

Turin, 28 - 29 October, 2019

# Developing & Delivering Payment for Ecosystem Services schemes in the UK

*Hazel Kendall*, Westcountry Rivers Trust



## CReIAMO PA

Per un cambiamento sostenibile





# Holistic advice for catchment management

Established; 1994

An environmental charity – dedicated to the protection, restoration and enhancement of the region’s rivers and to educate the public about the value of water:

Conservation

Restoration

Science

Education

Catchment management

Fisheries & Wildlife

Education & Research



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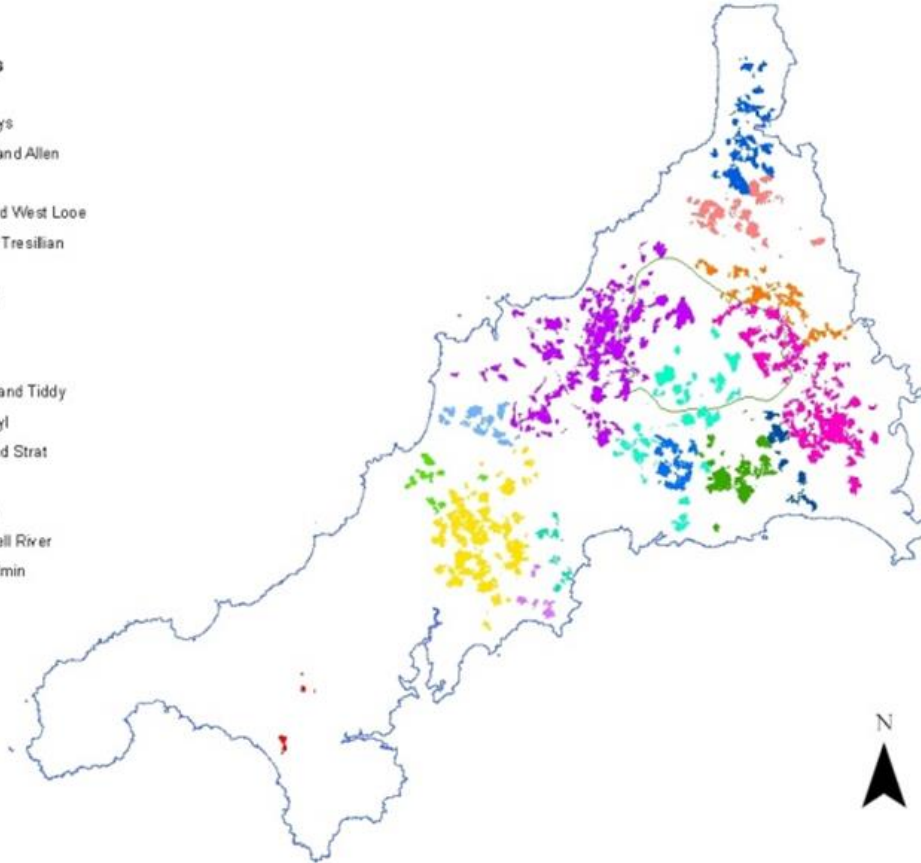
## Early project delivery example: Cornwall Rivers Project

### Legend

#### CRP Farms

#### Catchment

	Caerhays
	Camel and Allen
	Cober
	East and West Looe
	Fal and Tresilian
	Fowey
	Gannel
	Inny
	Lerryn
	Lynher and Tiddy
	Menalhyl
	Neet and Strat
	Ottery
	Seaton
	St Austell River
	NA-Bodmin



- 2002-2005
- 15 river catchments in Cornwall
- £2.6M
- 870 farmers & individually tailored and free 'Integrated River Basin Resource Management Plan'
- >560 km<sup>2</sup> area of catchments
- >1380 kms of surveyed watercourse
- "To achieve rehabilitation of the rivers and their catchments to bring significant benefits to both the environment and the economic viability of local rural communities"
- Specifically to improve the economic potential of Cornwall's freshwater fisheries resource, the development of which relies on a pristine riverine environment.

