



Understanding the Nexus with a complexity lens

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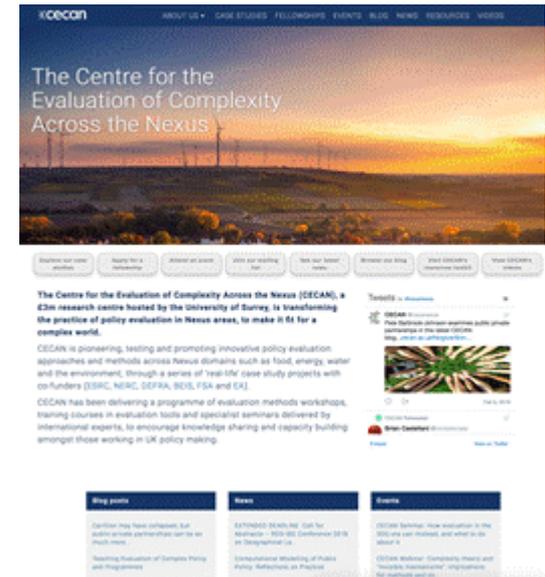
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❖ Overview

- The UK Centre for the Evaluation of Complexity Across the Nexus
 - Using complexity in WEF policy making and evaluation
- Public-private partnerships at the nexus
 - Examples
 - An ecosystem of partnership working



What is CECAN?

❖ Centre for the **Evaluation of Complexity** Across the **Nexus**

❖ Research centre

- Funded by research councils and gov departments/agencies
- 9 Universities, 5 practitioner orgs
- Mix of evaluators, and complexity, social, and environmental scientists
- Started March 2016
- **pioneering, testing and promoting innovative policy evaluation approaches and methods**



What is complexity? What is systems thinking?

❖ Similar ideas

- Academic differences
- In practice, the same

❖ Think in systems

- Think holistically, across systems
- Many and diverse components, which interact and adapt in nonlinear ways

❖ Key characteristics:

- adaptation to changes
- feedback loops
- thresholds for change
- areas of relative high and low stability
- past states influencing possible future states
- being highly dynamic, and
- being an open system, impossible to bound.

❖ Result

- tipping points, emergent new properties, and **unpredictability**
- Need different approaches and methods



Josina Vink
@josinavink

@Ecocene works to create a typology of systemic relations
#RSD6
12:55 PM - Oct 20, 2017

What we have been up to

- ❖ Case studies - co-produced projects with government, e.g.:
 - Farming and agriculture
 - Renewable heat
 - Energy trilemma
 - Waste crime
- ❖ Government guidance on evaluation - Magenta book
- ❖ Commissioned
 - Complexity Evaluation Framework for Defra
 - Water systems for Defra
- ❖ Briefing notes (EPPN) - cecan.ac.uk/resources
- ❖ Events, webinars
- ❖ Capacity building

