



**Gloucestershire Farming and Wildlife  
Advisory Group and Partners**

**Environmental Land Management  
Scheme Test and Trial**

**Led by Jenny Phelps and Dan Geerah  
Farmer Guardians and integrated local  
delivery ELMS Trial**



# ELM Trial

What are the aims of the ELMS trial in Glos:

1. To further develop an effective Natural Capital recording tool (The Land App) and Survey methodology, and condition score the public benefit of the environmental measures on farmland.
2. To demonstrate the effectiveness and value for money of a local adviser (Integrated Local Delivery) that can bring together farmers, communities and stakeholders to offer multiple opportunities (funding/resource) to deliver public benefits at a local level.

# Farmer-led ELMS trial in the Upper Thames

The trial is broken down into two phases over 18 months. Farmers who have volunteered for this trial will be geographically selected for Phase 1 or Phase 1 Control, and Phase 2

Phase 1 (6 months, 2019/2020)

20 Farmer, 5 communities and 10 partners

As a control 30 farmers will also take part who are not supported by an adviser (until Phase 2)

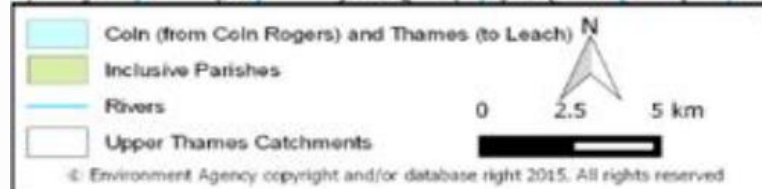
# Phase 1 Partners

- We welcome working with **all** partners and other tests and trials.
- We aim to integrate our work with the Wildlife Trust Trial, the Sustainable Food Trust Trial and the Cotswolds AONB tests. We are also sharing our work with other trials nationally. ( South Downs, Foundation for Common Land, Exmoor)
- All partners are welcome to share and trial with us – **but we must record what we do**
- **This is not about what we achieve as much as how we achieved it. Defra needs to know...**

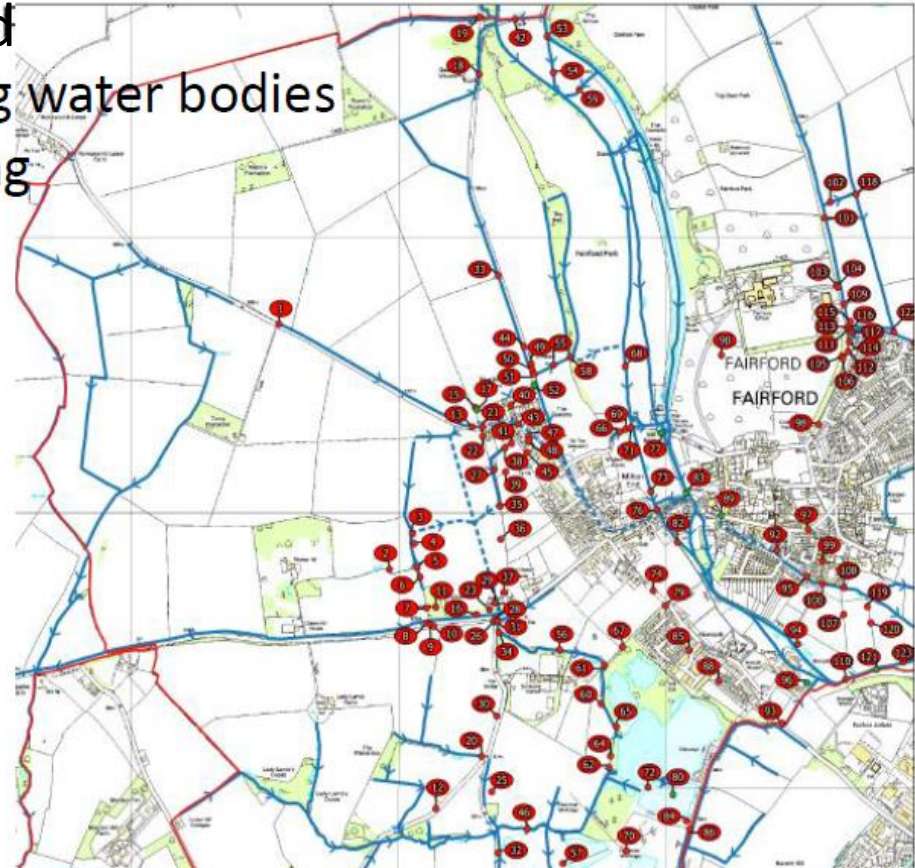
# Project templates - Farmers and Groups of parishes working along water bodies linked to Neighbourhood Planning



