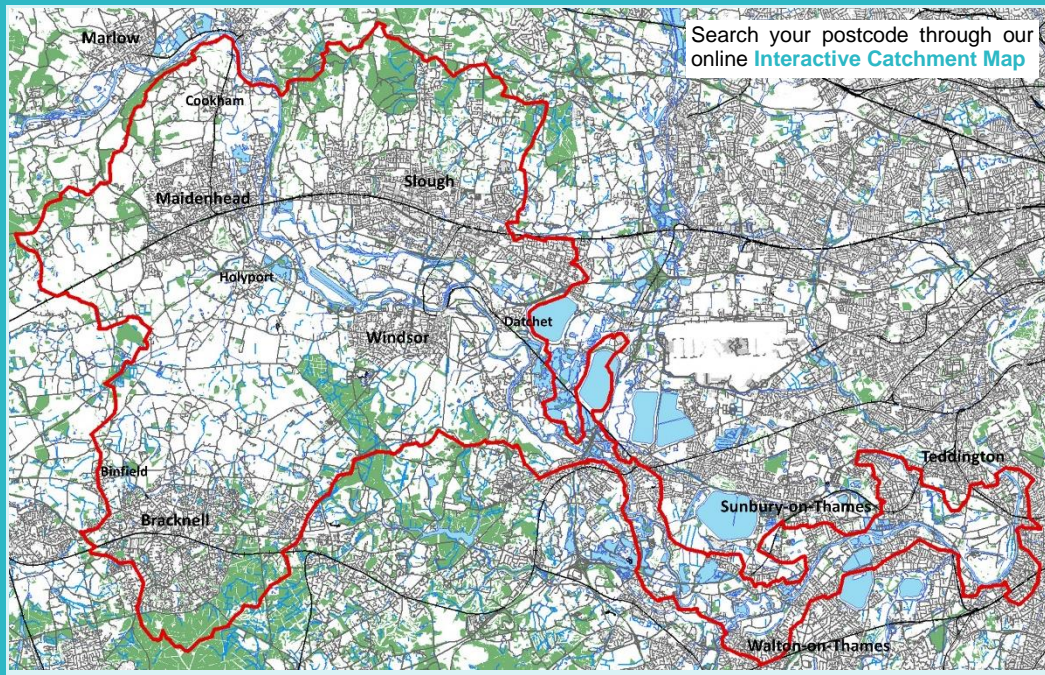


South East Water is delivering a voluntary catchment management programme with agricultural and amenity land managers, to help tackle diffuse water pollution from pesticides, within the River Thames. Over recent years, raw water pesticide concentrations in the Lower Thames have breached the 0.1 microgram per litre pesticide Drinking Water Standards. We are therefore working with agricultural and amenity land managers within the Lower Thames priority catchment to reduce the risks pesticides pose to drinking water supplies and the environment.



**Mark Slater**

Catchment Advisor - Lower Thames

E: [Mark.Slater@southeastwater.co.uk](mailto:Mark.Slater@southeastwater.co.uk)

T: 07773 649560

W: [southeastwater.co.uk/farming](http://southeastwater.co.uk/farming)

**The Lower Thames Catchment**

In our priority areas we can offer:

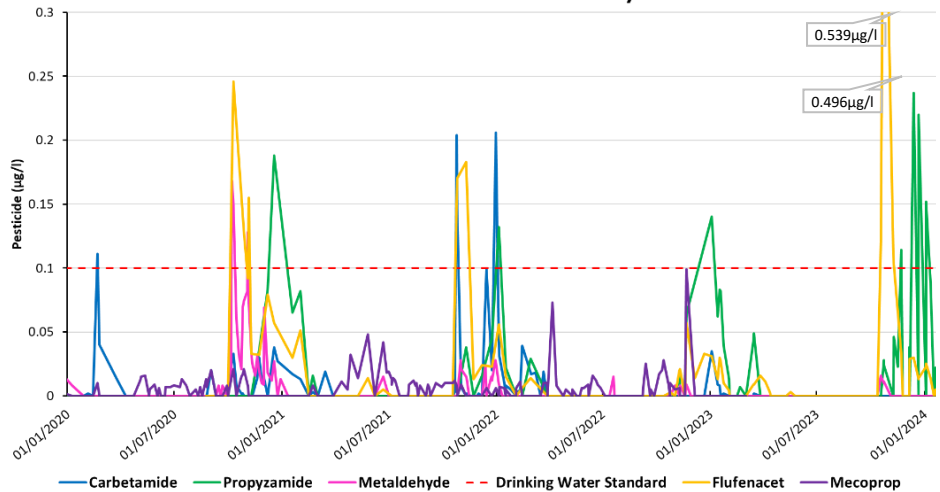
- Free specialist visits and advice
- Grant funding up to **£25,000**

**Lower Thames pesticide trends**

Over the last 3 months we have seen numerous spikes in pesticide concentrations in the Lower Thames at Bray. We have seen five exceedances of the Drinking Water Standard (DWS) for flufenacet, which reached 0.53 micrograms per litre (over 5 times the DWS). We have also seen four breaches of the DWS for propyzamide since November, peaking at 0.23 milligrams per litre. The trends this winter have been higher than we have seen over recent years, with more breaches being observed, likely due to the wet weather.

We remind all land managers and sprayer operators to maintain best practice and ensure mitigations are in place. It can take as little as 0.6 millilitres of neat propyzamide product to breach the DWS in an Olympic swimming pool (2.5 million litres).

