Salmon Watch Ireland Blackwater Report

28 Sept 2025

Summary Report of the Investigation into Fish Mortalities in the Munster Blackwater August-September 2025
Inter-Agency Report
September 2025

Blackwater Fish Kill - Report

In August 2025, up to 32,000 salmon and trout were lost in the Munster Blackwater. Despite an extensive State investigation, the cause was never identified. The incident highlights critical weaknesses in Ireland's ability to monitor, enforce, and prevent acute and chronic pollution pressures on rivers.

Key Findings from the Investigation

- **Oxygen: Dissolved oxygen was within normal ranges — oxygen depletion was not a factor.**
- **Chemicals: Screening for 900 substances (incl. pesticides and heavy metals) found no pollutants at toxic levels. Slightly elevated aluminium and background mercury/arsenic were within historic norms.**
- **Macroinvertebrates: Surveys returned Q4 (Good) and Q4–5 (High), showing no long-term deterioration in ecological status.**
- **Fish Health: Pathology revealed severe gill and eye damage consistent with exposure to a short-lived waterborne irritant.**
- **Algae & Nutrients: While no toxic algal blooms were detected, excess algae growth was observed on river substrates, indicating nutrient enrichment and chronic stress from diffuse pollution.**
- **Enforcement Issues: North Cork Creameries and other facilities were in breach of discharge licences. While not proven as the cause, repeated non-compliance poses a serious, ongoing threat.**

The Wider Context: Nitrates Derogation & Chronic Nutrient Transfer

- **Ireland continues to operate under a nitrates derogation, allowing higher stocking rates than standard EU limits.**
- **This system has accelerated nutrient transfer (nitrates and phosphates) into rivers and groundwater, creating chronic enrichment pressures.**
- **The Blackwater, like many catchments, shows signs of long-term eutrophication, including excess algae, which heightens fish vulnerability to acute pollution events.**
- **Acute kills, such as in August 2025, cannot be separated from the cumulative impact of chronic nutrient loading from agriculture and wastewater.**
- **Land spreading of industrial process material must be discontinued. The milk processing industry must actively transition to dealing with their waste through other technologies which do not include the application to land of this dangerous and highly polluting material.**

Full Data Available regarding Investigation Monitoring

Data 18 September Blackwater


eurofins | Environment Testing

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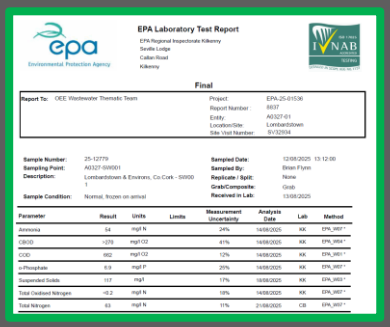
Certificate Code: AR-25-MO-029021-01
Page Number: Page 1 of 15
PO reference:

Certificate of Analysis

Test Code / Analyte	SUB	Analysis Started	Method	LOQ	SPEC	Result	Units	ACCRED
Arsenic (As) [J8312]								
Arsenic (As)	*			0.1		< 0.10	mg/kg	YL
Cadmium (Cd) [J8308]								
Cadmium (Cd)	*			0.01		< 0.010	mg/kg	YL
Lead (Pb) [J8306]								

Data Blackwater 09 September


epa Environmental Protection Agency

EPA Laboratory Test Report

EPA Regional Inspectorate Kilkenny
Seville Lodge
Callan Road
Kilkenny

IAB Testing

Final

Report To: OEE Wastewater Thematic Team

Project: EPA-25-01536
Report Number: 8837
Entity: A0327-01
Location/Site: Lombardstown
Site Visit Number: SV32934

Sample Number: 25-12779
Sampling Point: A0327-SW001
Description: Lombardstown & Environs, Co.Cork - SW00 1
Sample Condition: Normal, frozen on arrival

Sampled Date: 12/08/2025 13:12:00
Sampled By: Brian Flynn
Replicate / Split: None
Grab/Composite: Grab
Received in Lab: 13/08/2025

Parameter	Result	Units	Limits	Measurement Uncertainty	Analysis Date	Lab	Method
Ammonia	54	mgN		24%	14/08/2025	KK	EPA_9857 *
CBOD	>210	mgO2		41%	14/08/2025	KK	EPA_9858 *
COD	682	mgO2		12%	14/08/2025	KK	EPA_9851 *
o-Phosphate	6.9	mgP		20%	14/08/2025	KK	EPA_9857 *
Suspended Solids	117	mg/l		17%	18/08/2025	KK	EPA_9859 *
Total Oxidised Nitrogen	<0.2	mgN		19%	14/08/2025	KK	EPA_9857 *
Total Nitrogen	63	mgN		11%	21/08/2025	CB	EPA_9857 *

