



# ALL PARTY PARLIAMENTARY GAME AND WILDLIFE CONSERVATION GROUP

## **Meeting Minutes**

## "The Water Friendly Farming Project Interim Results"

### Tuesday 8<sup>th</sup> November 2016

2.00pm – 3.30pm, Macmillan Suite, Portcullis House, Westminster, London.

#### Attended:

	Name	Representing		Name	Representing
1	Angela Smith	MP	21	Jack Herriot	E.A.
2	Lady Miller of Chilthorne Domer	HoL	22	Janina Gray	S & T A
3	Lady Young of Old Scone	HoL	23	Katherine Hawkins	WT
4	Chris Stoate	GWCT	24	Lauren Smewing	JGA Winner
5	Jeremy Biggs	FHT	25	Marion Haffenden	JGA Winner
6	Colin Brown	Uni. of York	26	Graham Leeks	CEH
7	Sofi Lloyd	GWCT	27	Moragh Sterling	SERT
8	Holly Howe	GWCT	28	Murray Hart	DEFRA
9	Alastair Leake	GWCT	29	Nicola Owen	Minerals Prod. Ass.
10	Rupert Kelton	HIWWT	30	Peter Sutton	Syngenta
11	Anne-Marie Quibell	E.A.	31	Phillipa Mansfield	N.E.
12	Bronwen Williams	CEH	32	Rachel Dils	E.A.
13	Belinda Bailey	Syngenta	33	Richard Gunther	JGA Winner
14	Deb Leach	Thames 21	34	Richard Handley	E.A.
15	Nicola Dunn	NFU	35	Simon Bonney	E.A.
16	Ewen Morris	Thames Water	36	Hannah Robson	WWT
17	Chris Smewing	JGA Winner	37	Andrew Gilruth	GWCT
18	Glen Cooper	N.E.	38	Catherine Patel	E.A.
19	Helen Gazeley	Blogger	39	Paul Knight	S&TC
20	James Champkin	Angling Trust	40	Simon Wightman	RSPB
21	Henrietta Appleton	GWCT	41	Lord Selborne	HoL
			42	Lord Cameron of Dillington	HoL





#### Running order:

Time	Agenda Point & Details
2.00 – 2.05	Introduction by Angela Smith
2.05 – 2.15	<ul> <li>Presentation by Chris Stoate, Head of Research, The Allerton Project</li> <li>Mitigation measures include grass buffers and interception ponds. Streamside fencing has been erected where necessary. Woody debris dams and permeable dams have been installed. New ponds created and some existing ponds improved.</li> <li>Adding new carefully sited ponds increases landscape scale biodiversity.</li> <li>On clay soils small particulate matter can still move through the sediment ponds.</li> <li>Soil data being collected, shared and discussed with farmers, and means of reducing pesticide movement to water explored</li> <li>Adding standing water bodies such as settlement ponds not only helps to improve water bodies but they create good habitats in themselves to begin with</li> <li>Excellent working relationships with farmers created. A Dale direct drill has been made available to the farmers in the catchments to try through the Welland Valley Partnership</li> <li>Large farming audience reached through the Allerton Project demonstration</li> </ul>
2.15 - 2.25	<ul> <li>Presentation by Colin Brown, Professor of Environmental Science, University of York <ul> <li>In-stream permeable dams can reduce peak flow.</li> <li>In-line temporary water storage behind a series of permeable dams along a tributary stream is predicted to reduce peak flow by 8 to 27% with reductions at the bottom end of this range for the largest events.</li> <li>Headwater catchment management funding needs to be reviewed and secured</li> <li>Sediment catchment practices, including more, wider, buffers and reduced tillage, can reduce sediment loss from between 29% and up to 61% when comparing the test catchments to a situation with only 2-m statutory buffers.</li> <li>Metaldehyde is challenging for water companies as they cannot remove it consistently with current treatment technologies. Ferric phosphate is a good alternative, and split applications, as opposed to one large dose, can reduce both peak concentration and average load of metaldehyde in water.</li> <li>No one measure solves all problems but measures complement each other when used together.</li> </ul> </li> </ul>
2.25 - 2.35	<ul> <li>Presentation by Jeremy Biggs, Director of the Freshwater Habitats Trust</li> <li>While results show that there has been no overall improvement in nutrient pollution levels, the weather conditions since mitigation installment may explain this.</li> <li>Biodiversity is responding well to mitigations and diversity has increased by about 50% in the test catchment. Aquatic plants are a good indicator of this, and the creation and improved management of small water bodies has been the primary contributor to this trend, particularly of less common aquatic plants</li> <li>Biodiversity can be improved very quickly through the creation of new ponds, and now we must see how persistent this diversity increase will be</li> <li>Measures which have driven this positive impact are cheap and within the capabilities of most farmers</li> </ul>





