

Minister must revisit Nitrates Derogation Condition

The Irish Farmers' Association March 2023

Take home messages

1. The Minister for Agriculture has agreed with the European Commission to an interim review of the nitrates action programme in 2023. It would mean Ireland would default to a maximum limit under the derogation to 220kg/N/ha down from 250kg/N/ha from January 2024. The Minister must revisit this with the EU Commission.
2. This interim review will only be based on comparing water quality between 2021 and 2022. This is flawed since measures coming into place in 2022 and 2023 will NOT have had a chance to improve water quality.
3. The reduction in the nitrate's derogation to 220kg N/ha would have a significant economic impact and could potentially remove €236 million from the rural economy.
4. The prospect of reducing the maximum stocking rate to 220kgN/ha is already having knock-on consequences for all farming sectors. It is increasing the demand for land and is leading to a significant increase in land rental prices. This is having a disproportionate impact on the more financially vulnerable sectors. IFA estimate that an additional 69,000 acres will be required to sustain existing herd sizes on farms.
5. There is no guarantee that a reduction in the maximum stocking to 220kgN/ha will improve water quality. Farmers will continue to adopt measures that protect water quality but this must be based on the right measures, in the right place at the right time principle that have been shown to deliver improvements in water quality, not a blanket regulatory approach.
6. Ireland's grass based system is different to most other indoor production systems across Europe. This is a strong justification for Ireland having a Nitrates Derogation.

Economic Impact

IFA estimates that the profit reduction on impacted farms will be between €6,522 and €18,336 depending on how farmers adapt to the reduced limit of 220kg/N/ha (either by acquiring extra land or reducing cow numbers). Across the sector it is estimated that this condition could result in a loss to the rural economy of €236m. This impact is already evident in early 2023 as dairy farmers, impacted by nitrogen banding and the prospect of a reduction to 220kgN/ha, seek additional land. Dairy farmers, due to their higher per hectare net margins, are likely to out-bid farmers from other sectors in the land market. This is already impacting more vulnerable sectors such as tillage, beef and sheep. This is contrary to Government policy.

Nitrates Action Programme

The EU Nitrates Directive requires Member States to review water quality at least every four years and to create a Nitrates Action Programme (NAP). This programme outlines a suite of requirements that farmers must adhere to and is reviewed every four years.

The fifth NAP was introduced in 2022. It includes additional measures such as a reduced inorganic fertiliser allowance, longer closed periods for spreading slurry, fertiliser and soiled water and greater adoption of low emission slurry spreading (LESS) equipment.

It also outlines the maximum number of animals that can be present on farms based on the amount of nitrogen they excrete in a year. This is capped at 170kg organic manure nitrogen/ha or in the case of farmers who are granted a nitrate derogation 250kg/N/ha.

Animal Type	Annual Nitrogen Excretion Rate (kg)	Stocking rate (kg/N/ha)	Number of cows per hectare
Suckler Cow	65	170	2.61
Cows with milk yield <4,500kg/year	80	170	2.13
Cows with milk yield 4,501 – 6500kg/year	92	170	1.85
Cows with milk yield >6,501kg/year	106	170	1.60

Table 1. Number of cows permitted per hectares based on nitrogen excretion rate.