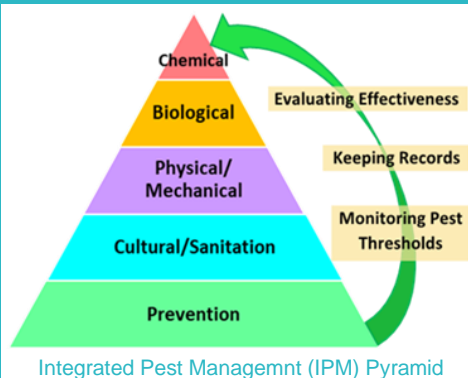
**River Thames Pesticide at Bray**



**Reducing pesticide risk to water quality**

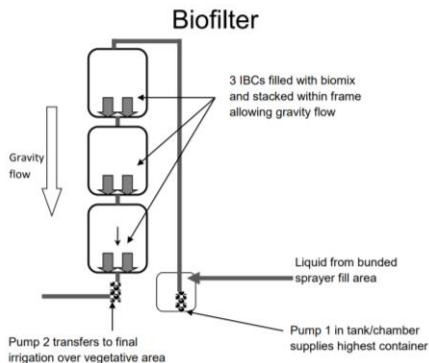
Whilst we are fully aware nobody is out there to actively pollute water, it can be an inadvertent consequence of pesticide applications if not done correctly. There are however numerous methods to reduce environmental contamination and risks to water quality:

1. **Integrated Pest Management (IPM):** every land manager should be using IPM as part of their approach. Pesticides can be useful tools, but non-chemical approaches should always be considered first. Where other methods don't work, pesticides should only be used in combination with techniques which maximise product efficiency. IPM can be as simple as selecting disease resistant varieties, creating stale seedbeds, cultivation techniques or establishing companion crops. Utilising field margins and the predatory insects can help control some pest species.





A buffer strip adjacent to a watercourse



Basic Biofilter design from the Voluntary Initiative Pesticide Handling Area and Biobed Manual

**2. Land management:** Where there is a risk of pesticides entering water, land management options could be used as a buffer to reduce risk. Wildflower margins or grass buffer strips can intercept run off and promote natural pest predators. Weed management can also be aided through the use of cover crops and fallow periods. The new Sustainable Farming Incentive (SFI) standards will offer £593 per ha for a legume fallow and up to £1,182 per ha for a 3D buffer strip next to water. South East Water can also offer flexible one-year agreements for land management options.

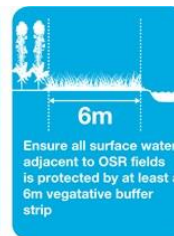
**3. Variable rate and precision technology:** Variable rate is a useful mechanism to apply pesticides more accurately and efficiently, varying dose dependent on crop requirements and shutting off sprayers in no spray zones. This also reduces the amount of product needed and potential losses to water. New SFI options will offer £43 per hectare to use camera/remote sensor when applying herbicides. We also offer funding towards the purchase of variable rate and precision equipment.

**4. Pesticide Handling Facilities:** Having a designated pesticide handling facility is a key method for reducing risk. Drips and spillages can be common when filling or washing out sprayers or containers, but if they are contained and sufficiently treated with a bio-bed/filter risk can significantly be reduced.

**5. Sampling, training and calibration:** Understanding your soils is imperative to the health of your crop and thus the susceptibility to disease. Soil health measurements and nutrient sampling can help identify limiting factors, which if addressed, can reduce inputs. Ensuring that machinery is calibrated regularly can also ensure better application efficiencies and reduce wastage, which can cost money and pollute water. We can help support soil sampling, training and calibration costs.

## Our top tips for reducing risk:

1. Fully consider if a pesticide is actually needed
2. Always read product labels
3. Establish vegetated buffer strips around all open water
4. Do not spray within 6 meters of surface water
5. Consider the weather, is it appropriate to spray?
6. Use precision/variable rate equipment
7. Consider installing a bio-bed/filter and handling facility



## Keep herbicides out of water

The Voluntary Initiative "Think Water" campaign has useful tips for reducing herbicide risks to water:

[voluntaryinitiative.org.uk/thinkwater](http://voluntaryinitiative.org.uk/thinkwater)



## How can South East Water Help?

We have **funding** and **free** advice available to you in the Lower Thames priority catchment. We can provide free specialist visits to:

- Assess and develop Integrated Pest Management plans
- Complete a pesticide handling facility design
- Look at water management plans, including rainwater harvesting

In addition we have our **Capital Grants Scheme** which offers up to £25,000 for options which benefit water quality.

- up to **£10,000** for **land management options** - including flexible one year agreements for: buffer strips, cover crops, crop substitution, and/or
- up to **£15,000** for **equipment and infrastructure** - including: precision sprayers, variable rate controls, pesticide handling facilities, rainwater collection, soil sampling, sprayer training, sprayer calibration

For a full list of available options, to see if you have any land within our priority catchments and to submit a formal enquiry, please see [southeastwater.co.uk/grants](http://southeastwater.co.uk/grants)

## Wildlife and Water Visits

South East Water have teamed up with the BBOWT Future to offer free advice visits which review your land and make recommendations for wildlife and water quality opportunities. These visits assess the opportunities for implementing wildlife habitats that often have benefits to water quality. They will advise where options could be placed and what funding may be available to help facilitate such changes. Please get in touch to discuss this opportunity.



**Berkshire  
Buckinghamshire  
& Oxfordshire  
Wildlife Trust**



South East Water takes looking after your data as seriously as we take looking after the environment. Your data is used by us under licence from the RPA Basic Payment Scheme so we can email, call, write or text you about our catchment work. This includes advice about grants, events and campaigns. We hope you want to hear from us, but you can change your preferences at any time by emailing us at [catchment@southeastwater.co.uk](mailto:catchment@southeastwater.co.uk). For more information, visit [southeastwater.co.uk/privacy](http://southeastwater.co.uk/privacy).