Committee(s): Port Health and Environmental Services Committee	Dated: 07/01/2025
Subject: City of London Thames Fishery Research Experiment	Public report: For Decision
This proposal: delivers Corporate Plan 2024-29 outcomes 	 Leading Sustainable Environment Diverse Engaged Communities
Does this proposal require extra revenue and/or capital spending?	Yes
If so, how much?	£4,800
What is the source of Funding?	City's Estate Grant
Has this Funding Source been agreed with the Chamberlain's Department?	Yes
Report of:	Katie Stewart, Executive Director Environment
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Summary

This report presents the results of the 52nd City of London Thames Fishery Research Experiment, which was held on 28 September 2024, at Denton, Gravesend, and sets out options for the 53rd Experiment in 2025 for the Committee's consideration.

As agreed by the Port Health and Environmental Services Committee in March 2024, the angling methodology was further improved this year in order to reduce fish mortality rates, and this proved successful. In addition, data collection was enhanced, and some basic analysis of the results was undertaken (Appendix 3).

These improvements are a positive step towards developing a more scientific and collaborative approach to the Experiment and the production of a broader, consistent and more valuable dataset. A proposal for a research project to commence in 2025 is presented at Appendix A. This proposal has been prepared in consultation with external partners and, if approved by Members, will involve working with academic institutions who will undertake the data analysis and interpretation.

Recommendations

Members are asked to approve the three parts of the recommended option (a):

- i. Proceed with the 53rd City of London Thames Fishery Research Experiment in 2025 in the existing format.
- ii. Review and approve the grant of £4,800 from the City's Estate to partially fund the 2025 Experiment.
- iii. Approve delegated authority to the Town Clerk, in conjunction with the Chairman and Deputy Chairman, to determine the details of the proposed Research Project in conjunction with suitable academic institutions.

Main Report

Background

- 1. The City of London Thames Fishery Research Experiment has been held annually since 1973. The Experiment takes the form of an annual angling competition, the results of which form a survey of the numbers and species of fish present in the river during a four-hour period each year.
- The Experiment encourages sustainability and conservation. The competition rules comply with advice and guidance issued by the Angling Trust and participants are advised about the proper handling of fish to minimise mortality. All young and undersize fish are returned to the river immediately once they have been recorded.
- 3. Results since 1973 have recorded data on more than 22 species of fish. The results provide data and information to organisations such as the Environment Agency, the Thames Angling Preservation Society, the PLA, and members of the river community.
- 4. As one of the oldest 'citizen science' projects, the Experiment has the unique advantage of linking the river's recreational angling community, and local communities, with sustainability and conservation. It is also an opportunity for the younger participants to learn from experienced anglers and hopefully be encouraged to develop a long-term interest in fishing and marine conservation.

Current Position

- 5. On Saturday, 28 September 2024, 75 adult anglers from eight teams caught 122 fish consisting of 5 species. Anglers competed for a range of team and individual prizes, including those sponsored by the PLA; The Fishmongers' Company; and the Worshipful Company of Water Conservators. Details of the competing teams and winners are provided at Appendix 1.
- 6. 122 fish of five species were caught this year:
 - Bass: 102
 - Flounder: 11
 - Eel: 6
 - Pouting: 2
 - Dab: 1.
- 7. For comparison, the data from the last 15 years is provided at Appendix 2.
- 8. The events of the day followed the format of previous years, i.e. the angling competition took place over four hours. This was followed with a three course meal in a marquee hired for the occasion, for approximately 150 people (anglers, stewards and guests) and a formal presentation ceremony.

