



**FARMING & COMMUNITY ADVICE &
SUPPORT FOR OUR CLIMATE & NATURE
RECOVERY**



Session outline

- How prepared are you to facilitate and advise on climate resilience through regenerative farming in your community?
- How confident are you that we can act together in time? - % Hope
- 25 mins – Farming and Community Advice for our Climate and Nature Recovery – Jenny Phelps MBE
- 10 mins – Environmental Advisers Register and Training - Teresa Meadows BASIS
- 10 mins – Developing the skills to be a successful facilitator for social, economic and environmental action – Fiona Galbraith Ruralink
- Workshop
- 30 mins – Transferable case studies – how integrated local delivery can be a framework for locally led joined up action.

Aims

- Setting the scene – Climate Emergency
- Facilitating transformational change in a global context
- Role of Regenerative Agriculture as a route for systems change
- How do we get there – with multiple developing funding streams?
- Essential role of advice in delivering an integrated local delivery framework - how to Act Now
- Facilitating Local Solutions – who to we look to for skills/training and advice – BASIS
- Can we develop a circular economy with a transformation of the food, fibre and fuel system – multiple investment ready projects
- A transferable template for community resilience working with farmer groups/clusters



Artwork credits

Climate Change 2022: Impacts, Adaptation and Vulnerability

The Working Group II contribution to the IPCC Sixth Assessment Report assesses the impacts of climate change, looking at ecosystems, biodiversity, and human communities at global and regional levels. It also reviews vulnerabilities and the capacities and limits of the natural world and human societies to adapt to climate change.

3.5 billion People living in areas vulnerable to climate change

Climate Change Risk Assessment 3

Chapter 3 – Natural Environment and Assets

Urgency: MORE ACTION NEEDED

Soils

- Changes in land use / land mgmt. required
- Spatially targeted support schemes & advice
- More investment in large-scale monitoring data/indicators linked to actions & functions
- Recognise that soils are complex and variable
- Integrate adaptation / mitigation

<https://www.theccc.org.uk/publication/independent-assessment-of-uk-climate-risk/>

Urgency: MORE ACTION NEEDED Agriculture and Forestry

- Targeted advice & outreach on evolving risks/opportunities
- Encourage innovation/diversification
- Dissipate agric/forestry sector boundaries & develop integrated strategies, incl. agroforestry etc.

WHERE ARE WE NOW? THE FINANCIAL AND ECOLOGICAL STATE OF UK FARMING

Drawing on the well-established economic theory of externalities, we identify six major hidden costs of dominant forms of industrialised agriculture: climate change, water pollution, poor nutrition, toxic chemicals, antibiotic resistance and destruction of biodiversity.

We set out four major threats to business as usual that establishes a strong case for a rapid and large-scale transformation in farming methods:



1.
degrading
natural assets



2.
high and volatile
input costs



3.
vulnerability
to a changing
climate



4.
shifting
consumer
trends

Farming Smarter

The Case for
Agroecological
Enterprise



Environment Bill/Act

- (5) In this Part “environmental principles” means the following principles –
- (a) the principle that environmental protection should be integrated into the making of policies,
 - (b) the principle of preventative action to avert environmental damage,
 - (c) the precautionary principle, so far as relating to the environment,
 - (d) the principle that environmental damage should as a priority be rectified at source, and
 - (e) the polluter pays principle.

A complicated maze of funding streams

Levelling Up Fund; Shared Prosperity Fund; Woodland Carbon Code;
Peatland code

Farming in Protected Landscapes

Soil farm Carbon Code....

Countryside Stewardship

Carbon trading

Biodiversity Offsetting

Conservation Covenants

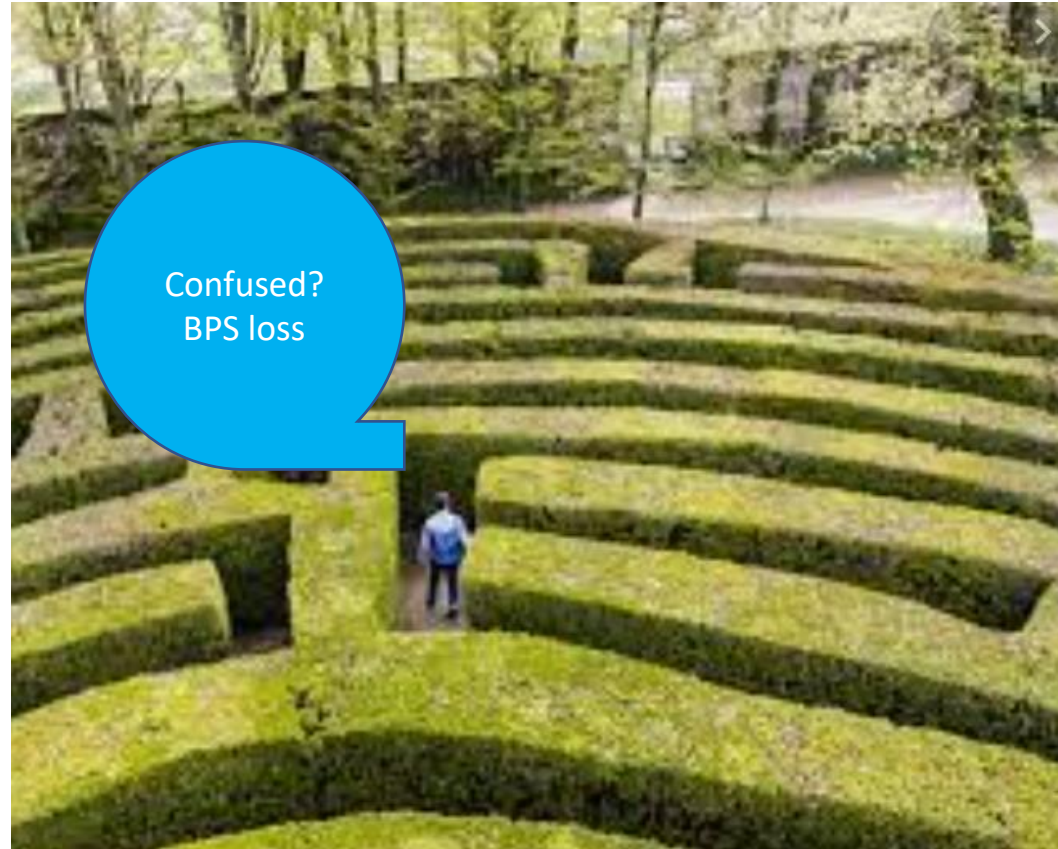
Payments for ecosystem
Services

Nature base solutions

Farm Resilience funding

Regenerative Agriculture

Diversification and Adding value; Woodland
creation Offer....and many more



Environmental Land
Management Scheme

Sustainable Farm Incentive
Pilots

Landscape Recovery Pilots

Investment Readiness
Funding

Green Recovery Fund

Water Environment
Grants.....

A Systems Approach - Integrated Local Action/Delivery
Communities supported to take climate action to work with
groups of farmers supported by a specialist adviser/facilitator

It is a **simple framework** that values local and farming knowledge and brings all strategies together at a local level to achieve **multiple international delivery opportunities with an all inclusive partnership.**

- Respects and connects to people's sense of place
- Inspires and enables them to **lead** on the protection of their own local environment
- Delivers multiple strategies with all partners in support – including food security
- Builds strong socio- economic communities



Integrated Local Delivery (ILD) framework

8 key themes to the approach:

Works at lowest appropriate administrative structure;

Clarifies statutory and non-statutory partners:

Delivers objectives at landscape scale;

Supports and values the farming community;

Facilitation to develop local/ stakeholder group;

Incorporates the Parish or Ward Council - GRCC;

Enables inclusive multi objective delivery;

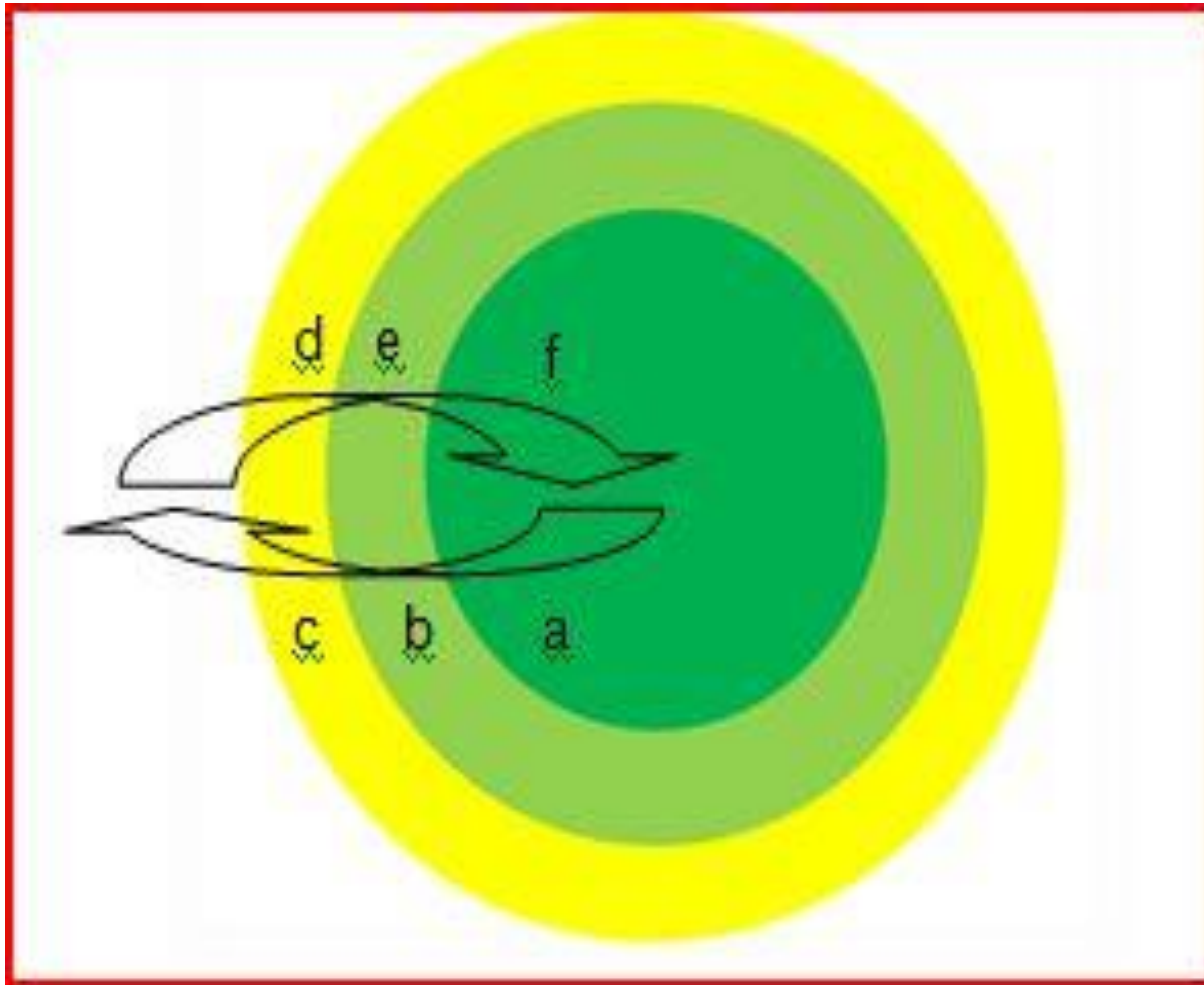
Identifies funding opportunities, resources and match funding.