Nitrates Derogation

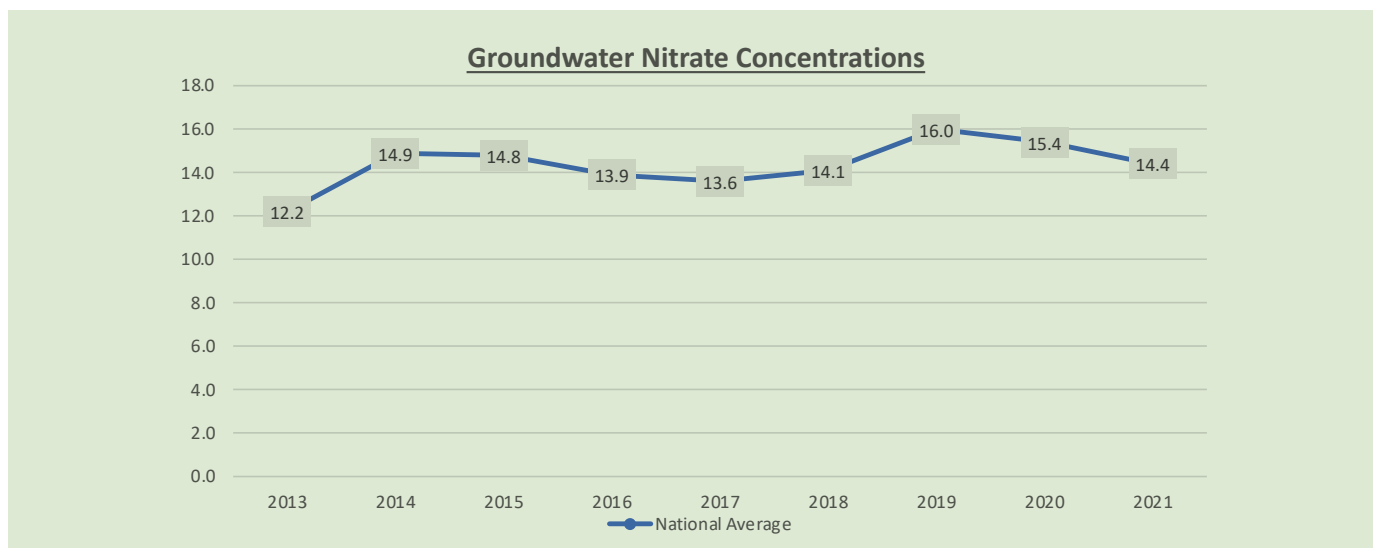
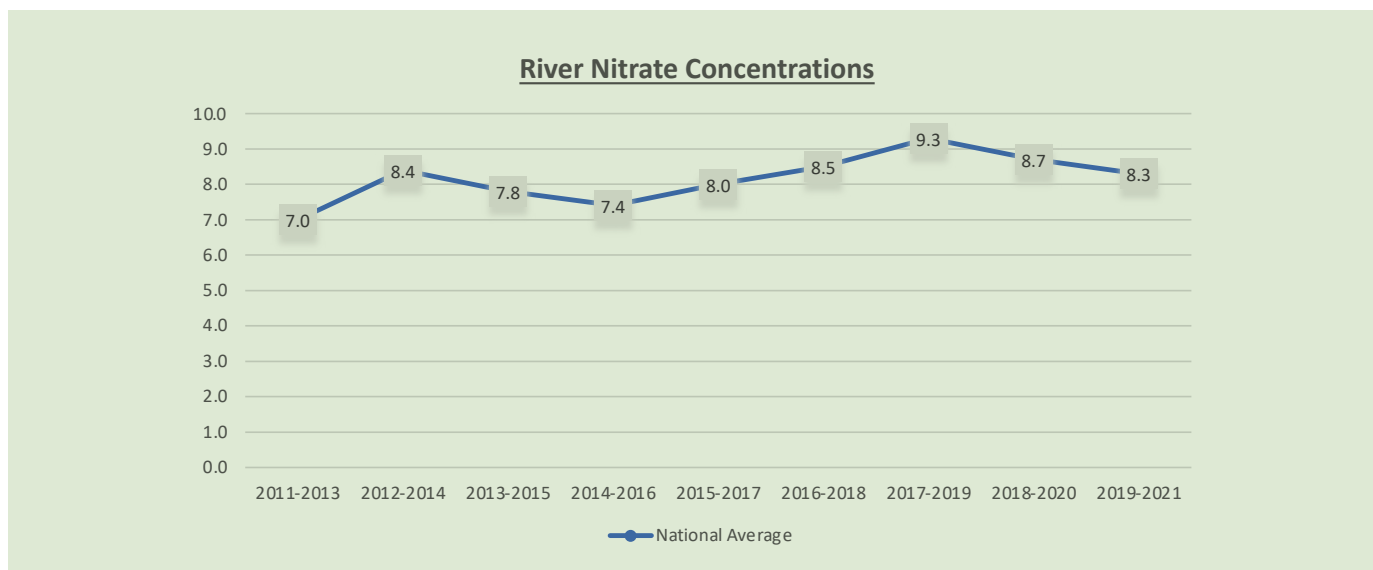
- Member States must apply to the European Commission every four years to be granted a nitrates derogation. Strict criteria must be met in order to get a derogation. Member states must demonstrate that the higher stocking rate is justified based upon the presence of crops (including grass) with a high nitrogen uptake and a long growing season. Ireland is ideally suited to demonstrate this given our unique system of outdoor, grass-based livestock production which is vastly different to livestock production systems across European Member States.
- Family farms that avail of a nitrates derogation must adhere to an additional suite of requirements. These include the submission of a fertiliser plan and an account of fertiliser purchases annually, environmental training, hedgerow management etc.
- In 2022 the Commission granted Ireland a derogation until the end of 2025. However, they attached a condition that the maximum stocking rate would be reduced to 220kg N/ha in areas where water quality has not shown improvement. This change in stocking rate would apply to all land areas that drain into a catchment with declining water quality even if parts of the catchment have high water quality status.
- Water quality data from 2022 and 2021 will be compared to determine the trend and status of catchments. Analysing a water quality trend over 2 years is too short to capture an overall trend in a water catchment. Short-term trends are less reliable as seasonal influences and weather events can override the benefit of additional protective measures.
- Crucially, such analysis would not capture the impact of additional measures which only commenced in 2023. These include an extended closed period where the spreading of slurry and soiled water is prohibited and the introduction of 'nitrogen banding' (the re-evaluation of maximum stocking rates permissible on dairy farms to reflect the average milk yield of the herd).

