

NATION FOCUS: NORTHERN IRELAND

SECTION EXTRACTED FROM THE
SURFERS AGAINST SEWAGE WATER
QUALITY REPORT 2023. SCAN TO
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HOW IS SEWAGE MANAGED IN NORTHERN IRELAND?

Northern Ireland Water (NIW) is the sole provider for water and sewerage in Northern Ireland. It is a company entirely owned by the Northern Ireland government.

The environmental regulator is the Northern Ireland Environment Agency (NIEA) which is an Executive Agency within the Department of Agriculture, Environment and Rural Affairs (DAERA). This means it has very little independence.

Crucially in Northern Ireland, there is currently no functioning government, as a result of power-sharing agreements breaking down.

This means that important decisions about how to protect and restore the environment in Northern Ireland are just not being made.

LITTLE DATA, BIG ON POLLUTION

Northern Ireland Water is responsible for operating the sewage network throughout the nation. This includes regulating its sewage overflows, which are designed to discharge sewage in exceptional circumstances of heavy rainfall, but which are now being used far beyond their original purpose.

This is resulting in raw sewage regularly being pumped onto beaches and popular inland bathing sites across Northern Ireland (and the rest of the UK). Northern Ireland's sewage issues are no different from the rest of the UK. We might not have the data to back it up, but they're using the same antiquated system and dumping sewage from Belfast to Portrush.

Northern Ireland has a total of 2,398 operational sewage overflows¹, however, data for the operation of this infrastructure is sparse. Up until November 2023 there was no transparency about the location of these sewage overflows in Northern Ireland, meaning that vital information regarding the safety of waters for people and ecosystems was unavailable.

Whilst Northern Ireland Water have provided a map of the locations of overflows they still provide no data on how often these overflows are discharging sewage, which they say is due to a lack of investment and budget for the provision of infrastructure to monitor sewage discharges.

All information regarding sewage assets (including condition and performance) is obtained through manual inspection, rather than automated systems as with other UK-based water companies.

This means we have little to no information regarding the state of Northern Ireland's water and the potential impact that sewage discharges are having on them. Not even Northern Ireland Water knows how much sewage they are dumping!

¹ <https://www.niwater.com/siteFiles/resources/2023/StormOverflows/StormOverflows-Whataretheyandwhendotheyoperate.pdf>

WHAT DATA IS AVAILABLE?

For the 2023 bathing season, the Department of Agriculture, Environment and Rural Affairs (DAERA) made a small amount of water quality data available to Surfers Against Sewage through a trial developed by Swim NI for use in our Safer Seas and Rivers Service.

This data includes a priority six locations selected as a pilot study to provide information on potential reduced water quality.

The data is generated using a Pollution Risk Forecast (PRF) model, which uses information such as weather data to determine a statistical likelihood of reduced water quality. It is important to note that PRFs are only predictions, and do not provide verified data regarding pollution events that are occurring or have occurred.

This prediction runs all year round, but DAERA does not validate the forecast outside the bathing season which is why we can't show the predictions on the SSRS. Once the model is past the pilot stage, we will be able to notify people of these risks all year round.

Whilst this is a positive step, it's not enough. At the very least we need to see more PRF locations across popular bathing locations² which are displaying data all year round. Ultimately, we need real-time sewage alerts to be put in place by Northern Ireland Water, so swimmers, surfers and dippers can protect themselves from direct discharges of untreated sewage.

When questioning Northern Ireland Water on how they manage discharges, they told us that they don't currently have the ability to accurately record or measure when discharges occur and how long they last for.

They therefore don't keep a record of the number of occasions, duration or actual volumes of releases into public waterways from the waste water system.

It's time to ramp up our voice in Northern Ireland and demand better transparency and accountability from polluters.

² <https://www.niwater.com/storm/overflow/>

WHAT DOES THIS DATA SHOW?

For the six sites which were used as PRF trials during the 2023 bathing season, four received alerts.

Two bathing locations, Ballywalter and Castlerock, received 41 PRF alerts over the period between the 1st of June and the 15th of September 2023.

Shockingly, this amounts to over two PRFs per week during the bathing season.

