Wildlife sightings

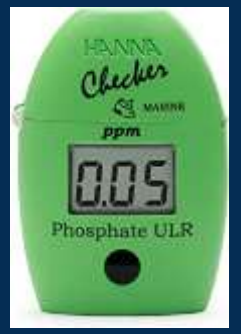
Citizen Science and the Catchment Systems Thinking Cooperative (CaSTCo) Project

Environmental DNA (EDNA)

Litter surveys

River obstacles

Outfall monitoring



Phosphate testing

Riverfly monitoring

Making sure that people count, at the heart of rivers' recovery.

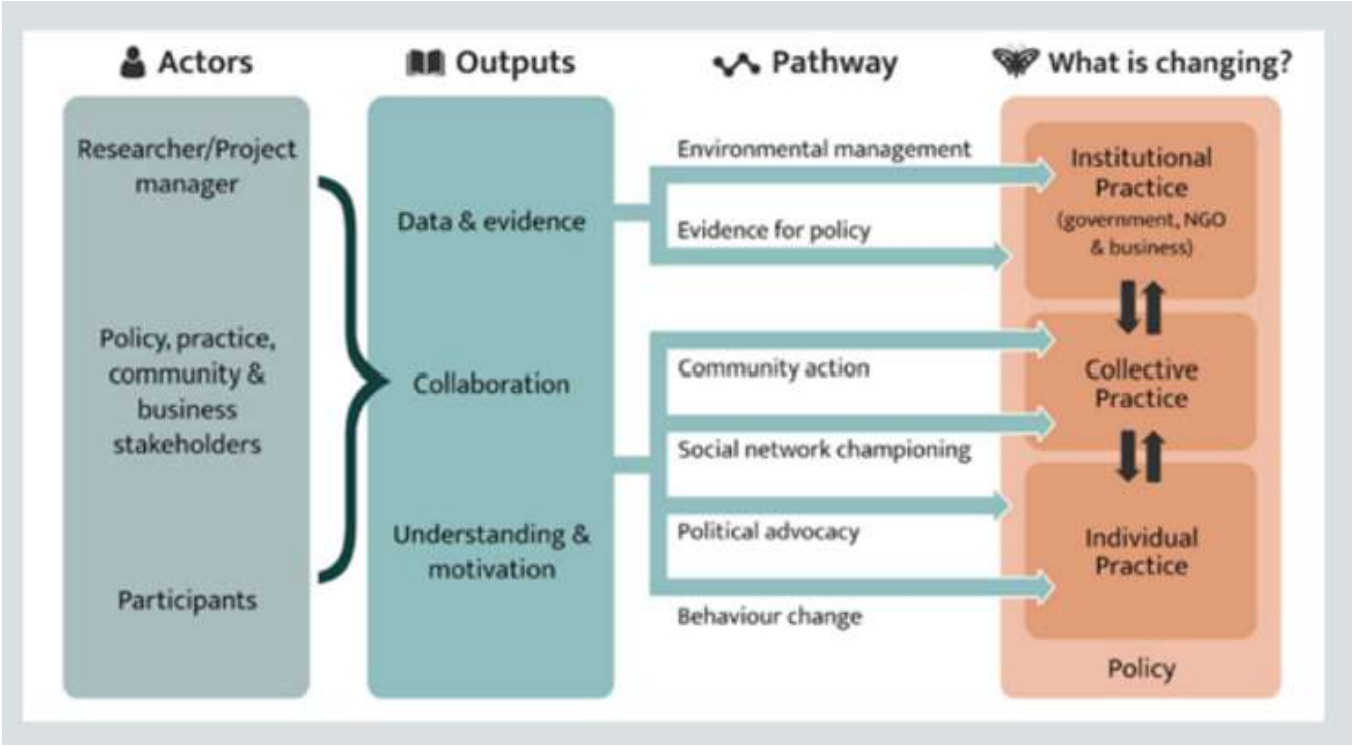
CaSTCo
Catchment Systems Thinking Cooperative

Water Breakthrough Challenge

United Utilities
Water for the North West

What is CaSTCo?

