# STAKEHOLDER ENGAGEMENT ON THE UPPER THAMES — COLLECTIVE DEVELOPMENT OF A PES SCHEME

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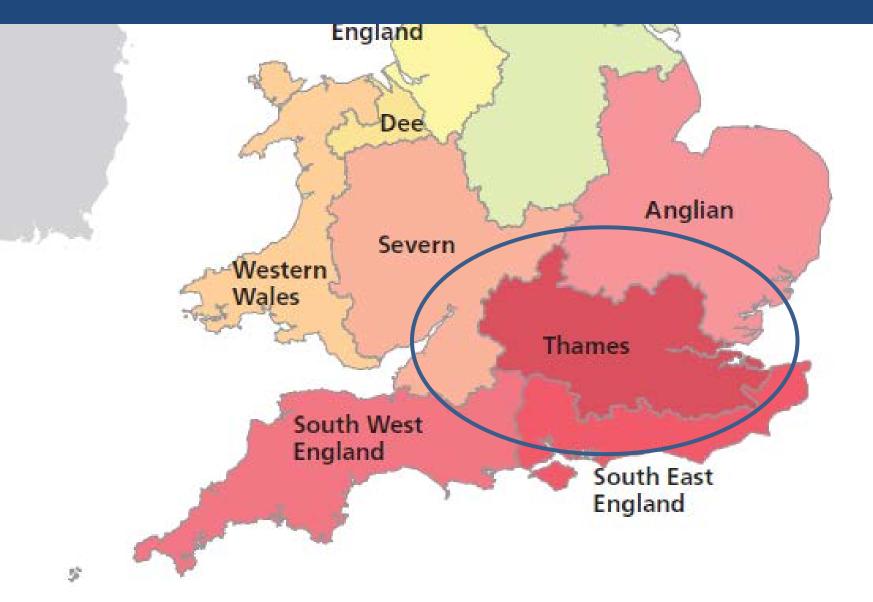




#### **Outline**

- Set the scene Upper Thames & PES
- Who is involved
- What was on offer
- Why stakeholder engagement
- Where have you reached so far
- Challenges to come ...

