

SEPTIC TANKS & PHOSPHORUS AWARENESS



Helping tackle the impacts of phosphorus-rich wastewater on our rivers.

Coming from the food we eat and the cleaning products we use, the waste water from our homes and businesses is rich in the nutrient phosphorus. Where it can't be removed during treatment (many smaller wastewater treatment works, and all private systems like septic tanks, don't have the capability) is it discharged into our environment. In the form phosphate, it plays havoc with the natural balance of our waterways, favouring nutrient-hungry algae over the crowfoot, water parsnip and watercress usually found in the Test and the Itchen.

We have reviewed data which shows that 9 sections of our river system in the Test & Itchen Catchment are either failing phosphate standards explicitly, or are showing evidence that phosphate pollution is damaging parts of the river protected for their wildlife habitat under EU law. Both of these assessments mean that the waters are failing to achieve targets set under the EU Water Framework Directive, which requires us to protect and restore the ecological status of our rivers, lakes, estuaries and coastal waters. Another 6 sections aren't failing standards directly, but their ecology is showing significant signs of being impacted by phosphate pollution. For example, the diversity or abundance of the aquatic plant community – the macrophytes – can be much reduced due to the effects of phosphate pollution, and this can have knock-on impacts on the aquatic insects and fish that feed on or live within these plants. The most significantly impacted waters in the Test & Itchen catchment include all of the waterbodies in the Upper Itchen.



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A technique called Source Apportionment can be used to attribute phosphate pollution in our waters to a particular source. For the Test & Itchen Catchment it shows that wastewater treatment works, private sewerage, aquaculture and agriculture all contribute.

Our ten tips leaflet, which can be downloaded from the website, will help the owners of private sewerage to keep their systems in good order, preventing costly repair bills and avoiding environmental pollution. The tips combine the new 'General Binding Rules' with best practice advice which will keep systems working effectively. In certain parts of the catchment, new systems will require a permit to ensure that they don't pollute our rivers – check Government advice to find out where.

Households and businesses on mains drainage can also help to reduce their share of the impact, by limiting the amount of phosphate they contribute via domestic cleaning products – our leaflet highlights that while phosphate-free products can be readily purchased, some commonly-used cleaning products are nearly a third phosphate.

Meanwhile, other stakeholders are also taking action to protect the Test & Itchen from phosphate pollution. Catchment Sensitive Farming officers work with farmers to help them reduce all types of Diffuse Water Pollution from Agriculture (DWPA) in order to protect our rivers. Water Companies are also investing in upgrades to wastewater treatment works to enable them to more effectively remove phosphate from the water they receive. This can be cost effective for larger works, and many have already been upgraded. But it can be impractical or extremely expensive (impacting customer bills) to add this treatment at smaller works, so companies are involved in national trials to try to identify new means of undertaking removal at these more difficult sites.

Tell us if you've made the switch to protect the Test & Itchen by contacting us via the Get Involved page on our website.