



Implementing regulations in the real world

Louise Walker
Pennine Water Group
University of Sheffield, UK
9th June 2010

Themes

- 1. The difficulty in applying sustainability ideals in practice**
- 2. A transition to total water cycle management**
- 3. Creating the context for change**

1. Sustainability (SD) – a jaded term?

“Sir Crispin Tickell (2000)
former chair of the UK sustainable development panel:
“Treating the earth as if we intended to stay there”

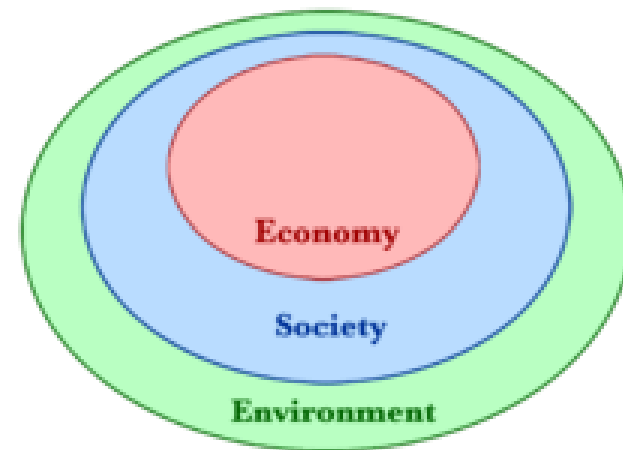
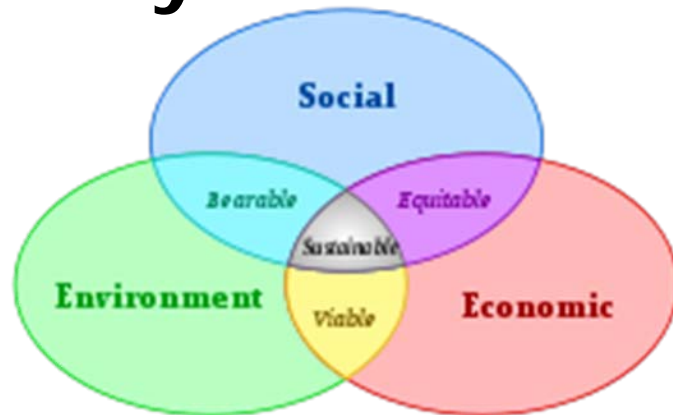
3 forms of resistance (Jacobs 1999):

- **We want it defined**
- **It is just a smokescreen**
- **It is inappropriate; it doesn't reflect cultural changes**