Figure 19

Number of PRF alerts at the monitored bathing sites

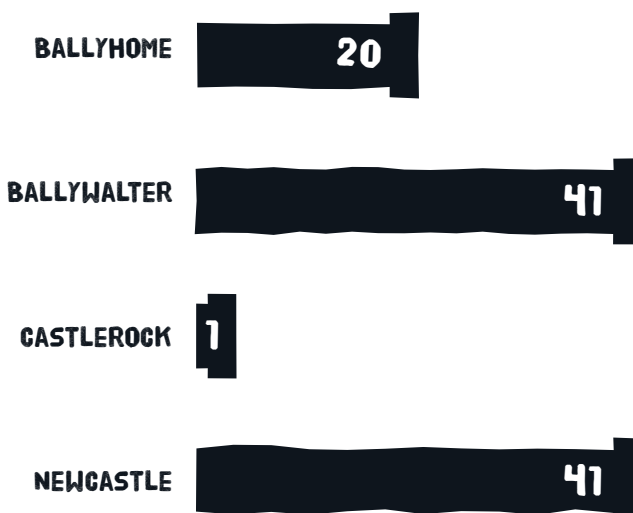


Figure 20

Bathing sites that receive daily forecasts during the bathing season.

- Receives daily forecast
- Does not receive daily forecast



NORTHERN IRELAND WATER’S PLANS FOR THE FUTURE

With sewage pollution on the national agenda, Northern Ireland still has no way of monitoring their discharges, and their plans to introduce sufficient monitoring leave much to be desired.

The first phase of the deployment of event duration monitors for obtaining sewage discharge information on Northern Ireland Water’s assets is scheduled for next year. It will be focused on bathing waters and shellfish waters and there are plans to have monitors installed on assets near the highest priority waters by June 2024, with information being sent directly back to the water company.

By the end of 2027, they aim to have over 900 monitors deployed, with the eventual aim of deployment on all sewage overflows. Despite this, Northern Ireland Water has provided little information with regards to how they plan to disseminate this vital information to water users and the public, whether the information will be real-time, accessible or even be made public at all.

The very first step to clean up the state of water in Northern Ireland is for the government and water companies to provide accurate real-time water quality information for all.

Water users around Northern Ireland have the same right to make educated decisions about how they use the water as anywhere else. Now we need the data to make that happen.



GET INVOLVED!

SAS Northern Ireland Reps are **PLANNING A DEMONSTRATION** and are working on gaining an audience with the **NI GOVERNMENT** to discuss some of the sewage and agricultural issues currently plaguing the nation, specifically what can be done to save Lough Neagh.



FOR UP TO DATE INFORMATION ON HOW TO GET INVOLVED, VISIT THE ONLINE REPORT.

Q NORTHERN IRELAND SPOTLIGHT: THE DEATH OF LOUGH NEAGH

Walking towards Lough Neagh for the first time, I'm struck by the scale of it (the lake is the largest in the British Isles). Although the lake has returned to an earthy brown as the autumn cold sets in, I'm reminded that only a month ago you could see the luminous green layer of poisonous algae that covered vast areas of its surface.

For some, this might have been an interesting spectacle, but I already know what the presence of blue-green algae at the scale seen means for the lake and for the wildlife interacting with it.

The lake is dying and is taking victims as it goes. Lough Neagh has been connected with multiple deaths of dogs over the last year, and dead swans and other birds are increasingly becoming a common scene. Swimming at Lough Neagh has been banned all summer.

Mary O' Hagan is a swim coach and runs the Ballyronan Blue Tits group. Mary has been cold water swimming for four years which has helped with both her physical and mental health.

"I have a really strong connection, particularly to Lough Neagh. I started cold water swimming because I was in a lot of pain, daily pain, chronic pain that I had for a number of years. When I can't get in the water, its taking a way a massive coping mechanism for me." - Mary

Contact with blue-green algae for humans can mean diarrhoea, conjunctivitis, skin and throat infections. For animals such as dogs, birds and cattle, it can quickly lead to abdominal swelling, seizures, liver failure and death.

"We've seen trails of dead animals along areas with really really dense green algae... I've not been able to walk my dog at Lough Neagh or any of the surrounding rivers all summer because I'm scared she's going to die" - Mary

But why have these cyanobacteria appeared in such force at Lough Neagh? DAERA state that an unfortunate but unavoidable mix of sunlight, and clear water columns (due to an influx of invasive filter feeding Zebra Mussels) has led to this algal bloom. But Ruby Free and many other campaigners have been working tirelessly to expose the truth of what's caused what they have deemed as the death of Lough Neagh.