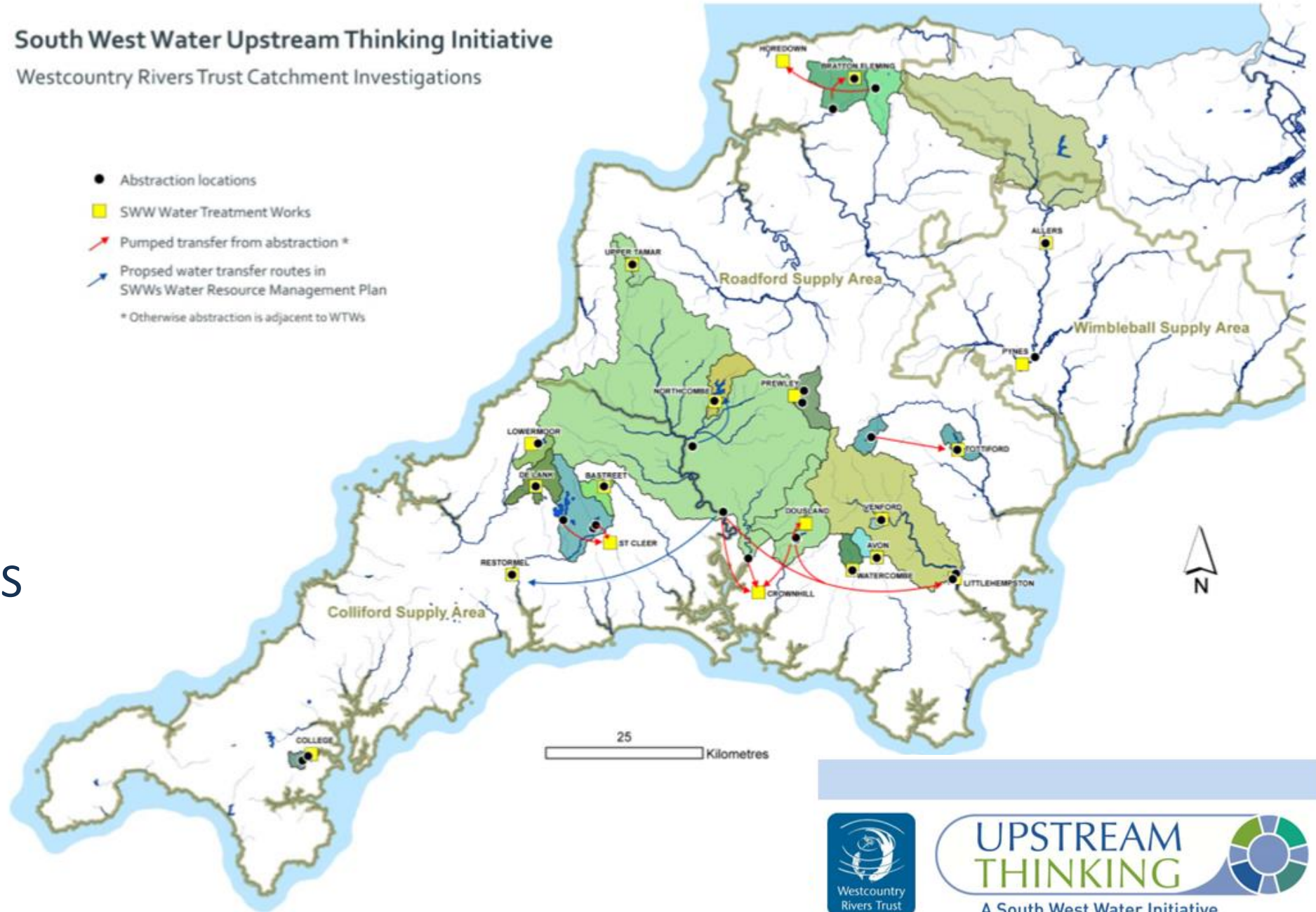




# South West Water Upstream Thinking Initiative

Westcountry Rivers Trust Catchment Investigations

- Abstraction locations
- SWW Water Treatment Works
- ➔ Pumped transfer from abstraction \*
- ➔ Proposed water transfer routes in SWWs Water Resource Management Plan
- \* Otherwise abstraction is adjacent to WTWs

