NUTRIENTS ACTION PROGRAMME

NIEA
Northern Ireland Environment Agency
Gníomhaireacht Comhshaoil Thuaisceart Éireann
Norlin Airlan Environment Agency
www.daera-ni.gov.uk

Department of
Agriculture, Environment and Rural Affairs
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An Roinn
Talmhaíochta, Comhshaoil agus Gnóthaí Tuaithe

Depairtment o'
Fairmin, Environment an' Kintra Matthers

Proposed Nutrients Action Programme (2026 – 2029)

May 2025

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Presentation Today

- Timeline
- Additional measures – overview
- Focused approach – high risk areas
- Support / solutions
- Enforcement and Sanctions - strengthen
- Stakeholder engagement

Timeline

Date	Action
Thursday 1 May 2025 (AM)	Meeting with Key Industry Representatives
Thursday 1 May 2025 (PM)	Launch of Public Consultation
Tuesday 6 May 2025	Meeting with Key Stakeholder Group
Thursday 8 May 2025	Briefing to AERA Committee
May / June 2025	Wider Stakeholder meetings – details on next slide
Thursday 26 June 2025	Consultation Closes
July / August 2025	Assessment and summary of consultation responses
September 2025	Finalised NAP to be approved by Executive
October 2025	AERA Committee engagement post Executive Approval
October 2025	Laying of NAP Regulations & publication of NAP
Thursday 1 January 2026	Revised NAP Regulations come into operation

Wider Stakeholder Meetings/Roadshows

Date	Action
Monday 19 May (2pm – 5pm)	Themed meeting on Phosphorus Conference Hall, AFBI Hillsborough
Tuesday 20 May (2pm – 4pm)	Information Roadshow Recreation Centre Hall, CAFRE Loughry Campus
Tuesday 27 May (2pm – 5pm)	Themed meeting on the Focused Approach AFBI Newforge Seminar Suite
Wednesday 28 May (2pm – 4pm)	Online Information Roadshow Microsoft Teams
Wednesday 28 May (7.15pm – 9.15pm)	Online Information Roadshow Microsoft Teams
Thursday 29 May (2pm – 4pm)	Information Roadshow Conference Hall, CAFRE Greenmount Campus
Monday 2 June (2pm – 5pm)	Themed meeting on Fertilisers Conference Hall, AFBI Hillsborough

Stakeholder Group - Themed Meetings

- **Phosphorus** – P Balance – SULS & development of P reduction road map.
- **Fertilisers** – N & P inorganic fertiliser limits, processed organic fertilisers, Fertiliser & Feed database.
- **Focused approach** – pilot, HRA & SEA.

Revised Nutrients Action Programme (2026 – 2029)

Reasons for change:

- Findings of NAP Review
- Level of Algal blooms and Lough Neagh Action Plan
- Legal requirements: Habitats Regulations, Water Framework Regulations, SEA, Case Law – Dutch Nitrogen ruling.

Proposal for Revised Nutrients Action Programme (2026 – 2029)

- Carry over of all existing measures
- Additional Measures
- Pilot & development of a Focused Approach
- Support for improved Implementation
- Strengthening the enforcement and sanctions

Additional Measures – Why?

- To address the P Surplus in NI Agriculture
- To reduce the risk of Agricultural Pollution to our watercourses
- Implementation of the Lough Neagh Action Plan
- To be compliant with the Habitats Regulations

Key Additional Measures – overview

- Phosphorus Measures
  - Introduction of a Phosphorus Balance for intensive farms (appx. 3500)
  - Restricted use of Chemical Fertiliser
  - SULS Programme and AD measures
- Reduce the risk of pollution
  - Arable buffers zones
  - Slurry Spreading Information System
  - Notification of new Storage tanks
- Compliance with other Regulations
  - Cross reference to Habitat Regulations
  - Focused Approach
- Lough Neagh Action Plan & Ammonia Strategy
  - IT Systems – Fertiliser and Feed DB
  - Protected UREA
  - Mandatory Use of LESSE