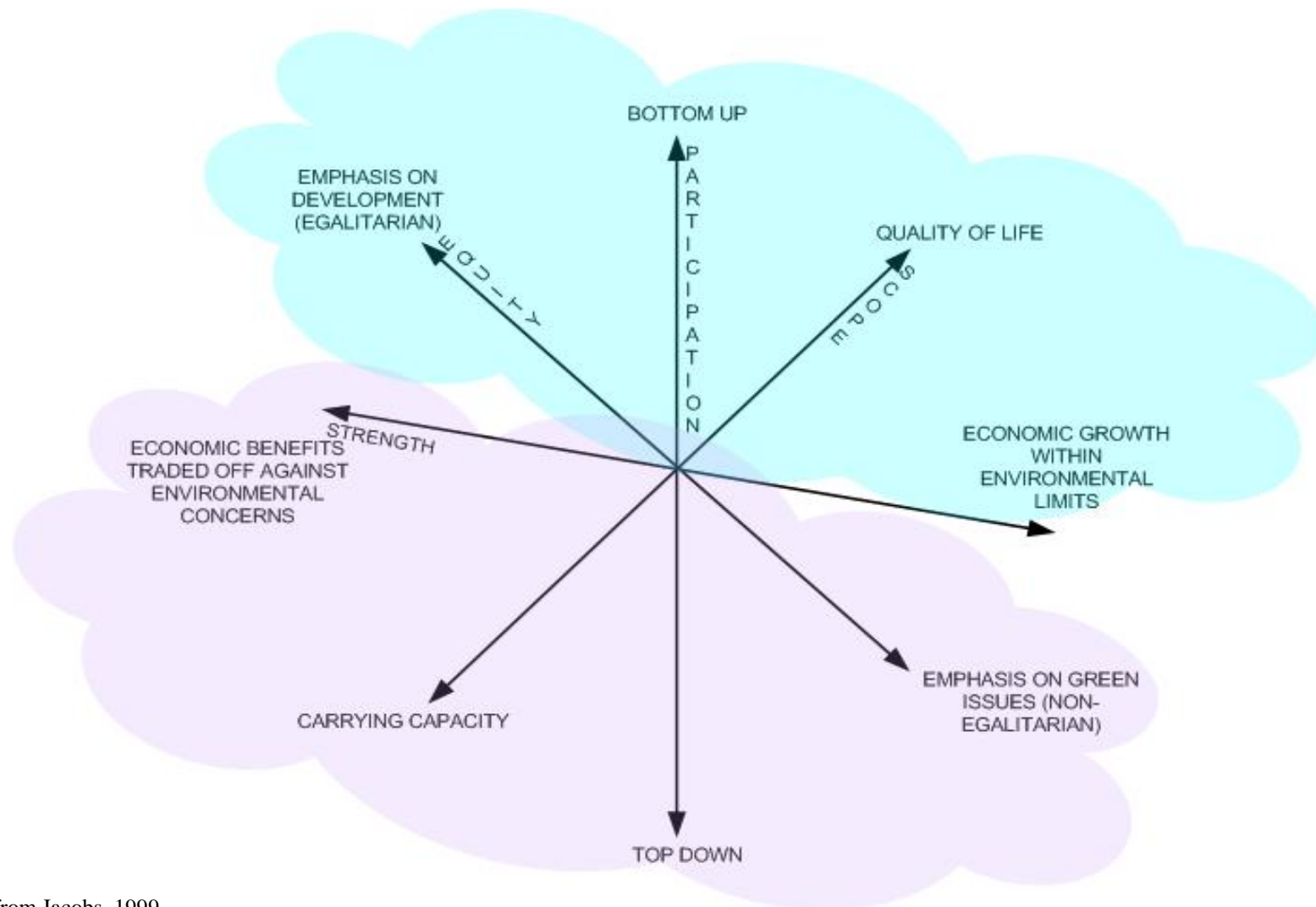
-or an essentially contested concept?

Gallie (1956)