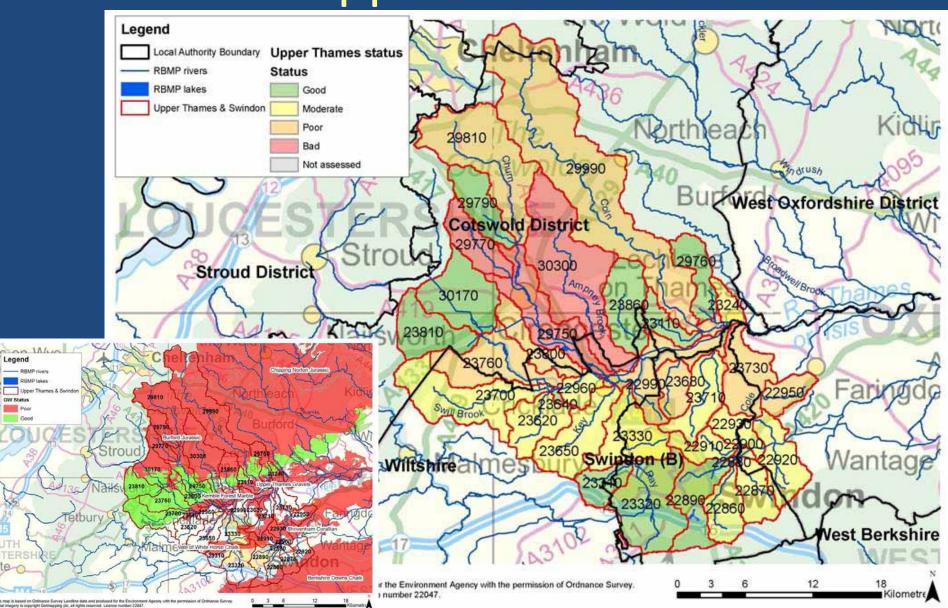
# **Thames River Basin**

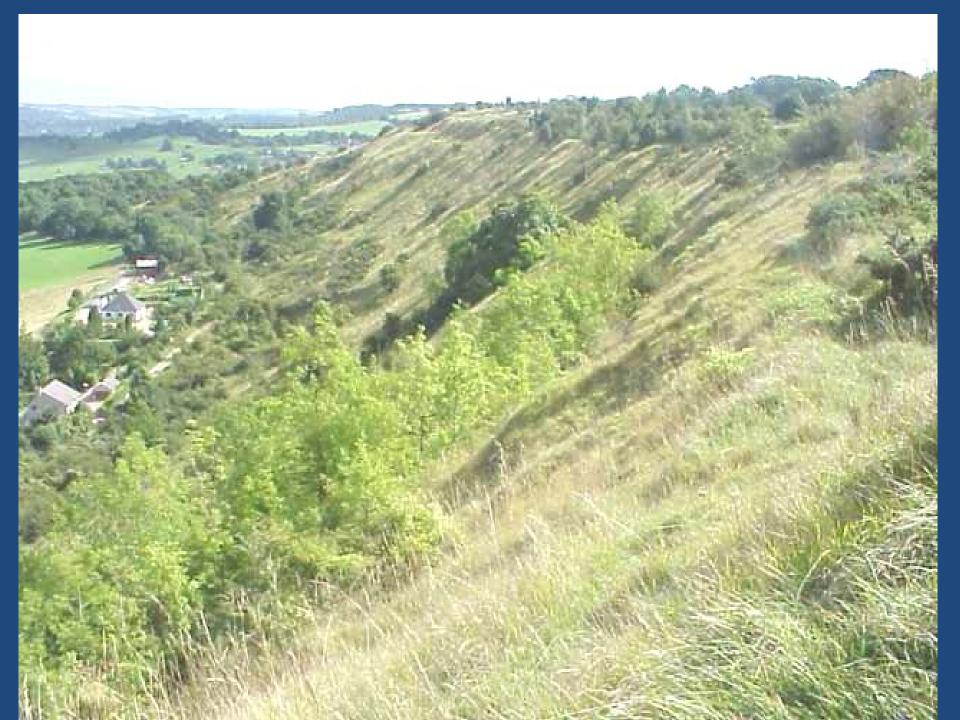


# Dividing up the Thames



# **Upper Thames**





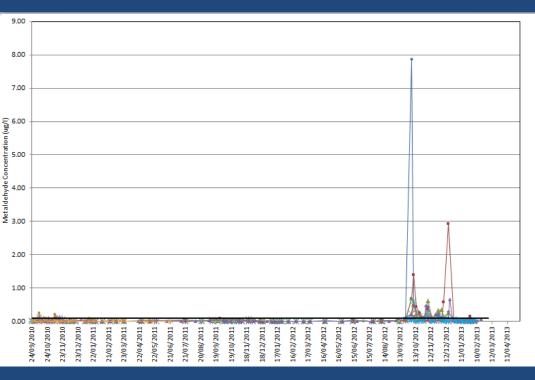


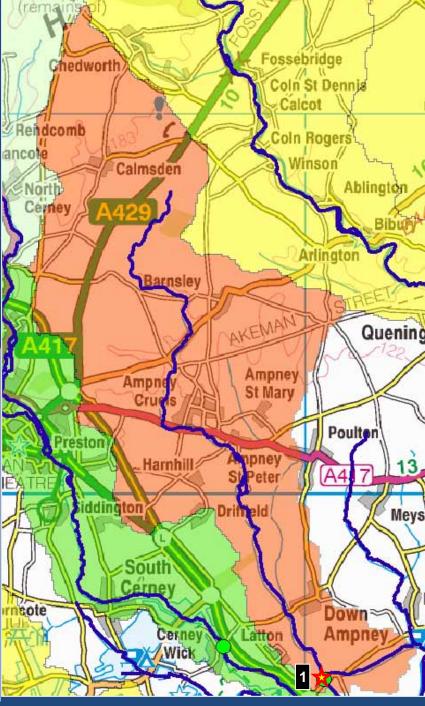
## **Upper Thames Catchment Partners**

- Government Agencies
- Protected landscapes bodies
- Local Authorities
- Farmer Groups
- Private sector: Water utilities, energy providers
- Conservation groups
- Water user groups (fishing and recreation)
- Waterways group (restoration of canal)
- Local communities