<http://www.fwagsw.org.uk/projects/wild-project/>



Data sets for action by local community catchment partnership delivering multiple benefits and enabling Sustainable Growth



# Environmental delivery framework – tool kit (integrated local delivery) now international case study – developed 2004 - researched and evaluated since 2011



Public Ecosystem Goods and Services from land  
management – Unlocking the Synergies

<http://pegasus.ieep.eu/resources/toolkit>



Stimulating long-lasting improvements in the delivery of social, economic and

# Natural Capital Mapping

- Working with The Land App and Ordnance Survey linked to Defra.
- Landowners have direct access to maps from the HM Registry.

Stream GPS to ArcGIS (e.g. habitats, species, land use, infrastructure)

- Pre-load and ground-truth historic data
  - Environmental Records
  - Enables data for collaboration
  - Helps landowners/ communities and Partners play their part



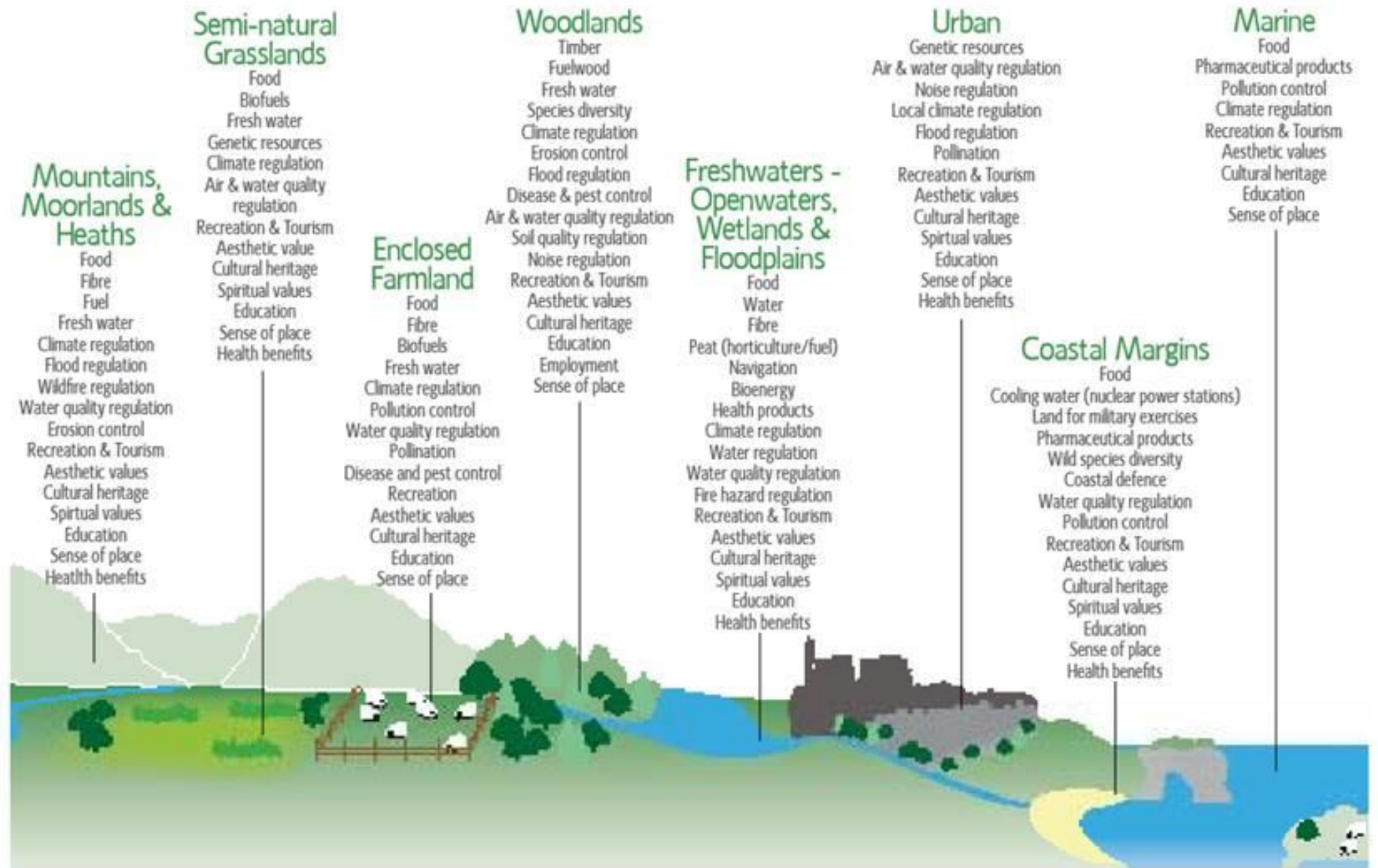


Figure 1: The eight Broad Habitats assessed in the UK NEA and examples of the services derived from each#.