Identifying projects of multiple benefits

Linked to parish/ neighbourhood planning that could be funded
from multiple sources

Administrative area – initial scoping

Everything that can be delivered

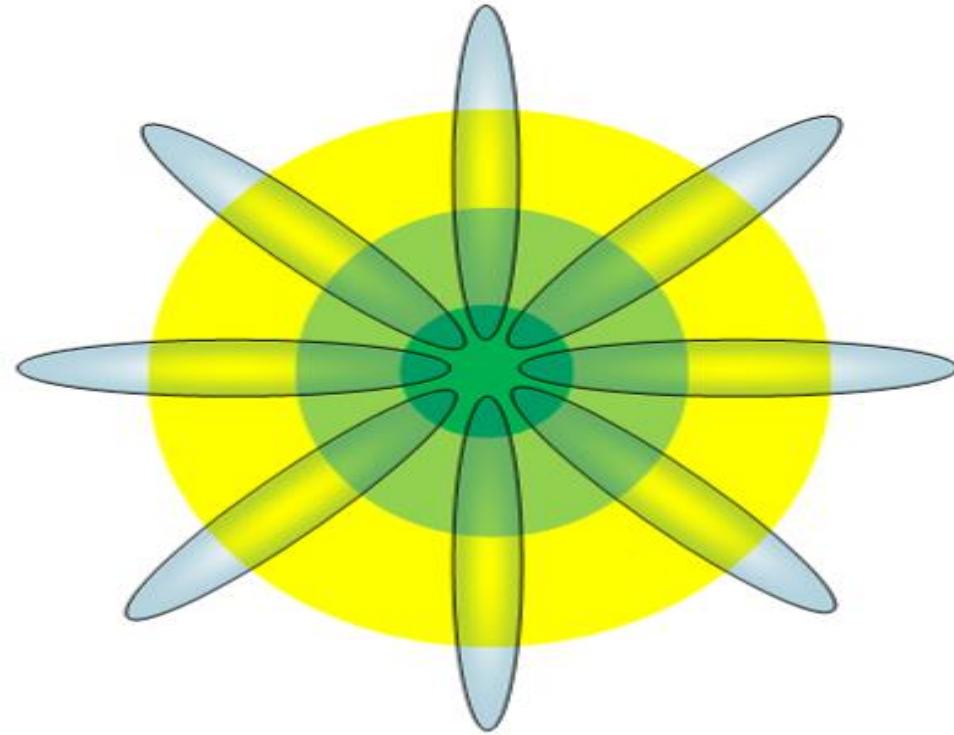


Local to
national and
back to
local.

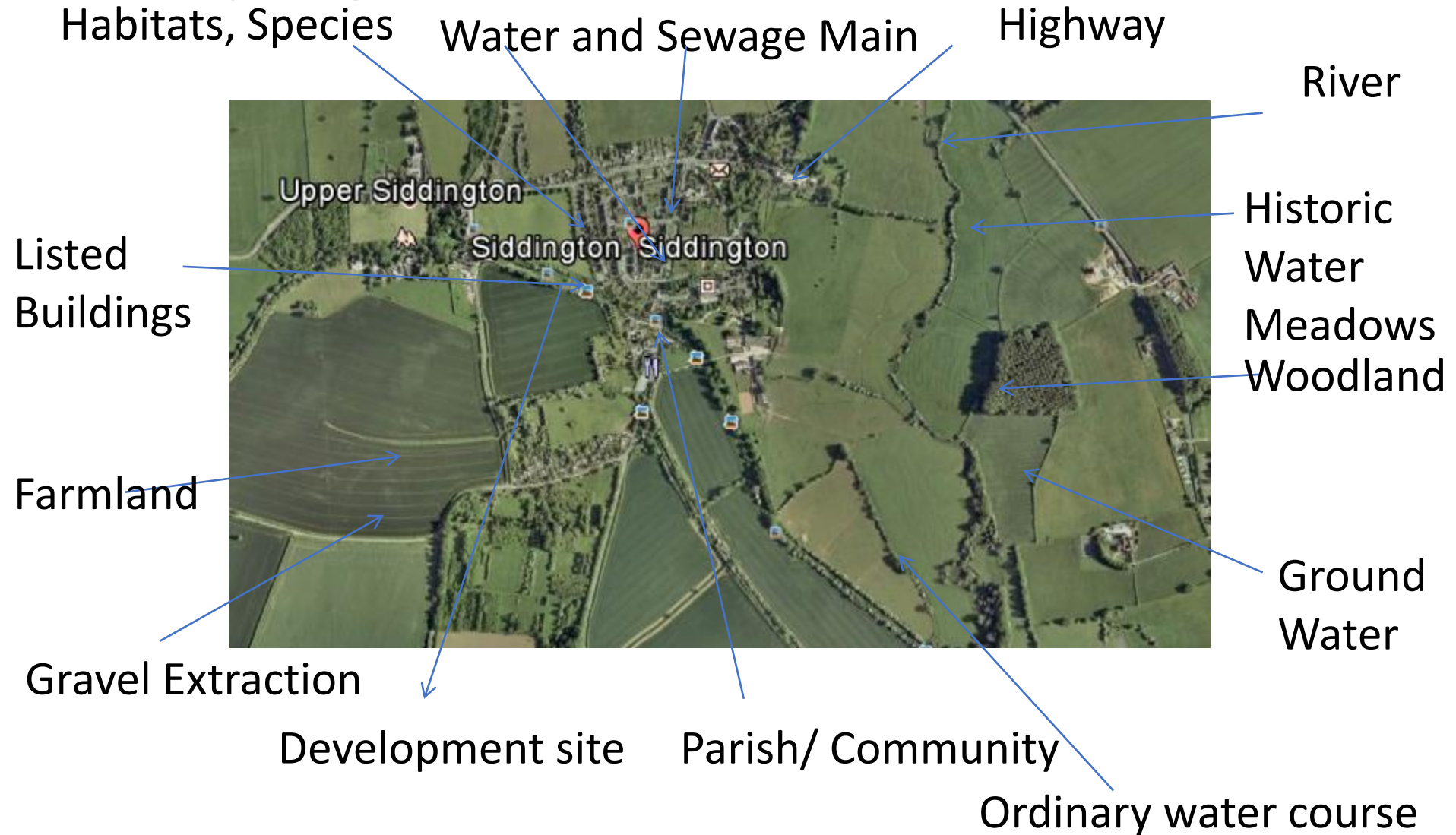
Asset scoping
identifies
locally
relevant
partners