Additional Measures

Lough Neagh Action Plan – NAP related actions:

- Slurry Spreading Information System
- Restrictions on Chemical Phosphorus Fertiliser
- Fertiliser and Feed Database
- NAP Review
- IT systems – Farm Livestock Nutrient Loading calculator

Key Additional Measures – Rationale & Scientific Evidence

- Phosphorus Balance
- Dairy Cow Nitrogen and Phosphorus Excretion Banding
- Restricted use of Chemical Phosphorus Fertiliser
- Mandatory use of LESSE
- Protected Urea fertiliser

Phosphorus Balance

Farm P Inputs less Farm Exports

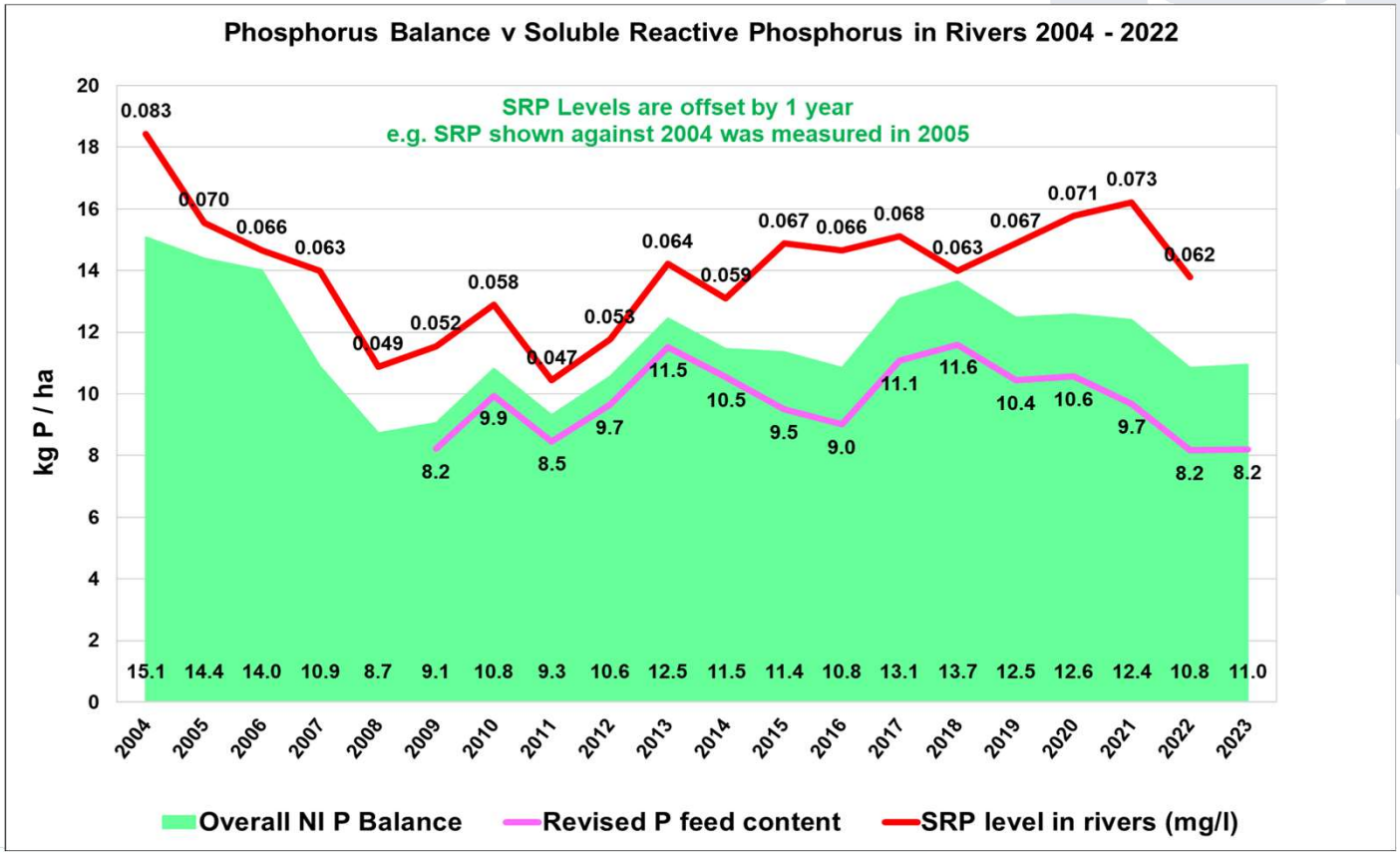
Feed P
Fertiliser P

Sales of product
e.g. milk, livestock, eggs, crops etc.

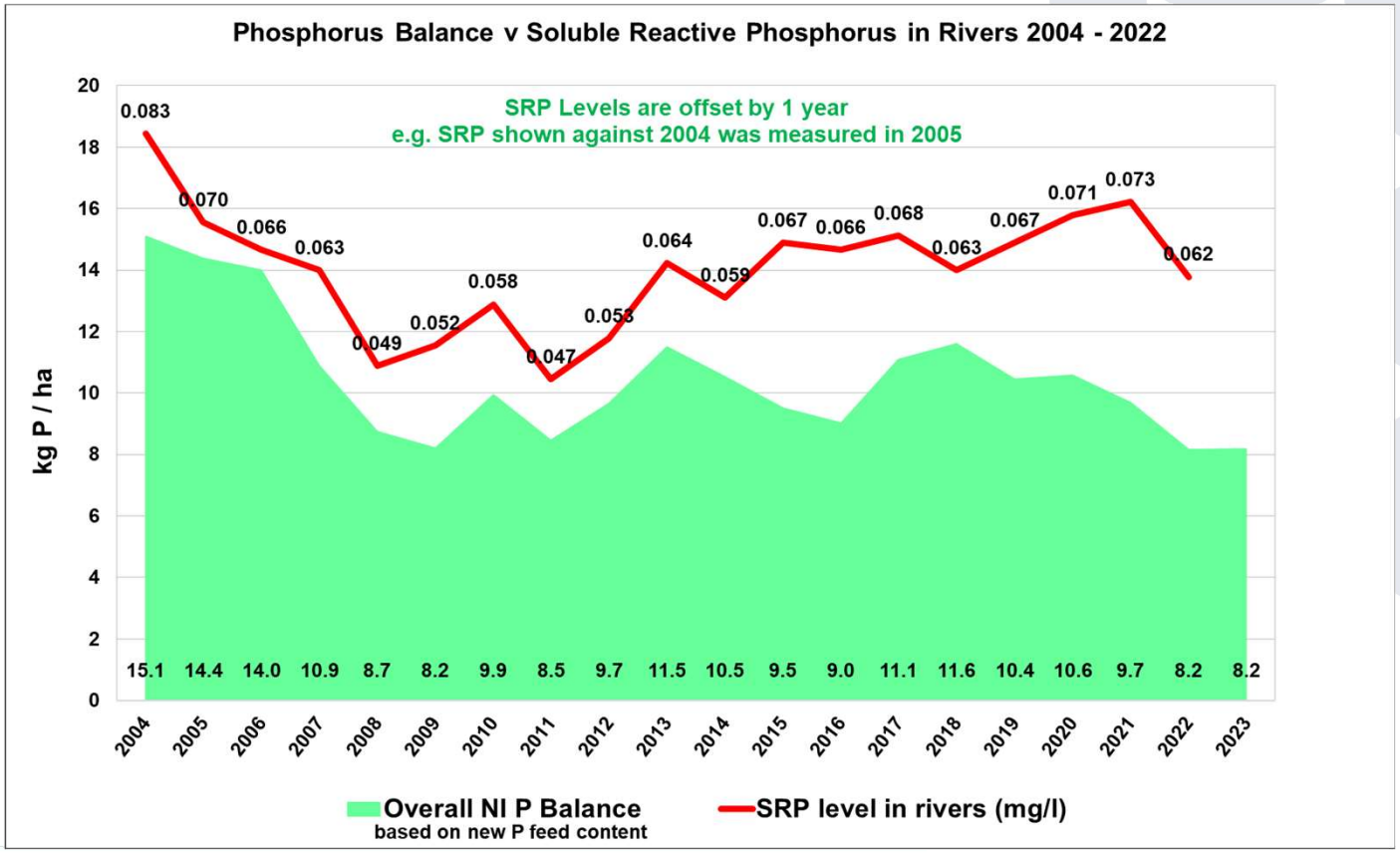
Grass intake and manure spread are internalised within the balance.

