Salmon Watch Ireland Newsletter

Ecological Disaster on the Blackwater Warns of Wider Threat to Irish Rivers

In recent weeks, the Munster Blackwater suffered a devastating ecological blow, with reports of up to 40,000 fish killed in a single pollution incident. An exact number may be impossible to predict.

While agriculture remains the dominant long-term pressure on the catchment, the scale and suddenness of this tragedy may suggest that an acute pollution event possibly linked to wastewater, industry, or an accidental discharge may have tipped an already fragile river system into collapse.

The Blackwater, designated under the EU Habitats Directive for salmon, lamprey, and freshwater pearl mussel, is not only an ecological jewel but also a cultural and economic lifeline for the region. This fish kill has underlined just how vulnerable the river has become.

The State of the Blackwater. What the Science Tells Us.

Research presented at the Teagasc Dairy Conference 2024 shows:

- Ireland's water quality is under strain: just over half of rivers meet "Good Status" under the Water Framework Directive.
- In the Blackwater catchment, 66% of waters are High/Good, but nitrate levels remain persistently high (average ~3 mg/l N at Lismore Bridge) — above the 1.8 mg/l N threshold for good health.
- Agriculture is the dominant contributor (>80%) of nitrogen loads, but cumulative pressures from wastewater, urban runoff, and potential industrial releases make the system highly vulnerable.
- Over 20% of farms exceed 170 kg N/ha organic loading, with some sub catchments exceeding 30–40%.

The Teagasc-led "Better Farming for Water: 8 Actions for Change" campaign outlines urgent steps needed:

- Expanding slurry storage.
- Preventing yard and roadway run-off.
- Greater use of over-winter cover crops.
- Smarter nutrient management, especially on risk soils.
- Collaborative farmer–community action.

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Salmon Watch Ireland

Letter to relevant Ministers concerning Nitrates Derogation Application River Blackwater

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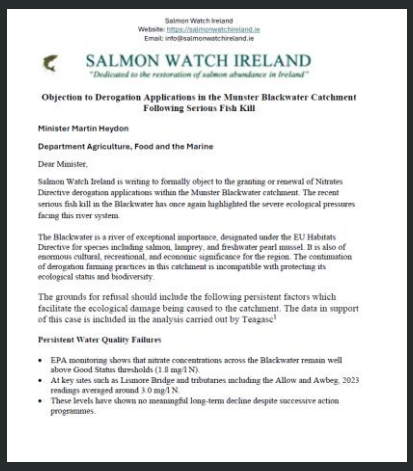

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SALMON WATCH IRELAND
"Dedicated to the restoration of salmon abundance in Ireland"

Objection to Derogation Applications in the Munster Blackwater Catchment Following Serious Fish Kill

Minister Martin Heydon

Department Agriculture, Food and the Marine

Dear Minister,

Salmon Watch Ireland is writing to formally object to the granting or renewal of Nitrates Directive derogation applications within the Munster Blackwater catchment. The recent serious fish kill in the Blackwater has once again highlighted the severe ecological pressures facing this river system.

The Blackwater is a river of exceptional importance, designated under the EU Habitats Directive for species including salmon, lamprey, and freshwater pearl mussel. It is also of enormous cultural, recreational, and economic significance for the region. The continuation of derogation farming practices in this catchment is incompatible with protecting its ecological status and biodiversity.

The grounds for refusal should include the following persistent factors which facilitate the ecological damage being caused to the catchment. The data in support of this case is included in the analysis carried out by Teagasc[1]

Persistent Water Quality Failures

- EPA monitoring shows that nitrate concentrations across the Blackwater remain well above Good Status thresholds (1.8 mg/l N).
- At key sites such as Lismore Bridge and tributaries including the Allow and Awbeg, 2023 readings averaged around 3.0 mg/l N.
- These levels have shown no meaningful long-term decline despite successive action programmes.