#### **Drivers**

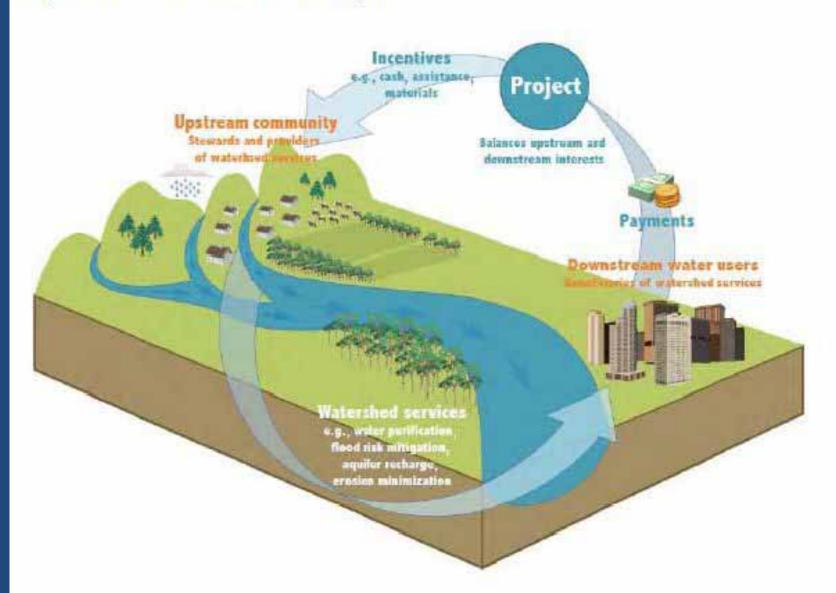
- Loss of arable reversion
- WFD failings & CSF
- Flooding, biodiversity
- Metaldehyde levels





# The PES concept

Figure 1 The PES concept



# **Human – Environmental System**

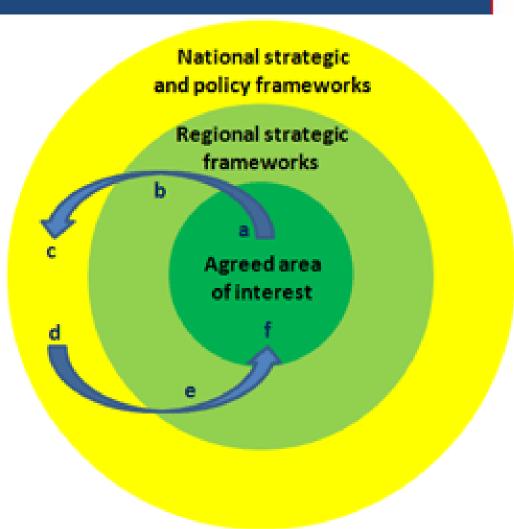


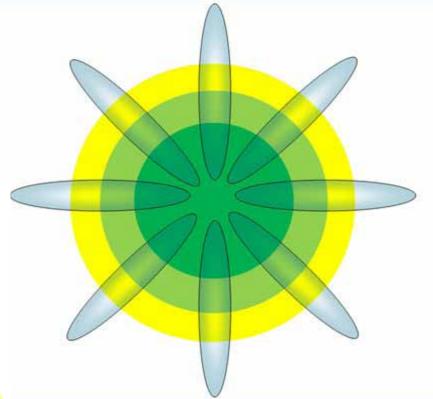
PES = Increasing supply and/or reducing demand

Burkhard et al 2012

## **Decision to consider PES**

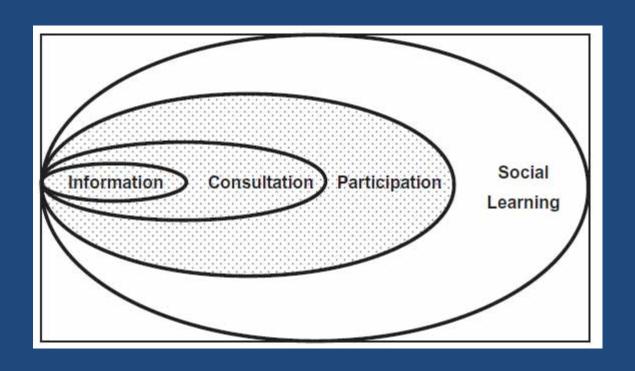
- Thames Water has no wish to be 'regulator'
  - But could suggest banning Metaldehyde
- Had partnership with high engagement
- Partial knowledge of Metaldehyde
  - How it behaves 'in the field'
  - What actions reduce concentrations
- TW will not fund PES on their own
  - Need partnership/other ESS
  - Existing partnership willing to explore

