

Protecting bathing waters

Farmers and advisors are working together to prevent pathogens from reaching rivers and lakes.

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In Ireland, we have a large number of beaches and lakes ideal for swimming and water sports. In total, The Environment Protection Agency (EPA) monitors 147 locations for their 'suitability for public bathing'.

The majority are on the coast, but lakes are also monitored for contamination with bacteria and other pathogens. The bathing season runs from the 1 June to 15 September each year and 95% meet the required standards.

While these results are positive, there is the potential for any bathing location to be contaminated with pathogens such as *E.coli*/intestinal enterococci. Humans or animals can be the origin of these nasties and they can arrive via waste water treatment plants, slurry spreading or animal access to streams/lakes.

Teagasc advisor David Webster works with the Agricultural Sustainability Support and Advisory Programme (ASSAP) in Co Westmeath, providing a water focused advisory service to farmers in Priority Areas for Action (PAAs), in collaboration with the local dairy co-ops and the Local Authority Waters Programme (LAWPRO).

"Westmeath has three bathing water monitored lakes and we have been working closely with farmers to minimise any impact on them from farming activities," says David.

"The bathing waters are a great resource to have in the county from a recreational and tourism point of view and there is great pride in seeing the public availing of these facilities.



"The activities that have the potential to lead to pathogen losses are applying slurry during the summer and allowing cattle access to the lakes or streams that flow into them.

"Cattle slurry is a source of pathogens and this needs to be carefully applied all year round, but especially so during the summer months when it can have the greatest impact on bathing waters."

Applying sufficiently wide buffers when spreading will help break the pathway and reduce pathogen losses.

Farmers are advised to adhere to the required buffer zones for slurry spreading: 5m from drains/streams and 20m from the lakeshore.

However, these distances should be increased in fields that are high risk, and in some cases, slurry shouldn't be applied at all.

"The greatest risk is when you have a wet summer," says David Webster.

"Farmers need to empty the slurry

tanks after the silage is cut and even though slurry may be spread in dry weather, subsequent rainfall can lead to surface runoff of slurry into the drainage network."

Allowing cattle access to streams to drink can also lead to an increase in pathogens, due to excretion of faeces. Providing alternative water sources to livestock can greatly reduce the impact of drinking points on water quality.

By being aware of the potential issues that can lead to impacts on bathing waters, farmers can adapt their farming practices to minimise losses and play their part in protecting an important resource for their communities.

Local farm families, as well as visitors, are keen to swim and paddle in these waters – with simple steps we can protect them from water-borne infection.