Who can work
together
to support
local delivery

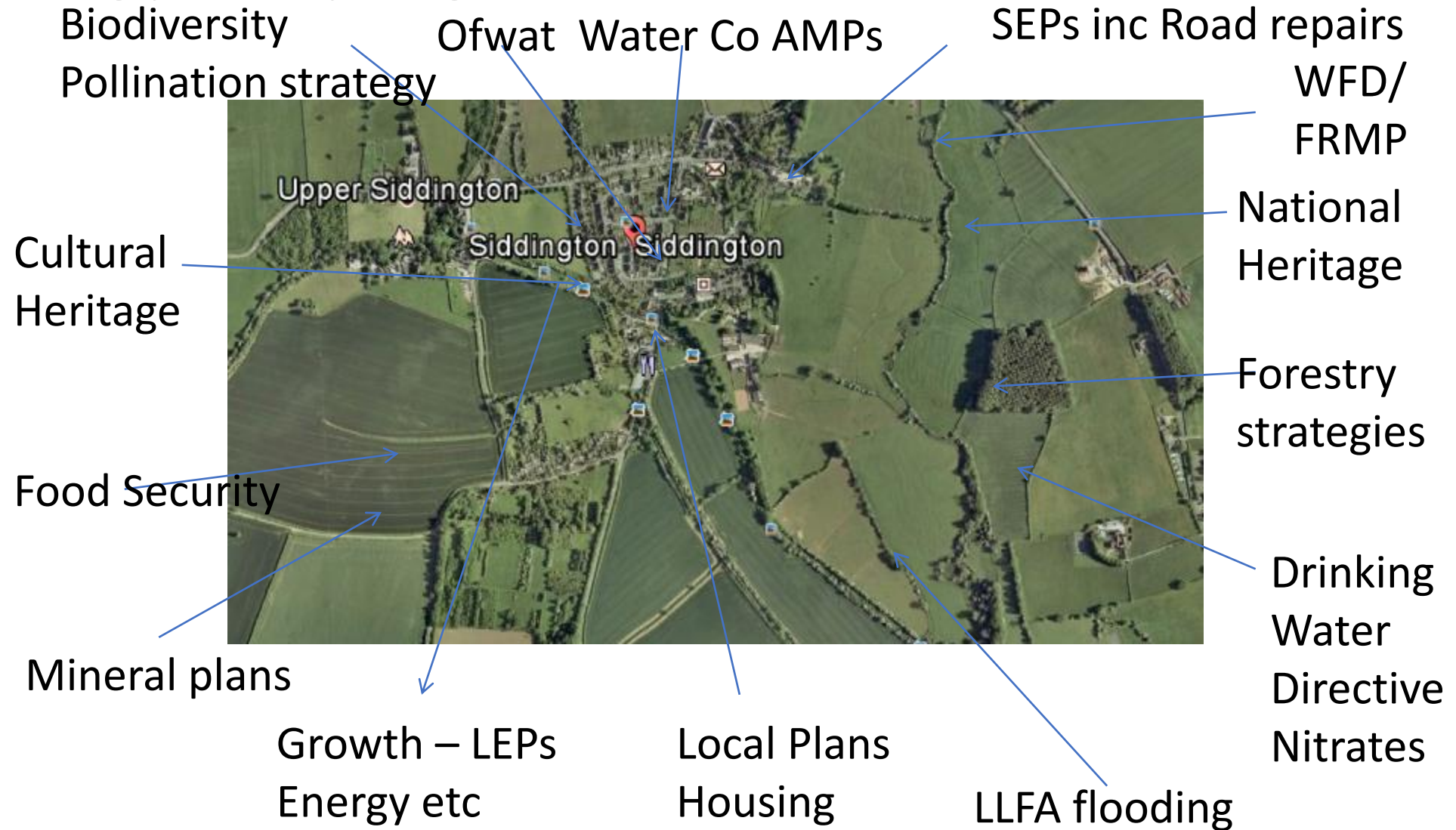
ILD Flower



Asset Scoping the Parish



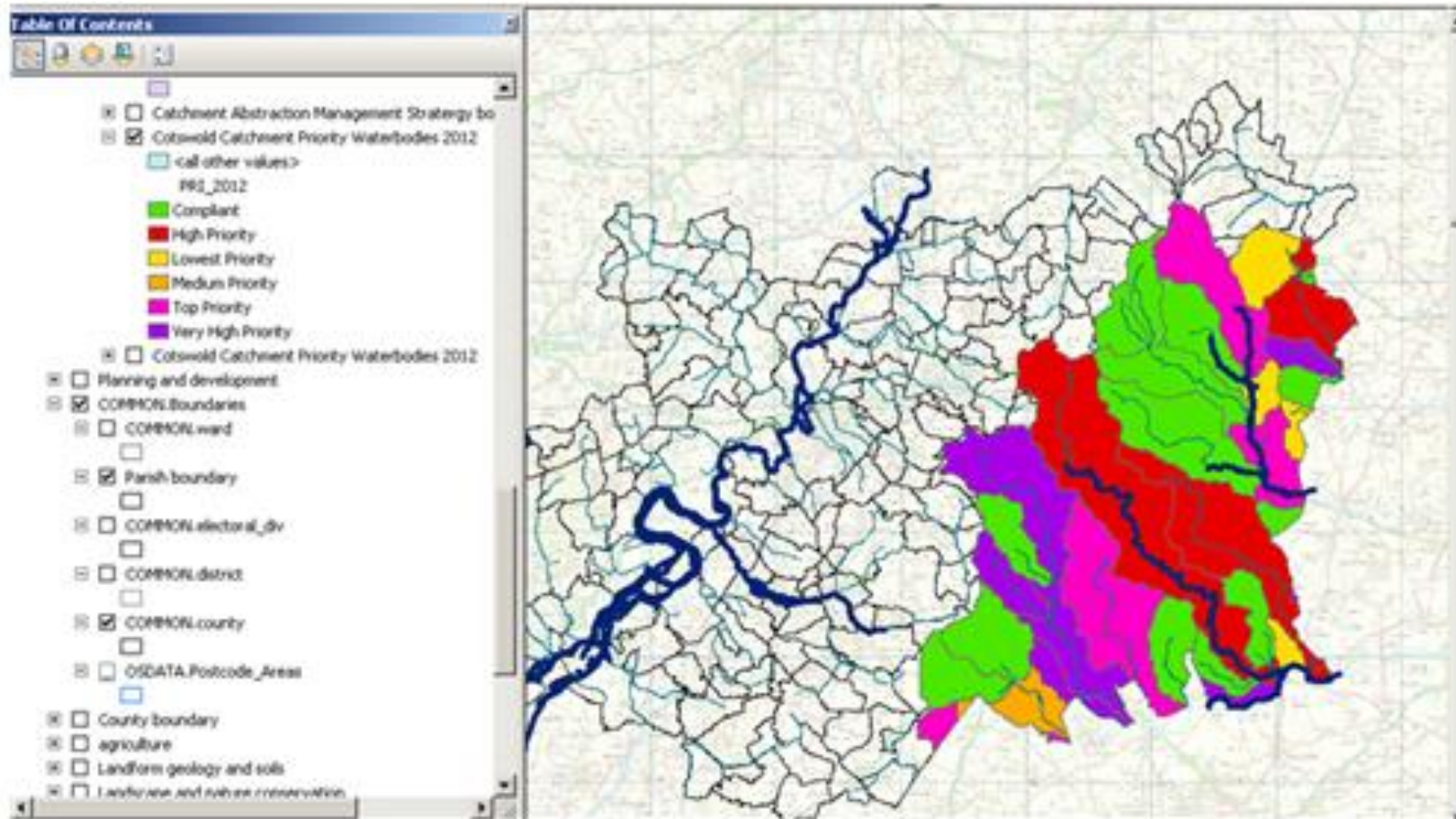
Strategy Scoping the Parish



Locally relevant contacts for the Parish

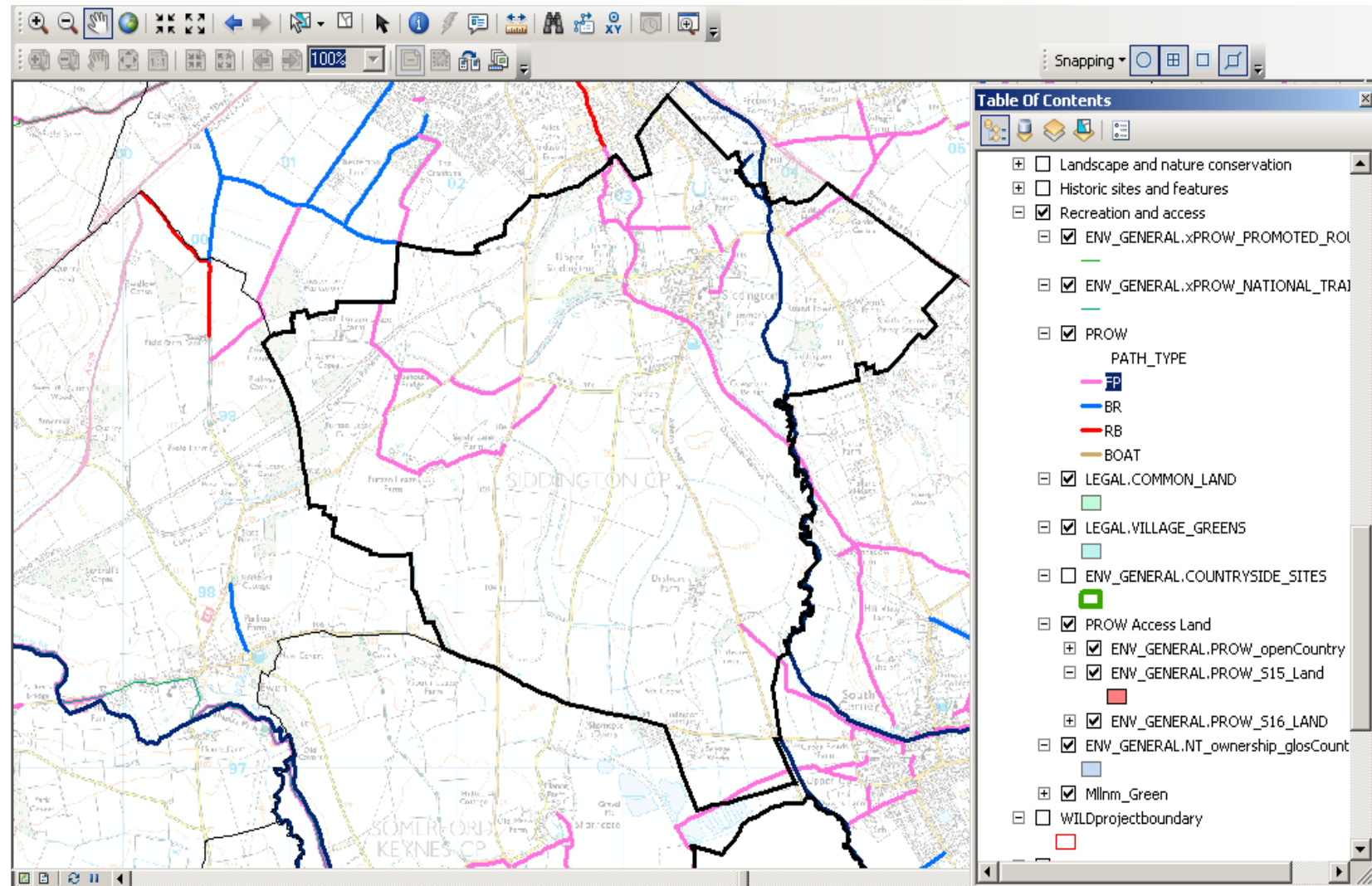


Developing Integrated approach that over layers all strategies , linking to growth, to understand all locally relevant partners and realise all opportunities All Depts.



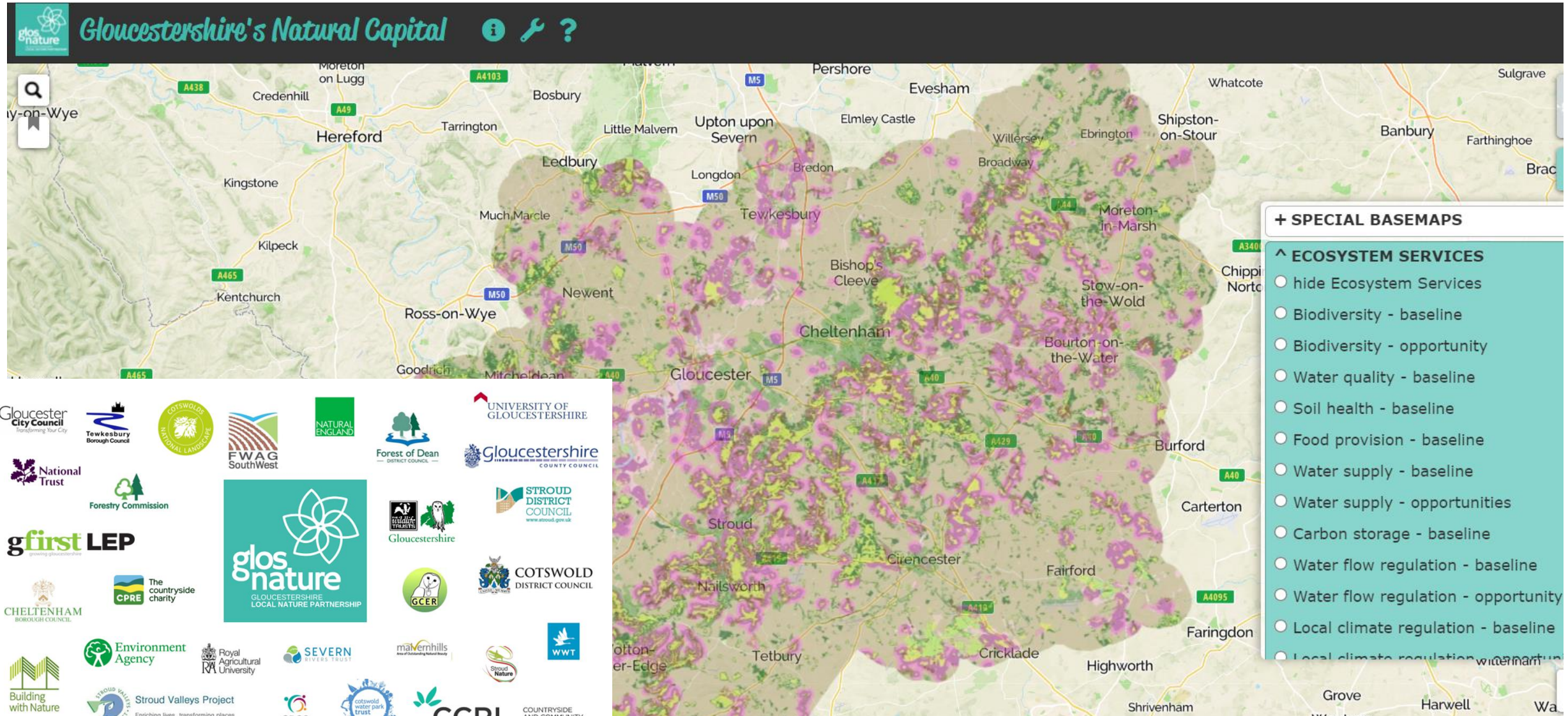
200 layers so far – locally relevant contacts
Web Portal hosted by CCRI/County Council

Identifies and integrates *all* environmental delivery opportunities

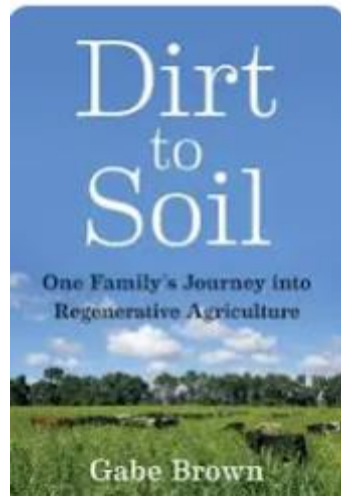


Locally relevant contacts from all organisations

Land managers helping to build a verified baseline for co-investment at a county level for blended finance and local action....



Regenerative Agriculture- what is it?



Regenerative Agriculture is a system of farming principles and practices that produces quality food, increases biodiversity, enriches soils, improves water quality, reduces flooding and enhances ecosystem services.

It aims to capture carbon in the soil and above ground biomass (plants), reversing current global trends of atmospheric accumulation and climate change.

At the same time, it offers optimum yields, resilience to climate instability, high health and vitality of farmland, livestock and helps build resilience for farming and communities.

