

4th Thematic Group meeting on
Sustainable Management of Water and Soils

Result-based RDP Payments for soil and water objectives

Testing findings and recommendations for RDPs

Ben Allen

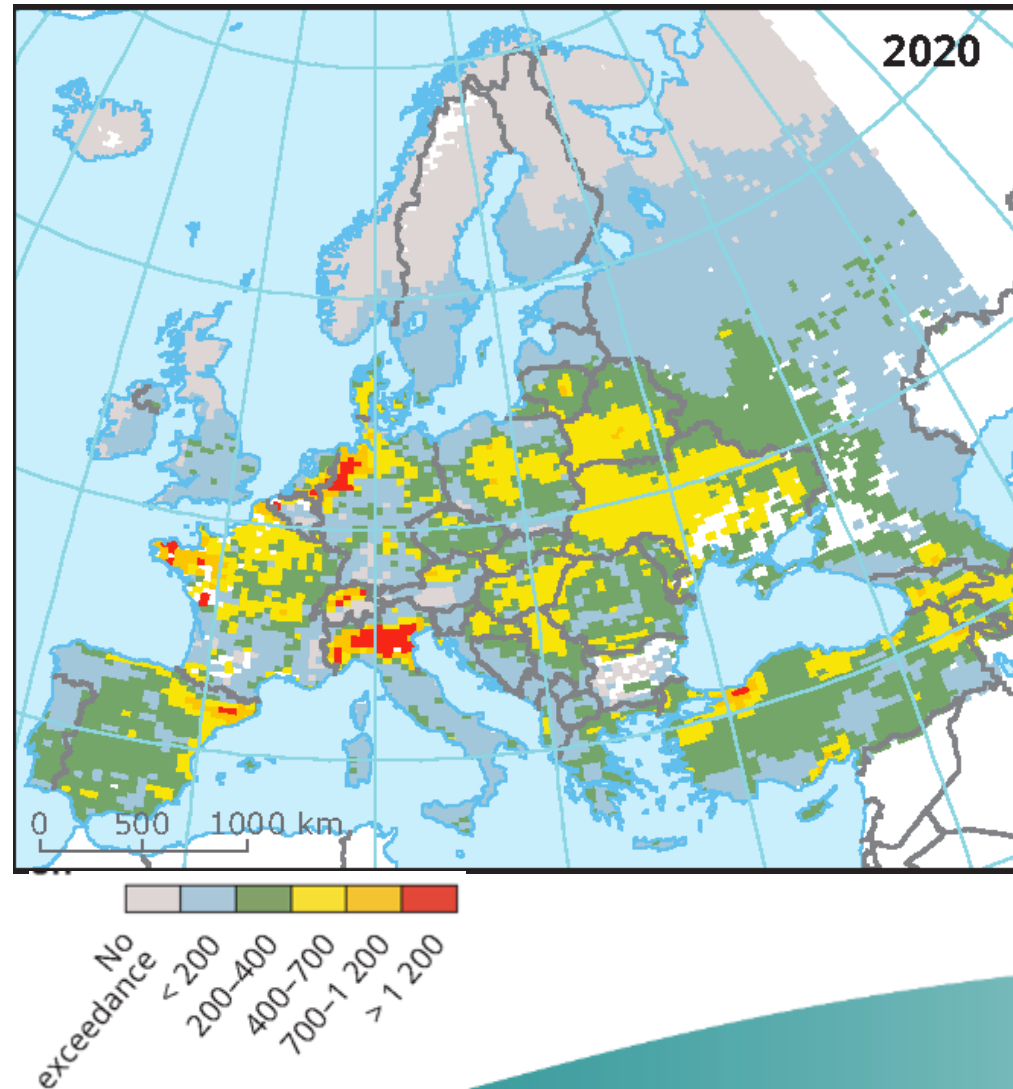
ENRD CP/IEEP

Turku, 15-16 May 2018

Nutrients – too much of a good thing?

Agriculture:

- 90% of EU Ammonia emissions
- 70% of Nitrogen entering lakes and rivers
- 20% of GHG emissions from agriculture (2% of EU total)
- 63% of area exceeds critical eutrophication levels – but declining to 2020 (54%)
 - Nitrogen increasing
 - Phosphorous decreasing



Agriculture a key challenge sector

“It should be explored how an obligatory EU-wide requirement to have a nutrient management plan and incentives for precision agriculture, forming part of any Member State CAP strategic plan, could improve results.”

European Commission CAP Communication - 29 November 2017



“I deem it absolutely essential to enhance our policy tools in relation to inputs. Proper nutrient management on farms is vital and will receive more attention in the future CAP than is currently the case.” - Commissioner Hogan – Speech at European Policy Centre Dialogue on Water & Agriculture in Europe, Thursday 28th September 2017, Brussels.