Feedback from stakeholders

- 9. Participating anglers and guests have provided positive feedback on the 2024 Experiment. Stakeholders acknowledge the Experiment's significance in evaluating the condition of the River Thames. The event also fosters a sense of community among river stakeholders and serves an educational purpose by involving young people.
- 10. The angling community's representative has commented as follows:
- 11. With the event being held in late September this year, the species recorded were typical for early autumn in this section of river.
- 12. The species recorded were dominated by European Bass of which there were 102; a notable increase on the 32 landed in 2023. This may be a developing trend of recovery following European wide protection measures introduced for Bass over the last decade. This also underlines the importance the section of river plays in the lifecycle of the species. Further analysis shows that the vast majority were Juveniles with only two fish above the minimum conservation reference size (MCRS) as adults; indicative of the river as a key nursery area.
- 13. This year, we again monitored fish mortality and were pleased to note that our fish handling code of practice appears to be effective.
- 14. We were very pleased to again support three youth teams, coached by four experienced volunteer anglers. The event continues to build on the original aspirations to engage young people in marine conservation related events. This

year we have managed to go one step further with two junior anglers having progressed from the youth teams to the adult teams.

15. The age profile of the adult participants is continuing to rise so it is important that we continue to encourage young people to participate. Additionally, we have had a positive response from the attending school teachers and we will explore ways of linking the Experiment results to science study in the classroom.

Financial Summary

- 16. The total cost of this year's event was £12,581.
- 17. Funding was provided through a grant of £4,800 from City's Cash (now City's Estate). We also received financial contributions of £750 from the Fishmongers' Company and £1,000 from the Thames Angling Preservation Society. (In addition, trophies were donated by the Worshipful Company of Water Conservators, and neighbouring business, Clubb Sand and Gravel Ltd (neighbouring business).
- 18. The remaining cost to the local risk budget was £5,819.20.

Improvements in 2024

- 19. We now hold 52 years' worth of valuable data which shows the numbers and species of fish present at the time of each Experiment. However, more detailed and scientific analysis of the results has never been undertaken.
- 20. Collection of associated environmental data has been limited and somewhat sporadic over the life of the Experiment. In recognition of how useful this data would be in the analysis and interpretation of the results, a process was implemented this year to collect water temperature and salinity readings.
- 21. In addition, as a first step towards improving the scientific nature of the Experiment, this year some further, basic and observational analysis was carried out by the lead Angling Coordinator, and his report is provided at Appendix 3. It is intended to build upon this in future years, should the Committee approve the continuation of the Experiment.

Looking ahead

22. For 52 years, the Thames Fishery Research Experiment has united those interested in the river Thames. It is one of the longest-running citizen science projects, providing valuable historical data for stakeholders. This long-standing event not only celebrates the rich angling tradition of the region but also records valuable data on fish catches, contributing to a broader understanding of the River's biodiversity and health. It is acknowledged, however, that the data gathered from this event could be utilised more effectively and be grounded in a stronger scientific basis.

23. A proposal for a research project to commence in 2025 has been prepared in consultation with external partners and, if approved by Members, will involve working with academic institutions who will undertake the data analysis and interpretation. The proposal is presented at Appendix 4 and is summarised below.

Research Project Proposal

24. The proposed City of London Thames Fishery Experiment Research Project seeks to evaluate the health of fish in the River Thames, focusing on contamination levels and climate change impacts.

Project objectives: The project aims to gather data on fish health, analyse Polychlorinated Biphenyls (PCB) concentrations, compare current levels with past predictions, and assess various biological and environmental factors affecting fish in the River Thames.

Environmental concerns: Anglers have expressed concerns about Estuary conditions, particularly sewage releases and water quality, which are believed to affect fish health and could indicate broader aquatic health issues.

Methodology: The project will involve sample collection during the annual City of London Thames Fishery Research Experiment, followed by laboratory analysis to measure PCB levels, heavy metals, microplastics, and parasite infestations. Data will be statistically analysed to identify significant trends.

Collaborative efforts: The project will provide the opportunity to collaborate with various stakeholders, including the angling community, environmental agencies, and academic institutions, to ensure comprehensive data collection and analysis.

Project benefits: The results may inform environmental policy and conservation efforts. Furthermore, the collaborative approach will offer valuable engagement with stakeholders, including government agencies and academic institutions which may support and influence future scientific research. In addition, it will involve working with the angling community and contributing to a broader understanding of the River Thames' biodiversity and health, to help shape future environmental strategies.

Project costs: It is anticipated that the sample collection, data analysis and interpretation will be undertaken by a partner academic institution which will absorb most of the costs.