<https://www.carboncowboys.org/>

<https://www.codeandtheory.com/things-we-make/the-terraton-initiative>

<https://www.kisstheground.com> <https://www.agricology.co.uk/>

5 Core Principles of Reg Ag:

5 Core Principles of **REGENERATIVE AGRICULTURE**



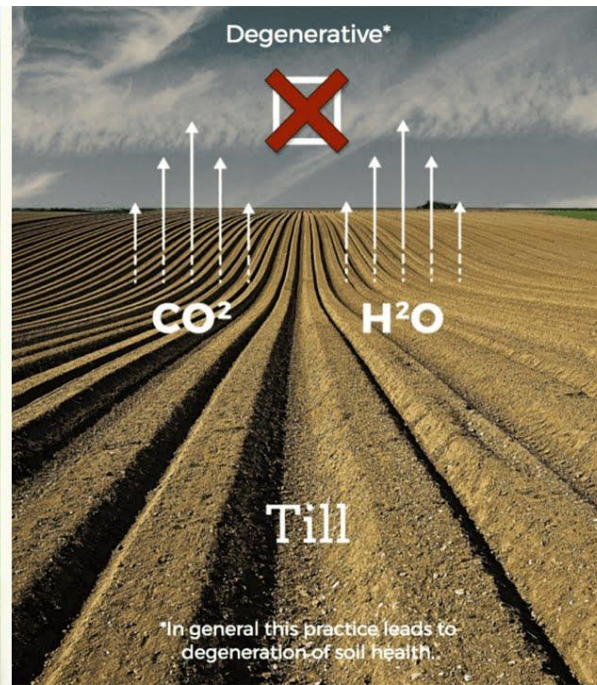
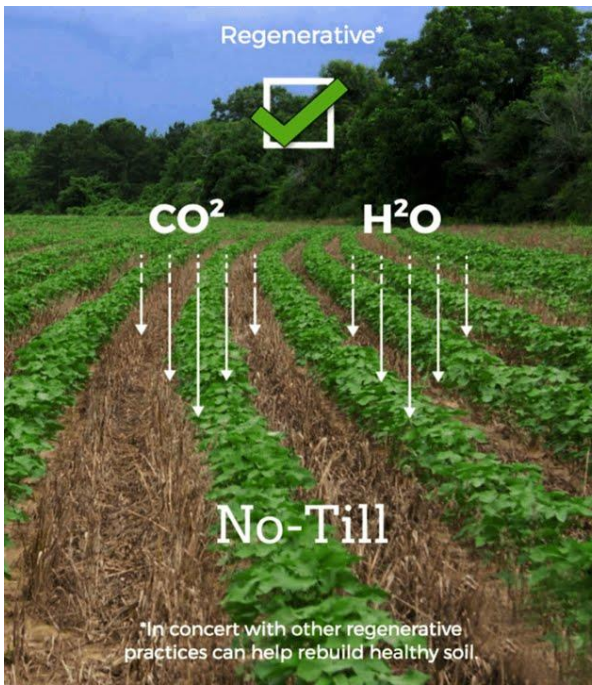
Minimising Soil disturbance

Soil structure

Aerobic

Biological recovery

Nutrient availability



Crop diversity

NATURAL DROUGHT RESISTANCE

Reliable grazing on dry soils

Drought resistance varies between species. Though plants don't usually die from drought, their yield can be halved, leaving livestock hungry. Deep-rooting plants in a herbal ley will penetrate further down into the soil to draw up moisture, providing grazing through dry months.

We can't control the weather.
On average 1 in 5 years is a drought year

FIRST HAND WILLIAM LAMIN
William Lamin was brought up on his father's farm until he married at the age of 24, when his father set him up as a butcher with a shop in Sherwood, Nottingham. But William hated butchery and after five years, with no work to his father, he took the adjoining farm to him on the Bestwood Estate.
When he found out, William's father told him he was a 'big fool' and would lose all his money. The estate had not been able to let the farm William had taken on and he soon found out why. He had thought the land was similar to the sandy side of his father's farm but it was actually much lighter sandy soil and very gravelly in places. In the spring it would blow away with the least bit of wind.
In desperation, William turned to Robert Elliott's book, *The Clifton Park Farming System*, for advice on how to farm dry land. He decided to modify Elliott's complex mixture, leaving out some species. His simplified version included cocksfoot, chicory, meadow fescue, burnet, yarrow, sheeps parsley and red and white clover. A hundred and fifty acres of this modified mix was sown every year, the ley becoming the foundation for William's successful farming system.
He retired in 1939 and after his wife died a year later, he found that he had nothing to occupy him in the evenings, and so he wrote a book, *Thirty Years on the Clifton Park Farming System*.
'It's like throwing money away to put ryegrass on dry land,' he says, explaining how its shallow roots mean it does not grow on dry land. In contrast, he likes to think how, with a big mining industry below his feet, the roots of his deep rooting leys were 'licking the moans stars below the ground'.
The conclusion of his book is that the best and cheapest food for livestock is well produced grass.

Compared to ryegrass, cocksfoot and the other forage grasses have deeper roots which make them more drought tolerant and able to continue to produce growth during periods of drought.

Ryegrass in or out?
Ryegrasses are often included in herbal leys. Given its lack of drought tolerance this gives rise to the question - why? The answer is that it recovers very quickly after a prolonged period of drought and is one of the first plants to produce growth when there would otherwise be none. This is a valuable trait that can be exploited.

COTSWOLD Grass Seeds

For advice call 01608 652552

COTSWOLD Grass Seeds

THE HERBAL LEY FARMING SYSTEM

Why it's lasted over 100 years

COTSWOLD Grass Seeds

PLANT IDENTIFICATION

Get to know the herbal ley plants throughout their growth stages

<p>Alsike Clover (<i>Viburnum sp.</i>) A medium-term legume suited to heavier soils</p>	<p>Sweet Clover (<i>Medicago lupulina</i>) A clover with deep-rooting legume</p>	<p>Meadow Fescue (<i>Festuca ovina</i>) An ubiquitous grass growing well on heavy soils with well-developed prostrate</p>	<p>Chicory (<i>Cichorium intybus</i>) A rootstock forage herb with well-developed prostrate</p>						
<p>Birdsfoot Trefoil (<i>Lotus corniculatus</i>) A herbaceous legume having 1-4 stems</p>	<p>White Clover (<i>Trifolium repens</i>) A high-protein, long-term legume</p>			<p>Ribgrass (<i>Phleum pratense</i>) A forage herb naturally high in iron & calcium</p>	<p>Perennial Ryegrass (<i>Lolium perenne</i>) A perennial grass</p>				
<p>Lucerne (<i>Medicago sativa</i>) A dry-land, deep-rooting perennial legume</p>	<p>Cocksfoot (<i>Dactylis glomerata</i>) A dry-land, deep-rooting perennial grass</p>					<p>Sheeps Parsley (<i>Petroselinum crispum</i>) A forage herb naturally high in iron & calcium</p>	<p>Timothy (<i>Phleum pratense</i>) A dry-land, deep-rooting perennial grass</p>		
<p>Red Clover (<i>Trifolium pratense</i>) A high-protein, long-term legume</p>	<p>Festulolium (<i>Festulolium ovina</i>) A perennial species combining ryegrass and fescue</p>							<p>Yarrow (<i>Aculeum millefolium</i>) A drought-tolerant, deep-rooting & perennial forage herb</p>	
<p>Sainfoin (<i>Ononis spinosa</i>) An odd root, herbaceous legume</p>	<p>Italian Ryegrass (<i>Lolium italicum</i>) A fast-growing grass producing both in year 1 & 2</p>								<p>Burnet (<i>Chenopodium album</i>) A deep-rooting & drought-resistant forage herb</p>
<p>Red Clover (<i>Trifolium pratense</i>) A high-protein, long-term legume</p>	<p>Festulolium (<i>Festulolium ovina</i>) A perennial species combining ryegrass and fescue</p>								
<p>Sainfoin (<i>Ononis spinosa</i>) An odd root, herbaceous legume</p>	<p>Italian Ryegrass (<i>Lolium italicum</i>) A fast-growing grass producing both in year 1 & 2</p>								

<https://www.agricology.co.uk/sites/default/files/Herbal%20Leys%20Guide.pdf>

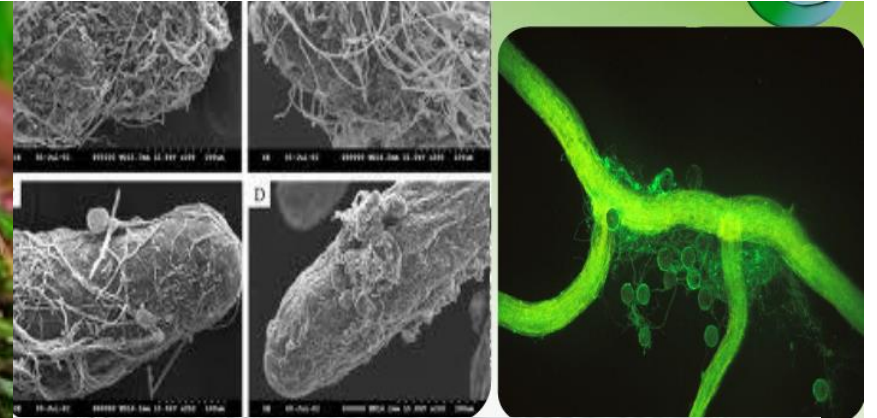
Keeping soil covered



Maintaining living roots



Mycorrhizae form a natural root barrier against pathogens and produce Glomalin (green fluorescing)

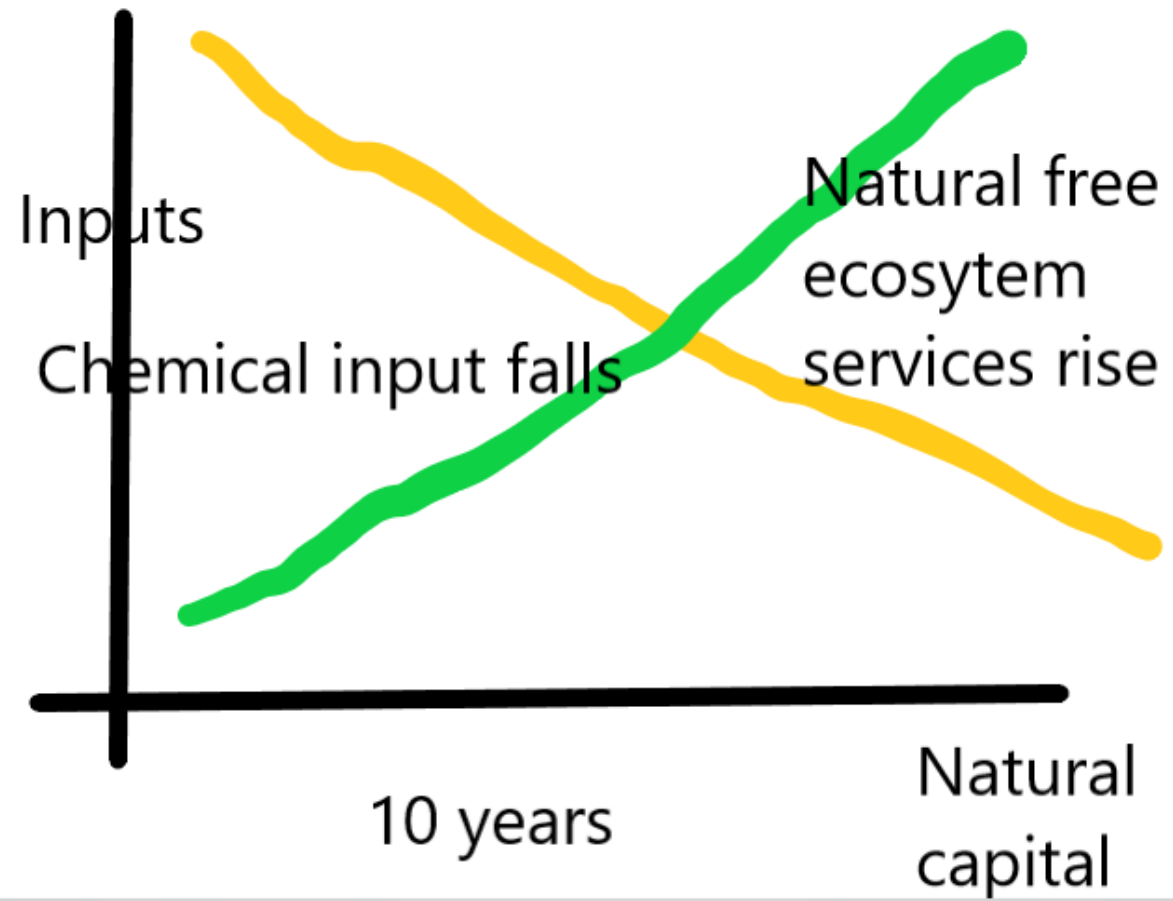


Slake tests:



Profits – by reducing inputs, restoring free ecosystem services, optimising outputs

- Rebuilding farmland ecology
- Improving OM in soil
- Allowing natural processes
- Supporting production
- Integrated pest management
- Stacking enterprises



Integrate livestock



- Rotational, mob or tall grass
- Grazing on diverse pastures
- Livestock in the arable rotation
- Feed grass to ruminants not grain (and chickens)
- Reduces need for worming and vets bills
- Builds soil carbon, holds moisture
- Underpins ecological recovery