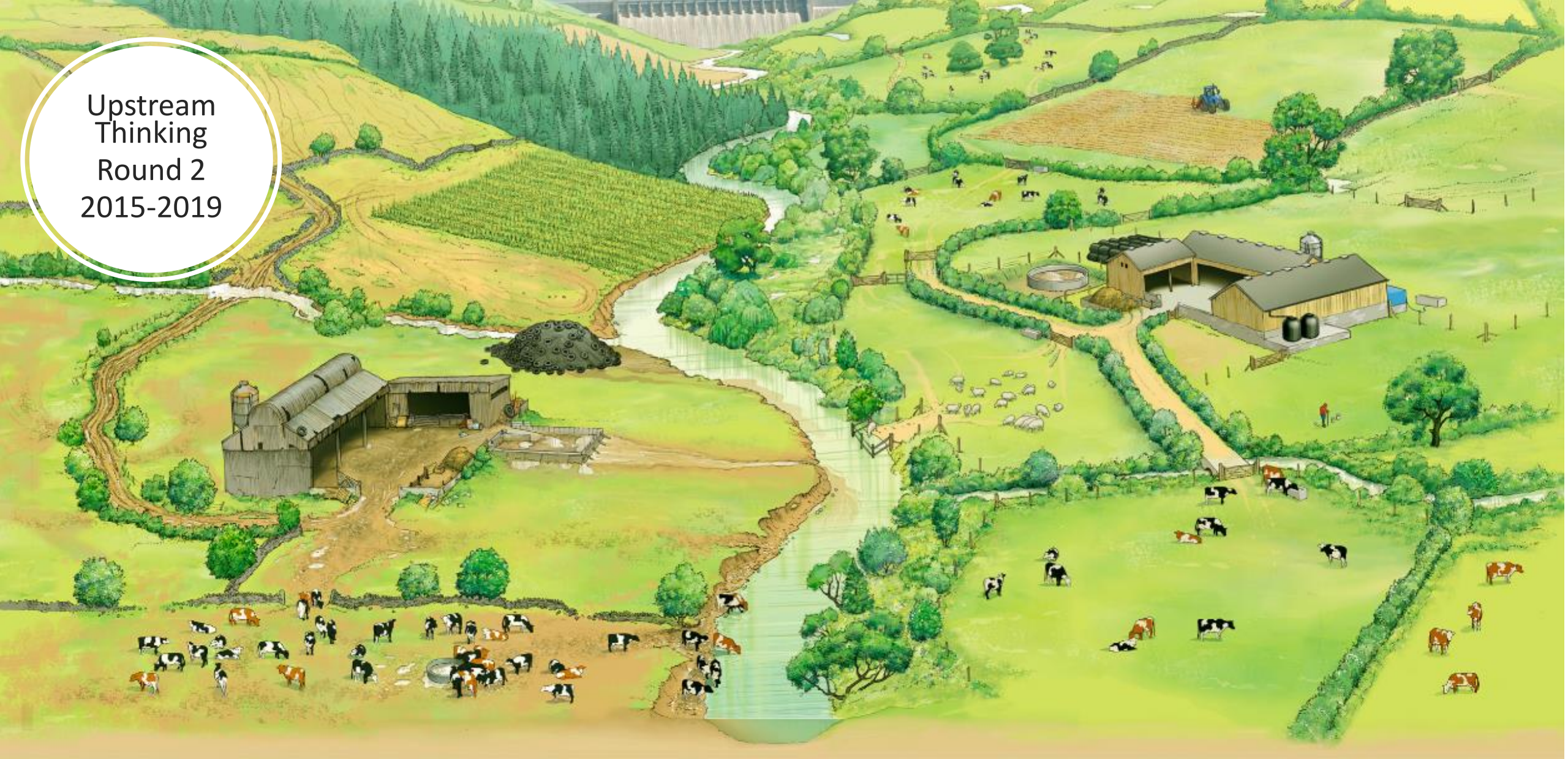


Upstream Thinking  
Round 1  
2009-2014

Water Company PES



Upstream  
Thinking  
Round 2  
2015-2019



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# Upstream Thinking

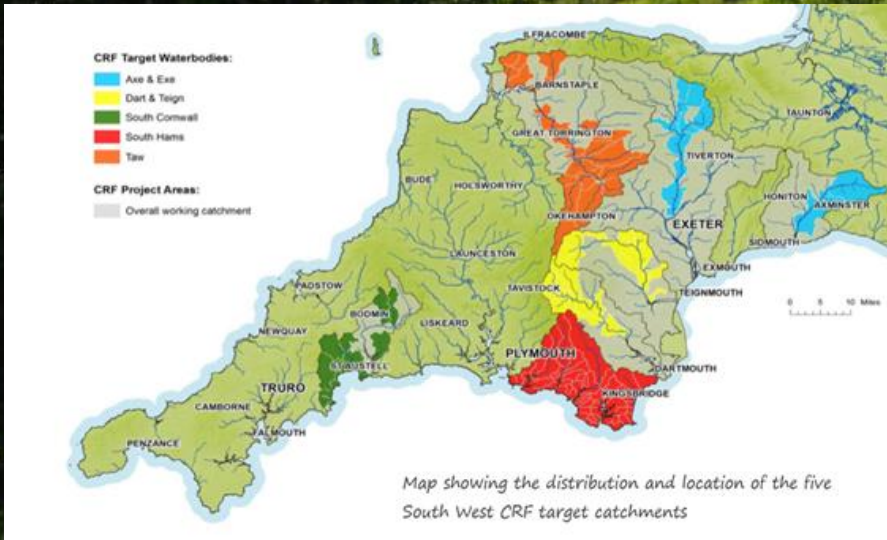
## Currently developing Round 3

### 2020-2024



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# Catchment Restoration Fund





# Westcountry Angling

Fish for wild brown trout, sea trout, salmon, grayling and coarse fish in unrivalled surroundings...

[Choose a beat](#)



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## Creation & development of WAP

- First token-based angling scheme in the UK
- 'Angling 2000'
- Later renamed the 'Angling Passport'





- Aiding conservation –
  - small payment to beat owner
  - delivering Ecosystem Services
  - links farmers, anglers, conservation
- Route into river angling
  - Easygoing, no commitment
  - Aging angling population / encourages younger anglers
  - amazing private locations
- Affordable angling
  - Accessible & affordable to all
  - appeals to those who like to roam, visit new places or holiday





Explore Beats

# The WAP App

You can find more detail on any of the beats listed by tapping on them.

