Soil and Water Workshop

23rd June 2015

Anglia Farmers, Norwich

10:00-13:00

Attendees

Sue Andrews, Senior Environment Officer, Environment Agency
Nick Anema, Farmer, JD & ND Anema
Rob Barker, Environment Officer, Environment Agency
Chris Eglington, Farmer, S.S Eglington and Sons
Jacob Fiennes, Farm Manager, Raveningham Estate
Tom Hunter, Rivers Engineer, Broads Authority
Rosanna Kellingray, Catchment Sensitive Farming Co-ordinator, Natural England
Andrea Kelly, Senior Ecologist, Broads Authority (Chair)
Patrick Mutimer, Farmer, Hall Farm, Suffield
Lister Noble, Wensum Demonstration Test Catchment/River Waveney Trust
Neil Punchard, Broadland Catchment Partnership Officer
Jack Walpole, Farmer, Old Hall Farm, South Elmham/Waveney Catchment Partnership

Apologies

Oliver Arnold, James Beamish, Paul Buxton, James Chapman, David Dent

Objectives

1. To introduce prioritisation and strategic targeting of measures at a catchment and field level using surface water run-off risk and ecosystem services maps.
2. To provide details of Catchment Partnership Action Fund 'Slow the Flow' project funding for 2015
3. To consider potential solutions to soil and water related issues and funding mechanisms, specifically:

   Controlled Traffic Farming and Precision Farming; Countryside Stewardship ('Soil and Water' options and proposed payment rates); Greening and cross compliance (particularly in relation to soil erosion GAEC 5); Rural Sustainable Drainage Systems

Desired outcomes

1. To obtain feedback on mapping produced by the partnership and agree potential next steps for sharing if believed to be useful for farmers and their advisers.
2. To increase publicity of 'Slow the Flow' and suggestions for how best to promote it.
3. To receive local farmers and their advisers' ideas on how to solve water related issues and their views on how the partnership can help.

Soil and Water Workshop 2015 Summary

Agenda

Time	Item	Who
09:30	Refreshments	
10:00	Welcome, housekeeping, introductions, BCP	Andrea Kelly
10:10	Outline of the workshop, catchment and field level mapping - run-off risk, soil and ecosystem services	Neil Punchard
10:30	General discussion: *Are the maps useful in assisting farmers or farm advisers to protect the water environment?* *Is soil type or condition most important for generating run-off and/or erosion?*	All
11:00	'Slow the Flow' project	Neil Punchard
11:15	General discussion: *Are buffer strips effective at protecting water resources?* *Is it realistic to expect no run-off from agricultural land?*	All
11:30	Break	
11:45	Controlled Traffic Farming ('win wins')	Chris Eglington
12:00	Mitigation measures: CTF, EFAs, reduced tillage, sub-soiling, disruption of tramlines, Countryside Stewardship	All
12:30	Future engagement – who, how, where, when, WHAT	All
13:00	Lunch and further discussion	

Previous engagement in 2015 around sustainable drainage and 'Slow the Flow' project

Presentations to: Norfolk Campaign for the Farmed Environment Steering Group on 21/04/2015; Broads IDB Board on 18/05/2015; Norfolk Rivers IDB Board on 28/05/2015.

Spring BCP Newsletter, Norfolk FWAG Summer newsletter

Advertisement of funding and workshops on CLA and Agritech East Water cluster website and NFU bulletin

http://agritechwatercluster.org/broadland-catchment-partnership-soil-water-workshops-june-2015/

http://agritechwatercluster.org/drainage-funding-for-broadland-rivers

https://www.cla.org.uk/your-area/east/events/broadland-soil-and-water-workshops

https://www.cla.org.uk/your-area/east/noticeboard/rural-sustainable-drainage-systems-funding-announced

Discussion Summary (all actions for partnership officer)

Mapping and future engagement

A farm adviser questioned the usefulness of the maps as it was assumed that farmers generally knew where their wet areas and areas prone to run-off were located, which was acknowledged. Farmers liked the maps and thought they would be beneficial in assisting smaller farmers to obtain grants to mitigate soil and water related issues. Use of the maps to support the current 'Slow the Flow' project and future water capital grants was endorsed. It was suggested that the maps were made available to Catchment Sensitive Farming and Countryside Stewardship Advisers for 1:1 in field visits with farmers.