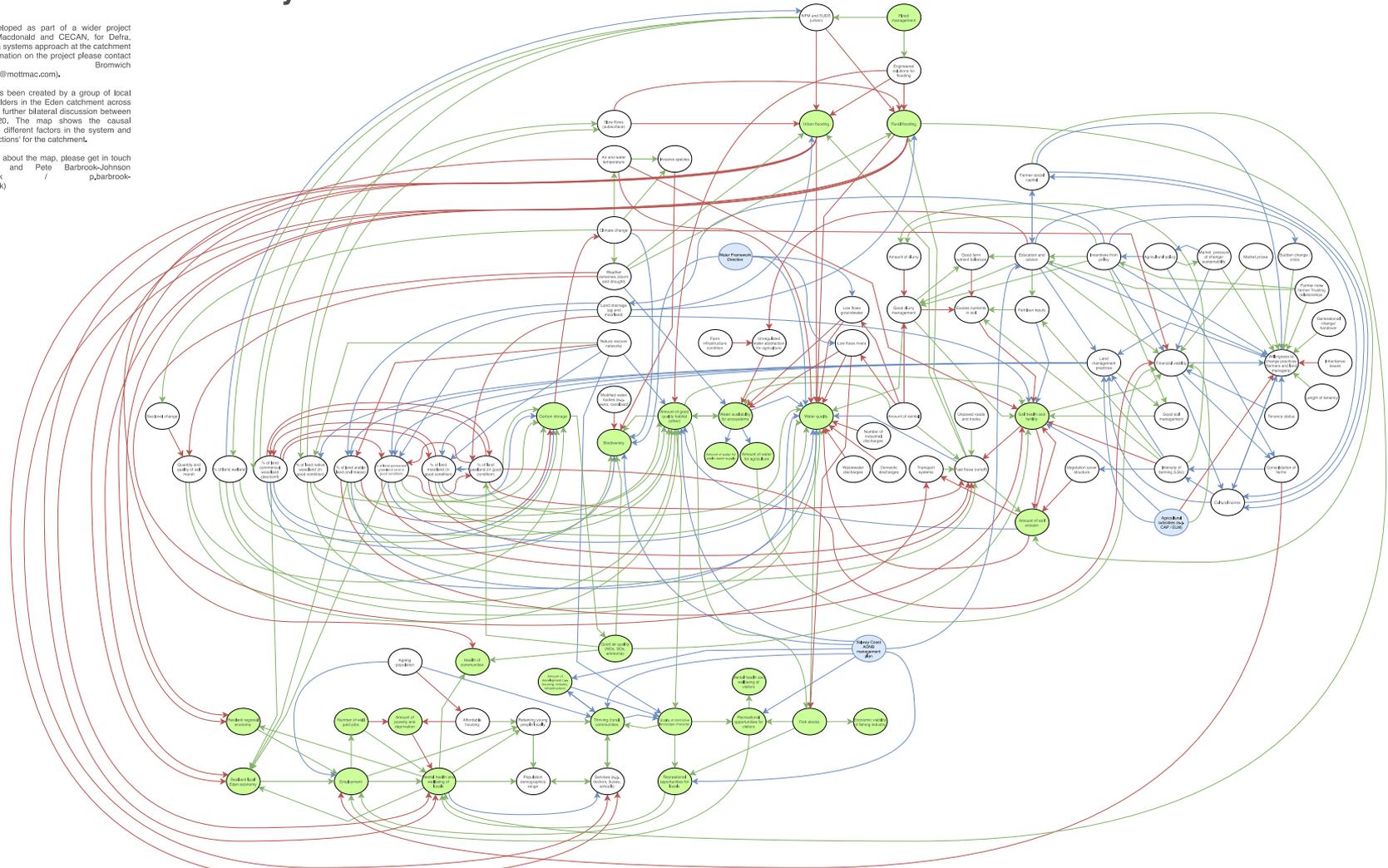


Participatory System Map of the Eden catchment water and environment system

This map was developed as part of a wider project delivered by Mott Macdonald and CECAN, for Defra, exploring the use of a systems approach at the catchment level. For more information on the project please contact Brendan Bromwich (brendan.c.bromwich@mottmac.com).

This system map has been created by a group of local and regional stakeholders in the Eden catchment across three workshops and further bilateral discussion between Jan and June 2020. The map shows the causal connections between different factors in the system and key outcomes or 'functions' for the catchment.

For more information about the map, please get in touch with Alex Penn and Pete Barbrook-Johnson (a.penn@surrey.ac.uk / johnson@surrey.ac.uk) / p.barbrook-johnson@surrey.ac.uk



Legend

- Positive causal connection (Red arrow)
- Negative causal connection (Blue arrow)
- Complex or unclear causal connection (Green arrow)

Policy factors (Green circle)

Factor (White circle)

Policy levers (Blue circle)

Policy: These policy factors have been added to the map. These show the influences of these policies on the system. Those are not the only relevant policies for the catchment. Please see the full report for a more comprehensive list.

Successes and failures at the nexus

- ❖ Complexity and systems a natural way into WEF thinking
 - Cross-domain
 - Social and participatory
- ❖ Methods that help (inclusive but rigorous, connect to other analysis)
 - Systems mapping
 - Qualitative Comparative Analysis
- ❖ Department/ministry-level objectives drive focus and aims - excludes nexus thinking
 - We haven't cracked this - cultural shift/social innovation
 - Commissioning of evaluation and applied research will be key
 - Informing guidance and building capacity