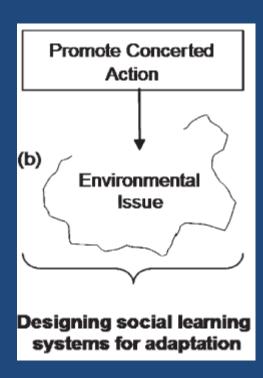




## Why stakeholder involvement

Collins and Ison 2009





Full involvement of both sellers and buyers. "Similar to AES but the boxes (options and payment) are empty".















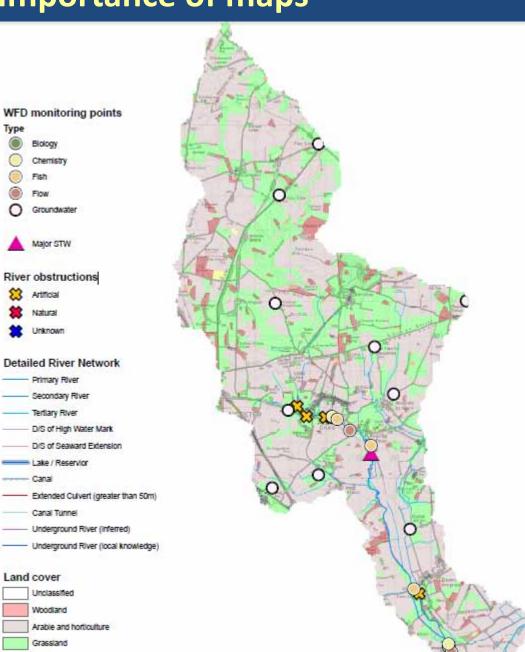


# Cotswold PES partnership

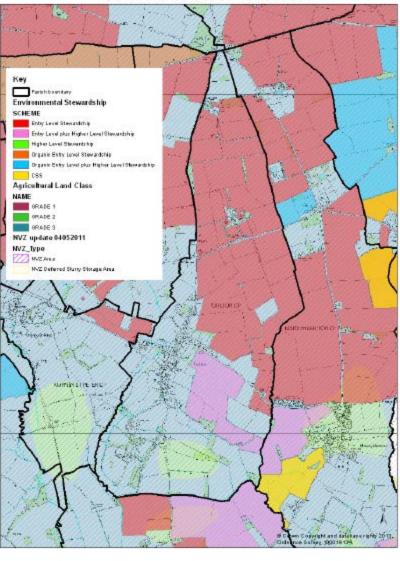
- Sellers farmers involved at start, data input
- Beneficiaries/Buyers
  - Private sector (Thames Water, Ecotricity)
  - Local communities (develop and benefit from)
  - Public Sector (EA and NE)
- Facilitators making links and contacts
- Researchers gather evidence & framework