Action - Arrange a short workshop for Natural England, Environment Agency and FWAG advisers on the maps, how they were generated, and their pros and cons by 20.12.15.

Action - Arrange autumn/winter workshop for smaller farmers and contractors potentially in association with agronomists and/or catchment sensitive farming by 20.12.15.

Action - Arrange development of a publicly accessible web map to share map layers by 31.03.16.

It was welcomed that the maps demonstrated that the higher grade agricultural land was essential for food and fuel production and had lower opportunity to deliver multiple ecosystem services. It was noted that the maps demonstrated how this land could be 'hydrologically' connected to watercourses during high rainfall events, particularly if soil was bare, saturated and/or compacted. This information was reported to have been absent from previous risk maps provided to farmers by Natural England.

The lack of soils data was not seen as problematic but lack of free data sharing from Cranfield University caused concern amongst farmers and advisers. It was reported that many farmers already had detailed information on their soils and that all soils had inherent but different risks. The condition and cover of the soil was agreed as most important in affecting run-off, erosion or leaching. It was agreed that it was not realistic to expect no run-off from agricultural land due to the conventional intensive farming methods, increasing frequency and magnitude of rainfall/'force majeure' events and type of crops grown in the catchment.

The notion that increasing the organic content of soil could help water infiltration and retention and improve yields was supported. The higher water holding capacity of lighter soils compared to heavier soils was cited by one farmer as a fact that had previously surprised him.

'Slow the Flow', Buffer Strips, and Sustainable Drainage

There was agreement about the ineffectiveness of buffer strips at protecting water resources and the need for, and multiple benefits of, rural sustainable drainage systems and constructed wetlands.

Bureaucracy around consents from the Environment Agency (leading to time delays) was reported as a definite barrier to the delivery of constructed wetlands based on the personal experience of one of the farmers. It was suggested that Bridget Marr, EA Catchment Co-ordinator could co-ordinate any consenting within the EA to ease and speed the process. It was suggested post workshop that the EA could provide a list of potential locations where rural SuDS may be useful in the catchment.

Action – contact Bridget Marr and request co-ordinating EA consents for any relevant future proposed schemes by 09.07.2015.

Action – arrange site visit with Patrick Mutimer and Rosanna Kellingray to discuss rural sustainable drainage schemes around Suffield by 30.06.2015.

The use of a tied ridger around beetle banks/in-field strips was suggested by a farmer as a particularly effective low cost measure to control run-off.

Farm Advice

It was raised and acknowledged that it was part of the Environment Agency's remit to provide 1:1 advice to farmers. It was questioned whether they were the correct organisation to deliver this advice given a perception of them as a regulator and mistrust from many farmers. It was reported that the majority of farmers had found their advice useful.

It was re-iterated that trusted advisers included agronomists, independent rural advisers, land agents and farmers wives. Catchment Sensitive Farming Officers in post for several years were reported to be better received than 'newcomers'. It was noted that it was important but often difficult to engage contractors.

It was raised that farmers were generally keen to obtain grants. Countryside Stewardship events had been arranged by Natural England targeting expiring HLS and ELS agreement holders. It was suggested post-workshop that a 'tool kit' could be developed to raise the profile of different funding options that could benefit farm businesses and the water environment (directly and indirectly).

Mitigation measures

A presentation from a farmer's personal perspective on Controlled Traffic and Precision Farming was well received. The benefits of soil sampling and variable rate application of fertiliser were agreed by farmers and advisers. It was demonstrated how the use of a drone allowed a farmer to detect deleterious effects of sub-soiling following a wet harvest. This had resulted in soil compaction that remained several years after the event. There was interest from other farmers in obtaining a drone.

Action – forward information on remote sensing grants to farmers by 30.06.15.

The role of tramlines in conventional farming was discussed and it was agreed that they could be responsible for a high proportion of run-off and pollution from agricultural fields. Careful management and disruption of tramlines was viewed as beneficial to the environment and farmers but time constraints meant that this discussion was limited.

Action – continue to promote tramline disruption during future engagement – ongoing.

Workshop participants 23rd June 2015