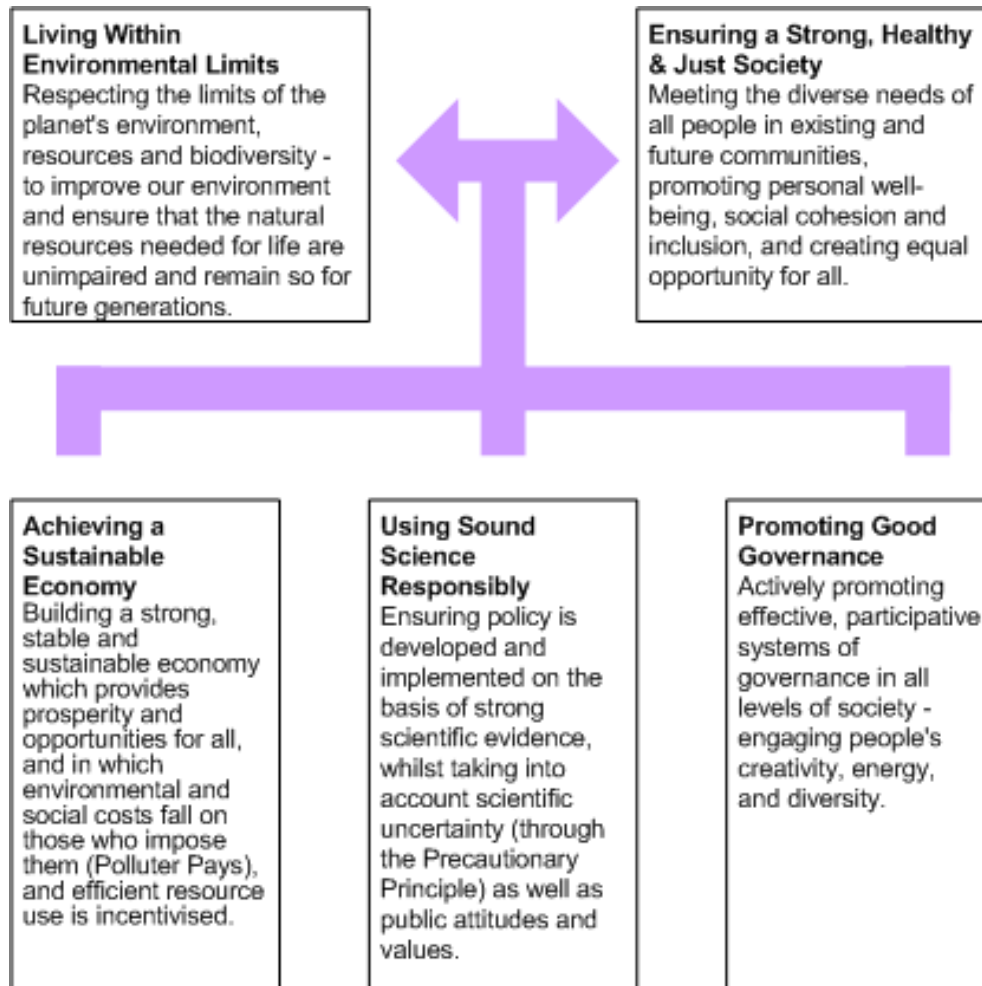
Concepts, the proper use of which inevitably involves endless dispute about their proper use e.g. social justice, fairness, democracy, art, duty...



From ideals to practice: 4 fault lines in the discourse



UK sustainability strategy



UK sustainable development strategy, 4 priorities:

- **Sustainable consumption and production**
 - **Protecting the natural resources **on which we depend****
 - **Building sustainable communities**
 - **Climate change and energy**
- + behaviour change & wellbeing**

Sustainability indicators, e.g.

Land use

Increase in space used for housing and highways
Reducing daily increase to 30 ha a day by 2020

Biodiversity

Population size of 59 selected Species of birds as an indicator for biodiversity
Stabilisation at a high level in 2015 (target based on the estimated level in 1975)

“If it can’t be measured, it can’t be managed”

Approach to implementation

Indicators

German Council for Sustainable Development (2001):
“...the results of several research projects demonstrate that the three-pillar model has been reduced to a listing of any societal objectives that agents happen to think important.”
indicators make it possible to underpin what is meant by ‘sustainability’.”

But: “The German Council for Sustainable Development sees the lack of data comparability as a serious problem. This situation prevents the required coordination at the various state levels and is a bottleneck for any commitment to the sustainability strategy.”

What really happens

- Local politics
- Money talks
- Lock in
- Interpretations
- Awareness
- Imposed procedures
- Unavailable data