#### **Importance of maps**



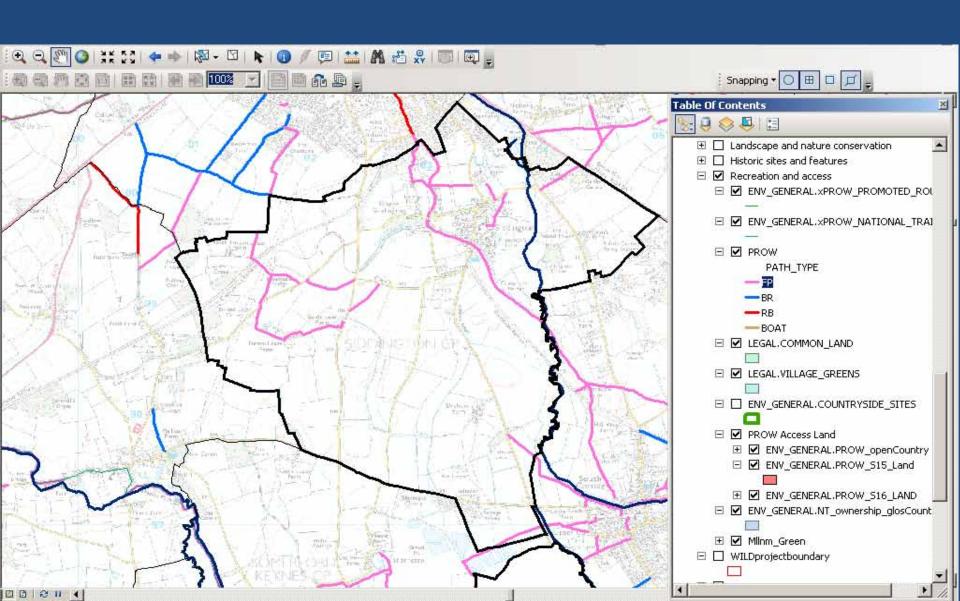
Map of Poulton Parish showing agricultural information.



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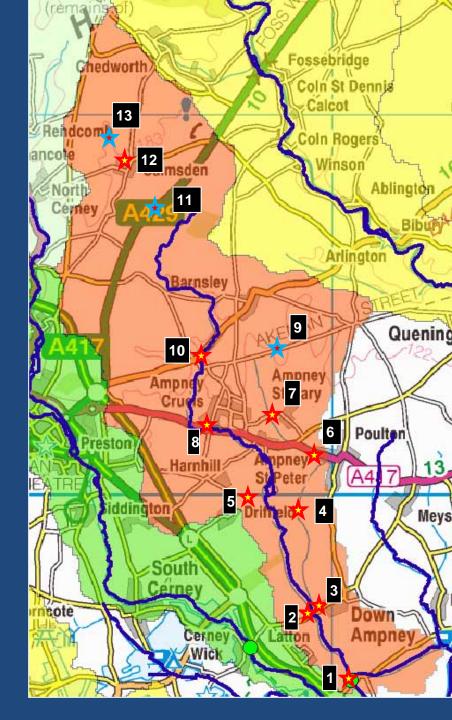
#### Access to data



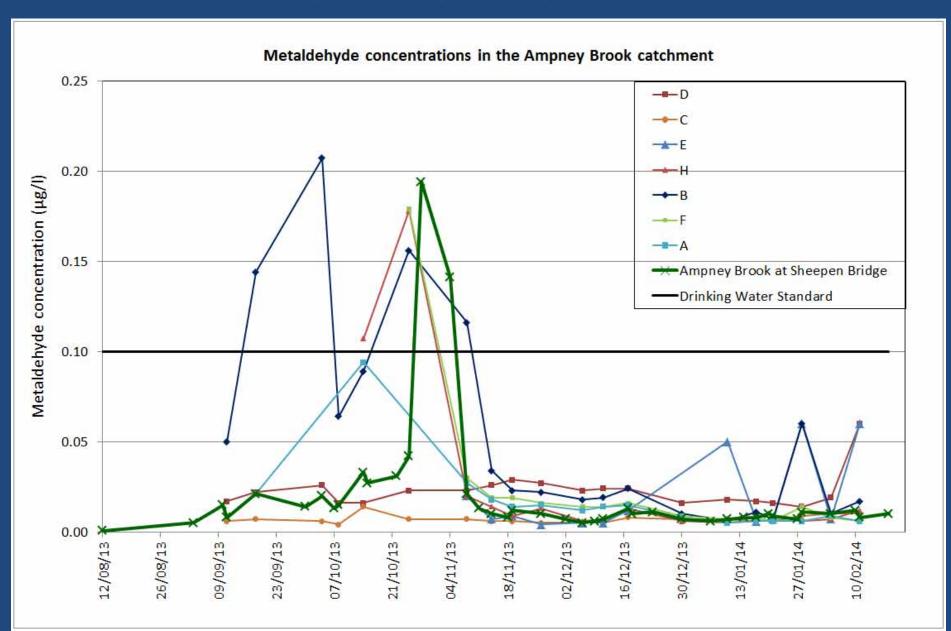


#### Data collection

- By farmer on farm
  - Nitrate, Phosphate and Ammonia + field diary
- By TW/UWE
  - Metaldehyde, pesticides
- By CSF soils
- Joint discussion of data
- Agree way forward
  - management options
  - knowledge gaps