- Nutrient management needs
- Specific actions
- Appropriate application rates, times & locations.
- Farm-level but can be broader (NVZ)

Nutrient Management Planning
Small AFO Summary Worksheet #2

AFO OPERATION NAME _____ ANIMAL TYPE Boiler
TYPE OF WASTE _____ OPERATOR _____ DATE / /

Step 3. Area for Land Application. (Attach aerial photo or topographic map and soil survey of farm showing land application areas. Include all buffers and setbacks that apply (Table 2).)

Nutrient Management Planning
Small AFO Summary Worksheet #3

AFO OPERATION NAME _____ ANIMAL TYPE Boiler Page _____ of _____
TYPE OF WASTE _____ OPERATOR _____ DATE / /

Step 4. Determine Crop and Nutrient Needs for Each Field Fencing Sheet Record Sheet

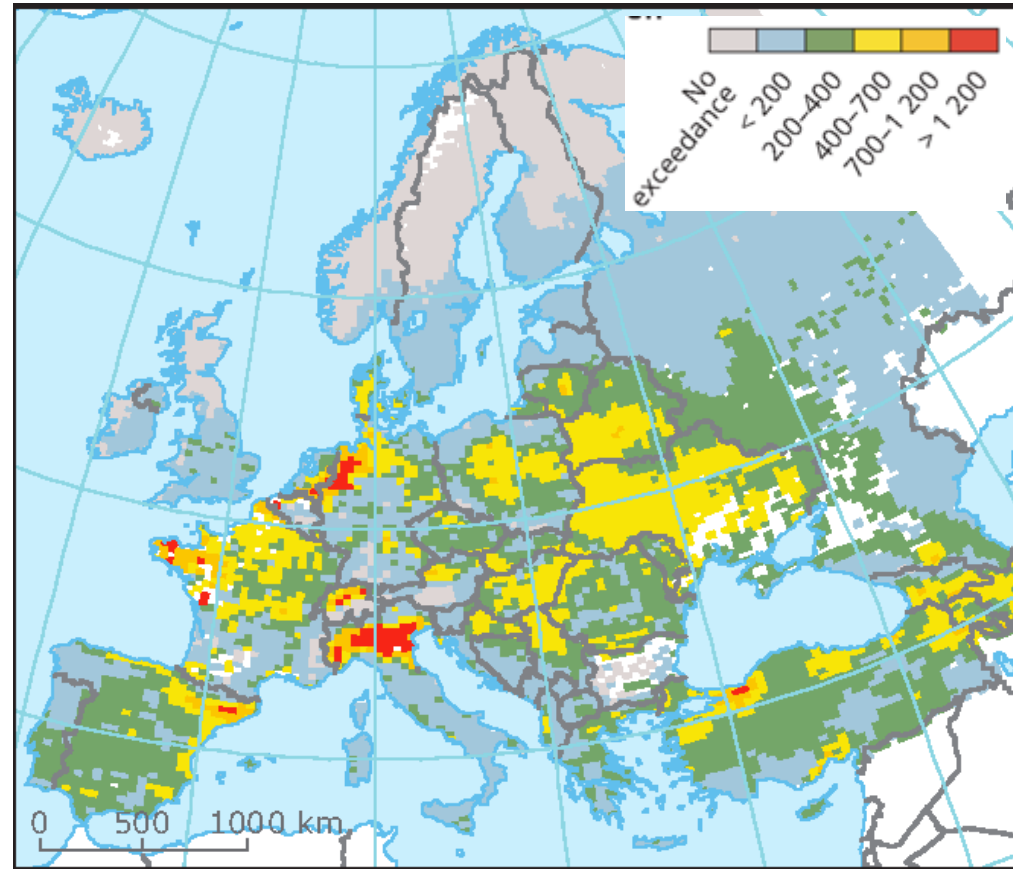
Field name or no.	Spreadable acres	Crops to be grown	P rating	Recommendation N ₂ O ₅ H ₂ O (lb./acre/yr.)	P 1 0 E K	Land application		Month of application
						Basis of P application	Total nutrients N ₂ O ₅ H ₂ O (lb./acre/yr.)	
						<input type="checkbox"/> None		
						<input type="checkbox"/> In P ₂ O ₅		
						<input type="checkbox"/> In P ₂ O ₅		
						<input type="checkbox"/> In P ₂ O ₅		
						<input type="checkbox"/> None		
						<input type="checkbox"/> In P ₂ O ₅		
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						<input type="checkbox"/> None		
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NOTE: 1 cubic yard liter = 810 pounds (Use actual values, if available.)
1 ton = 20 cubic yards (Use actual values, if available.)

