



Lunan farmer focus group workshop Dec 7th 2011



Report

Project Diffuse Pollution Management

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Institute



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Executive Summary

Project reference: Diffuse Pollution Management December 2011

Project contractors: Andy Vinten, JHI

Background to research

The SG has legislated through the Controlled Activities Regulations (CAR) 2008 to mitigate diffuse pollution (e.g. by establishing a set of General Binding Rules and requirements for Good Agricultural and Environmental Conditions (GAEC) for single farm payments). It has also promoted voluntary codes of good farming practice such as Prevention of Pollution from Agricultural Activity (PEPFAA), the Four point plan and the Voluntary Initiative. It also provides financial support through the SRDP and Land Management Options for measures that enhance biodiversity, and some measures that help to control diffuse pollution. There is a need expressed by the SG policy unit for on-going review and advice with respect to these measures, and the development of new measures and policy instruments to deliver them.

The CREW-DP project has been funded to support:

- (1) **Awareness raising** with SG, SEPA, DEFRA and other stakeholders, about existing monitoring and diffuse pollution control efforts (on Diffuse Pollution Monitoring Catchments and elsewhere) through appropriate field visits;
- (2) **Engagement** with SEPA's Diffuse Pollution Management Advisory Group (DPMAG) regarding approaches to the assessment of effectiveness in the priority catchments.

Objectives of workshop

The aim of this workshop was to dialogue with farmers in the Lunan monitored diffuse pollution catchment on current approaches to minimizing diffuse pollution, including regulatory and supported measures, and to explore the potential of existing and new measures to provide opportunities for win-win solutions that provide an economic as well as an environmental benefit.

Key findings and recommendations

1. Philip White spoke about the potential of precision agriculture techniques to deliver environmental and economic benefits to farmers. The potential of these techniques (eg yield mapping, soil fertility mapping, green crop nutrient deficiency detection, global positioning, automatic steering etc) was clearly recognized by farmers, but there was concern about the capital and recurrent costs of the

technology, and about how to assess the business case for this, particularly for smaller farmers. One farmer who had successfully used the technology had built up his capability over 15 years from a variable rate fertilizer spreader, to auto-steering and yield monitoring. There were concerns that the plant sensing technology could only generate information after yield had already been lost, particularly for plant P deficiency sensors. Also, it is not always possible to identify the cause, the limiting factor, and the deficiency sensed may be a symptom, rather than a cause of the problem. Plant sensing may be more relevant to dealing with catastrophic issues, such as manganese deficiency.

2. Ben Christen spoke about the economic benefits of buffer strips for biofuels in Denmark and described the development of a design for wet buffers on clay soils, which is to be included in a Danish government rural support scheme. From the comments of farmers, barriers to such a scheme being implemented here include the fact that farmers are not allowed to remove material from the buffer, and the width that is currently required by the regulations in Scotland, which leads to the buffer being treated as a “bit of scrub”. One farmer asked about suitable trees to plant in 2m buffers, and Ben suggested Red alder.

3. Andy Vinten spoke about the catchment management activities going on at present, and highlighted the removal of nutrients from the loch that are occurring associated with weed removal; this process could be better managed, and potentially enhanced, with SNH’s consent, to allow for recycling of this material to land. Andy Vinten also highlighted concerns over the perceived rise in water levels in Rescobie Loch. Eel traps installed downstream of Rescobie Loch had been investigated, and were not an issue.

4. Andy Vinten highlighted the filter fence trial for control of soil erosion after potatoes, which is going on in the catchment. This was followed by a field visit to this site (see pictures in Appendix 2). Feedback from farmers varied from strong interest in implementation, to a sense that the erosion issue was under control by other means (winter cropping, autumn cultivations etc).

5. A pilot questionnaire was provided to seek views of farmers about a number of measures that are available under the SRDP Rural priorities scheme (see Appendix 1). Participants were asked whether they had implemented these measures, would implement them in a future SRDP application, or under the guaranteed funding scheme, Land Manager’s Options.