- Balance includes livestock feed
- Nutrient contents of livestock feed influence nutrient surplus.

Phosphorus Balance



Phosphorus Balance



NI Phosphorus Balance - 2023

Inputs	
Fertiliser	2,458 t
Feed	12,969 t
Total Inputs	15, 427 t

Outputs	
Grass-based livestock, beef, sheep and milk	4,449 t
Pigs, poultry & eggs	3,139 t
Arable	717 t
Total Outputs	8,305 t

P Balance	
Inputs	15,427 t
Outputs	8,305 t
Balance	7,122 t

P Surplus = 7,122 t

Livestock Feed – average P content = 0.43%

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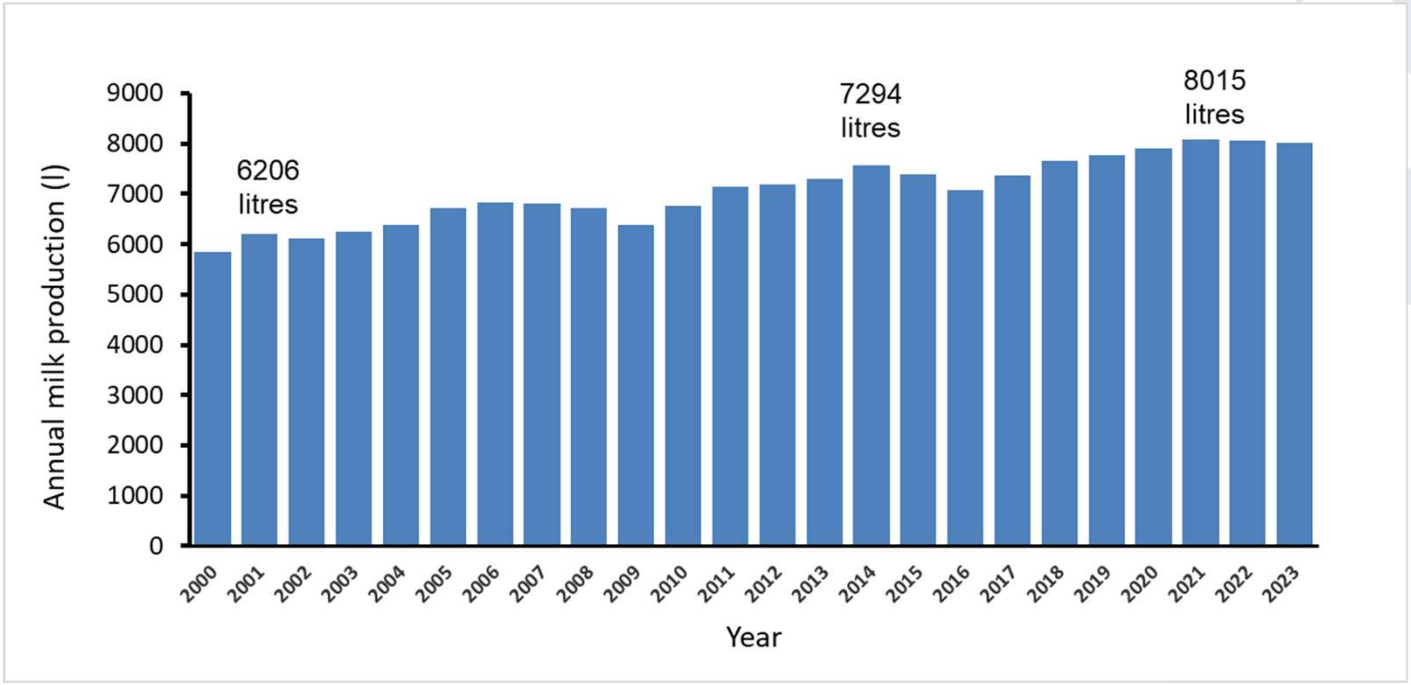
Dairy Cow N Banding by Milk Yield