## More detailed data



## Where are we now

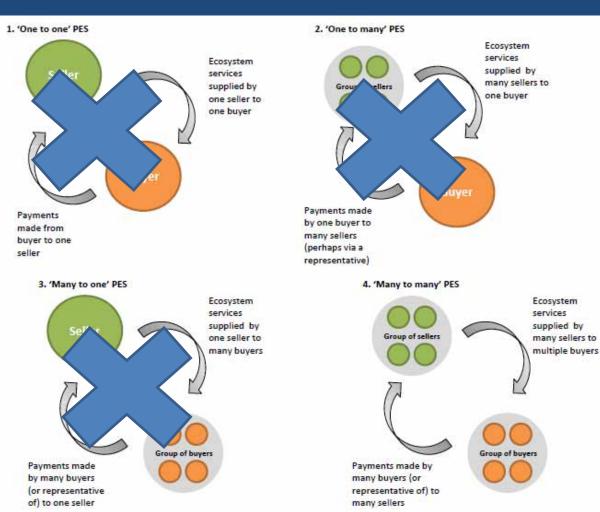
- We need more detail to increase certainty
- Options to take forward:
  - Introduce approved soil management practice
  - Specific management interventions
  - Add energy production component to arable rotation
  - Influencing application management
- Sellers install and researchers/buyers test
- Discuss results and fine tune

## What we have agreed thus far

Multiple sellers

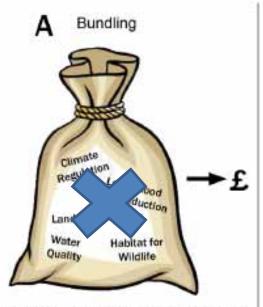
and multiple buyers

A 'Many toMany' PES



## What we have agreed thus far

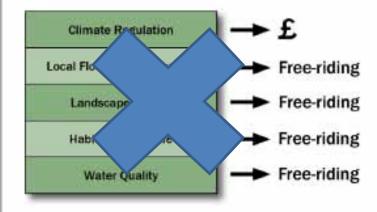
- Bundle of ESs rather than one ES
  - A layering of PES



Bundling – a single buyer, or consortium of buyers, pays for the full package of ecosystem services that arise from the same habitat. B Layering (or stacking)



Layering – multiple buyers pay for the separate ecosystem services that are supplied by a single habitat. C Piggy Backing



Piggy-backing – Not all of the ecosystem services produced from a single habitat are sold to buyers. One (or a few) service(s) is sold as an umbrella service, whilst other services are said to 'free ride', i.e. the benefits they provide are received by users free of charge.

# Payment for what?

- Not the status quo or passive
- Positive (long lasting?) impact (What is this?)
- Payment by input or outcomes (or both)
- What scale and time period (20-25 years)
- Certainty for buyer/beneficiary (required)
- Separating one ES difficult
  - Need system approach



## Remaining Challenges

- Including Soil (a slow variable) in the PES
  - structure/porosity/OM for many benefits
- Deepening testing with more interventions
  - Providing certainty for buyer/beneficiaries
  - Providing viability for range of sellers



## Remaining Challenges

- Including Soil (a slow variable) in the PES
  - structure/porosity/OM for many benefits
- Deepening testing with more interventions
  - Providing certainty for buyer/beneficiaries
  - Providing viability for range of sellers
- Developing robust framework
- What is 'benefit' of stakeholder engagement
  - Democracy, coordination, environmental effect

# Key findings so far

- Scoping to identify assets/beneficiaries
  - Provides basis for partnership
- Benefits of early stakeholder involvement
- Highly skilled facilitation is key
  - Developing trust, enabling engagement
  - Shared problem solving
- High reward for integrating local knowledge
- Participation could change institutions
  - Aid move from sector to territorial approach

# Any questions

Thank you

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