The number on the lower left of the beat photo is the amount of tokens required to fish that beat.

Once you have set a beat as a favorite, you can filter the beat list to just Favorites with the button at the bottom right of the screen. To switch back to the full list just tap the button next to it that says "ALL".

The circular icon that looks like a compass will take you to an over view map of all the beats where you can use Fish Pass to fish.

You can use two fingers on your screen to zoom in and out and tap on the red pins to find out what beat you are looking at.

This list is also filterable with favorites, so when you have favorited a couple of beats, and filtered the list, the map will only show you the beats you have tagged.



Angler's Record  
Please retain

No. \_\_\_\_\_

Date ..... 2019 Beat .....

Catch .....

For fishing info and tokens go to:  
[www.westcountryangling.com](http://www.westcountryangling.com)

## Catch Return

It is a requirement of using the Passport Scheme that you must submit a catch return

No. \_\_\_\_\_

Date ..... 2019 Beat .....

Catch/Comment. Please provide as much information as possible - species, number caught, method etc.

Place in box **AFTER** Fishing  
or file your return online at  
[www.westcountryangling.com](http://www.westcountryangling.com)



No. \_\_\_\_\_

Date ..... 2019 Beat .....

This token expires on 31/12/2019. Non-refundable  
\*except beats open for coarse fish from 1/1/2020 - 15/3/2020

Angler's Name .....

Car Reg No. ....

Place in box **BEFORE** fishing,  
or see reverse for instructions on scanning into

FISH PASS



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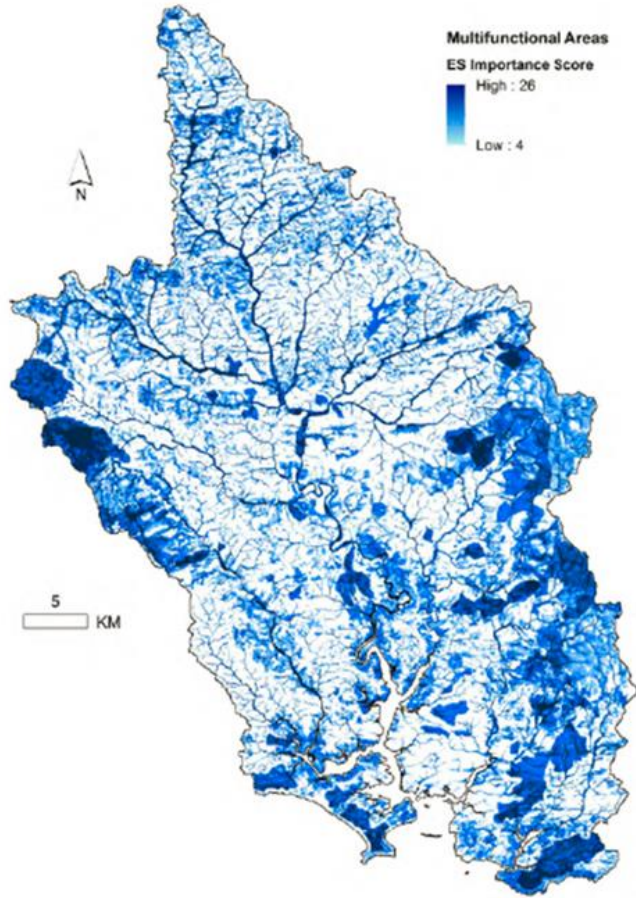


# The Catchment Based Approach (CaBA)



“...to work with stakeholders to establish a framework for integrated catchment management across England...to feed into the 2<sup>nd</sup> cycle of the RBMPs to meet objectives under WFD.”

