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Agricultures Role in meeting Environmental Objectives

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Introduction

- Climate and the Environment
- Ireland's environmental commitments and targets
- Challenges facing Irish Agriculture
- Water Quality
- Soil Quality
- Supporting Water Quality
- CAP Post 2020 proposals (higher environmental ambition)

Air

Biodiversity

Climate & Environment

Soil

Water

Ireland's environmental commitments and targets

	Climate	Air	Water	Biodiversity	Renewable Energy
Targets	GHG 10-15% reduction to 2030 Delivery 16.5-18.5MT CO2eq cumulative abatement from 2021 to 2030	The target for Ammonia is 112kt by 2020 and 107kt by 2030	EPA Report 2013-2018 Further Decline in Water Quality. Agriculture responsible for 53%	Agriculture and Land Use significantly impacts on Biodiversity due to agriculture occupying 80% of Ireland's UAA.	Renewable Energy Targets 2020 16% 2030 >16 – 32%

Climate and Environment Challenges in Agriculture

Drivers

•Animal numbers stabilised →

•Fertiliser sales and trends ↑

Impacts

•Greenhouse gas emissions ↑

•Ammonia emissions ↑

•Biodiversity ↓

•Water quality ↓

•Soil fertility ↓

Water Quality

Drivers for action

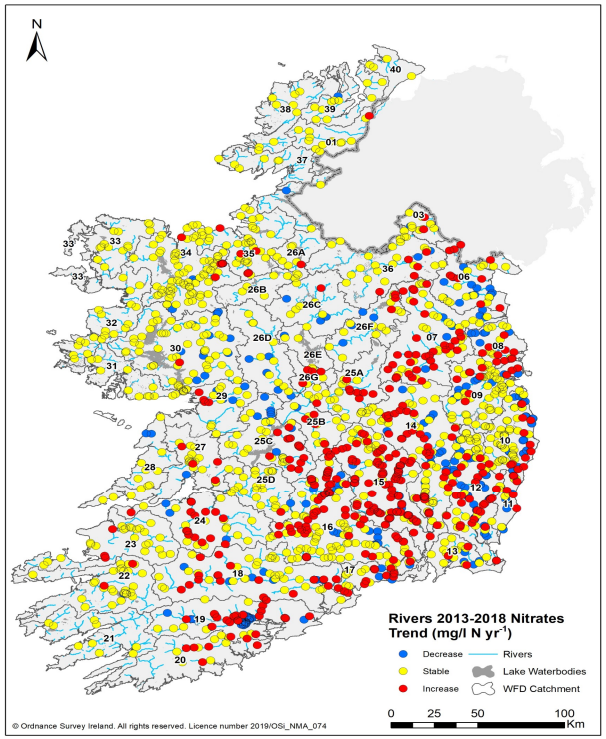
- Water quality is not improving
- Agriculture can negatively impact water quality
- Cost to the farmer as valuable nutrient lost to water

Pressures from Agriculture

- Fertiliser use increasing , N and P pressures
- Livestock numbers increasing on intensive farms
- Sediment

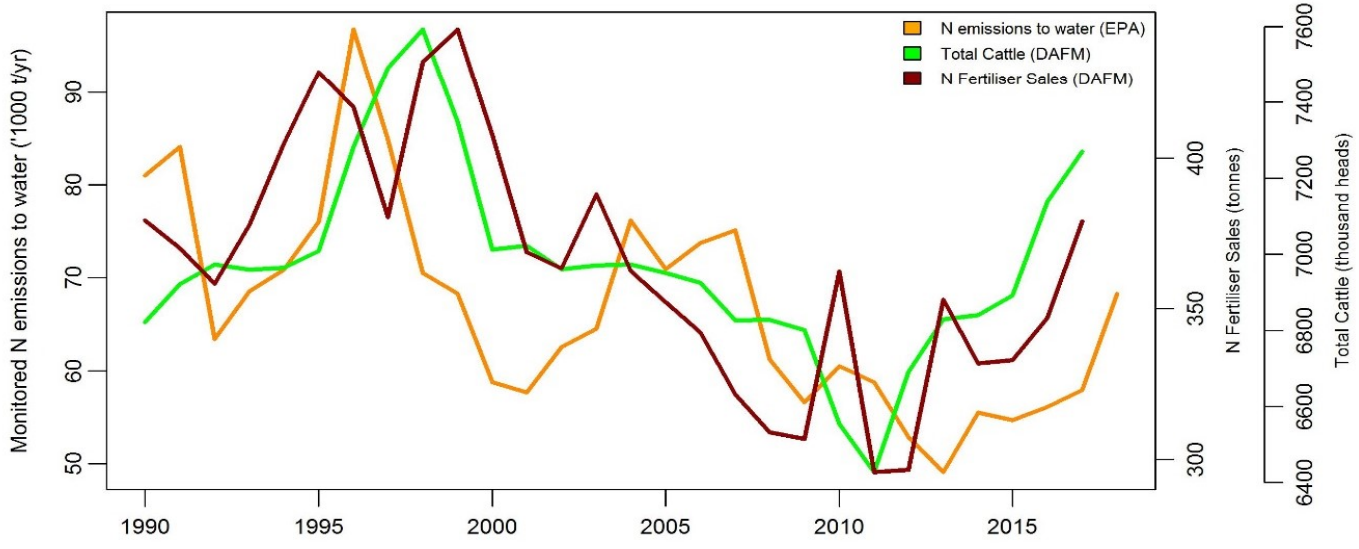
Priorities:

