

AETS

AGRI ENVIRONMENTAL TRAINING
SCHEME
By ACA Member Owen O Driscoll



1

AETS Course Objectives

- Update on environmental issues
- Update on CAP 2023 and New Schemes
- Introduction to recent developments at EU and National level
- Lessons learnt from GLAS participation.
- Key ecological concepts.
- Introduction to the concept of results based agri-environment measures including use of score cards.
- Information on farm health and safety standard

Reimbursement per attendee shall be paid €156



2

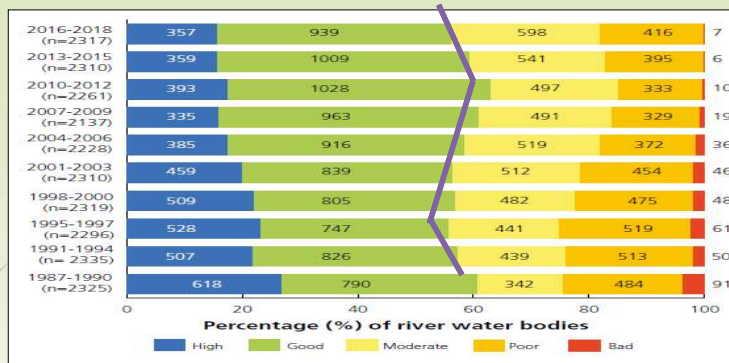
Structure of course

- Course = 2 training sessions on the day of delivery.
- The course must be 6 hours duration to be delivered between 10 am and 5 pm on any day during the week .
- One of the sessions, either morning or afternoon, must be delivered on a host farm.
- Max no of attendees at training course will be 25.



3

Water Quality Challenge



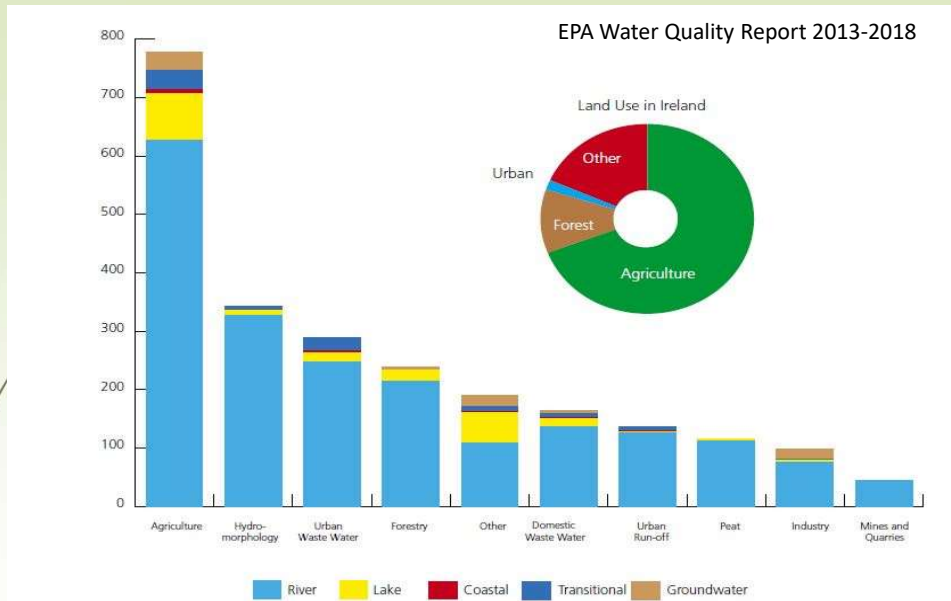
EPA Water
Quality Report
2013-2018

Just over half of Ireland's surface waters are at good or high status – 53%
Agriculture is the most widespread pressure on water quality
Hydro morphology - land improvement and drainage works/maintenance is also a significant pressure on waters
Diffuse losses of Phosphorus, Sediment and Nitrogen are the most significant issues impacting waters
Point sources of pollution, ammonium, pesticides and toxic substances are also impacting waters



4

What Pressures are impacting Water Quality?



5

Phosphorus (P)

EPA Report:

- 29% of river monitoring stations showing unsatisfactory phosphate levels
- 24% of river monitoring stations show an increasing trend



What Causes Diffuse P & Sediment Loss?