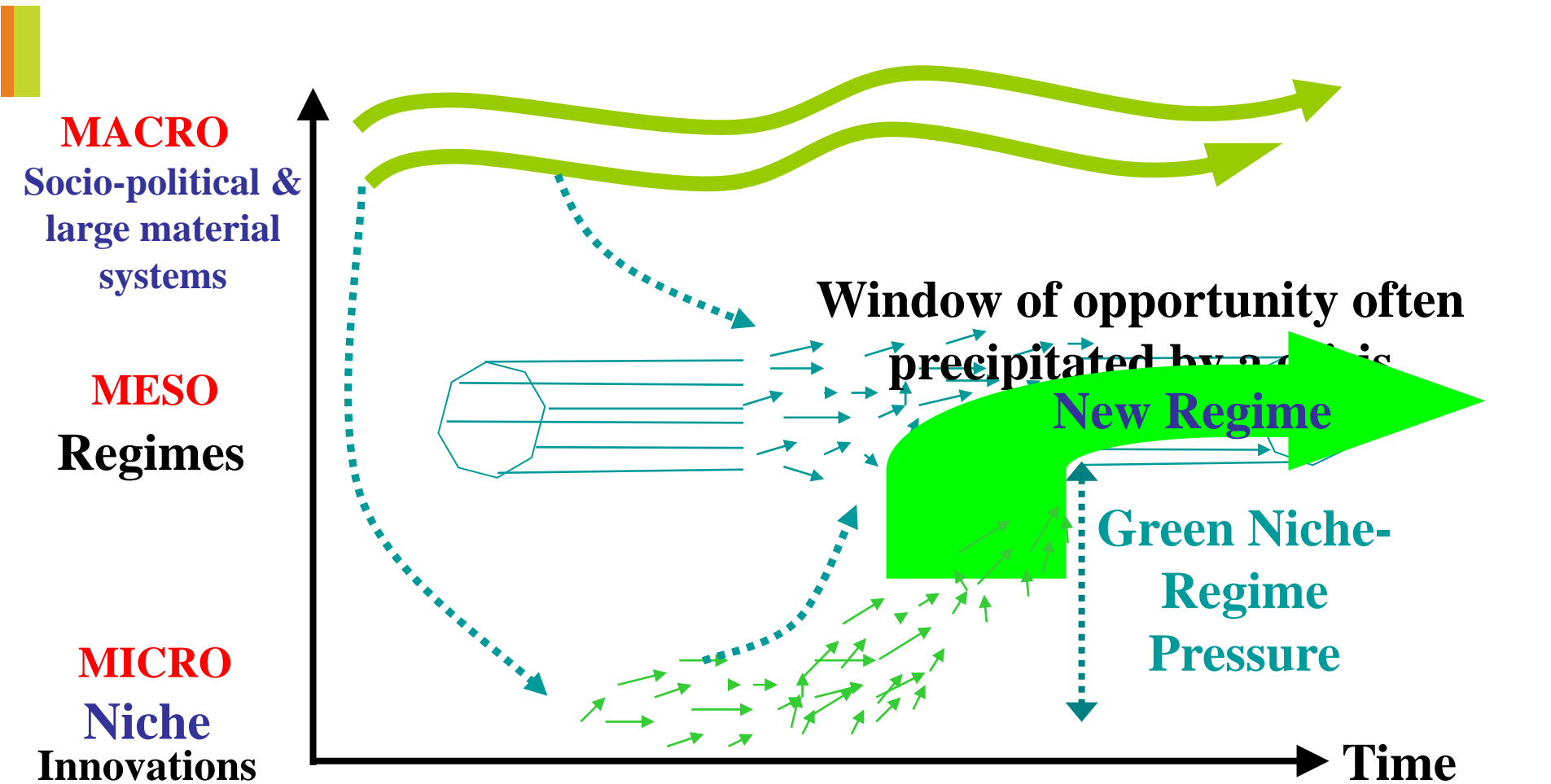
“While policy sets the direction of a community endeavour, those doing the day to day work in carrying out the mission hold the keys to its success”

(Larry Matel, US Engineer & LID expert, 2010)

2. A transition to more sustainable water management



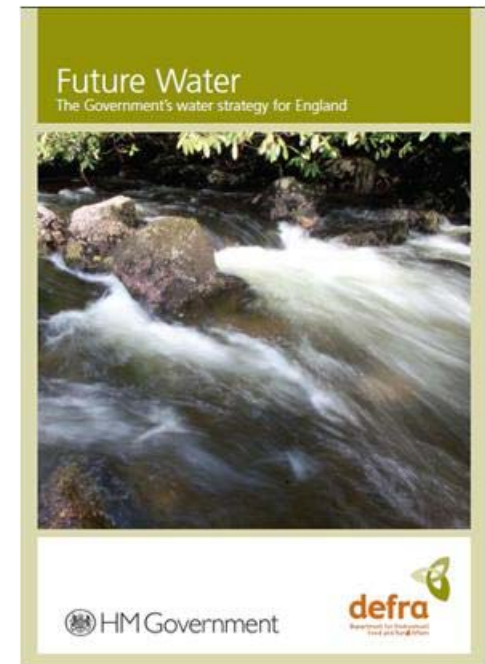
Understanding Socio-Technical Transitions