Ruby tells us what's in the water: "Lough Neagh is one of the largest freshwater lakes in Europe, we should be able to use this incredibly large resource but instead it's been unusable, it's unacceptable. It was all avoidable but we've had years of damaging environmental policies which incentivise intensive farming and allow sewage discharges to be dumped into Lough Neagh. All that nutrient overload has built up and amplified the process of blue-green algae (cyanobacteria) being produced in the lough –

it's turned the water toxic. The scientists have been banging on the door of DAERA for years, and know this was all avoidable. We're all upset and angry because we know this didn't need to happen. It's not just water users, everyone is being affected." - Ruby

Entering the water at the lake has been banned since the beginning of summer. DAERA have said it may be years before swimmers can safely get back into Lough Neagh.

But what's going on here doesn't just affect the minority swimmers, dippers and paddle-boarders who use the lake for recreation.

The poison that's taken hold of Lough Neagh is making its way down to the coast. Rivers and lakes are the veins of our land and lead right into the heart of the ocean. So, it's not shocking to learn that Castlerock, a designated bathing area on the north coast, has this summer been affected by the blue-green algae coming downstream from the great lake.

On the 7th July, DAERA informed us that sampling had confirmed potential blue-green algae at Castlerock with the source identified as the River Bann, the river coming directly from Lough Neagh. DAERA could not confirm if there was a risk to human health but put a precautionary alert in place for three days which we displayed on the Safer Seas and Rivers Service (SSRS).

Despite this confirmed presence of algae, the bathing water profile for Castlerock still indicates there is no risk of blue-green algae at this location.

“We’ve had to cancel sessions at the Wave Project because of the blue-green algae here in Lough Neagh travelling up the river affecting the beaches on the north coast. We’ve had to cancel sessions and we’ve had sessions where young people(who are with us because it is a safe space) have also not come to sessions because they have felt anxious, they’re too scared to go into the water” - Carla

Solutions for tackling algal blooms of this scale can be complex, but one solution is not. Substantially reducing the colossal amount of agricultural slurry and sewage going into the lake will cut the algae off from its nutrient source. Yet DAERA and NI government have allowed the continuous influx of slurry, and over 200,000 sewage discharges into the lake.

“12% of Northern Ireland’s wildlife risks extinction, this needs to be taken seriously, that means forever. The pollution from sewage and farmland run-off is incredibly destructive and is going to bring that number even higher. Recently we experienced a major fish kill in a river in County Down. This mass pollution event has wiped out generations of young trout and salmon populations which were already in severe decline. These things are happening across the country all the time.” - Ruby

Campaigners want to see an end to this vast influx of pollution, but because Stormont (NI government) has been suspended for nearly 19 months, it has been left to civil servants to tackle without any major political interventions.

In October 2023, DAERA missed the deadline to submit their Nitrates Action Plan for the next four years, indicating that agricultural pollution is not a high-priority matter.

Northern Ireland Water is substantially behind the curve on tracking its own sewage discharges, let alone implementing any solutions to reduce them.

“We need DAERA and the government to implement action. We’ve said time and time again, we want to help and be part of the solution, working together. We need more people coming together behind this collective voice. Funding needs to be redirected to improving the water treatment networks, we know farming policy can be changed. This is affecting everyone, you, your children and your grandchildren – please (to DAERA and the government) do something” - Ruby

Our natural environment is not a dumping ground for our waste. Sadly, Lough Neagh has become a stark example of what happens to wildlife following years of gross-mistreatment – and is an indication of things to come as we keep dumping sewage and slurry into our water across the UK.

Izzy Ross - Campaigns Manager

WHAT NEEDS TO HAPPEN?

We are calling on this and the next government to;

REVEAL THE TRUTH

We need UK wide transparency about sewage pollution.



- ✓ Accurate and accessible real-time water quality information year-round
- ✓ A transparent bathing water application process
- ✓ Water quality testing that shows the full picture
- ✓ Transparency across the sewage system



SCAN FOR THE FULL WATER QUALITY REPORT, WATCH THE HUMAN IMPACT STORIES AND SHARE THE FINDINGS.

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