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For immediate release

Citizen Science project reveals potentially dangerous levels of *E. coli* in harbours

Results from a Citizen Science project run by the Clean Harbours Partnership (CHP) in Langstone and Chichester Harbours to research pollution in harbour water has revealed *E. coli* [*Escherichia coli*] levels from stormwater overflows can be up to 760 times the threshold considered to be acceptable to public health.

Under the direction of Clean Harbours Partnership, accredited laboratory tests show several *E. coli* readings over 1,000 cfu/100ml, with one reading in Langstone Harbour, near to outflow at Budds Farm wastewater treatment works, as high as 380,000 cfu/100ml – 760 times the failure rate for levels of bacteria set under The EU Bathing Water Directive.

Concentrations less than 250 cfu/100ml are considered ‘excellent’ water quality while any readings exceeding 500 cfu/100ml signify ‘failure’ with a risk to human health. *E.coli* is a harmful bacteria commonly found in sewage that can cause infection, diarrhoea and vomiting when ingested. However, the presence of *E.coli* is considered by scientists to be a proxy for the state of river and sea water – and an indicator for many other contaminants.

Water samples were taken from both Chichester and Langstone Harbours during November when, according to Southern Water’s own data (Beachbuoy) there was over 1,000hrs of untreated wastewater dumped into Chichester Harbour, plus over 350hrs released from Budds Farm alone into Langstone. Chichester Harbour is an Area of Outstanding Natural Beauty. Both harbours are Sites of Special Scientific interest (SSSI).

Results echo findings by the Chichester Harbour Conservancy, which reported five out of twelve test sites failing similar tests at the end of October and a further six out of nine sites failing two weeks later. The Langstone Harbour Board do not test water quality but significantly a sit close to the harbour boundary at Northney, measured at over 11 times acceptable levels (5800 cfu/100ml), coinciding with an untreated release from Langstone and giving strong evidence that the plume of untreated wastewater spreads between harbours.

This has implications for local harbour users, from wild swimmers and sailors to fishermen.

Rob Bailey of CHP said: *“We initiated this research because our local communities and water users want to know what pollution is in our harbour water. The Authorities either can’t or won’t tell us. Recent local demonstrations show a loss of trust in Southern Water and a loss of faith in the system that is meant to protect the public and the environment. Both Chichester and Langstone Harbours have gold star environmental designations. If *E.coli* concentrations are a bellwether for water quality, we clearly have a problem that needs addressing. We will be sharing our findings with the Environment Agency although their track record for investigating such situations has been poor.”*

Bianca Carr of CHP, added: *“We believe it is important to share these findings with the public so that harbour users can make more informed decisions about when they get out on or into the water. We*

have found high concentrations of bacteria near the sewage outfalls – however there are few signs informing the public of this danger and despite not being designated bathing water they are regularly used recreationally by local communities. In the interest of public safety, we would like to see clear signage recommending that nobody uses the inshore waters after storms.”

This most recent testing is part of CHP’s Project Spotlight, the largest ever Citizen Science initiative around Chichester and Langstone Harbours. Over 300 seawater samples have been taken to identify the range of pollution present. Under the guidance of the Universities of Portsmouth and Brunel, the project is testing for the presence of some 500 chemicals, including pharmaceuticals and pesticides. Findings are expected to be published in early 2023.

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For further information, contact Bianca Carr or Rob Bailey info@cleanharbourspartnership.co.uk

Note to Editors

The Clean Harbours Partnership CIC is a registered Community Interest Company in England and Wales, Company Number 13863166. It is a collaboration of local interest groups based around Langstone and Chichester Harbours, formed in 2021 in response to local outcry and concern about pollution in Chichester and Langstone Harbours. It adopts an evidence-based approach to influence change. It brings interested parties together with a single focus on harbour pollution. This allows like-minded groups to leverage the benefits of scale and clearly communicate the facts. Find out more at our website, <https://cleanharbourspartnership.co.uk/>