	<ul> <li>The work is helping to put a new perspective on tackling pollution in that we should create more clean water and associated habitats rather than just trying to clean up dirty water</li> <li>For biodiversity improvements, it is necessary to tackle all water bodies, from small ponds to rivers, not just focus on rivers.</li> <li>The Water Friendly Farming work also suggests we should do more of what works first, and more often, and be more willing to reject approaches which show little evidence of benefit at the catchment scale</li> <li>Questions from the audience Chaired by Angela Smith MP</li> </ul>				
	O: Moragh Sterling				
	Where are permeable dams best installed and how much do they cost				
	A: Colin Brown				
	• Wherever it is ok for water to back up a little behind them, and they are cheap to install, supposedly using resources already available to the farmer				
	Q: Rupert Kelton				
	<ul> <li>What are the costs, design and size of the interception ponds?</li> </ul>				
	A: Chris Stoate				
	<ul> <li>It depends upon the farming system and topography</li> </ul>				
	Q: Angela Smith				
	<ul> <li>Are farmers receiving any compensation for building these structures or retaining the water on their land?</li> </ul>				
	A: Chris Stoate				
	• The aim is that the measures do not normally impinge upon the production area and only				
2.35 – 2.55	for a short time, but there are sites where productive land could temporarily be flooded without impinging on the farming system. Capital costs are covered by the project. <b>This sort of activity needs to be funded.</b>				
	A: unknown				
	We should not call it compensation. It should be called payment				
	Q: Murray Hart				
	• Can we have a feel for lifespan of implemented measures and maintenance requirements?				
	A: Chris Stoate				
	<ul> <li>Earth dams are robust and long-lived. Maintenance cost and timings will depend upon the material which builds up and the land type. Permeable dams are a new measure so we are still finding out.</li> </ul>				
	A: Colin Brown				
	Part of the project is to find out these things				
	Q: Graham Leeks				
	<ul> <li>Also wanted to know expected life of measures and if the chemical make-up of the sediment load is being checked</li> </ul>				
	A: Colin Brown				
	• These measures are effectively moving the need for dredging upstream. The ponds in the				
	experiments have needed emptying approx. every 2 years. Costs are still being finalized.				





#### A: Chris Stoate

• The previous MOPS project looked at the chemical compositions.

#### A: Jeremy Biggs

• We are checking to see if these things work first before calculating costs and longevity

#### **Q: Lady Young of Old Scone**

• Have you tried trees?

#### A: Chris Stoate

• There is already quite a number of treed areas as the catchments are part of the Medieval royal hunting forest of Leighfield and farmers generally feel like they have already done all they can with trees and have sufficient, but tree planting is always on the agenda.

#### Q: Paul Knight

• Are you concerned that there is no improvement in nutrient loads? Is there a pollution legacy or other reason for this?

#### A: Jeremy Biggs

• Yes, sewage works within the catchments are the main reason for the persistence of high phosphorus levels. Nitrogen levels are similar to those seen across the farmed environment.

#### Q: Angela Smith

• Have farmyard mitigations been installed?

#### A: Chris Stoate

• Yes, where necessary, but there aren't many within the catchments, focus has been on farmland

#### A: Jeremy Biggs

• A reedbed sewage works serving a small rural community has also been refurbished.

#### **Q: Sue Miller**

• The effect small waters are having is great. Is there any modelling or horizon scanning taking place for other mitigations such as biological control of slugs?

#### A: Chris Stoate

• We are focusing on restructuring the cropped landscape to tackle the issues and introducing different crops into the rotation to alter the use for pesticides

#### A: Jeremy Biggs

• We are trying to make the water clean in the first place

#### **Q: Andrew Gilruth**

• Are you encouraging payments to be made for the hard mitigations farmers put in place i.e. flooding their land?

#### A: Colin Brown

• An example of this would be Pickering which has used both soft and hard measures and yes more areas for flooding in this way are needed

#### A: Jeremy Biggs

• About 150,000 cubic meters of flood water can be held back in the hard measures at Pickering. The reduction in the flood peak is thought to be due equally to the hard and soft mitigations.





Q: Lord Selborne					
<ul> <li>How are you trying to improve poor soil organic matter levels?</li> </ul>					
A: Chris Stoate					
<ul> <li>Using non-inversion tillage and improving soil biodiversity maintains organic matter residue) on soil surface. Soil measurements are being gathered to monitor this. A pro running alongside this (the Defra SIP project) is also investigating cover crops.</li> </ul>	(crop oject				
A: Rachel Dills					
<ul> <li>What are the conditions of the drains on the land? How are you convincing farmers the keep water on their land?</li> </ul>	to				
A: Chris Stoate					
<ul> <li>Drains vary across the lands. Neglected field drains can cause waterlogging, surface is and poor crop establishment. What is needed is good drains and good soil managem</li> </ul>	run-off ient.				
A: Colin Brown					
Clay soils are very challenging: subsoiling and use of mole drains can work					
A: Lord Cameron of Dillington					
<ul> <li>What should be done with the sediment cleaned from the dams. If it is put back on t land will it not just wash straight back into the waterways?</li> </ul>	he				
A: Chris Stoate	A: Chris Stoate				
<ul> <li>The project has spread sediment on fields adjacent to the dams after harvest which worked fine. The sediment is likely to have washed to the dam from further upstrear off the next-door land.</li> </ul>	has m, not				
Conclusion – Angela Smith					
• To tackle these issues, partnership is needed on a landscape scale.					