# UK Habitat Classification

“The UK Habitat Classification is a new, free-to-use, unified and comprehensive approach to classifying habitats, designed to provide a simple and robust approach to survey and monitoring for the 21<sup>st</sup> century”.

- Merges current mapping systems:
  - **FEP + Phase 1 + EUNIS + NVC = UKHab**
- Hierarchical – can go into as little or much detail as necessary.

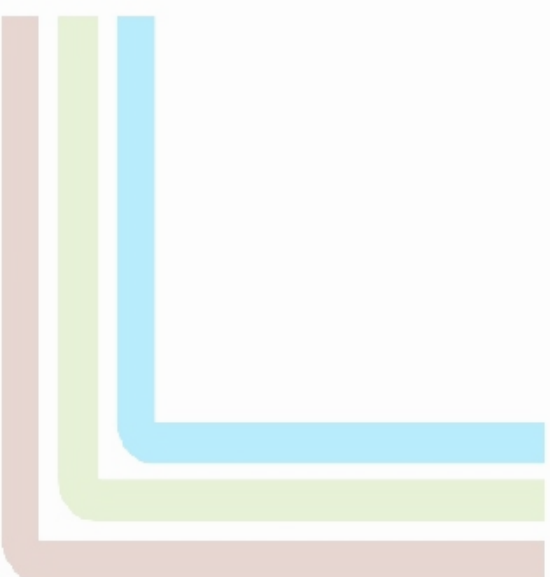


**eCountability**  
Managing your biodiversity  
risks and opportunities

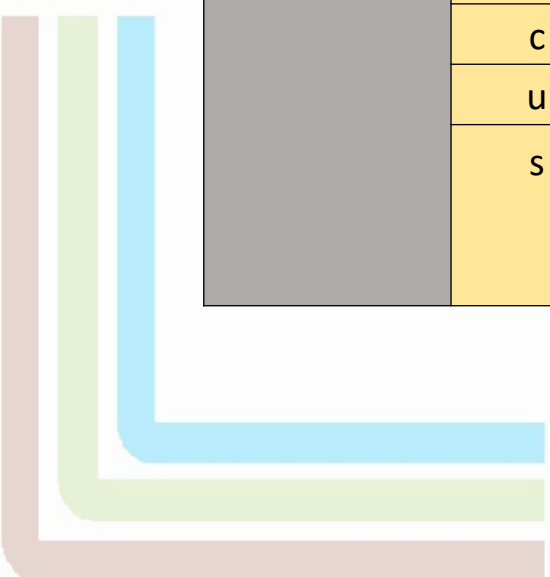


# UK Habitat Classification

	g - grassland
	w - woodland
	h - heathland and shrub
	f - wetland
	c - cropland
	u - urban
	s - sparsely vegetated land
	r - rivers and lakes
	t - marine inlets and transitional waters



Level 1	Level 2 code	Level 2 Label	Level 3 code	Level 3 Label
Terrestrial	g	Grassland	g1	Acid grassland
			g2	Calcareous grassland
			g3	Neutral grassland
			g4	Modified grassland
	w	Woodland and forest	w1	Broadleaved mixed and yew woodland
			w2	Coniferous woodland
	h	Heathland and shrub	h1	Dwarf shrub heath
			h2	Hedgerows
			h3	Dense scrub
	f	Wetland	f1	Bog
			f2	Fen marsh and swamp
	c	Cropland	c1	Arable and horticulture
	u	Urban	u1	Built-up areas and gardens
	s	Sparsely vegetated land	s1	Inland rock
			s2	Supralittoral Rock
s3			Supralittoral Sediment	