Nutrient excretion values for all classes of livestock are kept under review

- Systems and performance levels change
- New science becomes available

Dairy Cow Banding

Changes in annual milk production per cow since 2000



Cows require more energy intake to produce higher milk yields.

More energy intake means more excretion (manure).

Increased N & P inputs.

Dairy Cow N Excretion Value

- Existing excretion value = 100 kg manure nitrogen per cow per year
- Recognised that banding would ensure more precise calculation of manure N loading on farms
- Milk output per cow in NI has continued to increase
- Proposed that a range of N excretion bands will now be adopted within NI
- Use of multiple bands to mitigate large steps when moving between bands

Dairy Cow N Excretion Value

Proposed N excretion bands and associated N excretion values for each band

Band (litres)	N excretion per cow (kg/year)
< 6000	88
6001 - 6500	92
6501 – 7000	96
7001 – 7500	100
7501 – 8000	105
8001 – 8500	109
8501 – 9000	114
9001 – 9500	118
9501 – 10,000	123
>10,000	128

Restricted use of Chemical P Fertiliser

- Use restricted to the following criteria:
  - grass reseeding
  - establishment of clover
  - farm has deficit of Phosphorus that cannot be met by importing organic manures
  - Phosphorus is needed for animal health reasons

Reduce phosphorus loading to land and improve farm efficiency

Restricted use of Chemical P Fertiliser

- Monitoring data shows an increase of phosphorus across NI waters.
- Phosphorus identified as a major cause of poor water quality.
- Estimated that 62% of the phosphorus inputs to waterways are from agricultural sources.

Restricted use of Chemical P Fertiliser

- Cutting chemical phosphorus fertiliser inputs is a straightforward way to reduce the NI Agricultural phosphorus surplus.
- Most livestock farms do not need chemical phosphorus fertiliser as phosphorus is coming onto the farm in concentrate livestock feed.
- At NI level, there is more than enough phosphorus in manure/slurry available to meet crop requirements for phosphorus.

Mandatory use of LESSE

- Benefits of LESSE are well established - increased manure nitrogen utilisation efficiency and reduced ammonia emissions.

- The move to 100% use of LESSE will make the greatest contribution to putting NI agriculture on a pathway to meet the UK National Emissions Ceiling Regulations (NECR) 2018 target for reductions in ammonia emissions by 2030.

- The NI Environmental Statistics Report 2024, states that ammonia emissions from livestock have increased by 3.7% since 2005.

- Achieving reductions in ammonia is a priority for NI.

Mandatory use of LESSE

- AFBI research has shown that low emission slurry application can increase grass growth by 18% and 26% for trailing hose and trailing shoe respectively.

- Inorganic nitrogen fertiliser rates for grass silage crops can be reduced by up to 38 kg per hectare when typical rates of slurry are applied by trailing shoe.

- AFBI research has further demonstrated that implementation of low emission slurry application would achieve a 5 to 10% reduction in total ammonia emissions across NI agriculture.

- Wider public benefit – reduced odour from slurry spreading operations.

Mandatory use of LESSE

Proposed phased approach to 100% use of LESSE

Tier	Date	Livestock Manure N Production per hectare	% Livestock Manure N
Tier 1	Feb 2027	>/= 150 kg N/ha	50%
Tier 2	Feb 2028	>/= 100 kg N/ha	18%
Tier 3	Feb 2030	All farms	32%

Mandatory use of LESSE

- Regulations already require LESSE for pig farms with a total annual livestock manure nitrogen production of 20,000 kg or more. Proposed to amend this to be compulsory for all pig slurry to spread slurry using LESSE from 1 February 2027.

