

What we're testing for

We are running the two main tests the environment agency use for designated bathing water, which are:

1. E. coli (EC)
2. Intestinal Enterococci (IE).

Their presence in the water is a strong indication of sewage or some other faecal contamination. The results come back in cfu / 100 ml, which is just jargon for the number of bacteria in 100 ml of water. We then use the standard bathing water classifications from the Environment Agency* to interpret that number into a quality level. The cut-offs used for bathing water are really designed for statistical analysis of data over the whole bathing season, but the 'Sufficient' and 'Excellent' cut-offs are generally used for interpreting individual tests. For inland water

	E. coli (EC)	Intestinal Enterococci (IE)
Excellent	Less than 500 cfu/100ml	Less than 200 cfu/100ml
Sufficient	Less than 900 cfu/100ml	Less than 330 cfu/100ml
Poor	means that the values are worse than the sufficient – Bathing not advised	

* <https://environment.data.gov.uk/bwq/profiles/help-understanding-data.html>

Note that any results and comparisons presented are for guidance only and should not be relied upon owing to the variation in sampling and test methods used along with the delay between sampling and result, and the variability in water quality. Any results and comparisons presented are therefore indicative only and should simply be considered as part of your own wider risk assessment.

How are we planning to use the results?

Our reasoning is that the bathing water classifications are designed for swimming where your face is in contact with the water a lot of the time, and so when the results show the water quality is Poor, we avoid swimming, intentional capsizes and rescues where people's faces will come into contact with the water. We also avoid games with a high chance of capsizing.

Who is doing the testing?

Walton Viking Sea Scouts is taking samples of the Thames in Walton-On-Thames (near the Anglers pub) at least once a week. The EA test for designated bathing waters required collecting water 30 cm below the surface, in water at least 1 m deep, so we aim to do that. In the river, we make sure we're collecting flowing water rather than from too near the edge or bits where the water doesn't move much.

As to processing and analysing the samples we are using Eurofins (Water Hygiene Testing - Eurofins Scientific) which is an accredited lab and the same approach as Leander Scouts in Kington. Each test costs £66 inc VAT. The turnaround for analysis is about 72 hours.

Costs

Our plan was to do testing from mid-May to the end of September since that is our main boating season. We don't tend to boat much over the summer holiday, but the clubs and centres around us do, so we thought we'd get more support if we just said we'd cover that whole period. Weekly tests over this period comes to a bit over £1300.

Ideally we will raise more than this target which will allow for more sampling following storms (which is when sewage discharge events tend to happen) so that we can monitor more closely the return to safe conditions.

About Us and sharing data

We have taken our first samples. We have created a domain (in development) called <http://www.thames-watch.uk/> where will intend to post our results for public access, and can also post the results of other groups.

We have a contact email address for the team who are currently setting-up and managing the testing. They can be reached at testing@waltonviking.uk

Leander Scouts in Kingston has done a huge amount of work to establish an approach which we have adopted. Huge credit to Tim Pullen and team for this.

Location

We are downriver of the Wey and upriver of the Mole - both of these rivers are used for storm discharges. Leander Sea Scouts are testing in the Kingston area, but they may be affected by the Mole which is not relevant for our reach.