- A 3-year Ofwat funded innovation project involving
  24 partners across the Demonstration catchments
- CastCo aims to make sure that people really count, at the heart of rivers' recovery. And to
  - Bring in new sources of reliable information and share them more widely.
  - Close the gap that exists now between people, data on their catchments and decisions that affect their rivers.
  - Help diversify and democratise the data, plus inform better decisions.

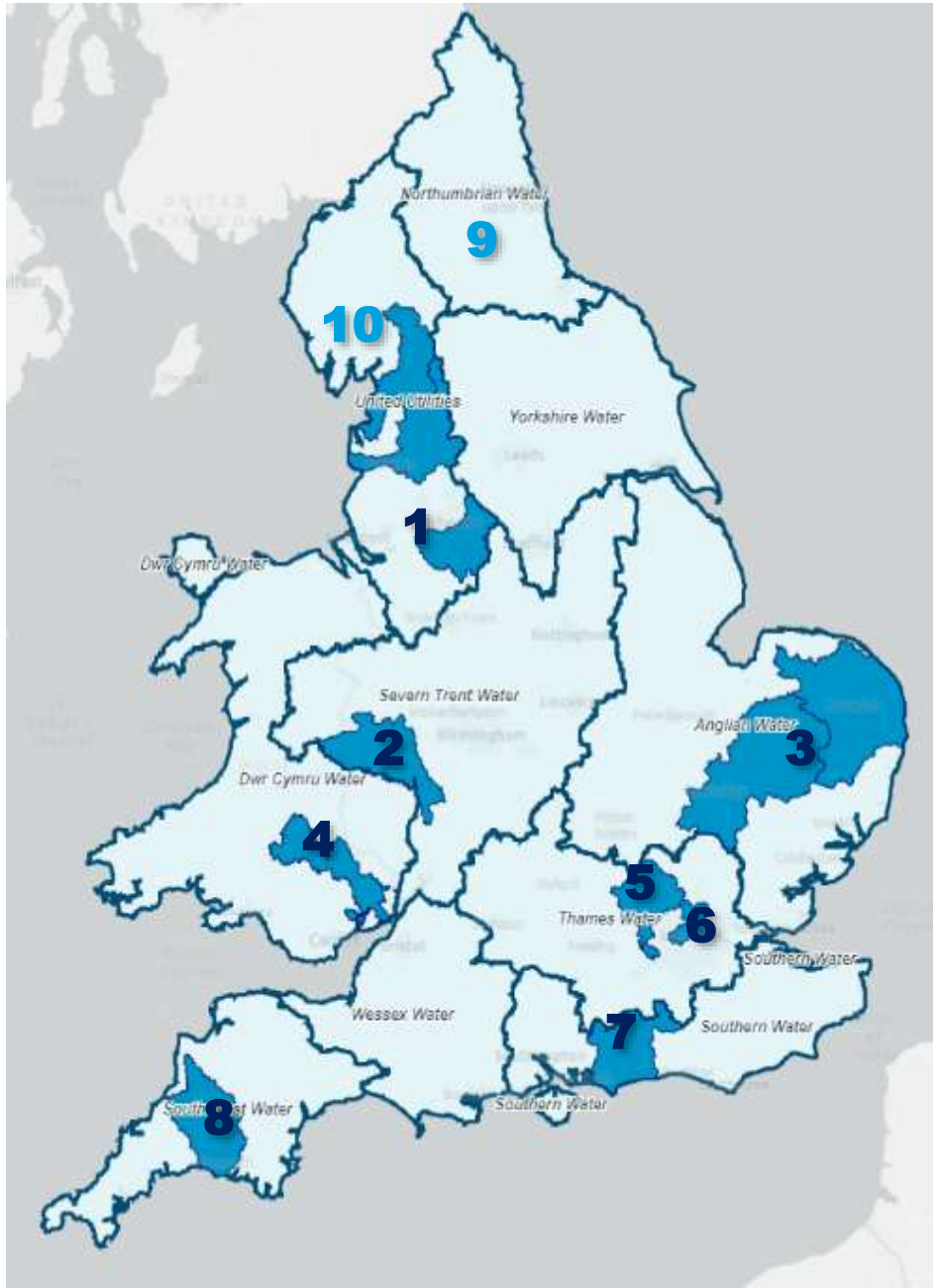


Bishop, I. J et. al. 2021. The Role of Citizen Science in UK Freshwater Monitoring. Earthwatch Europe

