

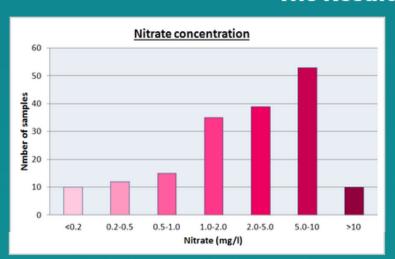
## Bristol Avon Waterblitz 2017



Between the 10th - 16th June, 176 water quality samples were taken across the Bristol Avon catchment involving a total of 375 participants!

The Waterblitz results give us a snap shot of the health of the freshwater bodies within the catchment. Participants tested the concentrations of nitrate and phosphate in water and also recorded land use, vegetation cover, litter and water surface features including algae, foam and oil.

## The Results



From the graph we calculated that the average nitrate concentration across the catchment is 4.2 mg/l.

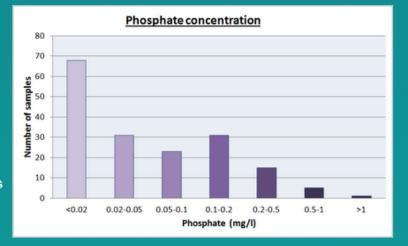
There are no official standards for nitrate levels in freshwater. However, the levels recorded in the Waterblitz are relatively high which is to be expected within a catchment mainly consisting of urban and agricultural land use.

Only 4% of sites had litter observed

The graph shows the average phosphate concentration across the catchment is 0.1 mg/l.

Only 7% of sites had no vegetation cover

12% of sites had floating algae observed This is encouraging as a healthy river should have phosphate levels at or below 0.1 mg/l, and 70% of the samples were at or below this level.



Common human sources of nitrate and phosphate are sewage effluent, fertiliser run-off, urban surface run-off and household waste containing things like detergents. These chemical elements also occur naturally in rivers and are nutrients for plants and essential for wildlife. However, an excessive amount of these nutrients may cause toxic algal blooms which harms aquatic insects and fish by decreasing oxygen levels and also increases the cost of treating drinking water.

## How will we use the results?

We will use the results to identify priority areas which can inform future work. We hope to continue monitoring trends to identify changes over time, as measuring water quality is a great way to see how the health of our catchment is changing.