UKHab Poly	<b>Arable and horticulture</b>	<b>Cropland</b>	<b>c1</b>
UKHab Poly	<b>Arable field margins</b>	<b>Cropland</b>	<b>c1a</b>
UKHab Poly	<b>Arable margins sown with tussocky grasses</b>	<b>Cropland</b>	<b>c1a5</b>
UKHab Poly	<b>Arable margin sown with wild flower or pollen &amp; nectar mix</b>	<b>Cropland</b>	<b>c1a6</b>
UKHab Poly	<b>Arable margins cultivated annually with annual flora</b>	<b>Cropland</b>	<b>c1a7</b>
UKHab Poly	<b>Game bird mix strips and corners</b>	<b>Cropland</b>	<b>c1a8</b>
UKHab Poly	<b>Temporary grass and clover leys</b>	<b>Cropland</b>	<b>c1b</b>
UKHab Poly	<b>Cereal crops</b>	<b>Cropland</b>	<b>c1c</b>
UKHab Poly	<b>Winter stubble</b>	<b>Cropland</b>	<b>c1c5</b>
UKHab Poly	<b>Game bird mix fields</b>	<b>Cropland</b>	<b>c1c6</b>
UKHab Poly	<b>Other cereal crops</b>	<b>Cropland</b>	<b>c1c7</b>
UKHab Poly	<b>Non-cereal crops</b>	<b>Cropland</b>	<b>c1d</b>
UKHab Poly	<b>Miscanthus</b>	<b>Cropland</b>	<b>c1d5</b>
UKHab Poly	<b>Short-rotation coppice</b>	<b>Cropland</b>	<b>c1d6</b>
UKHab Poly	<b>Vineyards</b>	<b>Cropland</b>	<b>c1d7</b>
UKHab Poly	<b>Other non-cereal crops</b>	<b>Cropland</b>	<b>c1d8</b>
UKHab Poly	<b>Intensive orchards</b>	<b>Cropland</b>	<b>c1e</b>
UKHab Poly	<b>Horticulture</b>	<b>Cropland</b>	<b>c1f</b>

# Secondary codes – provide further context

Habitat Mosaic	
10	Scattered scrub
11	Scattered trees
12	Scattered bracken

Habitat Complex	
19	Ponds (Priority Habitat)
20	Wood-pasture and parkland
21	Traditional orchards
22	Juniper on heaths or calcareous grasslands (H5130)



Origin	
33	Ancient woodland site
34	Arable reversion grassland
35	Biodiversity offset
36	Plantation
37	Semi-natural woodland
38	Secondary woodland
39	Freshwater - man-made
40	Freshwater - heavily modified

Land Use	
86	Accessible natural greenspace
88	Barn
89	Car Park
90	Commercial building
91	Development site
92	Educational building
93	Fish farm
94	Green lane
95	Fish farm
96	Educational building