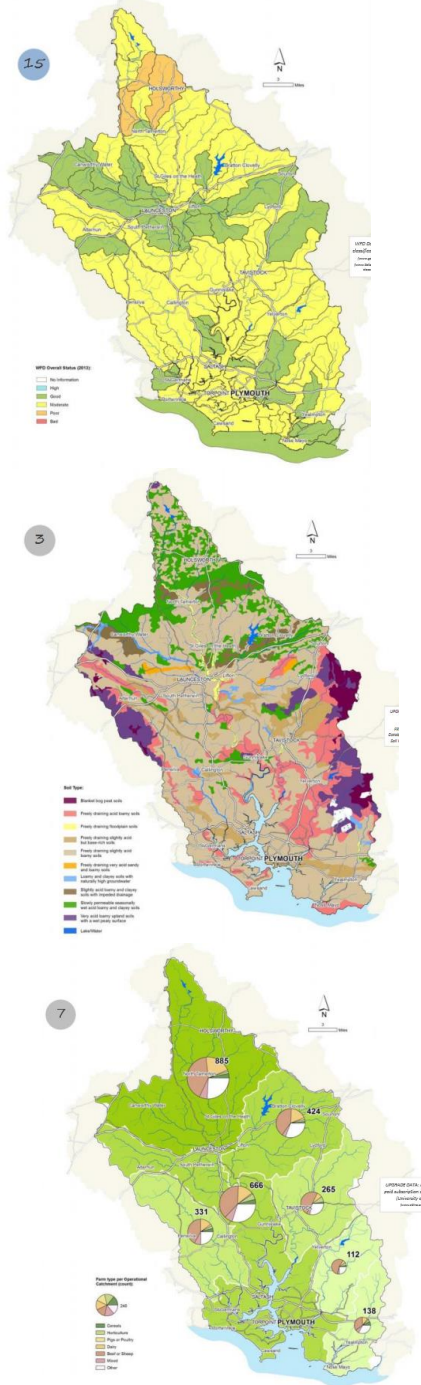
Figure 26. Map showing areas of land identified as playing a key role in the provision of multiple ecosystem services.



<https://issuu.com>

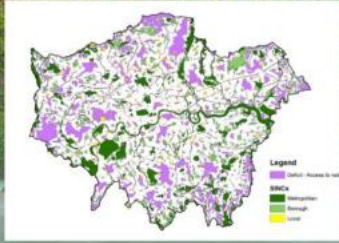


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# Local Action Project

2008



## Origins of LAP

Early natural capital approaches: Conservation Strategy Maps, Environmental Infrastructure & Habitat Creation Strategies.



2009



## Strategic Evidence

Bioregional planning to ecosystem services mapping: strategic evidence & partnership- working to target PES schemes.



2010



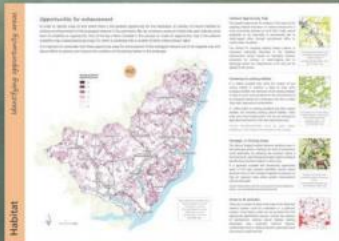
## Ecosystem Visioning

Co-creating a shared vision for ecosystem services provision across a catchment landscape with the Tamar Partnership.



2011

2012



## ES Mapping Framework

Developing a replicable & robust 'participatory ecosystem services mapping framework' to support collaborative working.



2013

2008-2013  
The early years...



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# Strategic evidence & partnership

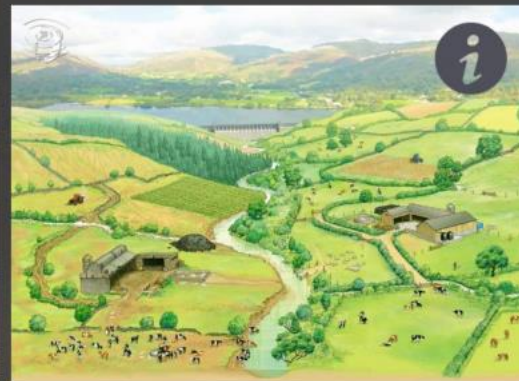


From the concept of bioregional planning to early attempts at participatory ecosystem services mapping: using strategic evidence & partnership-working to target PES schemes



## Strategic Evidence & Partnership: 2011

Establishing strategic local partnerships and developing catchment evidence - a first attempt to map ecosystem service-provisioning areas.



## WATER Project PES Handbook: 2008-10

Using ecosystem services mapping to facilitate the development of innovative Payments for Ecosystem Services (PES) markets.