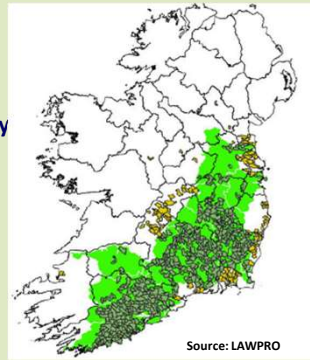
1. Most losses from low permeability soils
2. Heavy rainfall leads to saturated soil and overland flow of water
3. P and soil sediment washed off into drains & streams



6

Nitrogen (N)

- 47% of river sites have unsatisfactory nitrate concentrations
- 22% of estuarine and coastal water bodies have unsatisfactory nitrate concentrations
- 24% of groundwater sites have high nitrate concentrations and 3 sites exceed the drinking water standard
- Strong regional pattern and areas of greatest concern are in the South and South East



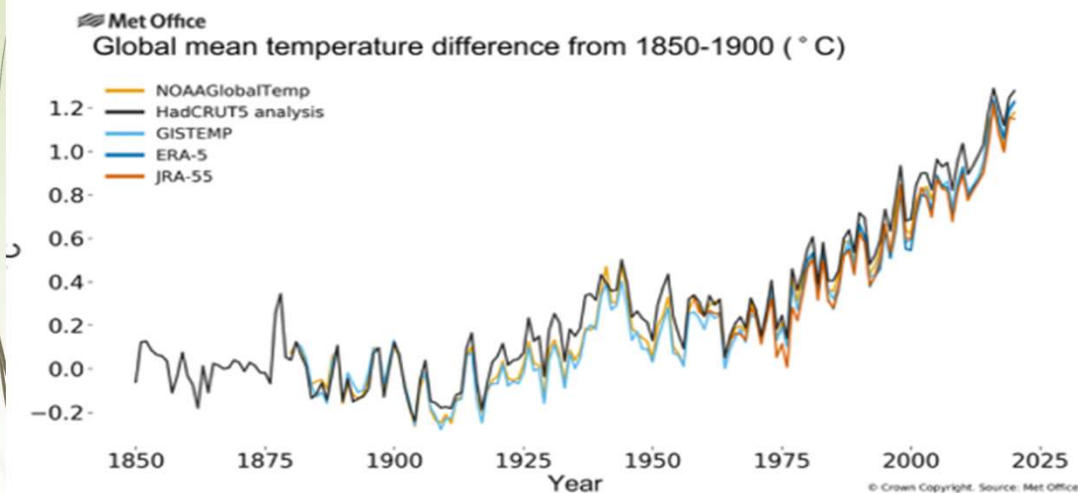
What Causes Diffuse N Loss?

1. Most N losses from free draining soils
2. N does not bind tightly to soil
3. Leaching occurs where more N applied than plants need
4. Excess N is leached by rain to waters