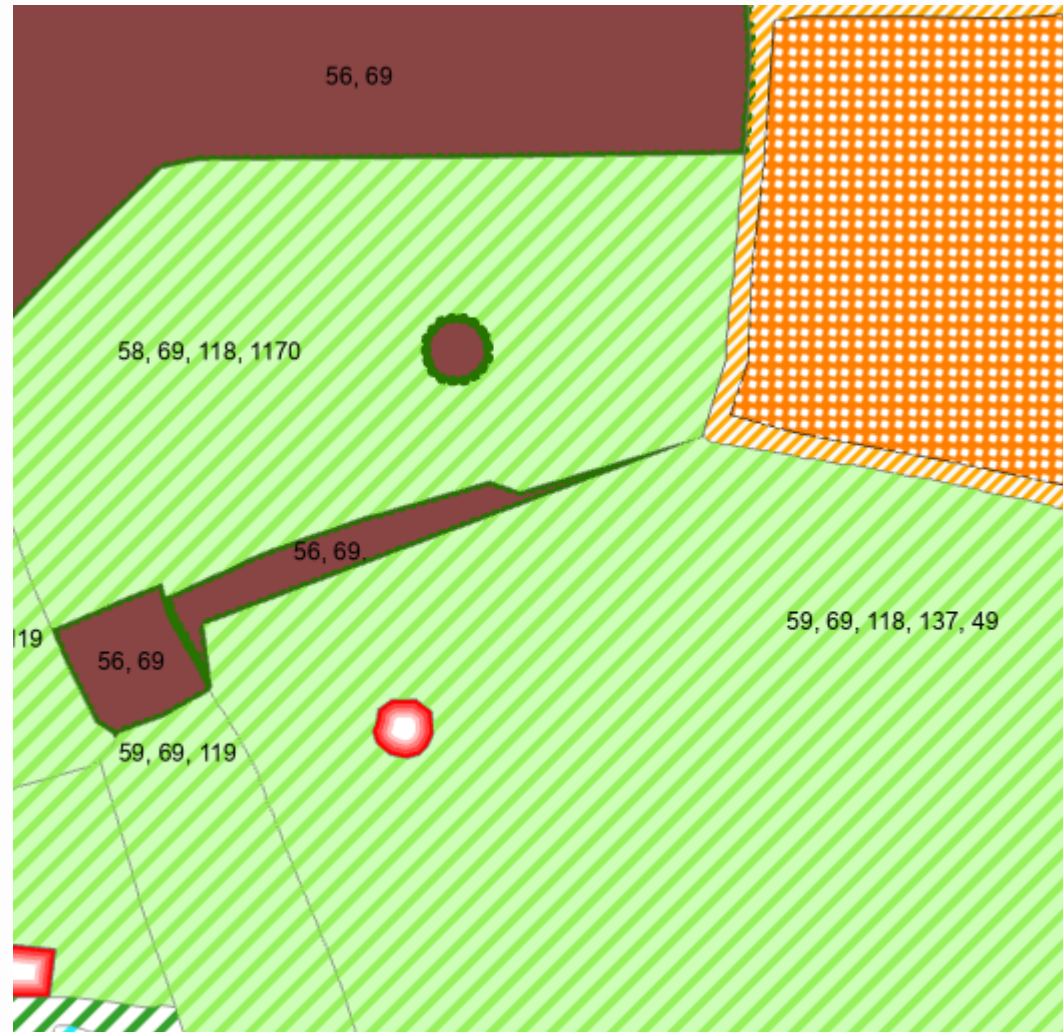
Management	
51	Coppice
52	Coppice with standards
53	Felled
54	Ground prepared for planting
56	Young trees - planted
57	Young trees - self-set
58	Grazed
59	Cattle - mixed
60	Sheep
61	Young trees - self-set

# Complete:

Habitat map is produced and colour coded.  
Secondary Codes Added.