Teagasc Dairy Conference

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Improving Water Quality with Particular Focus on the Munster Blackwater River Catchment

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Summary

- Water quality in Ireland is relatively good in a European context but there are significant opportunities for improvement
- The primary actions required at farm level to reduce nutrient loss to water are, increased slurry storage capacity, reduced point source loss from yards and roadways, increased use of over-winter green cover on tillage farms and greater efficiency in the use of organic manures from intensive farming systems
- A river water catchment approach will optimise Ireland's ability to target mitigation strategies, which are pertinent to the specific catchment taking cognisant of the current ecological status, known pressures and range of farming systems
- An intensive extension advisory programme will be required to assist farmers to change management practices at farm level to improve water quality using the 8 Actions for Change
- To be successful, the 'Better Farming for Water' campaign will require strong collaboration with existing water quality programmes such as AGSAP, Farming for Water EIP, Waters of LIFE, Blue Dot Catchments, ACP, as well as, impactful stakeholder engagement.

Introduction

Abundant, clean and good quality water is a fundamental cornerstone of any thriving society and is necessary for a vibrant economy and enjoyable living environment. A strong and healthy aquatic ecosystem offers vital goods and services, such as the provision of drinking water. Whilst water quality in Ireland is good in a European context, water quality has not improved in recent years. Encouraging improvements are being made in some catchments; however, these are being offset by declines in water quality in others.

The Water Framework Directive (WFD; 2000/60/EC) requires EU Member States to achieve at least good status in all surface water and groundwater bodies by 2027. Good or high ecological status is important for sustaining healthy aquatic ecosystems to support abundant communities of fish, insects and plants. Currently, just over half of Irish surface waters bodies (rivers, lakes, estuaries and coastal waters) are achieving at least good status.

The Nitrates Directive (91/676/EEC), in place since 1991, aims to protect surface water from pollution by agricultural sources and to promote good farming practice. The current (5th) Nitrate Action Programme (NAP) covers the period from 1st January 2022 to the 31st of December 2025. The NAP regulations contain specific new measures to protect surface waters from nutrient pollution arising from agricultural sources, such as dairy cow banding (linking milk yield to organic N excretion), reduced chemical N allowances, shorter organic and chemical fertiliser spreading periods and an increased requirement for soiled water storage. Ireland, like a number of other EU countries, has availed of a derogation from the maximum limit of 170 kg/ha of livestock manure N (organic N) as provided in the Nitrates Directive. Ireland was granted a derogation from the Nitrates Directive from 1st January 2022, but requiring a two-year review of water quality in 2023. This review resulted in a number of areas of the country having a reduction in the derogation limit to 220 kg/ha of organic N, while other areas remained at 250 kg/ha of organic N from 1st January 2024. There are currently approximately 7,000 grassland farmers availing of a derogation from the Nitrates Directive. While the levels of nitrate and P loss to water is highest in the areas with the more intensive agriculture, it is important to realise that sub-optimal water quality is a problem throughout the country and that agriculture is not the only pressure affecting water quality.

In 2024, Teagasc launched the 'Better Farming for Water; 8-Actions for Change' campaign. This is a 7-year (2024-2030) national multi-actor campaign focused on improving water quality in Ireland. The campaign was initiated at the request of the Minister for Agriculture, Food and the Marine, Charlie McConalogue TD, and forms part of a wider whole of government approach to improving water quality. The 'Better Farming for Water' campaign is building on existing water quality programmes such as AGSAP, Farming for Water EIP, Waters of LIFE, Blue Dot Catchments and others as part of the campaign to improve water quality. This requires the creation of strong collaboration between these initiatives and the 'Better Farming for Water' campaign. The purpose of this paper is to outline the actions required at farm level as part of the 'Better Farming for Water' campaign to improve water quality with particular focus on the Munster Blackwater River Catchment.

Salmon Watch Ireland

Policy Document 2025

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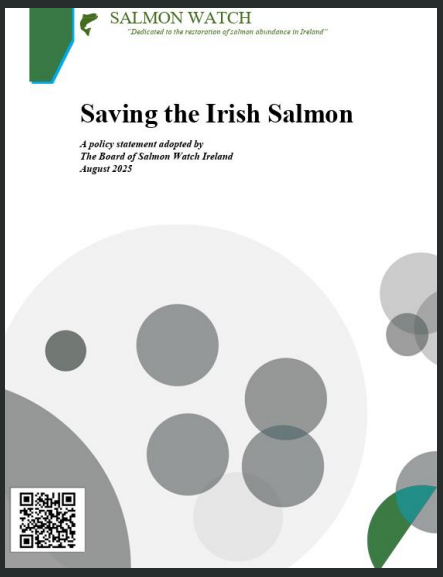