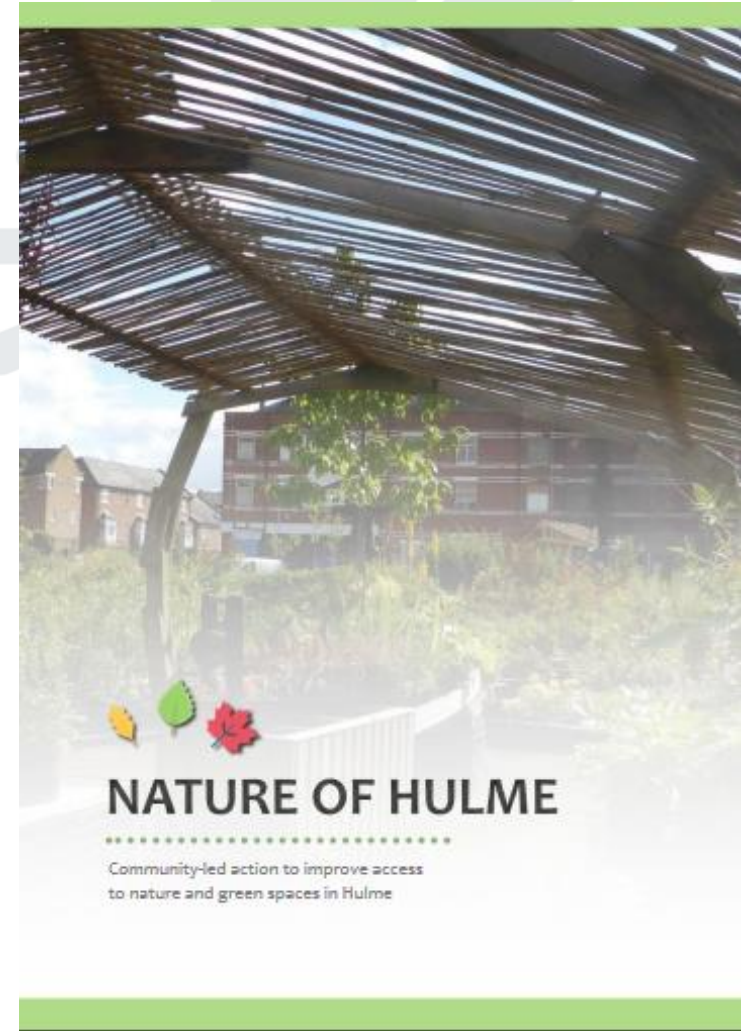
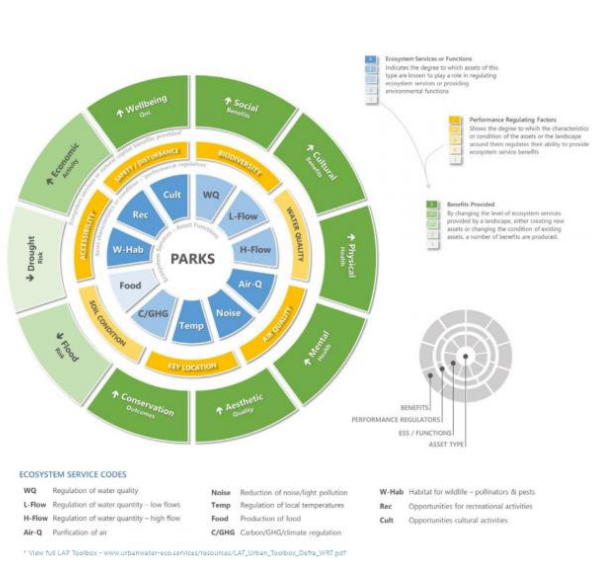
## The Tamar Catchment Partnership Pilot: 2012

Developing a truly participatory ecosystem services mapping approach - 62 stakeholders, >60 hours of deliberation, 1 shared vision for the catchment.