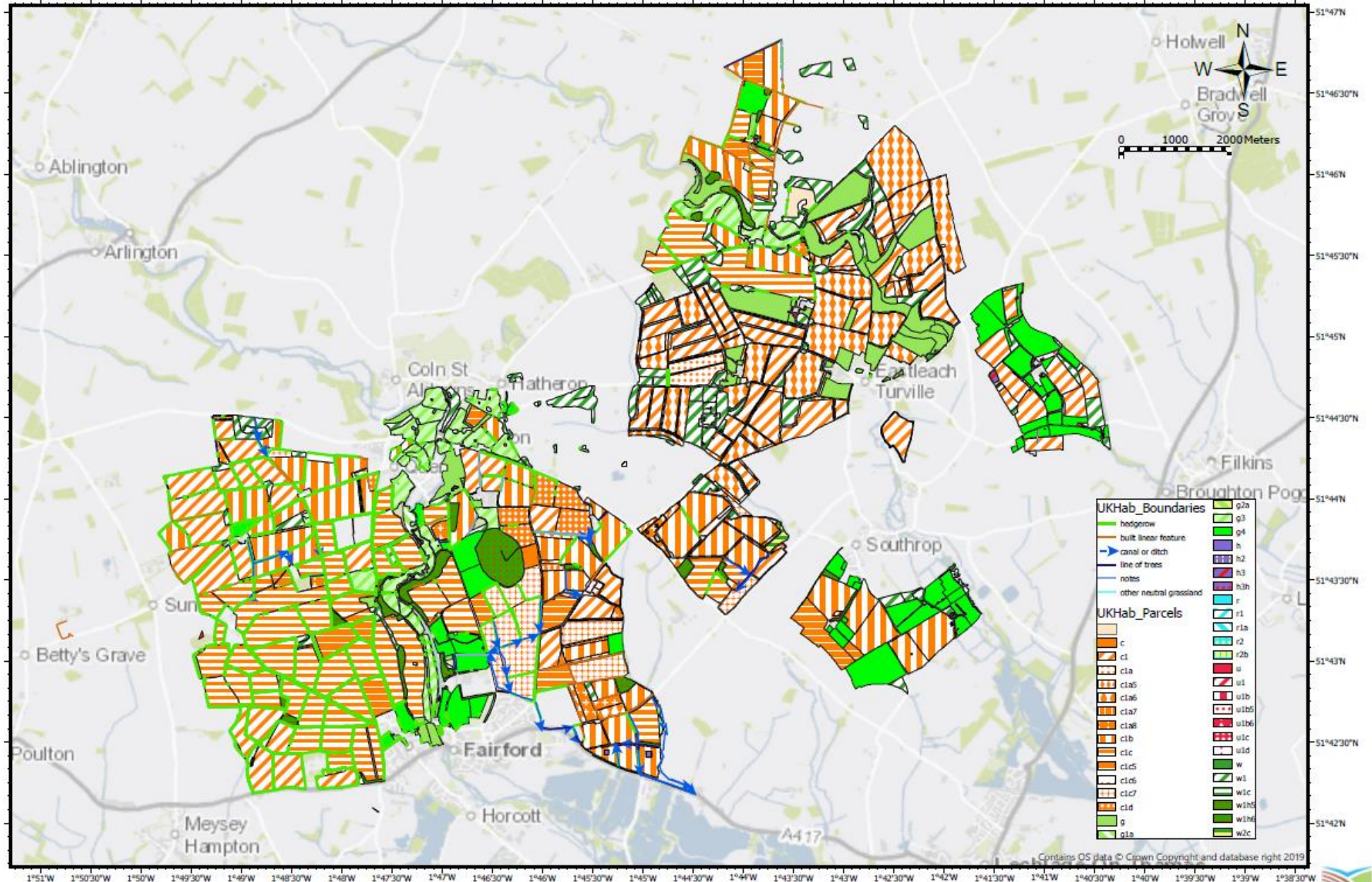
-  g4 – modified grassland
-  w1h5 – other broadleaf woodlands (>80% cover).

- 49 – Veteran Trees
- 56 – Young Trees - planted
- 59 – Sheep grazed
- 69 – Fenced
- 118 – Mesic
- 137 – Ridge and Furrow



# UK Habitat Classification - baseline mapping for Natural Capital

Joined up UKHab including:  
land classification  
and management  
codes



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Farm Reference Number: #13 Last updated on 27 January 2020 by dan.geerah