Gloucester
City Council
Transforming Your City



UNIVERSITY OF
GLOUCESTERSHIRE



Gloucestershire
COUNTY COUNCIL



gfirst LEP
growing gloucestershire



COTSWOLD
DISTRICT COUNCIL

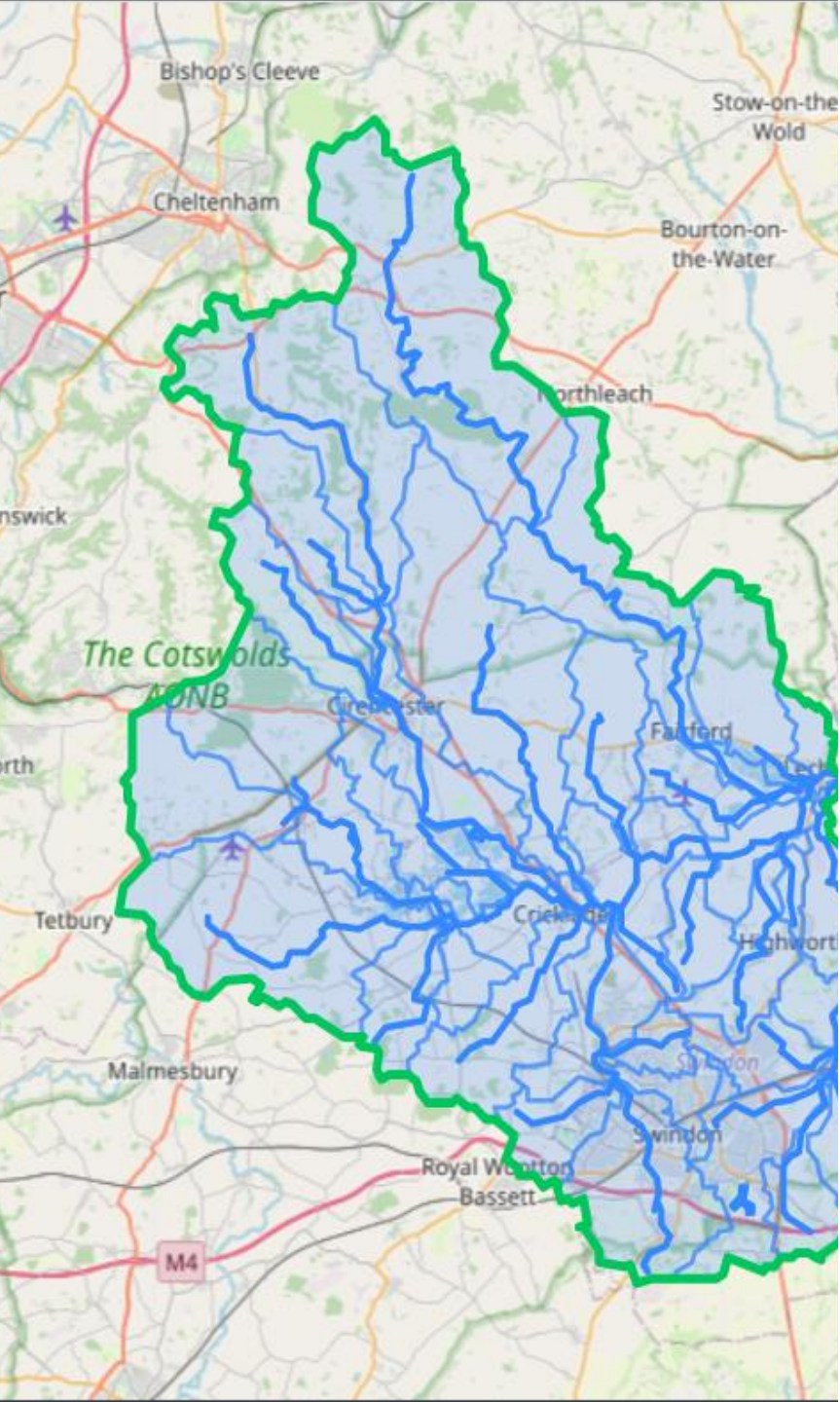
CHELTENHAM
BOROUGH COUNCIL



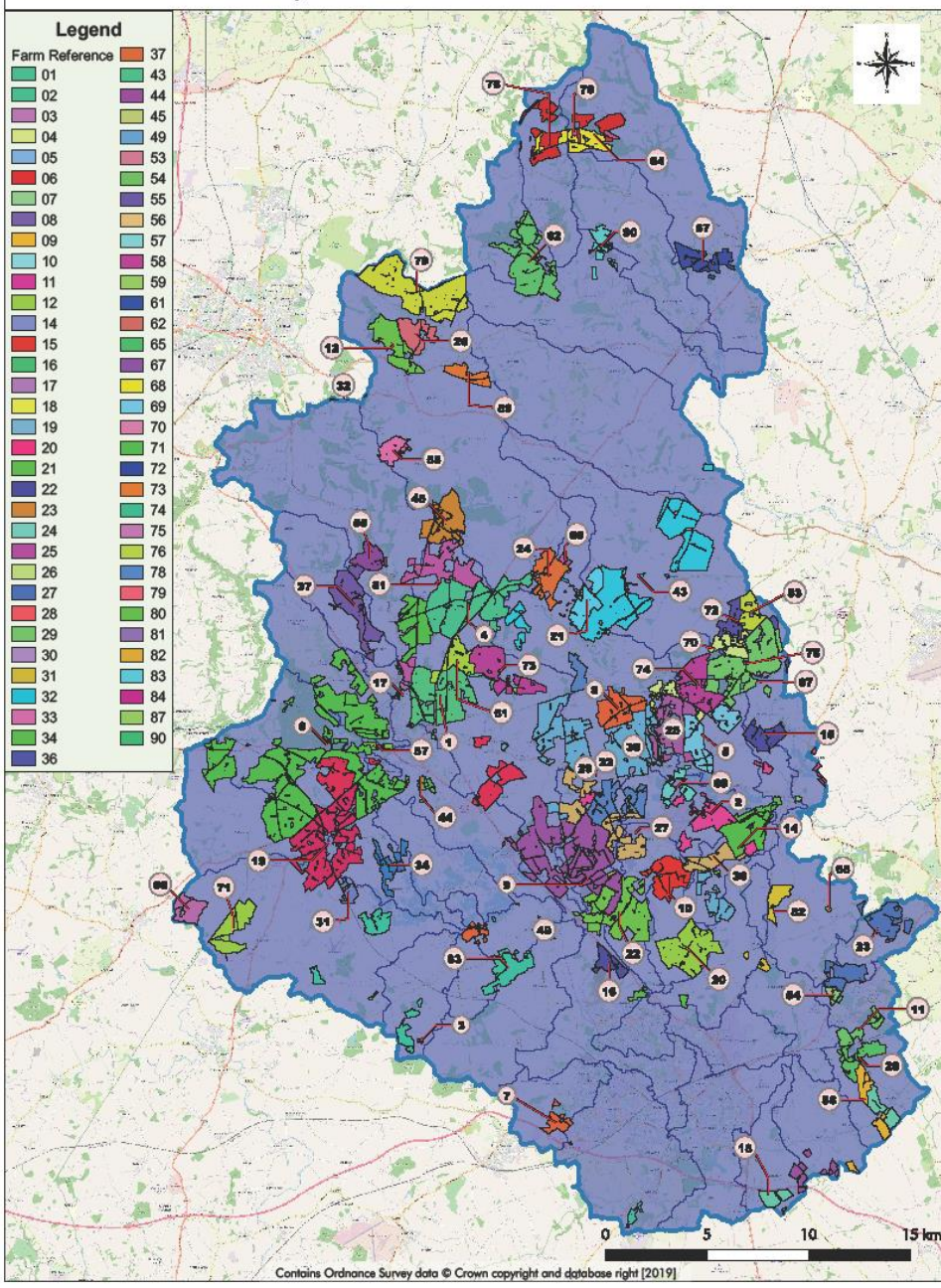
Building
with Nature



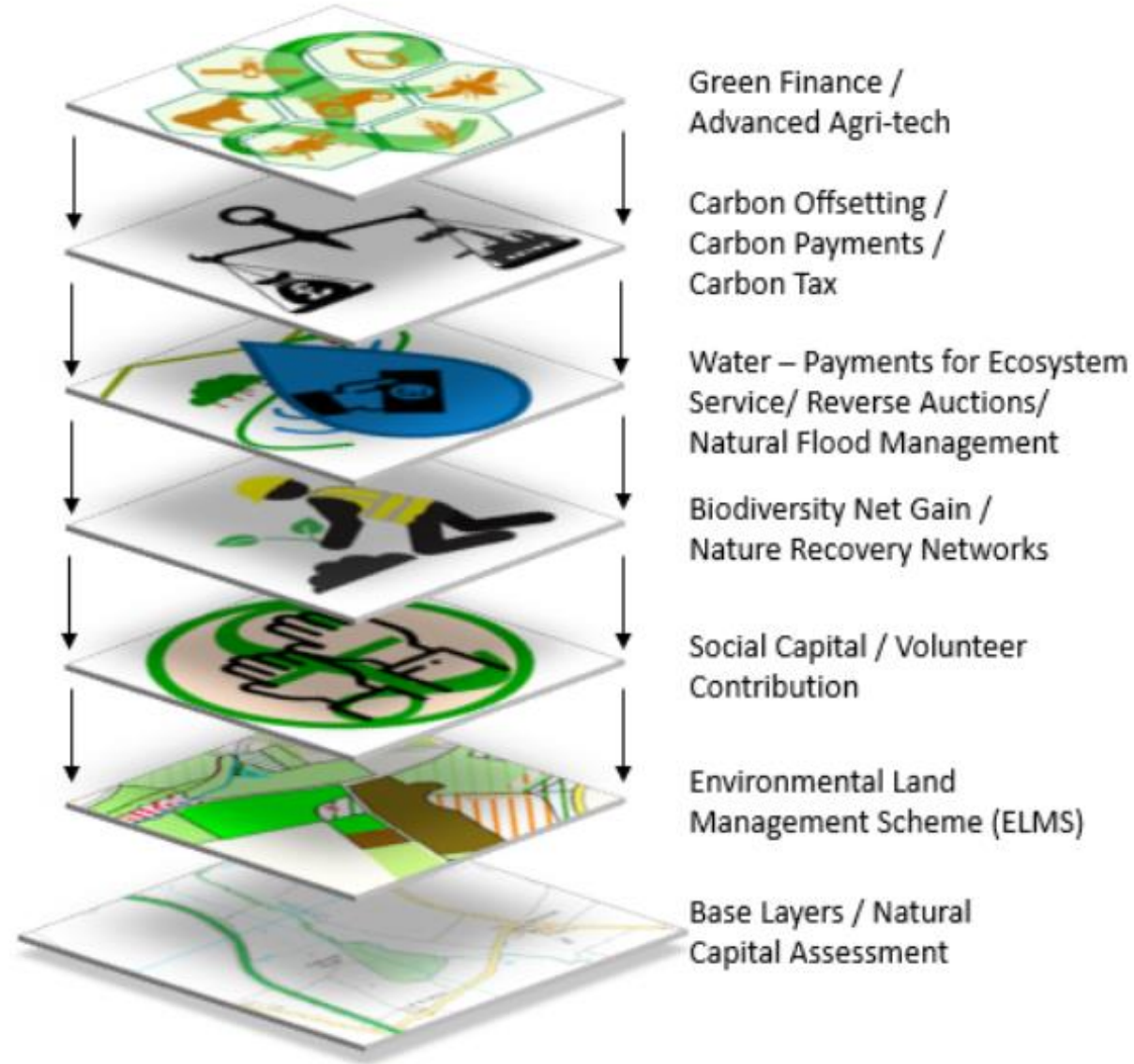
CCRI
COUNTRYSIDE
AND COMMUNITY
RESEARCH INSTITUTE