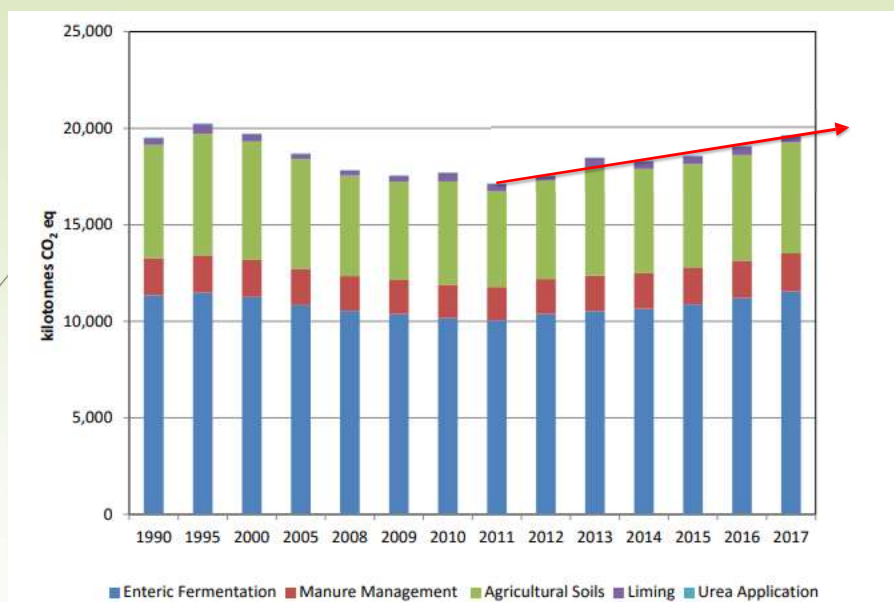
7

Climate Change Challenge



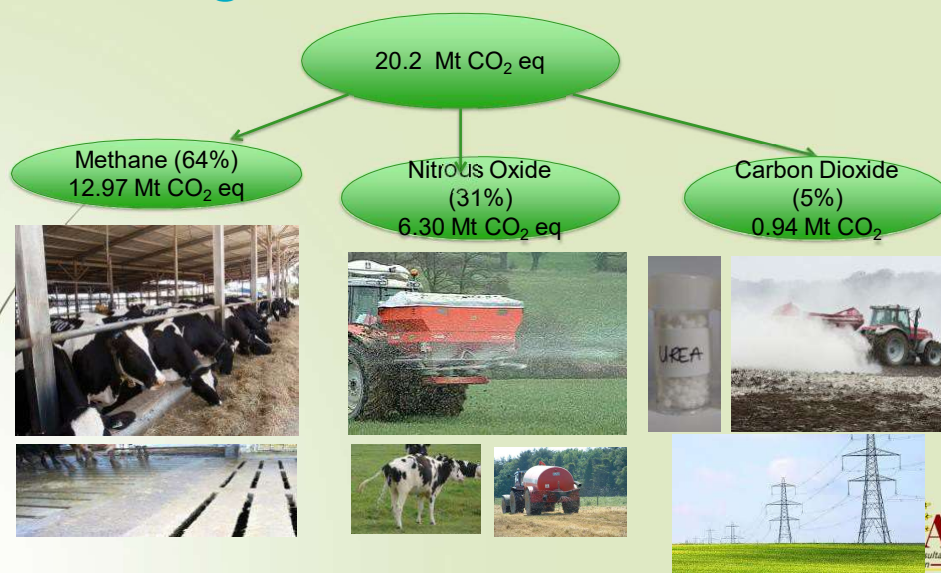
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GHG Emissions



9

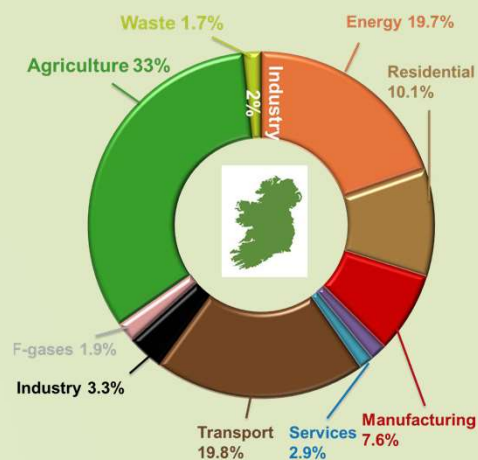
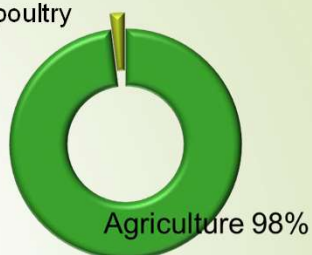
GHGs in Irish Agriculture



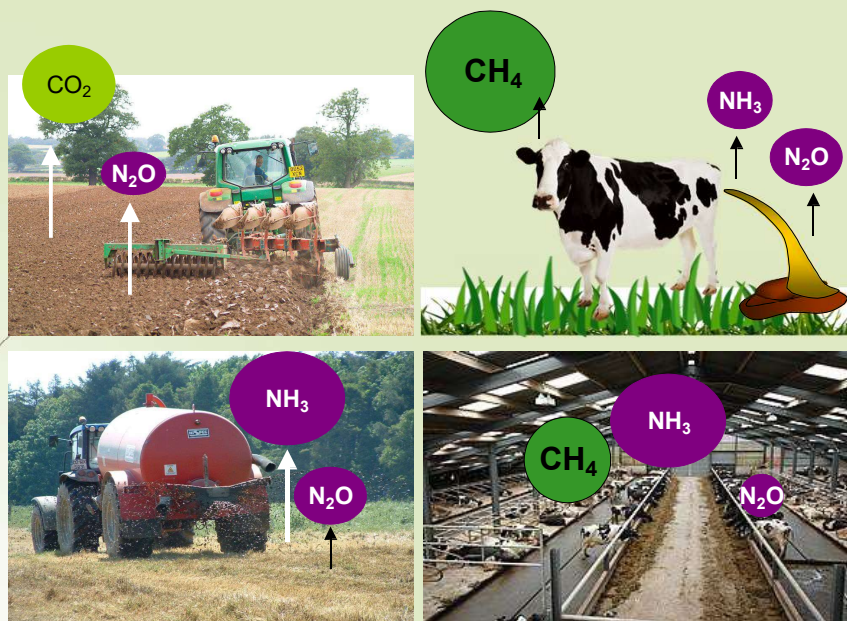
10

Agriculture GHG & Ammonia Emissions

- 33% GHGs
- 98% of Ammonia Emissions
- 80% of ammonia from dairy and beef
- Remainder from pig and poultry



11



12

The Challenges

- Industry expanding to meet global food demand
- GHG and ammonia emissions increased since 2011
 - 32% greenhouse gas emissions
 - 98% ammonia emissions
- **Agricultural GHG 2030 targets:**
 - Reduce emissions ~10-15% (17.5 -19Mt CO₂e)
 - Deliver carbon sequestration ~ 10% (2.7 MT CO₂e)
- **Ammonia targets:**
 - 1% reduction 2020-30
 - 5% from 2030 onwards



13

Future

There are challenges in Water, Climate and Biodiversity

Farmers can help address these challenges

New Technology and Mitigation measures (LESS, Protected Urea etc)

The new CAP and Agri Environment Scheme (AECM) can help



14