- Currently, derogated farms operating must use LESSE when spreading slurry from 15 June of each year. Proposed to make this compulsory all year from 1 February 2026.

- Consideration of further support to help farmers invest in LESSE is part of the ongoing development work for the new Sustainable Farming Scheme to help farm businesses improve their environmental performance.

Capital Support for LESSE

- The new Sustainable Farming Investment Scheme will initially focus on capital support for technology and equipment to help farm business reduce ammonia emissions, carbon emissions and nutrient losses.

- It should be noted that grant support cannot be used to meet existing statutory obligations.

- Proposals for a scheme are being co-designed with stakeholder organisations, and it is not possible to set out precisely at this stage how the proposed scheme will operate or what will be included for support.

Protected Urea

- From 1 January 2027 prohibit the use of granular urea fertilisers unless they contain inhibitors.
- Urea is a highly concentrated chemical nitrogen fertiliser.
- Protected urea is treated with an active ingredient called a urease inhibitor.
- The inhibitor slows the rate at which urea is converted to ammonium.

Protected Urea

- Switch to protected urea will reduce total ammonia fertiliser emissions in NI by 32%
- A study by AFBI and Teagasc showed significant benefit from using inhibited urea.
  - 78.5% reduction in ammonia losses compared with straight urea
  - Maintained similar agronomic yields
- The current ammonia inventory recognises that a 70% reduction in ammonia emissions will be achieved by switching from straight urea fertiliser to protected urea.
- With urea representing ~12% of total fertiliser use in NI there is potential for a notable saving in ammonia.

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Pilot & Implementation of a Focused Approach – Why?

- Mitigation Recommendation from HRA to ensure NAP meets requirements of Water Framework Directive **and** the Habitats Directive in the longer term.

- Recognition that one size approach doesn't fit all

- Aim - focused measures in the right place at the right time

Pilot & Implementation of a Focused Approach – How do we do this?