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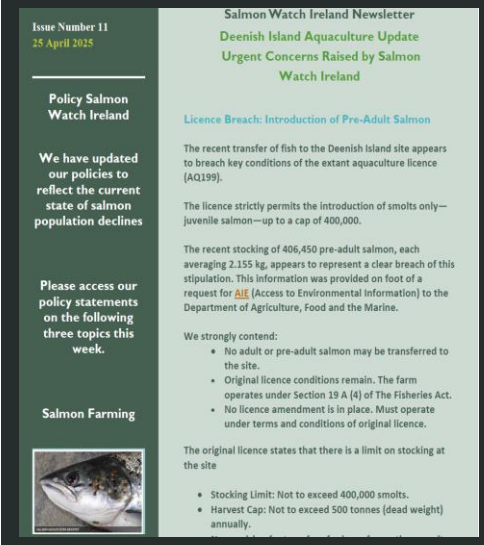

Explainer: How Excess Nutrients Kill Rivers

When too much nitrogen (N) and phosphorus (P) enter a river, they act like over-fertiliser. This process, called eutrophication, destabilises the ecosystem:

- Algal Blooms and Excessive macrophyte growth– Nutrients fuel rapid excessive growth.
- Oxygen Swings – Algae and plants produce oxygen by day, but at night and when they die (Photographic evidence from the substrate during the fish kill suggest large scale die off of algal growth) bacteria decompose them, consuming massive amounts of oxygen.
- Oxygen Collapse – Fish and insects need dissolved oxygen. If levels crash, they suffocate. Warm weather elevates water temperature (Less dissolved oxygen) and low river flows make this worse.
- Habitat Smothering – Sediment and algae choke gravels where salmon and trout spawn.

In the Blackwater, chronic nutrient enrichment from agriculture had already weakened the system. The recent acute pollution potentially linked to wastewater, industry, or an accidental release likely triggered the collapse. However, warm water conditions and sudden algal die-off may also have caused the sharp drop in oxygen that caused the mass fish mortality.

Our Policy on Nitrates Derogation

Salmon Watch Ireland has formally objected to the renewal of Nitrates Directive derogations in the Blackwater, arguing that allowing higher stocking rates than the EU's 170 kg N/ha limit undermines water protection.

We have highlighted the following factors:

- Persistent nutrient pollution, with no long-term decline despite action plans.
- The recent fish kill as proof of the system's fragility.
- EU obligations under the Water Framework Directive (2027 deadline) and Nitrates Directive.
- The risk of legal challenge and EU infringement proceedings if derogations continue.

At the same time, all interested stakeholders and campaigners are demanding a full investigation into the fish kill to determine whether industrial discharge, wastewater failures, or an accidental discharge triggered the collapse — compounding the ongoing nutrient pressures.

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We offer a limited research function regarding legal and environmental issues

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The Way Forward

To protect the Blackwater — and Ireland's rivers — we need urgent, joined-up action:

1. Cap stocking rates at 170 kg N/ha.
2. Invest in slurry storage and nutrient efficiency schemes.
3. Strengthen monitoring of wastewater and industrial discharges, with real-time alerts and rapid response.
4. Publish transparent catchment-level water quality reports.
5. Ensure accountability: the fish kill investigation must inform future water and agricultural policy.
6. Ensure effective monitoring of the river to guide the remediation of habitats impacted by this event. This should include invertebrate surveys and broader ecological assessments to establish a clear baseline against which future recovery can be measured.

Closing Message

The Blackwater is a living river system of extraordinary beauty and biodiversity. But it is fragile. Chronic nutrient stress from farming, combined with acute shocks from possible wastewater or industrial pollution, has pushed it to the brink.

We would also like to express our gratitude to all the angling and conservation fraternity who have worked tirelessly to highlight this tragedy. We strongly support your efforts and will help in any way possible to bring this river back to health

This fish kill is more than a tragedy — it is a warning. Without decisive action, Ireland's rivers face the same fate.