Recommendations from Salmon Watch Ireland

1. **Legal Approaches Enforcement & Compliance**
   - **Indictment of North Cork Creameries: Recent unlawful discharges must face the highest possible legal remedy through indictment.**
   - **Licence Suspension / Revocation: North Cork Creameries' discharge licence must be suspended under sanction until full compliance can be independently verified and guaranteed.**
   - **Continuous Monitoring of All Wastewater Discharges: Every licensed discharge to surface waters must be subject to constant monitoring, with breaches met by immediate and proportionate sanctions to safeguard water quality and habitats.**
2. **Reform of Nitrates Derogation**
   - **End the policy of permitting stocking rates that exceed the environmental carrying capacity of catchments.**
   - **Transition to a sustainable nutrient framework that prevents chronic enrichment and reduces the risk of algal stress events.**
3. **Rapid Response & Monitoring**
   - **Establish a standing inter-agency incident unit with capacity to sample water, sediment, and fish tissue within hours.**
   - **Deploy real-time monitoring sensors for oxygen, pH, ammonia, and algal toxins in priority rivers.**
4. **Laboratory & Research Capacity**
   - **Invest in an Irish national laboratory with capability for broad-spectrum pollutant and algal toxin analysis.**
   - **Commission dedicated research into the role of nutrient enrichment and algal stressors in fish kills.**
5. **Transparency & Community Involvement**
   - **Publish a national database of fish kills, nutrient levels, and facility compliance.**
   - **Support local reporting networks to act as early warning systems.**
   - **Upgrade all wastewater treatment facilities within the catchment to alleviate pressure. This must be completed without delay.**

The Munster Blackwater disaster was not an isolated event — it is the symptom of chronic nutrient pressures, weak enforcement, and inadequate monitoring.

Ireland's reliance on the nitrate's derogation is driving long-term nutrient loading and must be reassessed urgently.

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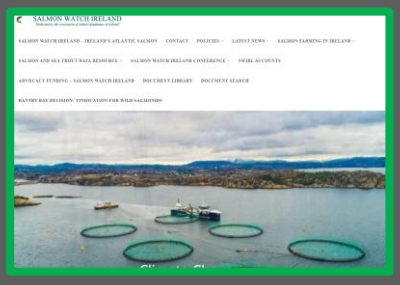

Tickets Available for Annual Conference Here

Athlone 11 October

Without decisive change, we will see more unexplained fish kills, the further decline of wild salmon, and the continued degradation of Ireland's rivers.

This must be a turning point — for salmon, for rivers, and for Ireland's environmental credibility in Europe.

Rehabilitation of the Blackwater

Salmon Watch Ireland believes that the recovery of the affected stretch of the Munster Blackwater must proceed through ecological restoration methods, allowing the river to heal naturally. Nature has the capacity to recover, but it will take time.

The investigation noted that both habitat and macroinvertebrate communities remain largely intact. However, we emphasise that chronic nutrient enrichment continues to compromise the ecological status of the river. Addressing this requires a comprehensive and sustained programme to reduce nutrient inputs, coupled with much stricter inspection and enforcement of facilities licensed to discharge into surface waters.

The added pressures of climate change — rising temperatures and reduced summer flows — increase the risks further. In the future, certain industrial discharges may need to be curtailed or suspended during vulnerable low-flow periods, unless operators can guarantee effluent treatment that ensures no harm to water quality or aquatic habitats.

Regarding Atlantic salmon, we are cautiously optimistic that stocks can recover in time. Recovery must be secured through natural processes, with recolonisation providing the best pathway forward in the shorter term. Reliance on hatchery progeny is not appropriate, as it risks undermining the genetic integrity and resilience of wild populations. Equally, broodstock collection is not a consistent or suitable approach, as the surviving adult fish must be allowed to spawn naturally to maximise the chances of recovery.

Crucially, the protection of adult salmon and trout stocks in the affected area — and more widely across the Blackwater system — is strongly required. Safeguarding these adults will provide the foundation for natural spawning and long-term recovery.

Robust monitoring, strict protection of wild fish, and long-term habitat safeguarding will be essential to ensure genuine recovery and to allow nature the space and time it needs to heal.


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