Demonstration Catchments

& main themes

1. **Upper Mersey, Ribble, Lune**
   fish, water quality
2. **Teme**
   bathing water
3. **Lark and Wensum**
   farming, performance of wetlands
4. **Usk**
   agriculture
5. **Beane**
   chalk streams
6. **Salmon & Dollis Brooks**
   community modelling
7. **Arun**
   soil health
8. **Tamar**
   diffuse water quality
9. ***Ouseburn***
   multiple pollution sources
10. ***Windermere***
    integrated monitoring



24 project partner organisations including:

- 12 Water companies
- CaBA partners
- Environment Agency
- Specialist advisors
- Universities

Each demo catchment includes:

- A volunteer coordinator
- Monitoring equipment
- Training and technical support
- Funded time to co-design the framework
- Funded time to develop a collaborative monitoring plan for their catchment
- Comms support

CaSTCo

CaSTCo Mission

What change do we want to see?

Communities are included in collecting and sharing river catchment data so that we all have better understanding and achieve better management of our rivers.

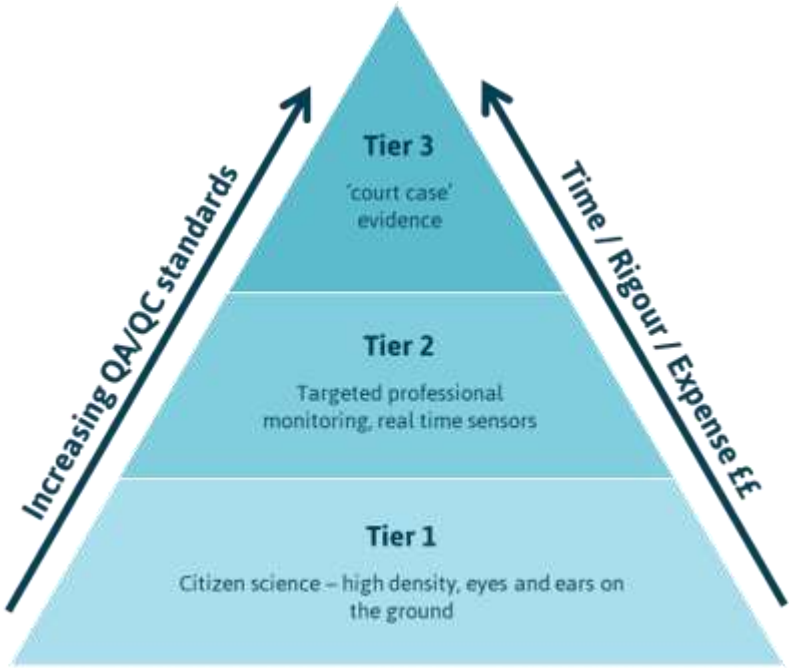
CastCo Outputs

What are we going to produce?

We will build the first national framework to enable communities to collect trustworthy river catchment data and share it openly.

This important information will be used by the water industry, authorities & communities to understand the health of our rivers, problems & solutions.