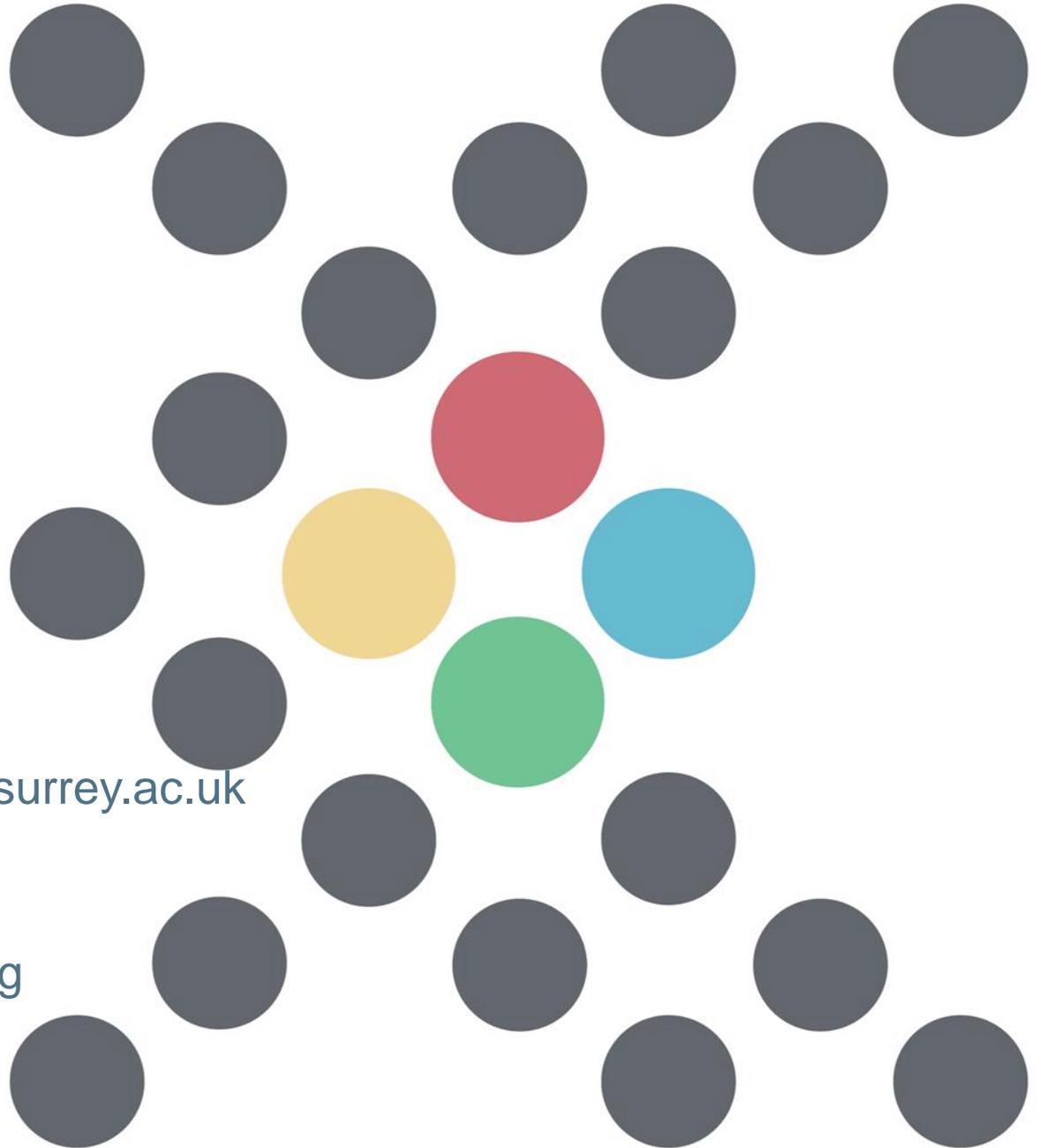
Public-private partnerships at the nexus

- ❖ Innovative forms of governance
a key part of better WEF thinking
- ❖ More participation and ownership
at local levels
- ❖ Operating across scales
- ❖ Examples
 - South Lincolnshire Water
Partnership – multi-sector assets
 - Landscape Enterprise Networks –
unlocking investment in
landscapes – like Payment for
Ecosystem Services
- ❖ innovativeppp.org



What next?

- ❖ Making complexity and systems tools more accessible, practical and valuable
- ❖ Advocating for WEF thinking up and down the policy hierarchy – being ‘WEF entrepreneurs’
- ❖ Supporting public-private-third sector collaboration
- ❖ Always keen for international collaboration – get in touch!



Get in touch!

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