# Urban environments; access to green and blue space (The Nature of Hulme, Manchester City Council & Defra)





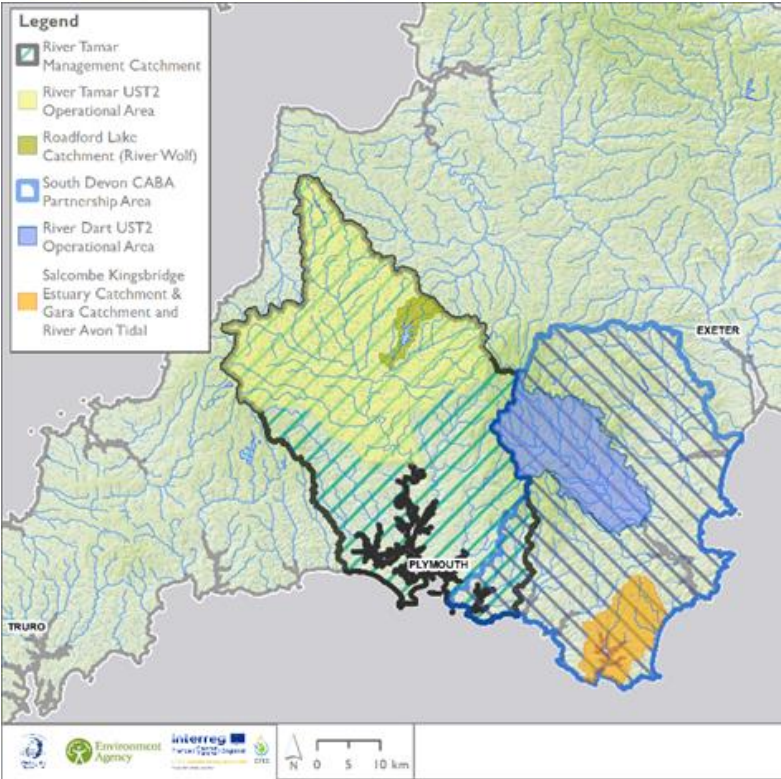
# Natural Capital in Urban Landscapes



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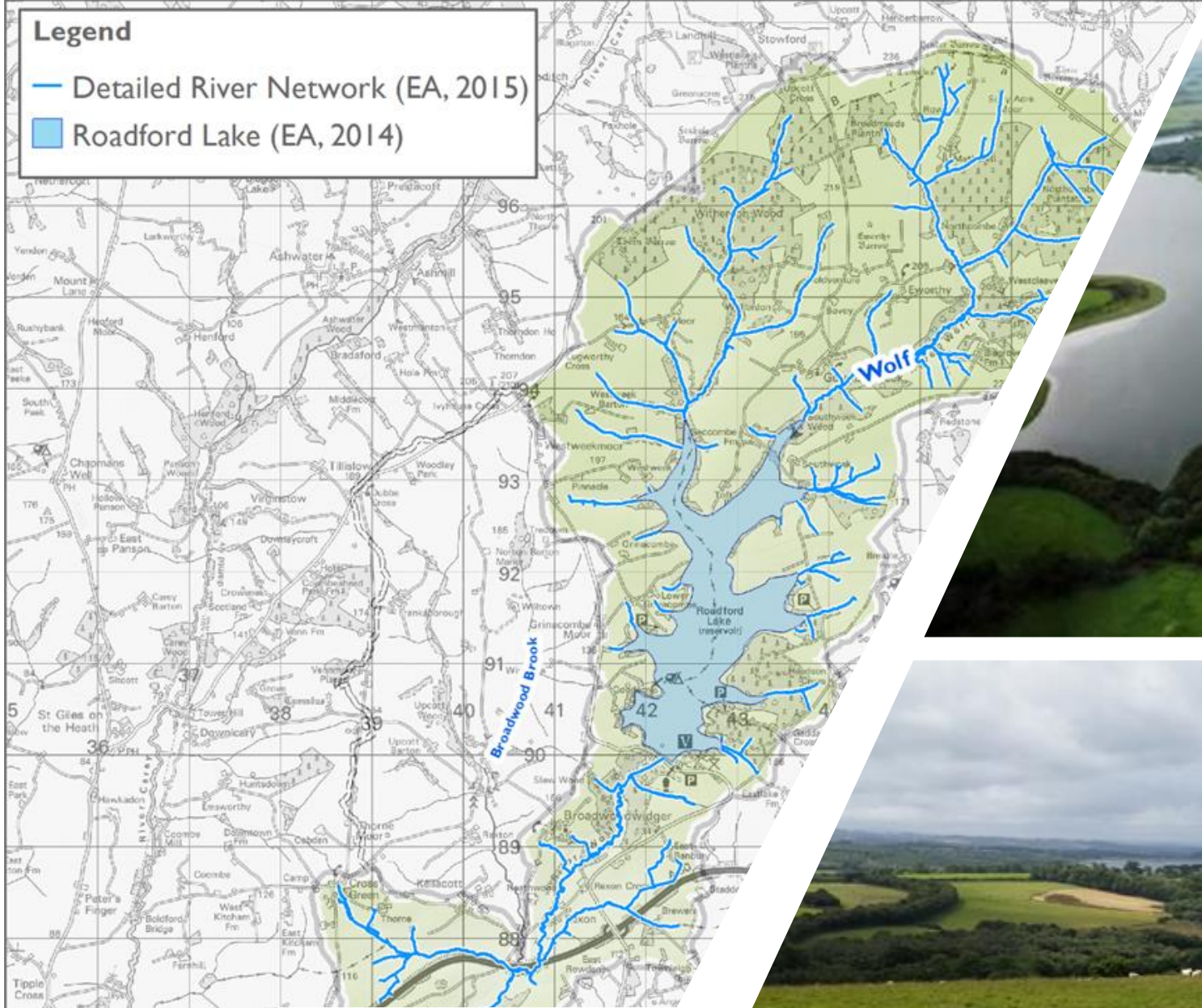
# Channel Payments for Ecosystem Services (CPES )

## Westcountry Rivers Trust - Devon pilot case studies: River Lyd & River Gara



# Legend

- Detailed River Network (EA, 2015)
- Roadford Lake (EA, 2014)





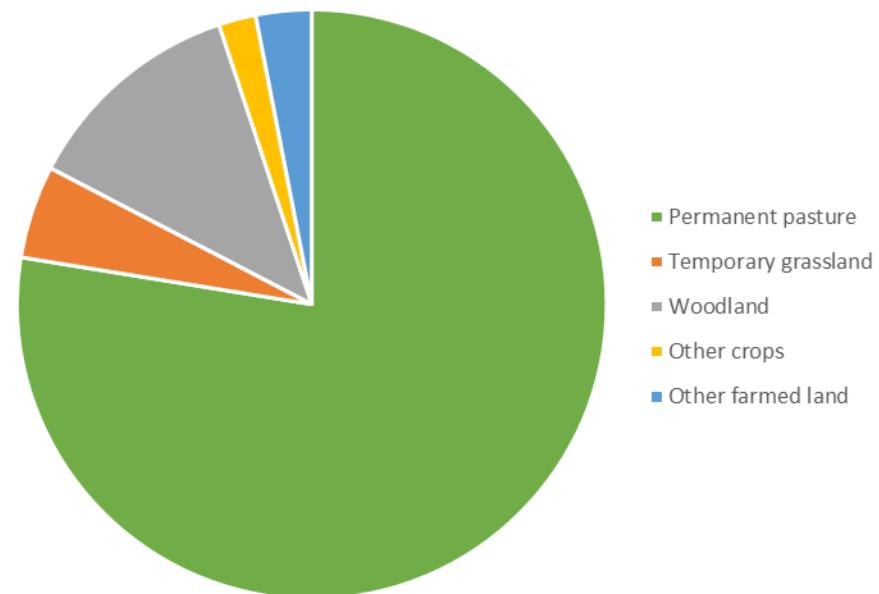
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# Roadford & Lyd land use