1. Meet the WFD water quality standards
2. Control agricultural emissions to all water bodies



River nitrate changes

Main sources of nutrient increases since 2013



Source	Phosphorus (Tonnes)*	Nitrogen (Tonnes)*
Human Population	162	531
National Herd	164	5462

*indicative figures (tbc)

Soil Quality

Drivers for action

- Suboptimum soil pH leading to environmental and economic losses
- Loss of Carbon stock in organic soils
- Carbon sequestration potential not realised

Pressures from Agriculture

- Fertiliser use
- Livestock
- Land use and land use change
- Structural damage

Co-benefits of Actions

Many of the measures currently in place have more than one benefit

e.g. Low Emission Slurry Spreading

Impacts

- Ammonia emissions
- Water quality
- Soil fertility
- Nutrient use efficiency

e.g. Planting/Laying/Coppicing

Impacts

- Carbon Sequestration
- Habitat/species corridors
- Water quality
- Flood reduction

Supporting Water Quality

- Water Framework Directive.

- **Nitrates Directive is the main Agricultural measure which aims to protect waters from sources of N and P from agricultural sources.**

- Strategic Management Requirements for CAP payments.

- ACP, ASSAP

- GLAS, TAMS, KT, RDP, EIPs

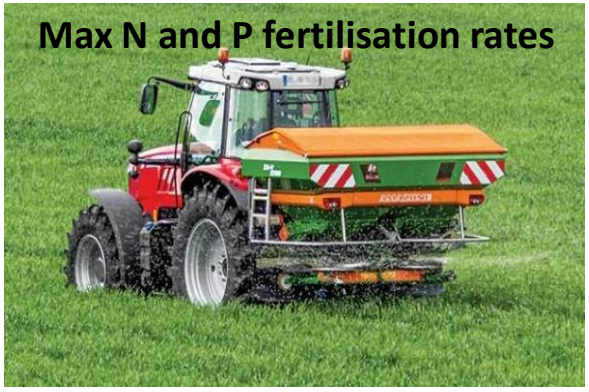
Nitrates Regulation, NAP, Derogation

- Regulates agricultural practices to maintain water quality
- Ireland's 4th NAP and derogation 2018-2021
- Derogation allows for higher stocking rates on farms but requires carefully considered controls on emissions
- Review of the Derogation completed in 2019 due to increase in livestock numbers, fertiliser use, and environmental and climate concerns.

<u>The main focus of the NAP is water quality but it benefits air and soil quality</u>

4th Nitrates action programme (NAP) (2018-2021)

