Harbour Committee

18th March 2025

Report of: Patsy Mellor - Director of Management of Place

Title: Harbour Water Quality

Ward: Hotwells and Harbourside, Centre, Lawrence Hill, Brislington East, St George Troopers Hill, Southville.

Officer Presenting Report: Head of Service – Harbour Authority

Recommendation

That the committee note the contents of this report and provide comments for future consideration

Summary

Harbour waters are valuable aquatic ecosystems, support wildlife, facilitate water recreation activities, are a key city centre tourist attraction, accommodate 400 plus moored vessels and function as critical, accommodate highways and property catchment water run-off and function as a critical flood defence system.

Managing and influencing the quality of Harbour water is a complex issue.

The Harbour Service KPI for Water Quality monitors the percentage of time the weekly bacterial water test at Baltic Wharf meets bathing water excellent standard.

The significant issues in the report are:

The Harbour Service do have some capacity to managing the negative impacts on water quality but there are limited skills and resources available to dedicate to this important issue.

Whilst the Water Quality KPI is a basic indicator of a specific aspect of water quality in one location, it is acknowledged that this standard offers limited scope to understand and influence harbour water quality or other environmental improvements.

1. Policy, legislation commitments

On 12th November 2024 a 'Golden Motion' was taken to Full Council to call for further action to be taken to address water quality in Bristol. The One City Environment Board has agreed to take on the policy brief, as requested and a Clean Rivers Working Group is being set up comprising of BCC, Wessex Water, Bristol Avon Catchment Group, the Environment Agency etc. The scope of the group is likely to start focused on the areas highlighted in the golden motion, since the water system is complex.

The 2020 One City Ecological Emergency Strategy set goal of "100% of Bristol's waterways to have water quality that supports healthy wildlife by 2030" – in recognition that we need to do our part to tackle pollution and improve the water environment.

The ecological status of waterways is determined under the Water Framework Directive, which is a European directive transposed into UK law, requiring monitoring of waterbodies for a range of issues, including pollution from chemicals and excess nutrients, as well as the health of wildlife

DEFRA provides the legal framework for the water environment and set out its long-term aims in the Environment Act 2021. This includes a target for 80% reduction in phosphorus by 2037 against a 2020 baseline (60-80% of phosphorus in the water environment comes from sewage discharge).

Water Environment Regulations 2017 apply to surface waters (including some coastal waters) and groundwater (water below the surface of the ground). They set out requirements to prevent the deterioration of aquatic ecosystems; protect, enhance, and restore water bodies to 'good' status; and achieve compliance with standards and objectives for protected areas.

The council is a member of the Bristol Avon Catchment Partnership that works to improve rivers in the Bristol Avon region and its Monitoring and Reporting Technical Sub-Group

2. Consultation

Internal

- Harbour Teams
- Blue Green Infrastructure Strategy Officer
- Harbour Place Shaping Strategy Officer
- Sustainable City Team
- Docks Principal Engineer

External

- Regional WaterSpace Partnership (B&NES, SGC, BCC, Environment Agency, Wessex Water)
- Harbour Stakeholder Group

3. Context

Water pollution: sources and monitoring

Sources of water pollution in the harbour waters include:

- Run off from the urban transport network directly into the Harbour or via the surface water drainage network.
- Property catchment water run off drainage.
- Agriculture and land management run off into the upstream river catchment.
- Wessex Water Combined Sewage Overflows (CSO) intermittent discharging into the harbour.
- Contamination from tributary rivers from the wider catchment area
- Illegal effluent discharges from boats
- Fuel pollution discharges from vessel engines.
- Litter and waste accumulation in the water.

Multiple combined sewer outfalls drain into the Floating Harbour, River Avon and Frome. Coast and rivers watch map | Wessex Water. BCC work in partnership with Wessex Water on water quality issues within their responsibility and remit.

Bristol City Council undertakes sewage pollution testing at sampling sites in the Floating Harbour all year round. This is jointly funded by Bristol City Council and the Health Protection Agency. Weekly and monthly bacteriological water samples are taken. Weekly test locations include Baltic Wharf, St Augustine's Reach, Prince Street Bridge, Bathurst Basin and Redcliffe Bridge. Monthly test locations include SS Great Britain, Castle Tunnels, Bristol Bridge, Netham Lock, and Cumberland Basin. Current test results are made available to the public on the BCC Harbour website Water quality and pollution, Floating Harbour and rivers (bristol.gov.uk), along with safety advice for water activity Water quality in Bristol Harbour.

Water quality test results show significant differences in water quality in the test locations. Generally, water quality is significantly poorer in central Harbour areas as there are large numbers of surface water discharge points into the harbour that are discharged to in very heavy rain and there is also input from the River Avon upstream.

4 The Committee to note

That Harbour Authority Managers will be an active member of the Clean Rivers Working Group that is currently being established. Harbour representation membership suggestion. The Clean Rivers Working Group will gather the appropriate stakeholders to further develop water quality KPIs for the city and identify water quality improvement actions.

The Harbour Authority Managers will continue to support a blue green infrastructure strategy which is in early development for the city. Within this strategy, the River Avon and Harbour waters form a major part of the primary network. This work will consider enhancement opportunities to strengthen outcomes for both ecological recovery and place shaping; and aims to establish new programmes and funding bids for future investment.

5. Other Options Considered

N/A

6. Risk Assessment

Improving water quality is complex and will require working across a number of different organisations i.e. Wessex Water, Environment Agency etc.

Poor water quality can have an impact upon the reputation of the organisation. The public expectations that the council is able to have a significant impact on pollution caused by the sewage system are not in line with the regulatory system and limited resources of the council.

Poor water quality can cause illness to water recreation users.

Better water quality is a key requirement for nature recovery, but it is extremely difficult in a city to improve without major investment.

Improvement targets and performance indicators need to be realistic and be designed to manage public expectations.

7. Summary of Equalities Impact of the Proposed Decision

N/A

8. Legal and Resource Implications

N/A

9. Land

N/A

10. Personnel

LOCAL GOVERNMENT (ACCESS TO INFORMATION) ACT 1985
Background Papers: None