Soil management plans, provide a more holistic and systemic approach to managing soils and water

Benefits of Nutrient management planning

- **Raise awareness:**
 - resource efficiency;
 - Impacts (environment & productivity)
 - Legal requirements
- **Support farmers to:**
 - Improve compliance;
 - Increase productivity
- **Managing authority:**
 - Improved monitoring across objectives;
 - Better understanding of actions beyond farm level




- **Beyond the legal requirements to:**
 - Support & *incentivise the development of plans*;
 - Provide a *more systemic approach to* soil & water management;
 - Identify RDP measures to support *plan implementation*;
 - Provide *advice and training*



Nutrient management plans and the reference level (2014-20)

Support through RDP



 Spain –
Castilla y Leon

M10.1.4 (sustainable agro-industrial crops) farmers must carry out **soil analysis** in order to establish a program of fertilization appropriate to the needs of the crop, adjusting the doses and achieving a more sustainable crop.

 Estonia

M10.1.1 **Crop rotations** and minimising pesticide input is supported.

M10.1.2 – (in NVZs support for regional water protection). Required water protection **training**.

M10.1.3 – (regional soil protection) aims to prevent nutrient leaching

M10.1.4 (Env-friendly horticulture) - aims to prevent nutrient leaching

 Austria

M10.1.16 (preventative groundwater protection) includes '**Plans and records on fertilisation and soil sampling**'.

Objectives to:

- Reduction of nutrient discharge into ground and surface water through:
 - modified cultivation of arable land in regions that are vulnerable by high nitrate concentration;
 - maintaining grassland in regions with a high soil value and endangerment of ploughing
- Training of farmers on the relationship between fertilisation and nitrate concentration in water bodies, and through soil sampling

Reference level



Required under law



SMR:

- 1** – **Record keeping** for fertilizer application
- 4** – **Registration** of phytosanitary treatments
- 10** – **Appropriate use** of phytosanitary treatments

Fertilisation plan required as a condition of entry into the AECM 10.1.1 is in keeping with the requirements of the Estonian Water Act.

Record keeping is also part of the Water Act requirements.

Minimum requirements set out in national law on use of fertilisers and pesticides in keeping with Nitrates & SUP Directives

NMPs in 2014-20 RDPs

LAW: -

AECM: 5 year cultivation plan and record keeping

LAW: Crop protection plan

AECM: Planning by collective - (NMP?)

LAW: Fertilisation plan, record keeping

AECM: Nutrient management actions

LAW: Fertilisation plan under specific conditions

AECM: -

LAW: Fertilisation plan under specific conditions

AECM: -

LAW: -

AECM: nutrient management plan and soil sampling

LAW: Record keeping, application according to plant need

AECM: Plans and records on fertilisation and soil sampling

LAW: 5 year nutrient management plan and soil sampling

AECM: -

LAW: Fertilisation plan based on soil analysis

AECM: Commitments and actions supporting nutrient management

LAW: -

AECM: Prerequisite for farm, irrigation, fertilisation plans.

LAW: Fertilisation records; registration of phytosanitary products

AECM: Soil analysis to establish fertilisation programme





ENRD TG meeting
**Proposed recommendations on Nutrient
Management Plans**

Adding value to soil and water management

1. Soil Management Plans (SMPs) should be a **pre-requisite of support** for soil and water management through RDPs.
2. In the development of RDPs, careful consideration should be given to **where RDP support can add value** to existing National or Regional requirements. Requiring the collaboration and involvement of:
 - Ministries responsible for the implementation of legislation relating to soils and water;
 - Ministries responsible for designing and implementing RDPs;
 - Stakeholder groups with interests in, or who may be impacted by the requirements of SMPs.

Targeting and monitoring

3. Set out **clear priorities** (linked to RDP needs assessment) for a given area/holding & highlight the environmental and production benefits to farmers;
4. Careful assessment of the **ability to measure impacts** of management practices
5. **Ongoing monitoring and review** to ensure the actions implemented through the plans are delivering results

Encouraging and supporting action on the ground

6. *RDPs to set out clearly **which measures or packages of measures should be used** in different contexts to implement SMP identified priorities;*
7. ***Demonstration farms & pilots**, combined with dedicated extension services & advice through RDPs;*
8. *Ongoing training for farmers and farm technicians*

[Draft] Recommendations (post 2020)

SMPs in the next programming period

- Soil management plans should become:
 - a pre-requisite of receipt of RDP support at the holding level;
 - a required component of MS CAP strategic plans;
- RDPs should be developed to provide support to implement the actions and requirements set out in the SMPs, by identifying the relevant measures and making them available to farmers;
- New support tools should be made available to allow farmers to make more fundamental and systematic changes to the way they farm to improve resource efficiency and deliver environmental objectives. E.g. transition or conversion payments
- Monitoring will require support for the establishment of robust indicators and monitoring tools to allow the tracking of progress. These should be encouraged through new research and pilot exercises through EAFRD support, including EIP Operational Groups, as well as LIFE projects.

Thank you!

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