(Brown and Keath, 2008: Geels, 2007: Rip and Kemp, 1998)

Typical socio-institutional barriers

- Lack of a common vision**
- Institutional fragmentation**
- Undefined organisational responsibilities**
- Limited political incentives and disincentives**
- Poor organisational commitment**
- Technological path dependency**
- Poor community capacity to meaningfully participate**
- Lack of experience with facilitating integrated management processes**



Future Water outlines a strategic and integrated approach to the sustainable management of our water resources, for the public water supply as well as for the provision of healthy ecosystems and the services they provide

3. SKINT: helping the transition

Skills, Integration, New Technology

- Integrating spatial planning and water management
- Encouraging the use of innovative technical and sustainable solutions which have already proved to be successful
- New ways of learning
 - In a multi-disciplinary context

SKINT and sustainability

Aim: to provide procedural and technical input for the assessment of sustainability of technical solutions

- also 'selling sustainability'

Methods:

- review of current procedures, share knowledge & enhance good practice
- Collaboratively produce a means for assessment

SKINT sustainability discussion template

ECONOMY, SOCIETY, ENVIRONMENT:

WATER:

- Are water issues taken into account from the inception of the project?
- Have catchment characteristics been considered?
- Does the project reduce flood risk locally?
- Does the project ensure no increase in flood risk downstream?
- Does the project enhance receiving water quality?
- Are groundwater levels affected?

SKINT sustainability discussion template

PLANET:

Does the project have a positive effect on conservation /biodiversity?

Does the project use renewable or recyclable materials wherever possible?

Does the project follow the principle of the waste hierarchy (reduce, reuse, recycle, recover)?

CLIMATE:

How adaptable is the project to changes in climate and demographics?

Has the project been assessed against recognised scenarios?

CULTURAL HERITAGE

Does the project impact on build or buried cultural heritage?

Assessment objectives:

- Simple to use
- Easily accessible data
- Equitable
- Basis for discussion
- Enables evaluation of technical measures
- Applicable for all partners and their stakeholders
- Transferrable to other projects

However

- Something rather than nothing
- Speaking more or less the same language
- Needs time, context and communication
- New terms, same ideals?
- Resilience
 - Vulnerability
 - Adaptability

Learning and Action Alliances (LAAs)