6. Part of this reluctance was related to the paper work involved with SRDP, especially for small schemes. One farmer had used it for funding a cattle shed, but would not use for smaller field based measures. The pilot showed a general preference for the guaranteed funding, a mixed response to farm woodland creation, due to the high value of the arable land on most farms, and a feeling that SRDP applications should have the potential to roll over beyond 5 years.

7. Power point presentations are available at the CREW website:
<http://www.crew.ac.uk/projects/diffuse-pollution-management>

Key words

Precision agriculture, buffer strips, biofuels, rural priorities, filter fences

APPENDICES

Appendix I Summary of results of questionnaire (n=5 farmers)

Lunan Farmer Focus Group				
Activity: Rural Priorities and Water Quality				
In 2013, the funding for agri-environment/rural priorities will be revised by Scottish Government. Set out below are measures that currently receive funding either under Tier 2 SRDP grants, or under Land Management Options. We would like your views on some of these measures. Pick one measure from each of the categories (LAND CONVERSION, LIVESTOCK MANAGEMENT, LAND MANAGEMENT and FIELD AND WATER MARGINS), which is most appropriate for your farm, and then please tell us:				
A. Have you implemented in the last 5 years? B. Would you include it in a future SRDP Tier 2 application C. Would you do it if directly funded under Land Managers Options?				
	A.	B.	C.	Give your reasons and comments...
LAND CONVERSION				
Arable reversion to grassland areas within fields that are prone to flooding, runoff and/or erosion risk £240/ha for 5 years	1		3	1. Only suitable land is water margins, which are already in grass. 2. reduces erosion and nutrient loss
Woodland creation woodland, productive conifer, productive broadleaf, small scale woodlands £101-£229/ha plus initial planting grant	1	1	1	1. No land poor enough

Create, Restore and Manage Wetland supports the conversion of arable or improved grassland to wetland by raising water levels. £226/ha for 5 years plus capital costs	2	0	1	1. Land all arable
Hedgerows and extended hedges and extension of width of hedges with adjacent undisturbed grass margins £0.53/m for 5 years	1	2	2	1. Only benefits - no idea of costs
LIVESTOCK MANAGEMENT				
Manure/slurry storage water getting into manure/slurry stores facilities slurry or manure more efficiently capital costs	3	1	1	1. Would be a cost, some benefit
Constructed Farm Wetlands (CFWs) 40% of eligible costs for planning, excavation, fencing and pipework	1	1	0	
Nutrient Management Plan the cost of producing a nutrient management plan in any one year up to £300	2	2	3	1. Do it already with SAC
LAND MANAGEMENT				
Soil and water management plan the risks to soil and water on the farm including soil erosion, compaction, structural degradation, and losses of organic matter and of nutrients. the cost of producing a nutrient management plan in any one year up to £300	2	1	1	1. DO it anyway
Retention of Winter Stubbles stubbles from your harvest of spring or winter cereals, protein or oilseed crops to provide cover and food for birds until the end of February the following year. £96/ha for 5 years	2	0	2	1. Most of farm in winter cereals

Natural regeneration after cereals stubbles from winter cereals and leave areas uncropped to naturally regenerate and produce rough fallow conditions to provide cover and food for birds until the end of August of the following year £406/ha for 5 years	retain 0	1	2	1. Sounds quite attractive
FIELD AND WATER MARGINS				
Buffer Areas for Fens and Lowland Raised Bogs natural vegetation buffer at least 10 metres in width field drains and culverts;	grass/semi-break existing £286/ha for 5 years plus capital costs 0	0	0	
Grass Margins and Beetlebanks - mixed arable strip between 1.5 metres and 6 metres in width in an arable field. £473.76 per hectare per year for the establishment and management of a strip	grass margin 2	1	2	1. Might suit buffer strips. 2. Increase wildlife cover and reduce soil erosion
Give any other comments you want to make here..... 1. Develop a simple mechanism for rolling existing SRDP environmental measures into new schemes after end of 5 year contract.				



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