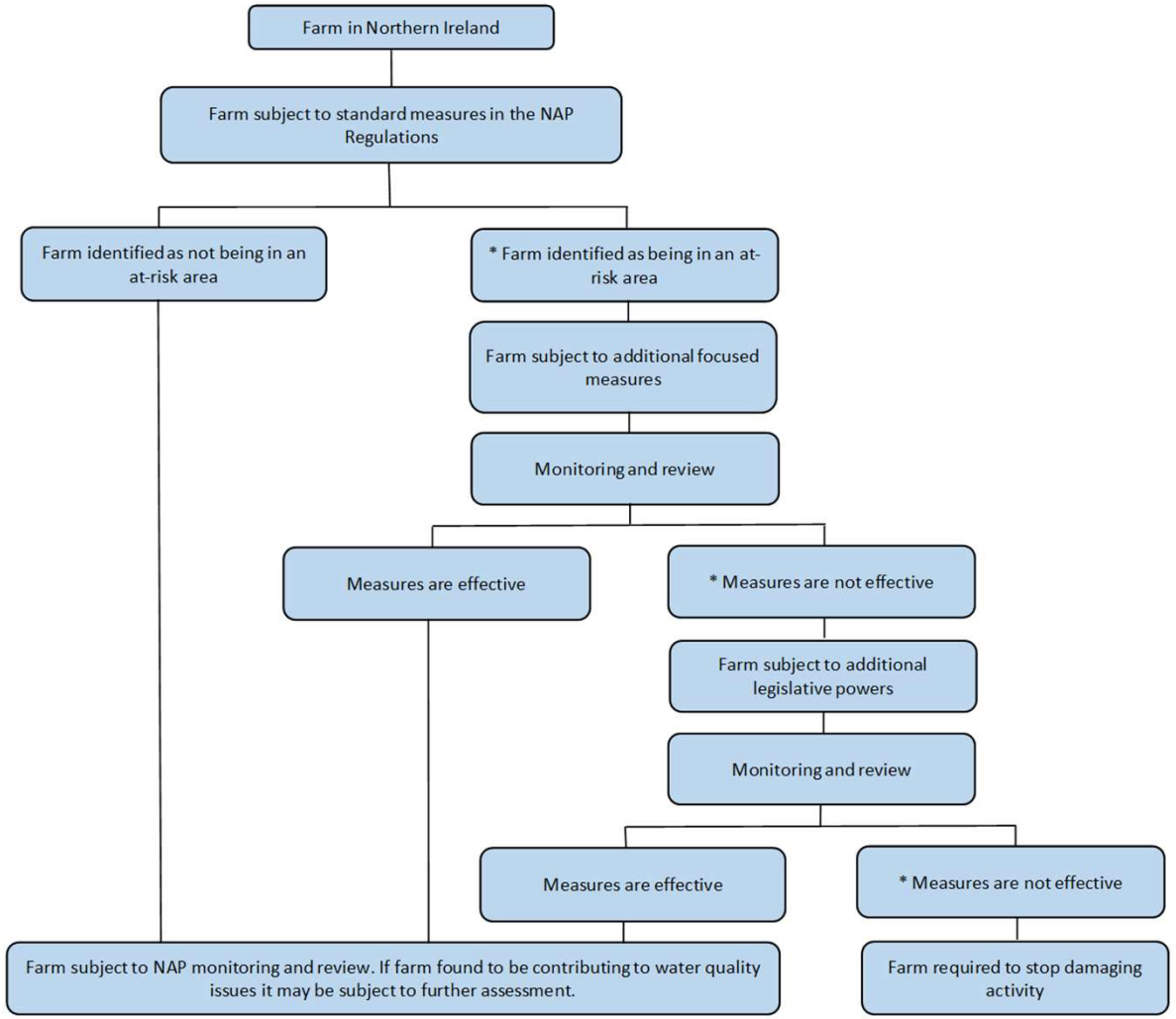
- Develop and run a pilot
  - This will provide further scientific evidence on additional focused measures.
  - Based in high-risk area(s) – targeted using available evidence

- Following the pilot – Develop implementation plan for a focused approach
  - Full list of additional focused measures
  - Mechanism to identify the high-risk areas for the focused approach
  - Amend and update Regulations to implement focused approach

Process Map for Focused Approach

Four steps

1. Identification of risk areas
2. Focused measures
3. Additional legislative powers
4. Monitoring and review



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What are the Solutions / Support?

- Knowledge Transfer Programmes
- SULS – Processing Slurry to reduce P surplus
- IT Systems & Nutrient Calculator Tools
- Links to Sustainable Agriculture Programme
- Soil Nutrient Health Scheme
- Roadmap for Farm Phosphorus Reduction

Support for Water Quality and Nutrient Management

• FBIS Capital – LESSE	£11m
• EFS – protection of watercourses	£24m
• Soil Nutrient Health Scheme	£46m
• SULS – Processing of Slurry	£12.6m
• Sustainable Catchment Programme	£4.2m
Total	£97.8m

Enforcement & Sanctions – Why ?

- To strengthen implementation
- To improve compliance
- NAP measures are based on Good Agricultural Practice and efficient use of nutrients, to minimize environmental impact.
- Enforcement – a “back stop.”

Enforcement & Sanctions – How?

- Administrative Checks and Controls

- Increased Inspections
  - Farm Sustainability Standards Inspections – Overall percentage checked
  - Focused NAP Inspections

- Primary Powers – through the Fisheries Bill
  - Fixed Penalties
  - Higher Fines

Nutrients Action Programme (2026 – 2029) Implementation

Support

- Education & Knowledge Transfer
- Capital Investment

Inspection

- Farm Sustainability Standards
- Targeted Inspections

Stakeholders

- Engagement
  - Pre-Consultation
  - During Consultation
  - Post Consultation

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Thank you !