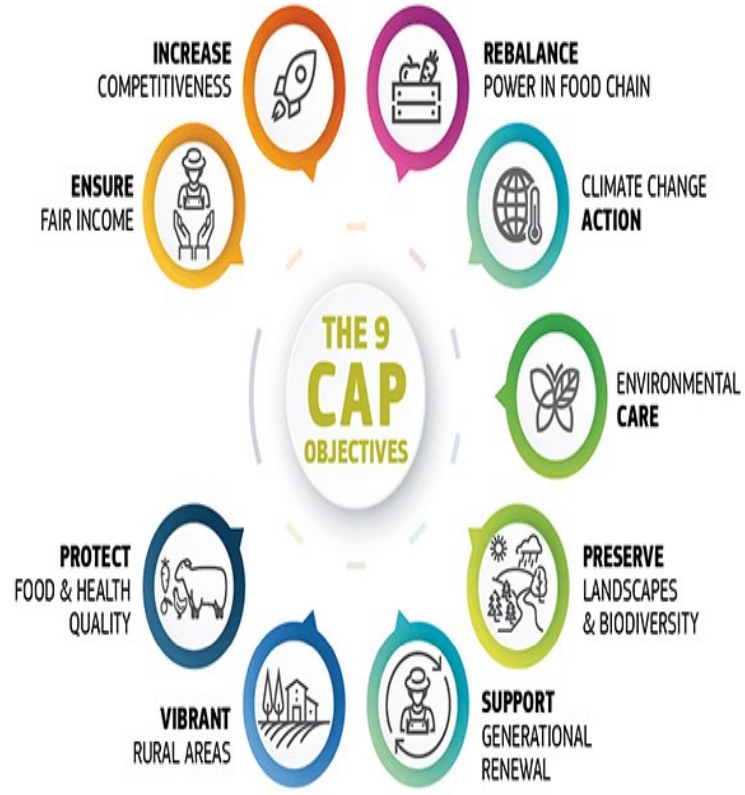
Main measure to prevent pollution of water from agricultural sources under the WFD



