Bathing Water at The Lido, Knaresborough

This part of the river Nidd, since its **designation as a Bathing Water in May 2024**, has **weekly water samples** taken by The
Environment Agency from one location at The Lido during the
bathing season (May to September)

[Google Swimfo or click on <u>Bathing water profile (data.gov.uk)</u>]

TO DATE, of the **20 samples taken so far**, from May 9th to September 20th 2024, **15 have exceeded the 'SUFFICIENT' standard** for the bacterium Escherichia coli **(900 cfus per 100ml).**

This means that the LIDO's water quality is not sufficient i.e. is 'POOR' for swimming.

The two largest values recorded, on July 15 and September 10, 2024 had concentrations of 9300 and 5800 cfus respectively.

Analysis so far does not convincingly associate high values of E. coli cfus with high rainfall.

Associations of cfu levels found at the Lido with river levels at Birstwith and rainfall on sample collection days will be tested, and insights gained from other research.

Other Research

- 1. Nidd Action Group <u>Nidd action Group-Home</u> undertook two major samplings of the Nidd in 2023, in conjunction with a post grad student from the University of Leeds
- NAG took part in a nationwide survey of UK Bathing Waters, led by Surfers Against Sewage, Watershed and The University of York. The survey of 28 bathing waters, used a standard professional protocol to collect and analyse data during the week commencing July 28th2024.

The purpose was to evaluate UK Bathing Waters in terms of chemical and genetic elements, including bacteria and pharmaceuticals. Both are good markers of sewage which reaches rivers through a number of routes*

Analysis of the water collected covers

- Nutrient Chemistry concentrations (e.g. Phosphates and Nitrates)
- Pharmaceutical presence and concentrations
- E.coli concentrations using an innovative and validated citizen-science friendly method
 of inoculating petrifilms with river water and photographing and counting the bacterial
 colonies that grow
- Genetic analysis, including anti-microbial resistance genes, will enable a determination of the predominant source of the pollution human or other animal.

The results are expected to be publicly available in the next few weeks

3. NAG is also joining in with a NERC funded research project, led by the University of York and starting in October 2024, studying the concentration of pharmaceuticals in Yorkshire Rivers.