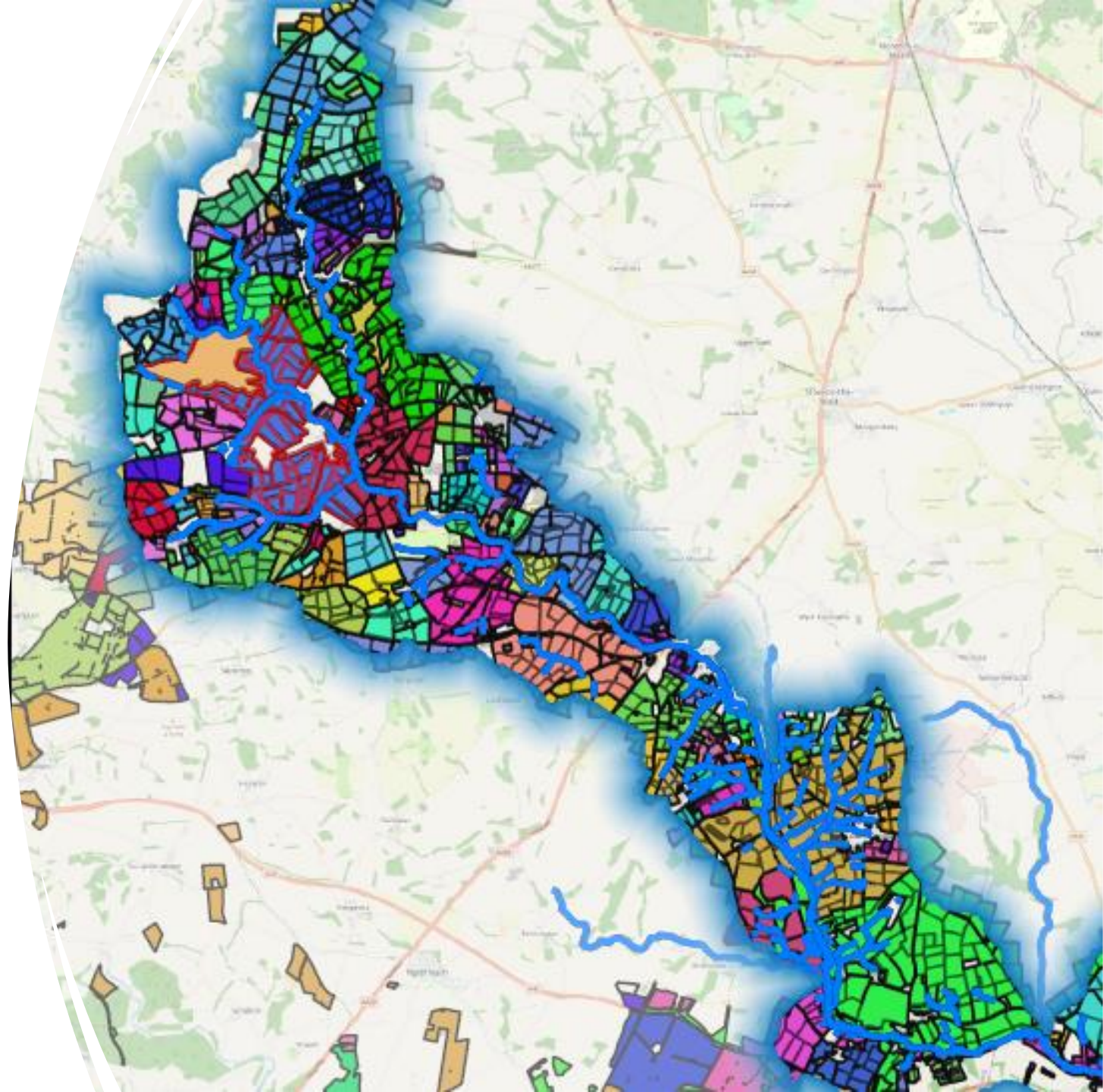
Farmer Guardians of the Upper Thames - Integrated Local Delivery ELM Trial Area - March 2019



Aggregation of Blended Finance from local partnerships and investors needs a vehicle to receive funding



Water body templates



Multiple Investment ready projects

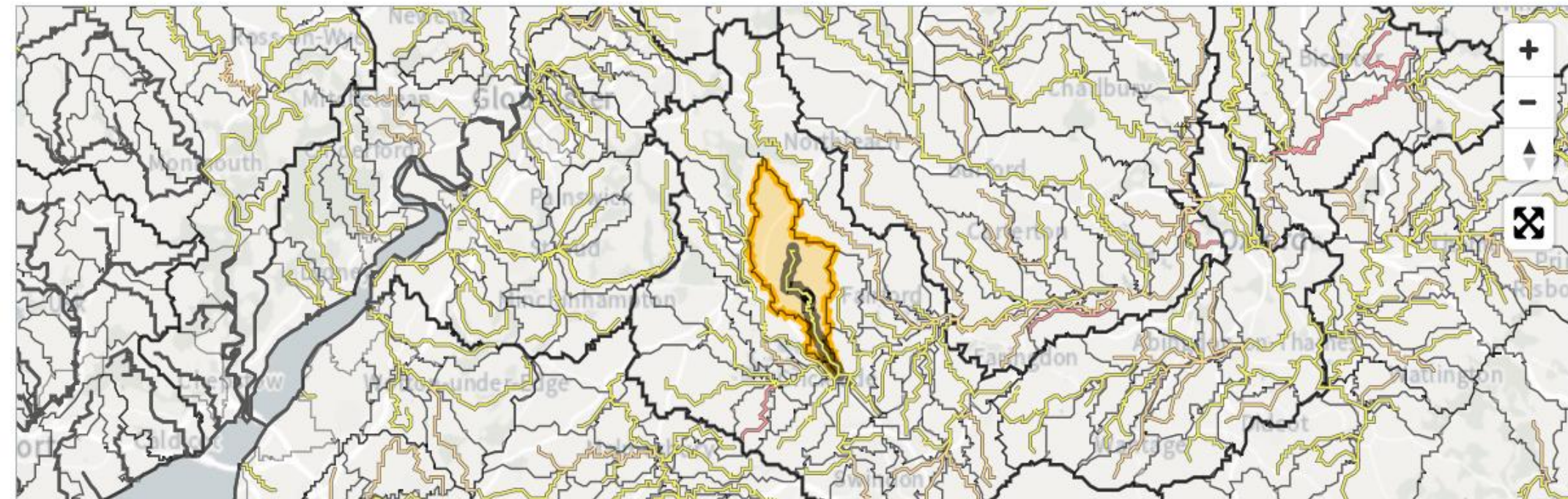
Catchment Data Explorer



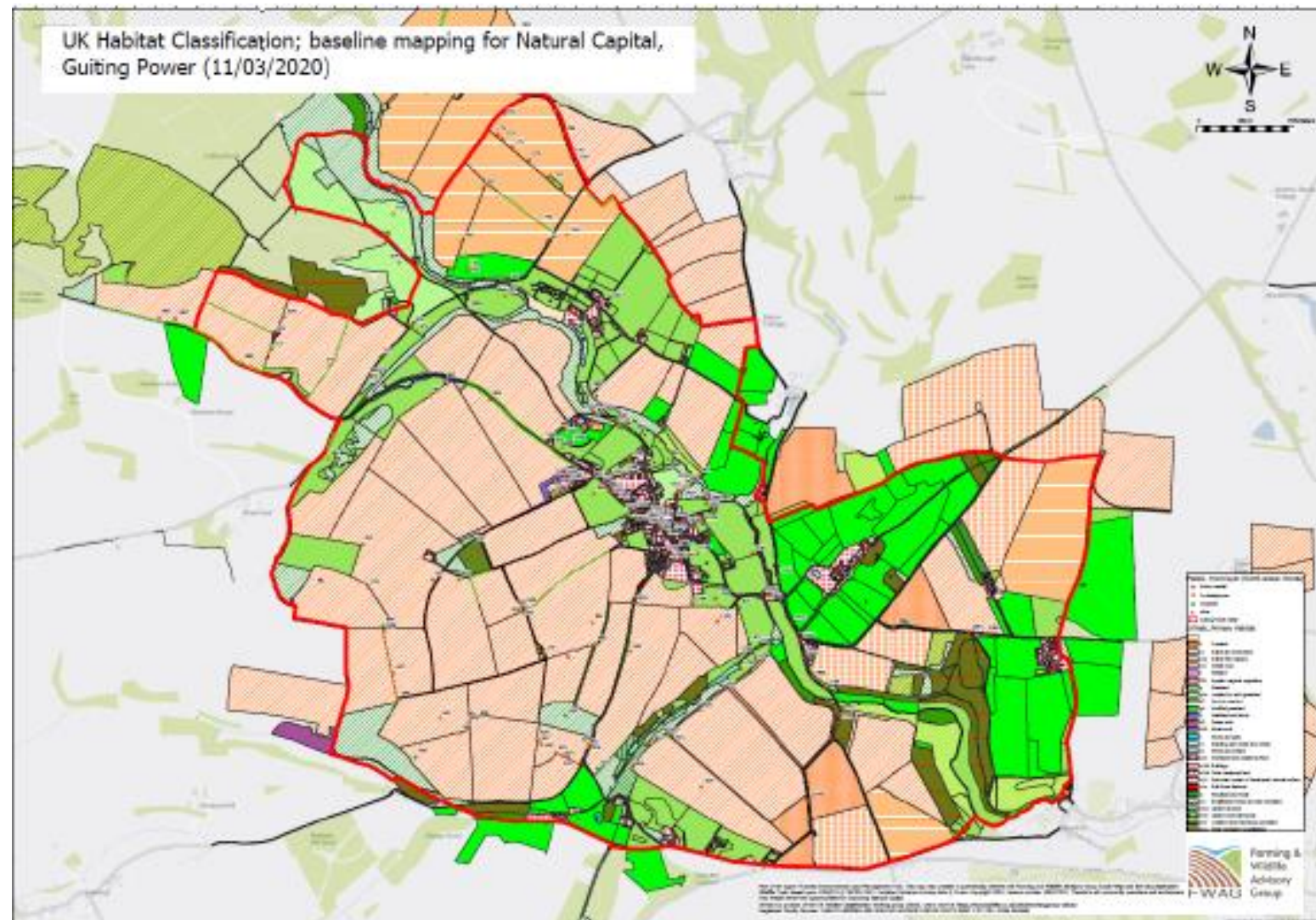
[Home](#) [Useful Links](#) [API Reference](#) [Data downloader](#) [Help](#) [Glossary](#) [Noticed a problem?](#)

Search ▼

[Home](#) ▶ [Thames](#) ▶ [Gloucestershire and the Vale](#) ▶ [Thames Upper](#) ▶ Ampney and Poulton Brooks (Source to Thames)



Building Communities Resilience working with groups of farmers along water bodies



- Community UK Habitat Map linking to:
- *Neighbourhood and Parish Planning*
 - *Local Plans*
 - *National Planning*
 - *Policy Framework*
 - *Net Gain*
 - *Climate Emergency*

<https://drive.google.com/open?id=1jGZOq3C8mFPWcefH9A-V3X3uPQzUEWdT>

“To bring multiple stakeholders together to solve such complex issues takes advanced people skills”

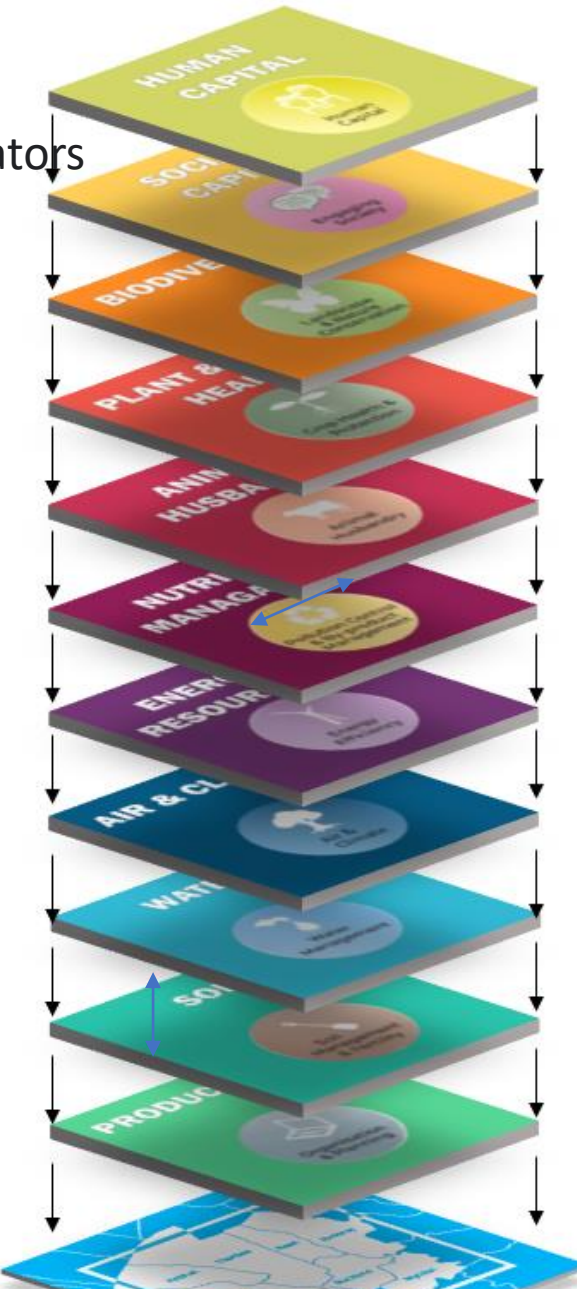
- Developing the skills to be a successful facilitator for social, economic and environmental action
- Essential, practical training for professional and volunteer rural facilitators
- <https://ruralink.org.uk/facilitator>

Farmers and Communities need support.