- Active learning & Knowledge Sharing



MARE
FRC
SAWA

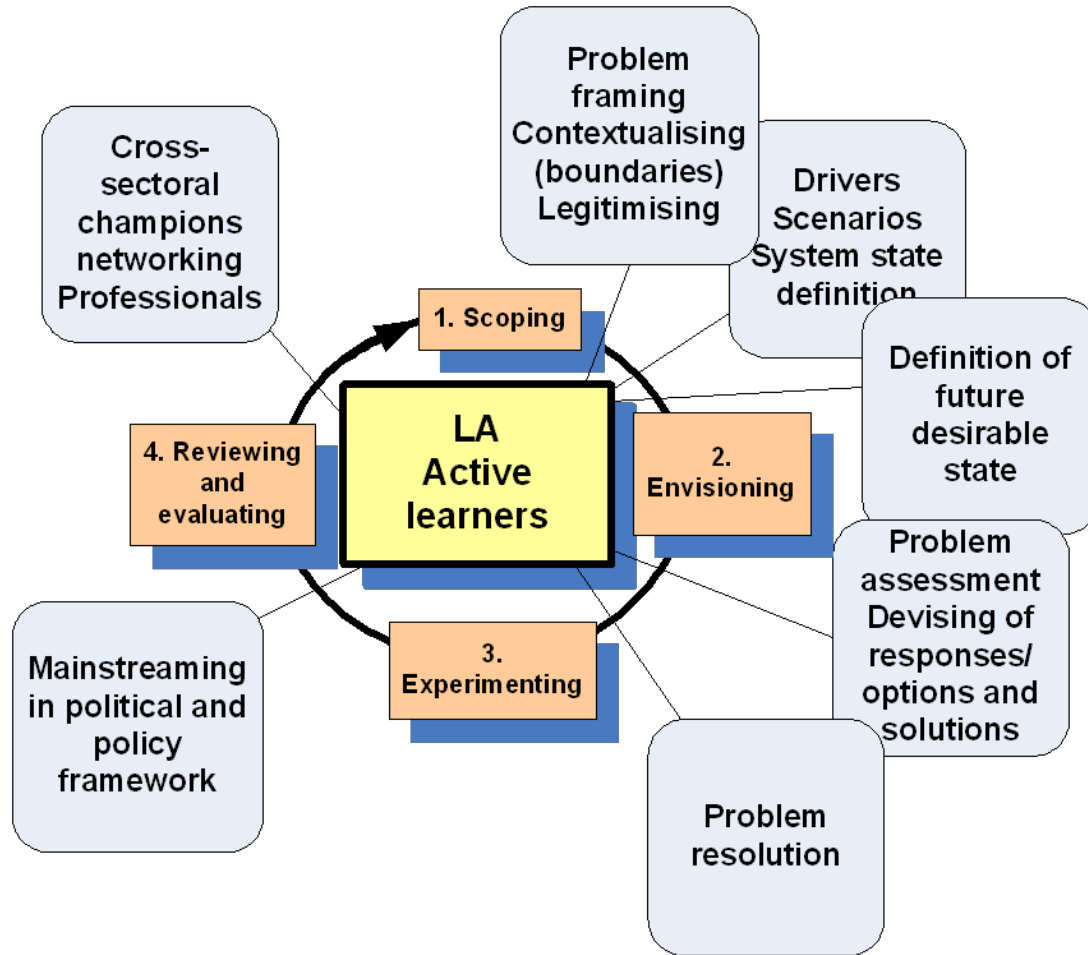
Complex problems with multiple and diverse stakeholders in the context of an uncertain future - 'wicked' problems

Learning & Action Alliances

LAAAs are central to the whole process of sustainable living and delivering sustainable water management and the **integrated sustainability assessment** process.

A cyclical, participatory process of scoping, envisioning, experimenting, and learning through which a shared interpretation of sustainability for a specific context is developed and applied in an integrated manner, in order to explore solutions to persistent problems of unsustainable development (Weaver & Rotmans, 2006).

The integrated assessment process



Creating a context for change

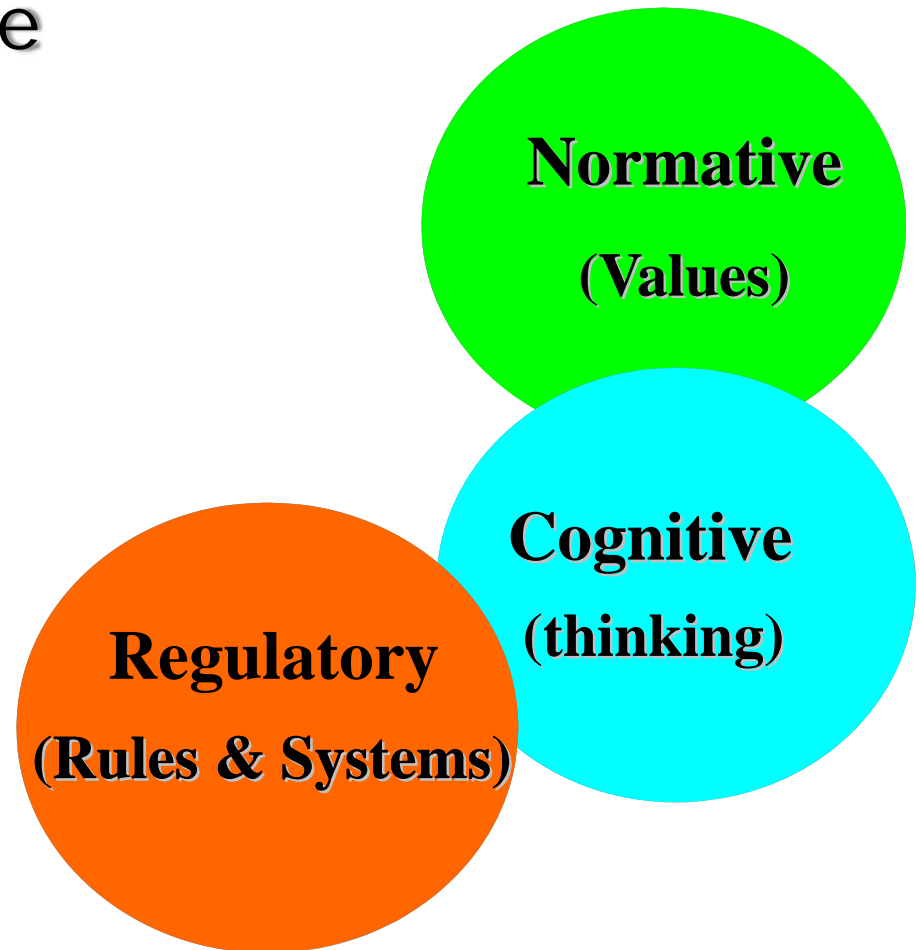
Factors for change:

