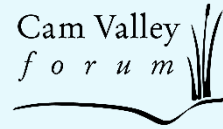


Press Release: Major nationwide study of Designated Bathing Water monitoring reveals River Cam had the joint highest number (48) of organic chemicals detected



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Citizen scientists from 23 communities, including Cam Valley Forum have contributed to the largest inland bathing water quality study ever conducted in the UK. The study revealed that the River Cam had the joint highest number (48) of organic chemicals detected although most were at very low levels.

The groundbreaking national study saw Cam Valley Forum's citizen scientists participating, by collecting daily water samples from the designated bathing water at Sheep's Green, over one week in the summer. Designated Bathing Water sites are monitored by the Environment Agency weekly during the bathing season, but focusing only on two faecal bacterial indicators, *E. coli* and Intestinal Enterococci. However, this national citizen science-led study revealed a cocktail of organic substances at bathing water sites nationwide, including pharmaceuticals, PFAS, pesticides, vet medicines, caffeine and nicotine. This intensive monitoring of our most loved waterways highlights the need to further expand the monitoring regime to include a broader range of contaminants that may pose risks to human health. Some of the other pollutants monitored for were: faecal bacteria, phosphate, aluminium, manganese, nitrate, zinc, nickel, iron, copper, PAHs (Polycyclic Aromatic Hydrocarbons) and UV filter components used in suncreams.

Sheep's Green on the River Cam in Cambridge saw the joint highest number of organics detected at a total of 48. The top 3 organic pollutants found in the River Cam were Paracetamol, Caffeine and Chrysene. Chrysene can originate from various sources, including road runoff and as a combustion product as well as a component found in the banned preservative, creosote.

Commenting on the testing Cam Valley Forum said "We are not surprised to see the high trace organic concentrations in the Cam at Sheep's Green. There are more than 30 sewage treatment works (STWs) upstream of Sheep's Green and some of these Anglian Water assets are in need of upgrades. There is a combined population equivalent for these STWs greater than 105,000 which is two-thirds the population of Cambridge. The effluent from STWs serving such a large population will inevitably contain pharmaceuticals.

The situation is worsened in the Cam valley because over-abstraction of water by Cambridge Water Company and others, which has resulted in reduced river flows and insufficient dilution of STW effluents. As a result of this combination of problems, CVF is very concerned for the health of life in our precious chalk streams"

Cam Valley Forum added. "The concentration of paracetamol and caffeine is incredibly low. For example, you'd need to drink a small swimming pool's worth of river water to get the same hit of caffeine as from a cup of coffee. However, we are more concerned by the levels of the chemical

Chrysene. The research shows that it was present in the Cam this summer at eight times the Dutch Government's the Maximum Acceptable Concentration. The EU warns that this substance may cause cancer and that it is very toxic to aquatic life, with long lasting effects. We need this to be investigated to identify the source."

This citizen science study was a collaboration with Surfers Against Sewage, Watershed Investigations and the University of York to raise awareness about the quality of inland bathing waters and demand radical reform of current legislation to account for emerging pollutants that pose new threats to public health. The findings of the study are set to inform future water quality policies and shape the direction of environmental regulations in the UK, with a government consultation on [Bathing Water Regulation reform](#) in England and Wales, welcoming responses until Monday 23 December.

Giles Bristow, chief executive of Surfers Against Sewage, said:

"The saturation of our waterways with sewage pollution is well known, but these findings demonstrate there's a lot more than human waste lurking beneath the surface. With regulators and the government turning a blind eye, citizen scientists, like those in Cam Valley Forum have acted to lift the lid on the toxic chemical cocktail that's leeching into our rivers, lakes and seas.

"The true environmental and health impact of this slurry of pollutants, which include banned and carcinogenic 'forever' chemicals, are still being revealed. Yet Government is allowing them to swamp the wild waters where we surf and swim, and where fragile ecosystems are already on the brink of collapse. Bathing regulations urgently need wholesale reform and the Government's consultation, which is open right now, must deliver.

"These findings must be the catalyst that ends the era of inadequate water quality testing and kick-starts a future where the public are given a full picture of what's coursing through the UK's waters. We've lifted the lid, now it's time to flush the pollutants out of our rivers, lakes and seas."

To learn more about the campaign, visit www.sas.org.uk/bathingregsreform. To contribute to the government consultation, visit www.gov.uk/government/consultations/reforms-to-the-bathing-water-regulations-2013

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Notes to editors

The [Watershed Investigations](#) non-profit investigative journalism unit, in collaboration with [Surfers Against Sewage](#), the University of York and citizen scientists tested 23 designated inland bathing waters across the UK.

Volunteers took water samples everyday over the course of a week in late July/early August and the University of York tested them for a wide range of substances. This is to give us a better picture of what is in our bathing waters and the primary sources of pollution.

Volunteers have received online training from [Professor Alistair Boxall](#) and [Assistant Professor John Wilkinson](#), Environmental Scientists from the University of York, both of whom carried out the testing and analyses.

Volunteers took samples across the bathing sites which were pooled for analysis at the designated bathing sites in England, Scotland and Wales below:

England
Sheep's Green, River Cam, Cambridge
River Ribble, Edisford Bridge
River Severn, Ironbridge
Wharfe at Wilderness Carpark, River Wharfe, Wetherby
Wallingford Beach, River Thames, Wallingford
Nidd at the Lido, River Nidd, Knaresborough
River Avon, Fordingbridge
River Dart, Steamer Quay
River Dart, Dittisham
River Dart, Stoke Gabriel
Hampstead Heath Mixed Pond
River Deben, Waldringfield
Wharfe at Cromwheel, River Wharfe Ilkley
Frensham Great Pond
River Severn, Shrewsbury
River Dart, Warfleet Creek
Manningtree Beach, River Stour, Manningtree

The Serpentine, Hyde Park
River Teme, Ludlow
Derwent Water, Crow Park
Scotland
Dores
Loch Morlich
Wales
The Warren, River Wye, Hay On Wye

About Cam Valley Forum <https://camvalleyforum.uk/>

Cam Valley Forum is a voluntary group, established in 2001. We work with our extensive network of partners to protect and improve the environment of the River Cam and its tributaries.

- We help identify, monitor and tackle problems affecting the river.
- We build new collaborations and initiatives to improve the river and its surroundings.
- We campaign for improvements and advise on projects that may affect the river.
- We promote understanding of the river environment, including through workshops, guided walks and training of volunteers.

About Surfers Against Sewage – <https://www.sas.org.uk>

Surfers Against Sewage is a grassroots environmental charity based in Cornwall, dedicated to the protection of the ocean, waves, beaches and wildlife. It was created in 1990 by a group of Cornish surfers from the villages of St Agnes and Porthtowan on the north coast of Cornwall. In relation to water quality, the charity's ambition is to end sewage discharge into UK bathing waters, and high-priority nature sites, by 2030. It also campaigns to end plastic pollution, tackle climate change and restore marine habitats.

About Watershed Investigations

WATERSHED partners with national and international media to run high impact articles and investigations focusing on all aspects of the water crisis: pollution, resources, over-abstraction, wildlife, public health, environmental justice, and the impacts of climate change.

About the University of York

The University of York is a member of the Russell Group, tackling global issues through its teaching, research and commitment to improving local and international communities. At York, students get the best of both worlds, studying on a parkland campus in one of Europe's most beautiful cities. Nurturing independent minds and a strong collective spirit, all for the public good, York empowers people from all backgrounds to thrive in a rapidly changing world.