Water Quality

According to the latest EPA's Water Quality 2016 – 2021 report, water quality has shown a small decline with a 1% decline in rivers and a 2.7% decline in lakes. However, there are encouraging signs in Priority Areas for Action (PAAs), where programmes such as Agricultural Sustainability Support and Advisory Programme (ASSAP) are operational and show improvements in water quality that exceed those being achieved outside PAAs. This shows that a more targeted approach, the right measures, in the right place at the right time, rather than a blanket regulatory approach will deliver improvements in water quality.

There are also encouraging results when we look at nitrate concentrations in our rivers and groundwater in the 2020-2021 period where nitrate concentration levels have shown a reduction. This is a positive development, particularly when we also factor in the additional measures, such as banding, now being introduced, which are expected to further reduce nitrates concentrations.

It is assumed that a reduction in the maximum stocking intensity will result in a proportionate improvement in water quality. This ignores the complexity of improving water quality. Teagasc have consistently demonstrated through the Agricultural Catchments Programme that multiple factors impact water quality including soil type, topography and climatic events. The focus should be on ensuring compliance with existing regulations and implementing the right measure in the right place at the right time – a core principle of the ASSAP programme.



Glossary

Nitrates Directive

The Nitrates Directive was introduced in 1991 and set rules for the management of animal manures, inorganic nitrogen fertilisers and other nitrogen-containing materials spread onto land. The Directive sets a maximum limit of 170kg/ha/year of nitrogen from manure (N) to be applied on land. It forms an integral part of the Water Framework Directive (WFD) which requires all European surface waters – lakes, rivers, transitional and coastal water, and groundwater – to reach “good status” by latest 2027.

Nitrates Action Programme (NAP)

The Directive requires Member States to apply agricultural action programmes to include measures to protect water quality. Ireland’s first NAP came into operation in 2006. Ireland applies a whole of territory approach to the NAP.

Nitrates Derogation

Ireland’s nitrates derogation allows farmers to farm at stocking rates, above 170kgN/ha up to 250kgN/ha. This is subject to additional conditions such as submission of fertilizer plans, compulsory attendance at environmental training courses, hedgerow management measures etc.

Stocking rate

Stocking rate is the number of animals on a given amount of land over a certain period of time. Under the Nitrates Directive farmers can carry a maximum number of livestock equivalent to 170kgN/ha/year or in the case of farms with a derogation 250kgN/ha/yr.

Organic and Inorganic nitrogen

Organic Nitrogen refers to nitrogen applied to land by livestock either directly in the form of faeces or urine or indirectly in the form of slurry and manure while Inorganic Nitrogen refers to nitrogen applied to the land in the form of fertiliser

Catchment

A catchment is an area of the landscape that catches and collects rainfall and allows it to flow through rivers, lakes and groundwater to the sea. There are 46 catchments and 583 sub-catchments across Ireland. To effectively manage the water quality the natural attributes and human activities within the catchment area need to be considered.

Priority Areas for Action (PAA)

River Basin Management Plan for Ireland 2018 – 2021 (RBMP) set out a new approach for the protection and management of water quality in Ireland and selected 189 Priority Areas for Action. The process to select the PAA used several principles, the most important one that water bodies should be ‘At Risk’ of not achieving good or high-water quality status.

ASSAP – Agricultural Sustainability Support and Advisory Programme

ASSAP – Agricultural Sustainability Support and Advisory Programme ASSAP is working with farmers on the ground to help improve water quality in PAA, it is a free and confidential advisory service working collaboratively with farmers to assess the farms for any potential issues that may be impacting water quality in the local catchment.

The Agricultural Catchments Programme (ACP)

The Agricultural Catchments Programme (ACP) commenced in 2008. This programme is coordinated and managed by Teagasc. For the past 15 years the programme has carried out intensive monitoring of six catchments covering a range of landscape, soil and farming combinations amassing a unique environmental, agronomic and socio-economic data set unrivalled around the world.