Progression towards accredited specialist advisers and facilitators working to a common framework to support locally relevant action (skills, training opportunities and the development of a professional register)



Integrated local delivery
Facilitators/advisers
Unlocking power of location
Sign posting to partnership experts



Human Capital
 Social Capital
 Biodiversity
 Plant & Crop Health
 Animal Husbandry
 Nutrient Management
 Energy & Resource Use
 Air & Climate
 Water
 Soil
 Productivity



Advisers could collect sustainability productivity and mapping

CaBa Agricultural Hub

“joining up the dots around farm advice, funding & initiatives “

the umbrella body of the rivers trust movement

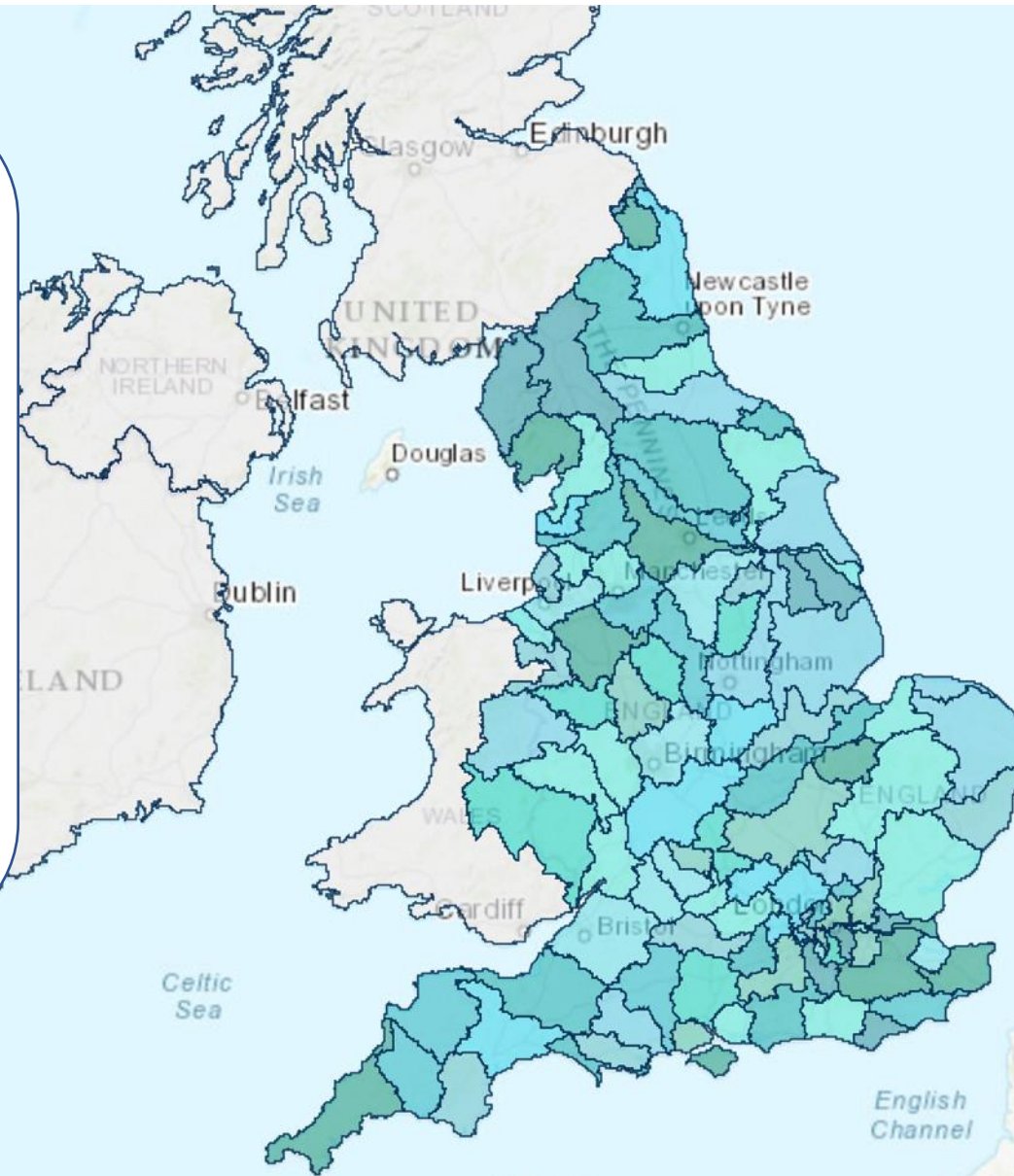
where there's **water**, there's **life**

What is the Catchment Based approach (CaBA) ?

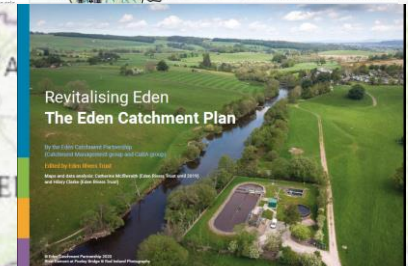
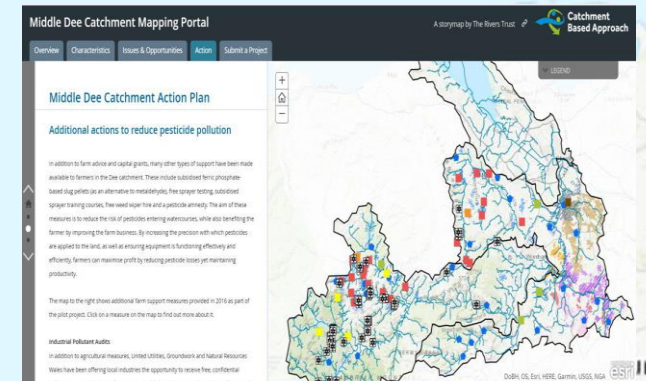
105 CaBA

Partnerships encompass a diverse range of partner organisations that **work collaboratively and draw on local knowledge & expertise.**

They are active in each of the 100+ Water Framework Directive catchments across England, including those cross-border with Wales.



They each undertake **integrated management of land and water**, addressing each river catchment as a whole and delivering crosscutting practical interventions on the ground



Connections – Advisers

1. Register as an adviser

Adviser Registration

Important!

Please note that all information provided using this form will be publicly available. Do not include personal information such as your name, a personal email or a personal telephone number.

Organisation*

Contact Details*

Please provide details of how you would prefer to be contacted.

Type of Boundary for Area Served*

Please select the type of boundary you would like to use to delineate the area your organisation serves

Catchment Partnership Catchments

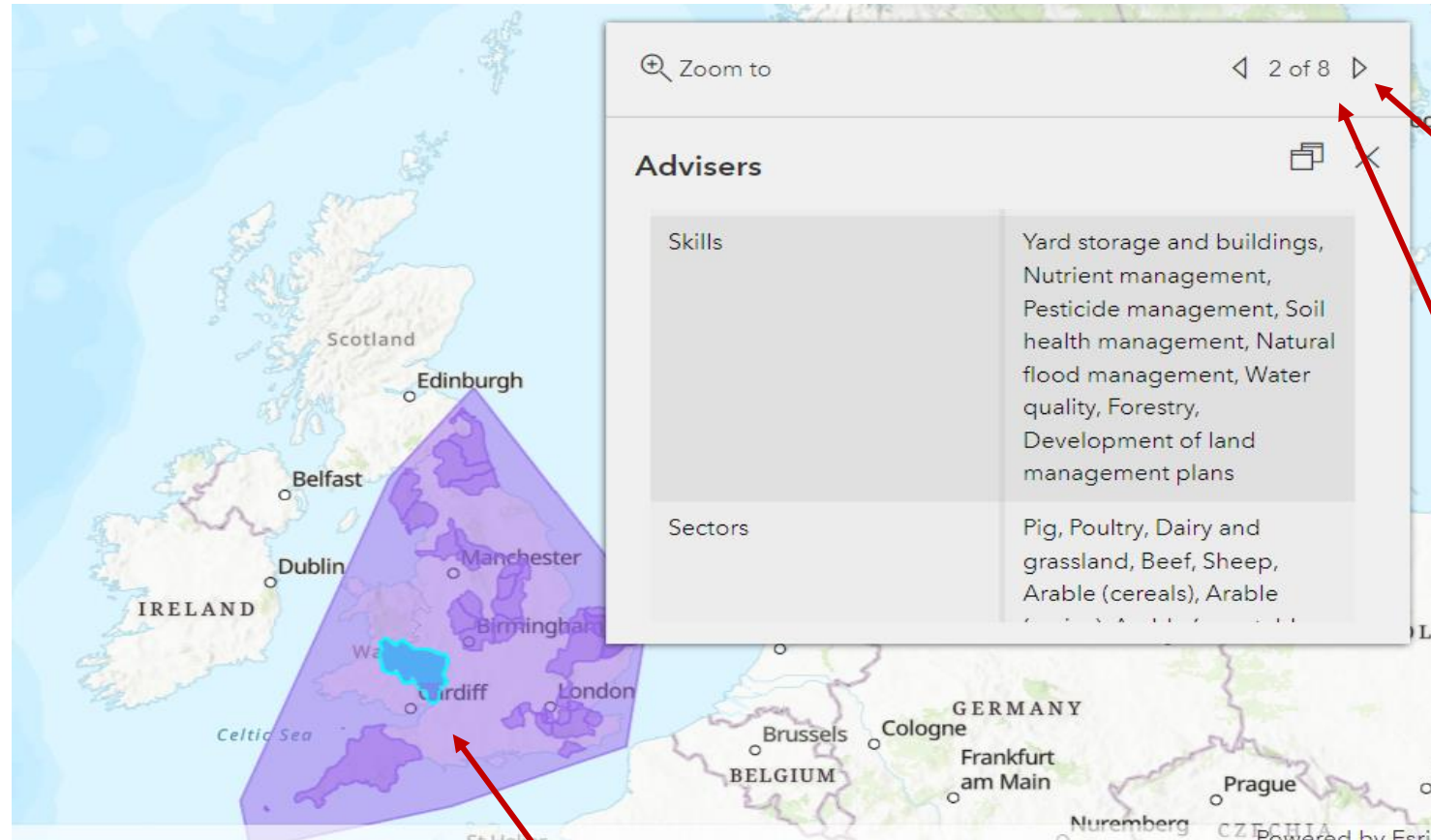
Environment Agency & Natural England Administrative Boundaries

Local Authorities

Radius Around Specified Location

National or Remote (and able to advise nationally)

2. Find and Adviser



Click on
your
location

Scroll
through
advisers

8 advisers
cover your
location

Connections – Funding & Initiatives



1. Register as a funder / landscape initiative

Funding & Initiative Registration

Funding providers and initiative managers can use this survey to add opportunities to our funding and initiative database. Entries added to the survey will appear in our data and information applications.