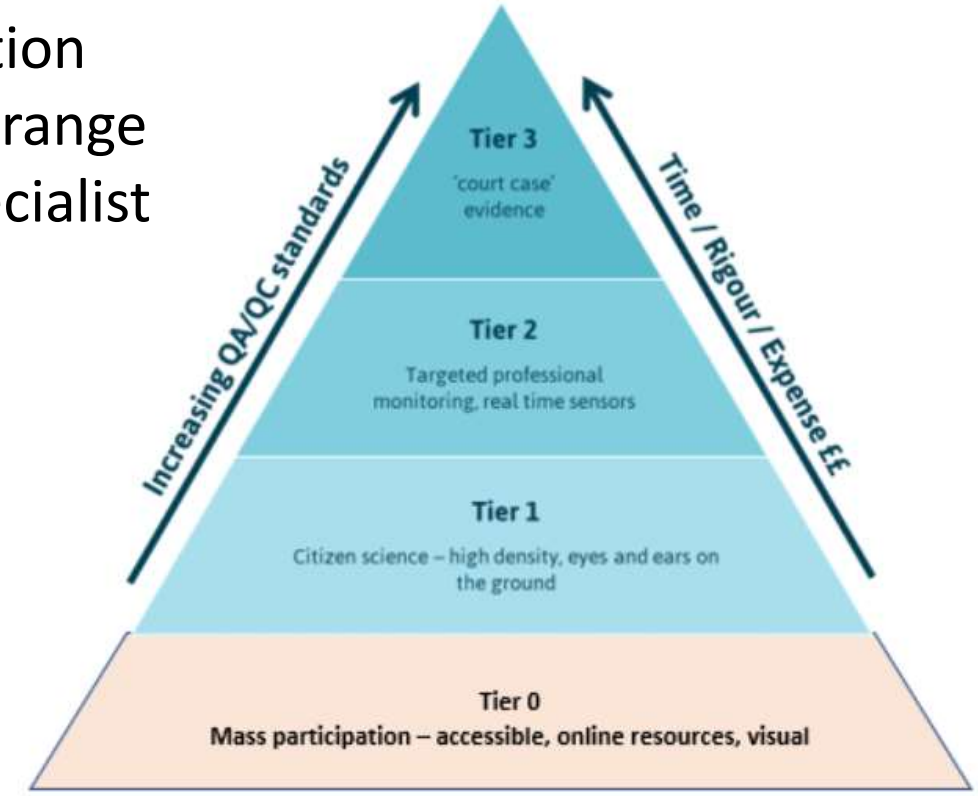
We will build this together, through testing and innovation, in the Demo catchments around England and Wales.



CastCo Outputs

RiverWatch…

Entry level river survey scheme that enables large numbers of people to collect useful information on river condition and is accessible to a wide range of participants without specialist expertise or prior training.



Environment Agency and/or Water Companies
ARMI / Urban / Extended Riverfly NGO monitoring, local investigative with or without volunteers
Westcountry CSI, Freshwater Watch, Water Guardians
River Watch, Big Garden Birdwatch, Big Butterfly Count

CaSTCo 3-year project objectives

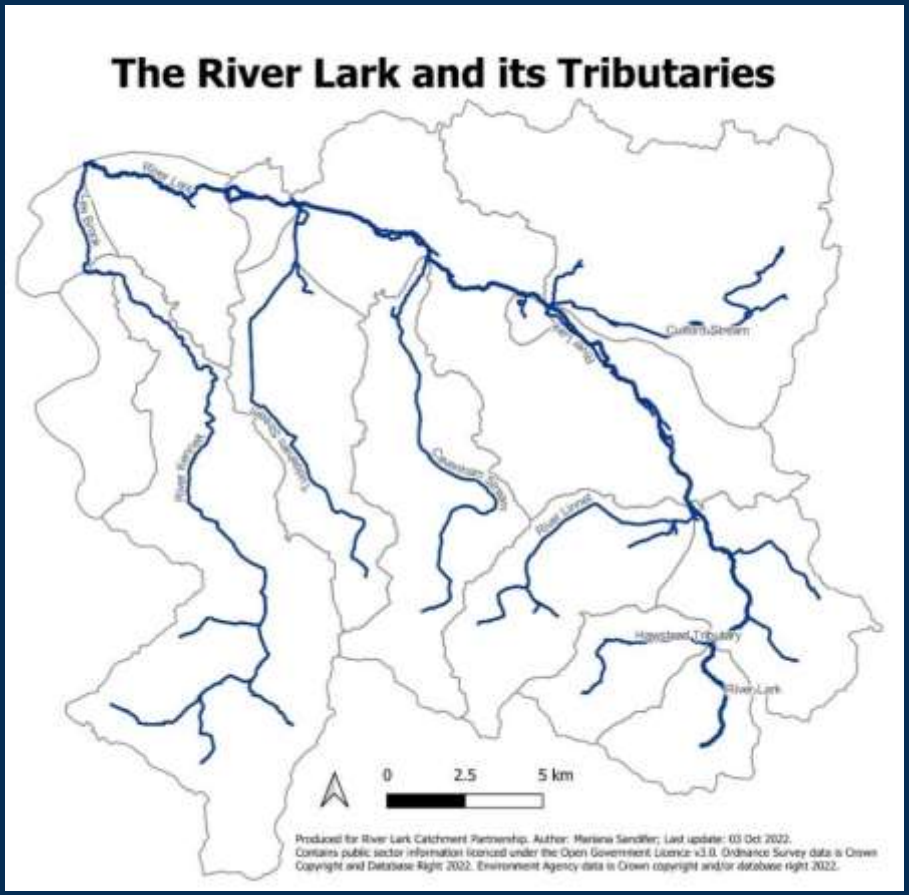
1. To deliver… an agreed framework for the people to monitor rivers and their catchments
2. … a platform (or portal) to openly share river catchment data
3. … a training programme for both volunteers and trainers.