Options

- 25. Despite financial contributions from some partner organisations, approximately half of the cost of the Experiment is charged to the Port Health and Public Protection local risk budget and this amount does increase year on year. When deciding whether to approve the Experiment in 2025, your Committee is asked to consider whether the benefits of the event outweigh the rising costs, therefore several delivery options have been prepared:
 - a) i. Proceed with the 53rd City of London Thames Fishery Research Experiment in 2025 in the existing format (i.e. with a full complement of anglers and guests (approx. 150), a seated meal and presentation ceremony).

ii. Partially fund the 53rd Experiment with a grant of £4,800 from the City's Estate fund.

ii. Initiate the proposed Research Project which will be developed in conjunction with suitable academic institutions.

Option **a**) would fulfil the aim of developing a more scientific approach to the Experiment, contribute to a broader understanding of the biodiversity of the River Thames, and further enhance collaboration and partnership working. While we anticipate limited additional costs for the Research Project, the overall cost of the event will rise in line with inflation. **Recommended**

b) i. Proceed with the 53rd City of London Thames Fishery Research Experiment in 2025 on a reduced scale, similar to the format followed during the 2020 pandemic year. This would involve a limited number of key guests and the provision of simple catering without a formal sit-down meal.

ii. Partially fund the 53rd Experiment with a grant of £4,800 from the City's Estate fund.

ii. Initiate the proposed Research Project which will be developed in conjunction with appropriate academic institutions.

Option **b)** approach minimises costs and allows for selecting angling times based on optimal tidal conditions. However, it compromises the 'community' and collaborative aspect of the event, severely limits the time required to calculate the competition results, determine winners and hold a presentation ceremony, and may decrease the likelihood of practical support and financial contributions from academic institutions and partner organisations. **Not recommended**

 c) Do not continue to hold the City of London Thames Fishery Research Experiment, leaving 2024's 52nd anniversary event as the final occurrence. Not recommended

Proposals

- 26. Option a) is recommended. This option does impact on the local risk budget, and the other options may need to be reconsidered in future years.
- 27. The March 2016 Policy and Resources Committee agreed the transfer of funding commitments from Finance Grants Sub Committee to the relevant Committees for ongoing administration. Should you choose to proceed with the 53rd Experiment, you are also required to review and approve the annual grant from City's Estate fund to deliver the Experiment. The amount of the proposed grant for the Fishing Experiment in 2025/26 is £4,800 (subject to final approval by Court of Common Council in March 2025).

Corporate and strategic implications

Strategic implications - The City of London Thames Fishery Research Project supports the aims and outcomes of the City's Corporate Plan 2024-2029, particularly 'Diverse Engaged Communities' and 'Leading Sustainable Environment'.

Financial implications - The Experiment is partly funded by a grant from City's Estate and from financial contributions made by partner organisations. The balance is paid from the local risk budget. Financial implications are balanced against the non-financial benefits when deciding whether to proceed with the 53rd Experiment and the format it will take.

Climate implications - The City of London Thames Fishery Research Experiment encourages sustainability and conservation. It is one of the oldest 'citizen science' projects and encourages young people to become involved in conservation of the river Thames.

Conclusion

The 52nd City of London Thames Fishery Research Experiment was a successful event which was well supported and enjoyed by all who took part. Continued improvements to the angling methodology resulted in reduced fish mortality rates. In addition, data collection was enhanced, and some basic analysis of the results was undertaken which will

If approved, the proposed project will enhance the existing 'City of London Thames Fishery Research Experiment,' establishing a scientific foundation for collecting data from the event. This data will contribute to a broader understanding of the biodiversity and health of the River Thames.

The project aims to facilitate comprehensive collaboration with stakeholders, government agencies, and educational institutions, alongside the recreational angling community. This collaborative approach may bolster and guide the progress of future scientific research.

Appendices

- Appendix 1: Summary of competition results and winners 2024
- Appendix 2: Fishing experiment statistics 2010-2024
- Appendix 3: Analysis of Experiment results 2024
- Appendix 4: Draft project proposal for 2025 onwards

Background Papers

'Improvements to methodology of the City of London Thames Fishery Research Experiment.' Port Health and Environmental Services Committee, 28 March 2023

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