together to help create a clean and flourishing environment for our rowers and indeed everyone to enjoy every day.“
>
> **British Rowing**

9 Understand the plastic lifecycle to tackle sources of litter

Prioritise reducing plastic at source and building on the principles of a circular economy.

ORGANISATION	ACTION
Active 360 and In The Drink	Identify current position of riverside bars use of single use plastic cups and develop strategy to facilitate and implement switch to reusables.
British Plastics Federation	Promote circularity and improve links to a net zero strategy for industry through production of Recycling Roadmap.
Royal Holloway University/ Natural History Museum	Research into reducing microplastics in the environment, including through landfill leakage. Research to understand plastic life cycle to target more solutions and sources of pollutants.

10 Remove existing litter in the river

Identify and take action to tackle the sources and hotspots of pollution into the river.

ORGANISATION	ACTION
Active 360	Build resources to enable more plastic clean ups from public.
British Rowing/ River Action	Organise events in 2024 to engage local rowing clubs on the Thames.
Bywaters	Host foreshore clean ups along the Thames for commercial clients.
DP World	Annual volunteering days which focuses on removing litter from Thames foreshore.
London Borough of Hammersmith and Fulham	Facilitate volunteer clean ups in borough.
London Borough of Tower Hamlets	Support individual, community and organisational volunteer activities that tackle litter and flytipping along or nearby our borough's water ways
Port of London Authority	Continue to operate Driftwood Service removing debris and detritus from the river. Together with Thames Water, commission an independent study on remediation options for embedded wet wipes in the Thames with technical advice from the Environment Agency.
Thames21	Build the capacity of volunteer clean ups through national Plastic Action Steering group.

“Whilst we have seen significant progress in water quality through investment in infrastructure, there continues to be adverse pressures on the health of wildlife in the Thames including from impact of chemicals and the rising tide of plastics. The Clean Thames Action Plan will help us collectively tackle these threats so that we can achieve the shared ambition of the river’s water quality be consistently good enough to reach its wildlife potential and be safely enjoyed by people.”

Zoological Society of London

SPECIAL THANKS

“At the PLA, we want the river to be the cleanest it has been since the industrial revolution. But we know we can’t do it alone. The collaborative efforts of our partners and stakeholders who have participated in the development of this strategy are crucial and we extend our deep appreciation to all of you. A special mention and thanks to the Thames Litter Forum for their dedicated work and unwavering engagement in delivering the actions set out in the previous Thames Litter Strategy. Your commitment to this cause is truly commendable and invaluable to this vision. This new action plan stands as a testament to the power of collaboration and shared dedication. We look forward to achieving our joint vision for the river together. ”

Grace Rawnsley
Director of Sustainability and Net Zero Transition

WALSINGHAM HOUSE
35 Seething Lane
London, EC3N 4AH

LONDON RIVER HOUSE
Royal Pier Road
Gravesend, Kent, DA12 2BG

T: +44 (01474) 562200
F: +44 (01474) 562281

info@pla.co.uk
www.pla.co.uk
@LondonPortAuth

REFERENCES

[1] Environment Agency, “Environment Agency - Catchment Data Explorer,” environment.data.gov.uk, 2022. https://environment.data.gov.uk/catchment-planning (accessed Sep. 2023).

[2] ZSL, “The State of the Thames 2021: Environmental trends of the Tidal Thames,” McCormick, H., Cox, T., Pecorelli, J., and Debney, A.J. (Eds), Regent’s Park, London, UK, 2021. Accessed: Sep. 07, 2023. [Online]. Available: https://cms.zsl.org/sites/default/files/2022-10/ZSL_TheStateoftheThamesReport_Nov2021_0.pdf?_ga=2.266511502.1227659184.1694073430-1611245276.1694073429

[3] Y. Peng, P. Wu, A. T. Schartup, and Y. Zhang, “Plastic waste release caused by COVID-19 and its fate in the global ocean,” Proceedings of the National Academy of Sciences, vol. 118, no. 47, Nov. 2021, doi: https://doi.org/10.1073/pnas.2111530118.

PORT OF LONDON AUTHORITY