4. To demonstrate how this works in the “Demo catchments”
5. To test the framework and platform across a large area with volunteers
6. And review how well this worked.

7. To write… a plan to make this type of monitoring, part of business as usual in the future
8. … a plan to ensure that what we’ve achieved becomes part of how the water sector makes its big decisions about the environment.

Objectives for the Lark

- Water quality & steam flow monitoring
- Sediment & nutrient load estimation
- Impacts on invertebrate populations?
- Understanding fish kills
- How will development affect the Lark?
- Developing a platform for visualising & sharing data
- Improve public understanding of river health
- How accurate is CS data & how can we use it?
- Can we use CS data to engage agricultural change?
- Can we engage landowners in CS?

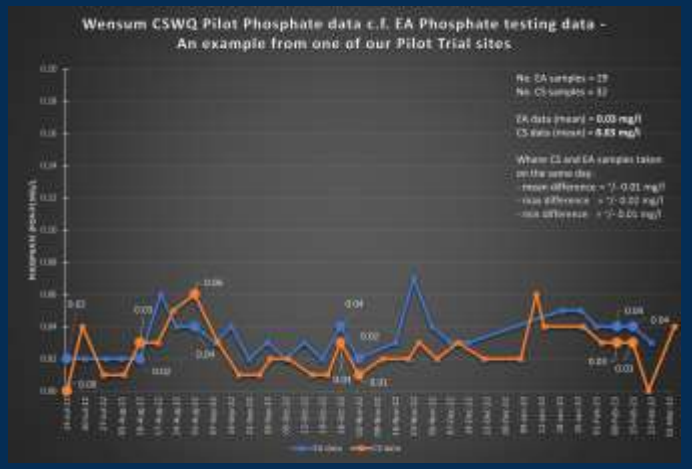


Making progress……

- Engaging with partners to design a Collaborative Monitoring Plan for the Lark
- RLCP leading on flow monitoring & training volunteers; trialing flow meters
- New equipment inc. DO meter from Water for Tomorrow
- Working with Anglian Water on Demo+ objectives including data platform
- Working with Wensum & EA to start validating CS data & testing methods





Longer-term aims (10+ years)

To support people in monitoring their rivers and catchments beyond the CastCo project

1. *Empower catchment partnerships, communities and citizens in every Demo and beyond to ask questions about the health of their river and gather the right evidence.*
2. *Use the evidence to develop a shared understanding of river catchments leading to collaborative decision-making and informed actions that deliver environmental improvements.*
3. *Promote the contribution of community involvement in deriving evidence for catchment management.*
4. *Community monitoring inspires people to value their river catchments.*
5. *Integrate good quality citizen science and community monitoring data into a local evidence base in every Demo catchment.*
6. *Partners build a network for sharing learning with each other.*
7. *Use the achievements and learning to seek funding for growing community monitoring nationally.*

From Visioning Workshop (Jun 2022) – see Miro board:
CaSTCo Visioning Workshop, Online Whiteboard for Visual Collaboration (miro.com)