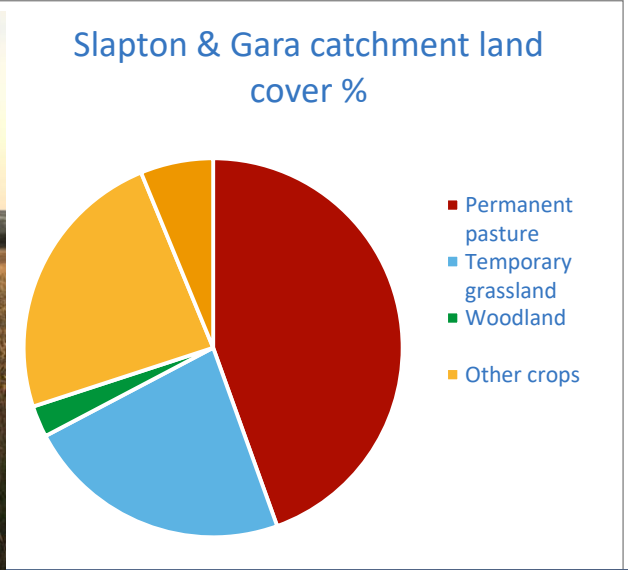


Wolf catchment land cover %





# Slapton & Gara land use



**BUSINESS  
IN THE  
COMMUNITY**









2015  
International  
Year of Soils

# SOILS STORE AND FILTER WATER



Soils improve food security and our resilience to floods and droughts



## What is soil moisture?

Soil moisture content is the amount of water in the soil (by weight).

The maximum amount of water that a soil can retain depends on:



the soil's **texture** and **structure**



**organic matter** content



**rooting** depth



Soil organic matter **can retain about 20 times its weight in water.**

Healthy soils with a high organic matter content can **store large amounts of water.** This is crucial for maintaining food production while also improving resilience to floods and droughts.



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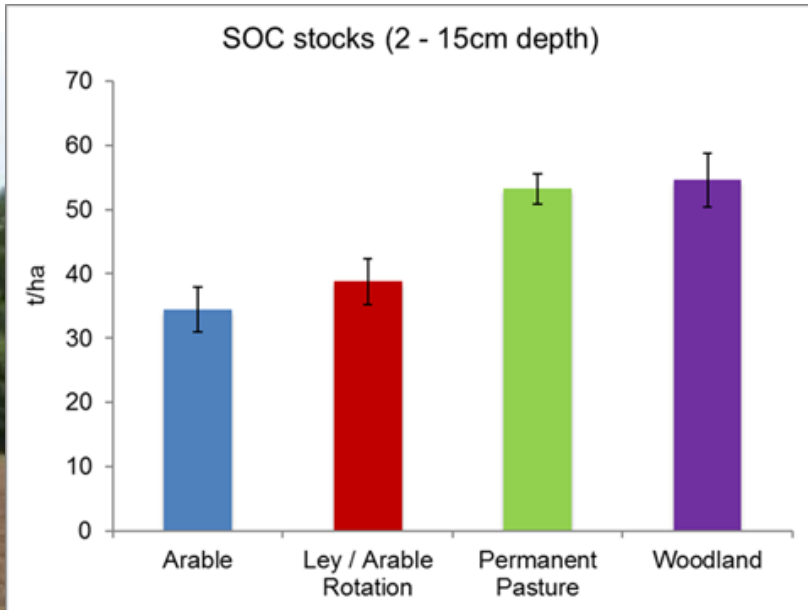


By restoring degraded soils and adopting soil conservation practices...



...there is major potential to **decrease the emission of greenhouse gases from agriculture, enhance carbon sequestration and build resilience to climate change.**





*Mean SOC stocks (t/ha) for each management type (Tamar catchment).*

*Error bars are standard error of the mean of 3 replicates in each field.*



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**Interreg**   
 France ( Channel  
 Manche ) England

Channel Payments for Ecosystem Services

European Regional Development Fund



**CPES**

Contact us

## Our current land management projects



The CPES Fund – Online Donations  
Business & Private Sector engagement