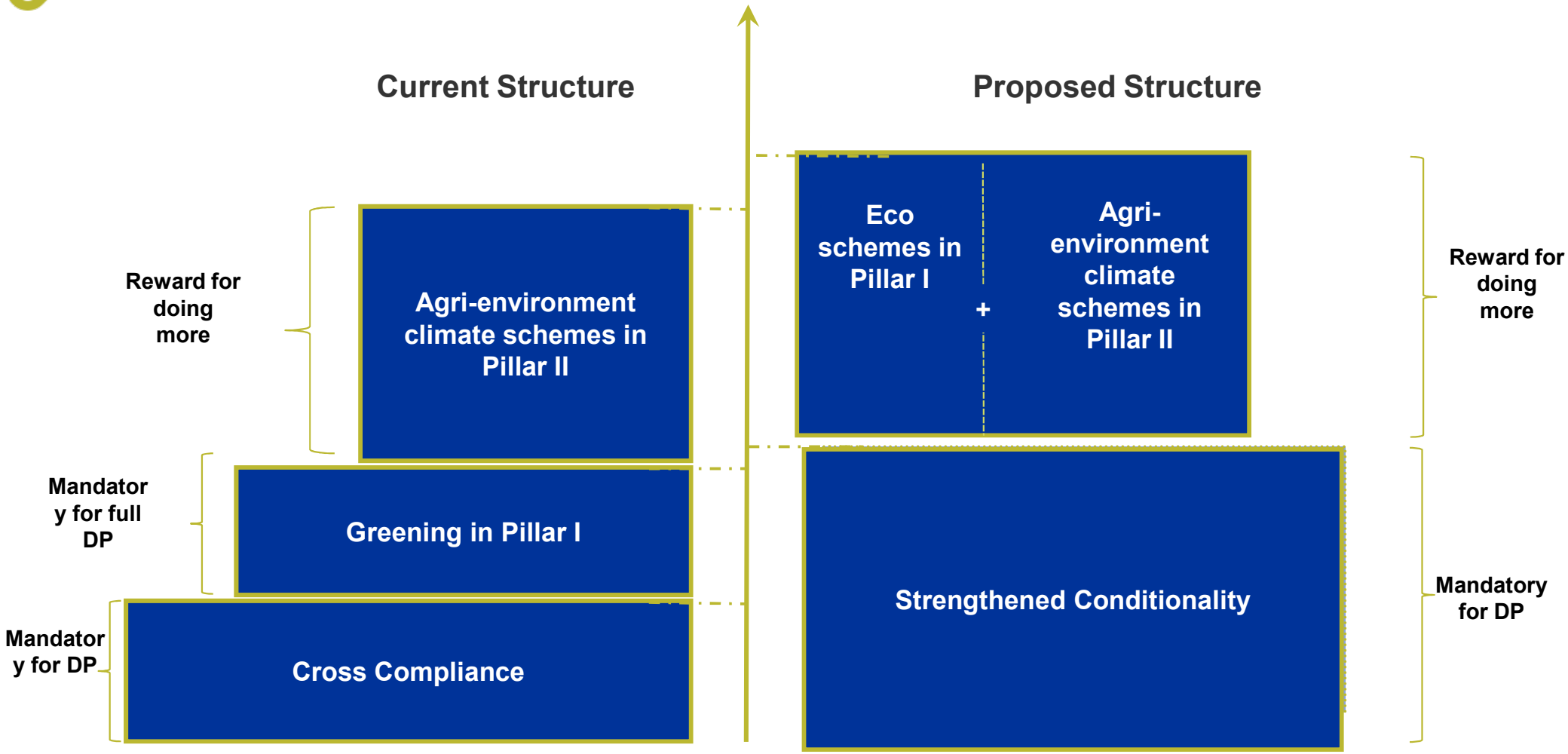
CAP Post 2020 proposals

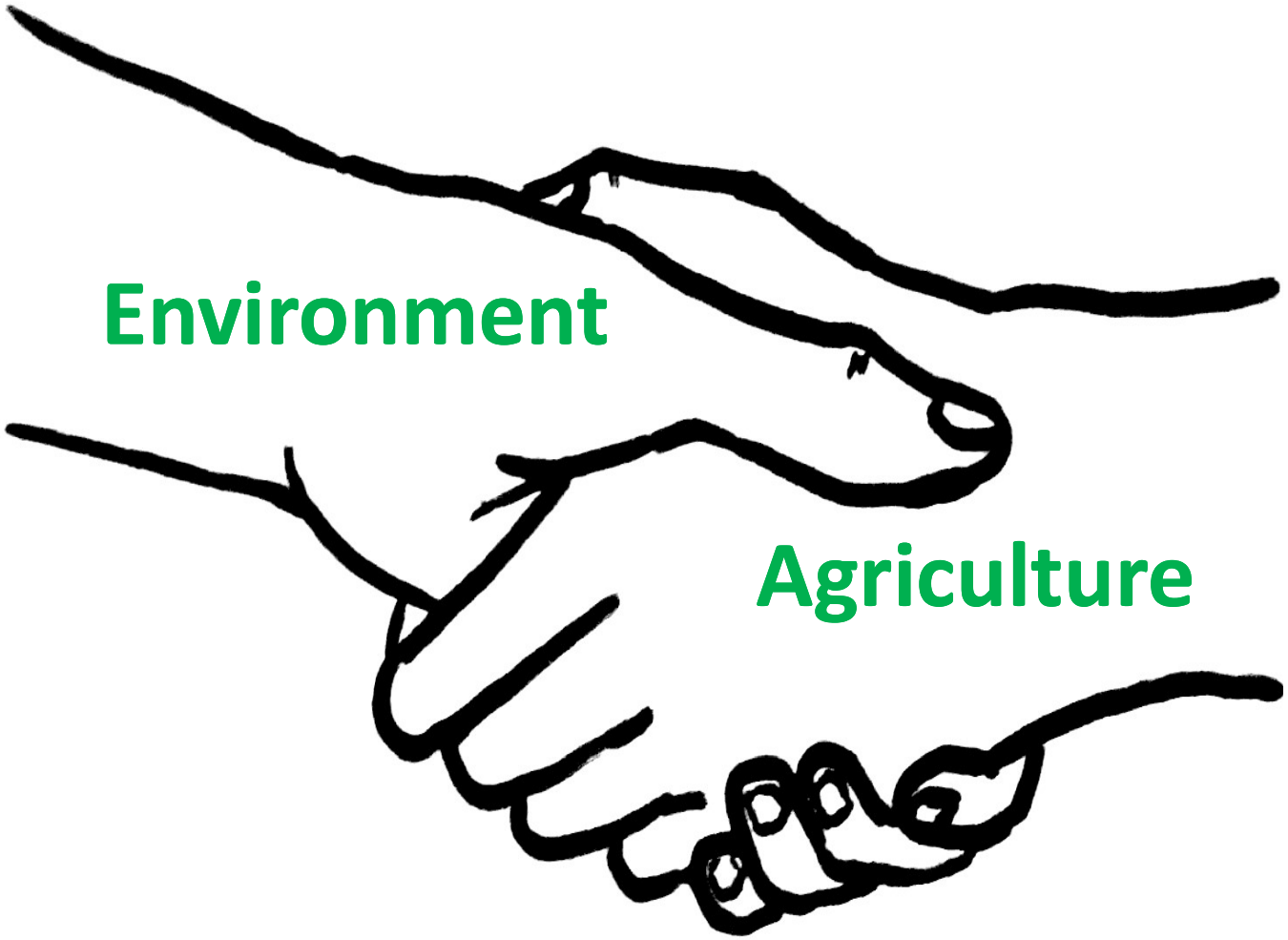
Higher environmental ambition

- Increased **conditionality** (cross compliance)
- **Eco-scheme** within Pillar 1
- Target at least 30% of Pillar 2 on specific env objectives



How will the green architecture change?




Environment
Agriculture