- Enabling context
- Champions of change - & their training
- Luck
- Trust

"Humans are ambitious and rational and proud.
And we don't fall in line with people who don't respect us and
who we don't believe have our best interests at heart.
We are willing to follow leaders, but only to the extent that we
believe they call on our best, not our worst."
Rachel Maddow, US political commentator).

Inevitable change or managed transition?

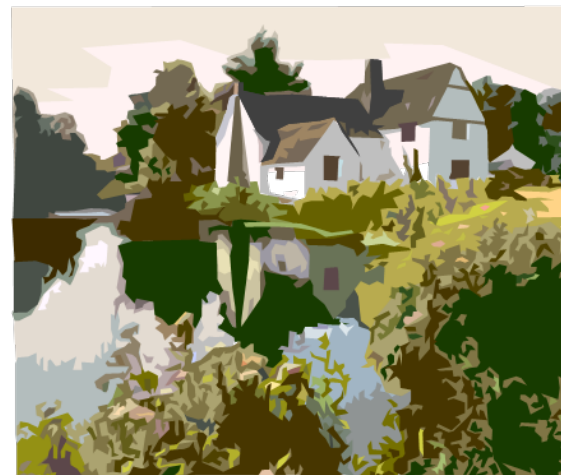
Change is inevitable – either planned or forced
Beneficial or destructive



In conclusion

We need to:

- Test and re-test the concept
- Use other terminology if it makes more sense in practice
- Not lose sight of the issues
- **Communicate**



THANK YOU FOR LISTENING



References

- Brown, R.R. Keath, N. and Wong, A. (2009) *Wat. Sci. & Tech.* 59:5, 847-855
- Brundtland G.H. (1983) *World Commission on Environment and Development (WCED)*, United Nations. Reported in: *Our Common Future* (1987), Oxford: Oxford University Press. ISBN 0-19-282080-X
- Gallie, W.B. (1956) Essentially contested concepts. *Proceedings of the Aristotelian Society*, vol. 56, 1956, pp. 167-198
- Jacobs, M. (1999) Sustainable Development as a Contested Concept, pp.21-45 in Dobson, A., *Fairness and Futurity: Essays on Environmental Sustainability and Social Justice*, Oxford University Press, (Oxford), 2006. First published 1999
- Matel, L.J. (2010) Creating an LID Environment in an Ultra Urban Setting. Larry John P.E., Managing Engineer, City of Bremerton Department of Public Works, *Low Impact Development 2010: Redefining Water in the City* © 2010 ASCE
- Weaver P M., Rotmans J. (2006). Integrated sustainability assessment: what, why, how? Matisse (Methods and Tools for Integrated Sustainability Assessment) Working Papers 1. October. (<http://www.matisseproject.net/projectcomm/index.php?id=643>) (accessed 24/11/08)