Organisation*

Please add the name of the organisation you represent.

Title*

Please add a title for the opportunity.

Summary of Opportunity*

Please provide a short description of this funding opportunity or initiative.

Environmental Challenge Category*

Please select the environmental challenges your funding opportunity or initiative seeks to address. Note that the selections made here determine where your data appears in our 'challenges, opportunities & funding - in depth data explorer' application.

 Flooding Air Quality

2. Find Funding / local initiatives

Search filters:

- All Opportunities
- Flooding
- Air Quality
- Health & Wellbeing
- Low Flows
- Climate Regulation
- Water Quality
- Habitats

Zoom to

Organisation	Ribble Rivers Trust
Closing Date	31/03/2022, 01:00
Summary of Opportunity	Ribble Life Together is the flagship project of the Ribble Catchment partnership. The project offers free and confidential farm advice and visits which have the aim of identifying

Click on your location

Search local initiatives/projects

Search different types of funding

the umbrella body of the rivers trust movement

where there's water, there's life



Connections – Case Studies & Demo Farms



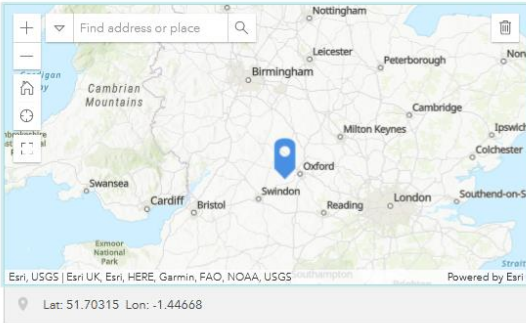
1. Register case study or demo farm

Agricultural Advice Hub Case Studies & Demo Farms

Please use this form to list case studies.

Organisation*
What is the name of the organisation listing this case study?

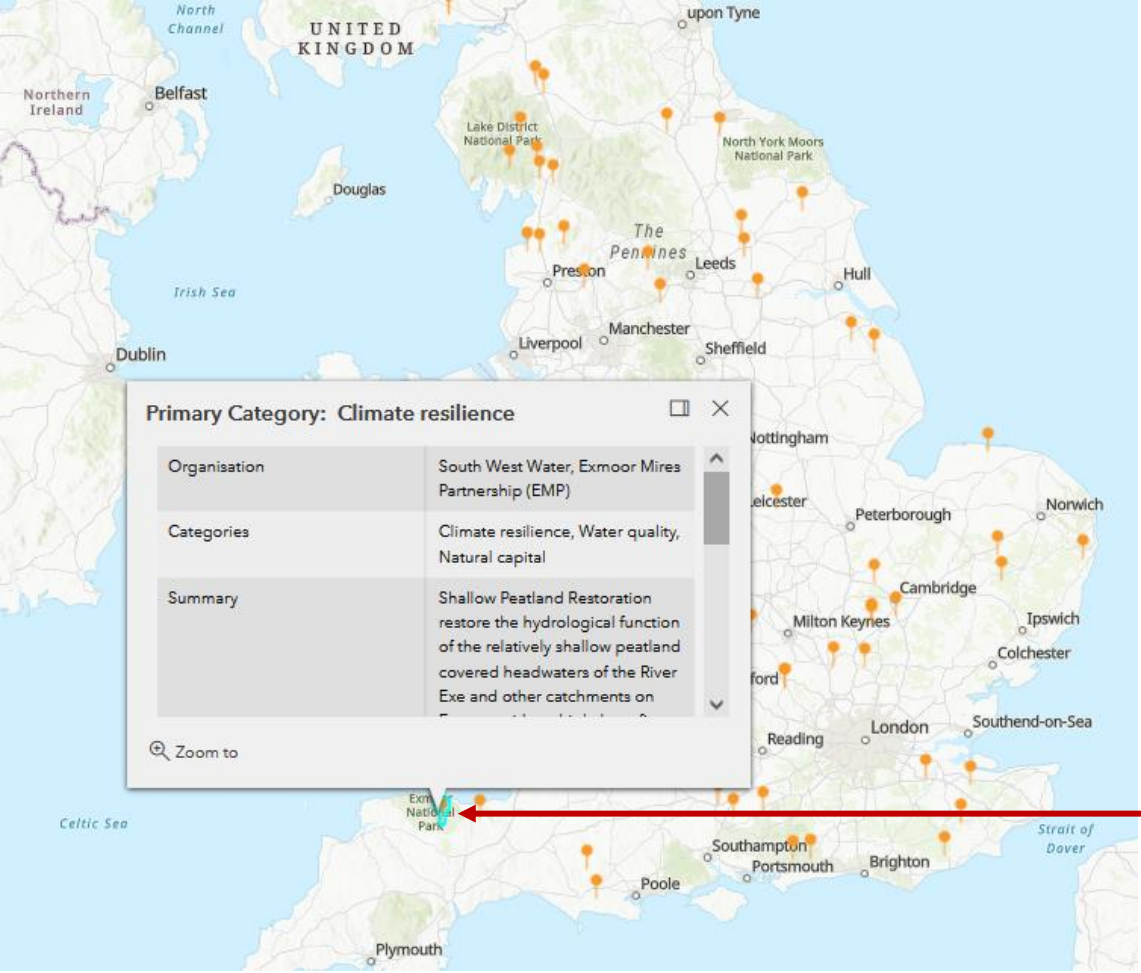
Case Study Location*
Please move the pin to the location for the case study



Primary Category*
Please select the most relevant category for your case study

- Environmental assessment
- Yard, storage and buildings
-

2. Find local examples



Primary Category: Climate resilience

Organisation	South West Water, Exmoor Mires Partnership (EMP)
Categories	Climate resilience, Water quality, Natural capital
Summary	Shallow Peatland Restoration restore the hydrological function of the relatively shallow peatland covered headwaters of the River Exe and other catchments on

Zoom to

Click on case studies to find out more

the umbrella body of the rivers trust movement
where there's water, there's life



Guidance & Best practice

Guidance



Make connections Data & information Guidance & best practice Supporters Feedback

Farm Wildlife Toolkit

Do you already have an idea of what you'd like to implement on your farm but are looking for some guidance on how best go about it to benefit wildlife? Click on the links below to find further information about improving key elements of your farm.

Farm Wildlife is a partnership of organisations working together to provide a single source of best practice management advice for wildlife on farmland. Learn more about the partnership by clicking [here](#).



Existing Wildlife Habitats



Field Boundaries



Wet Features



Flower-rich Habitats



Seed-rich Habitats



Farmed Area

Additional tools

Additional Tools

There are lots of tools out there to support farmers who want to embrace more environmentally sensitive practices. Below are some our community think are useful. Click on the link to find out a bit more about the tool and see if it's right for you. Don't forget that you can use our 'Find an Adviser' tool if you need further advise or help with any of these tools.

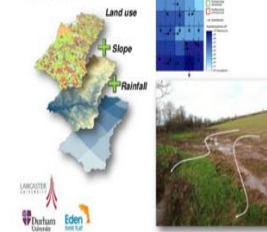
- **Farmscoper** is a decision support tool that can be used to assess diffuse agricultural pollutant loads on a farm and quantify the impact of farm mitigation methods on those pollutants.
- **SCIMAP** provides a framework to consider where in the landscape pressures of degraded water quality and flood waters are coming from and hence where mitigation actions would be most effective.
- **The Land App** is mapping software that allows farmers to manage all their data, projects and team from a single place.



FARMSCOPER ADAS RSK

Farmscoper

SCIMAP: A diffuse pollution risk modelling framework



Scimap



The land app

The Land App



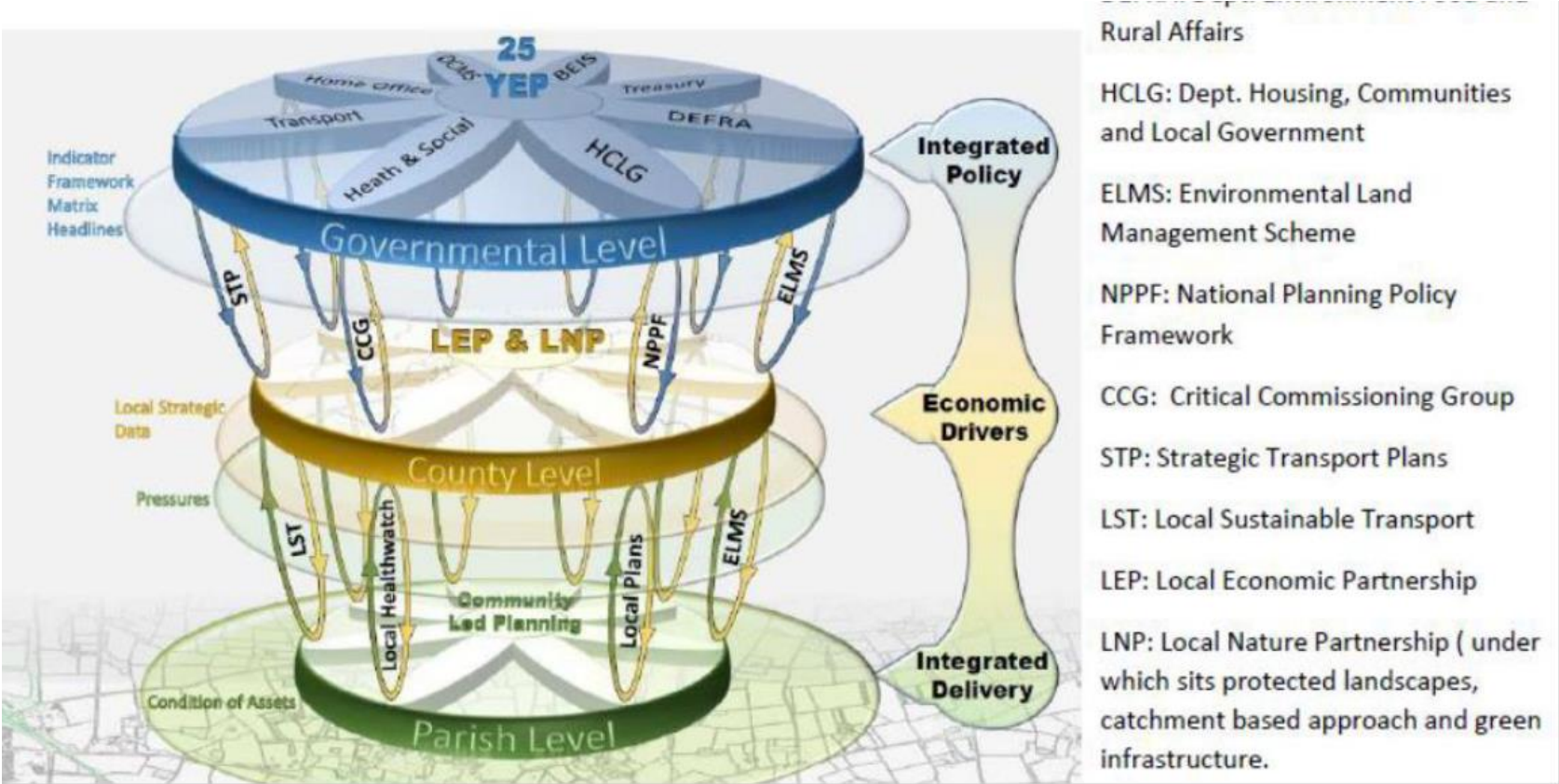
Need help? Find an adviser

the umbrella body of the rivers trust movement

where there's water, there's life

Local communities can take climate action to become resilient economically and environmentally by conveners helping to unpick complexity and enabling co-delivery on the ground.

Cost beneficial to Treasury to invest in facilitators and conveners. 1:6 £s



Scoping

- <https://magic.defra.gov.uk/>
- <https://environment.data.gov.uk/catchment-planning/>
- <https://catchmentbasedapproach.org/get-involved/>
- <https://www.lepnetwork.net/about-leps/location-map/>
- <https://www.gov.uk/government/publications/map-of-local-nature-partnerships>
- <https://www.local.gov.uk/>
- Local and neighbourhood plans – declarations of climate emergency