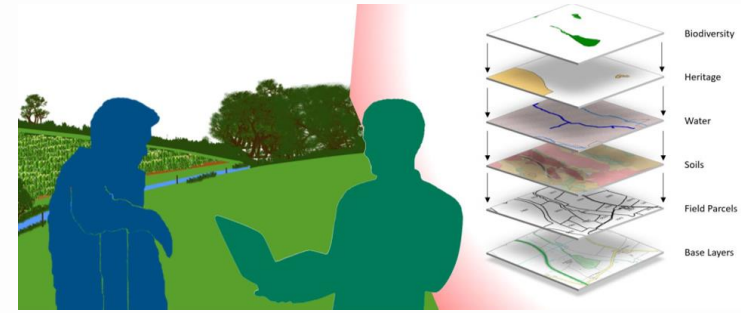






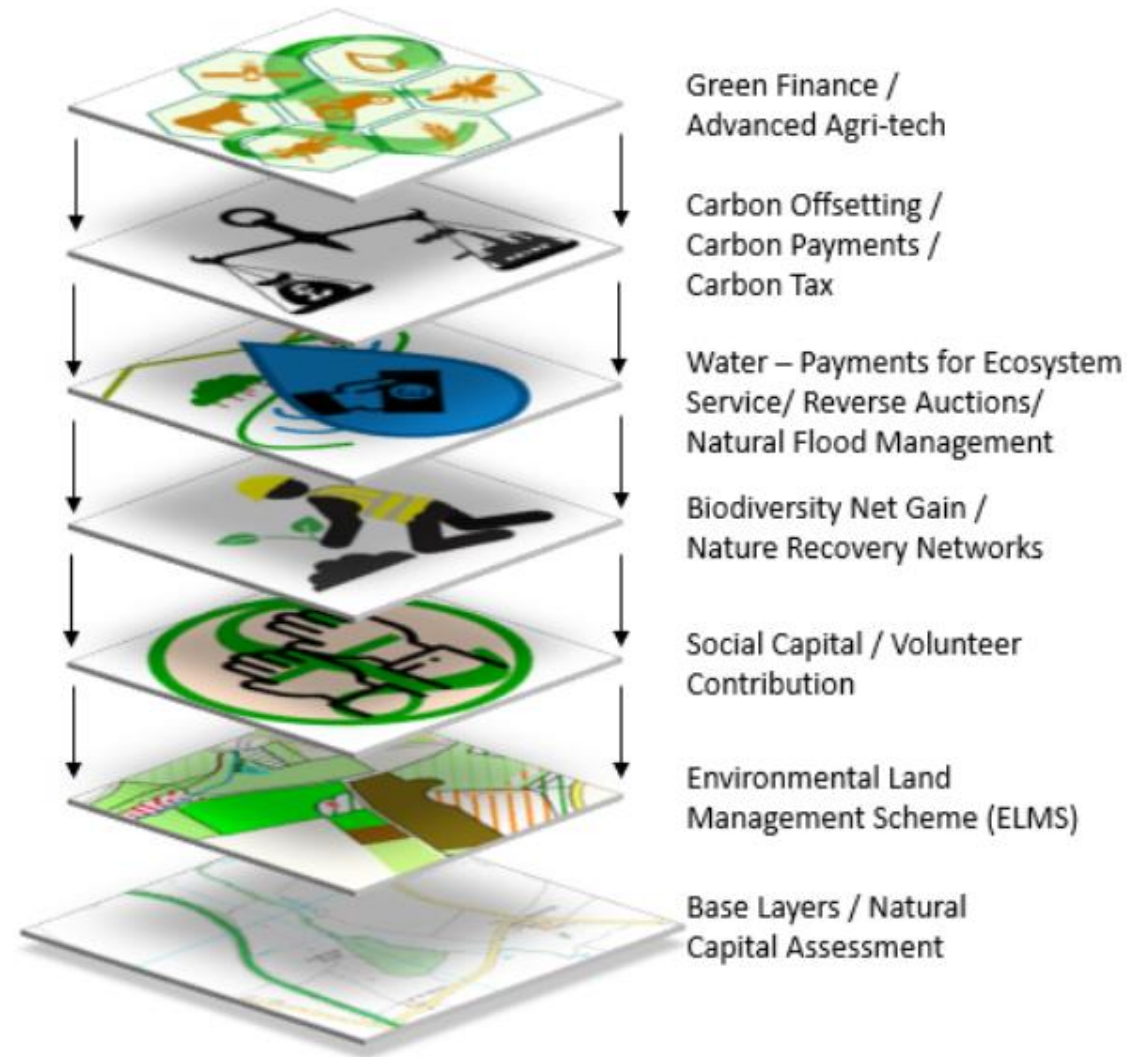


# The Advisers can help:



- Landowner signs up to The Land App – pulls in RPA data and digitises current land use from BPS and ES/CS
- Translates directly into a UK Habitat Map layer (via ArcGIS) which creates a platform for ecosystems services and natural capital
- Inspire and Enable Farmers and communities to help parishes work together along water bodies. Sharing data and mapping issues / opportunities for resilience planning and delivering climate change emergency response → linked to local plans.
- Farmers and communities verify the *Nature Recovery Networks* as a UKHab map for county → that can be used for mitigations against human pressures.
- Create land management plans that are annually reviewed and refreshed so that each field, farm and parish can benefit socially, economically and environmentally. With data analysed so that societal choices can be made that identify opportunities for restoring infrastructure, natural capital and ecosystem services connectivity.
- Lever in funding and resource from multiple sources linked to catchment partnerships and LNP stakeholders, to deliver LEP Local Industrial strategy

# Essential ELM designed to be able to co-locate with other future payments



# Questions?

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