

# ***Shaping the future of economic valuation for environmental management***

*How can academics, consultancies, NGOs and government economists work better together to respond proactively to changes in our field?*

Steve Arnold  
Principal Economist

@outdoorecon  
steve.arnold@environment-agency.gov.uk

What we  
do

What we're  
facing

What we  
need

# What we do

10,000 staff; 12 economists

Flood risk management; industrial regulation; water and land

We use appraisal to make case for spending; make case for not spending; planning and strategy; evaluation; options analysis

Guidance, tools, steering, quality assurance

# What we do



## Flood risk management

- CBA
- For decisions around spending and funding
- By local EA staff
- Based mainly on avoided damage costs



## Industrial Emissions

- Disproportionate Cost Analysis
- Carried out by the company asking for a derogation
- Based on damage costs of emissions



## Water Framework Directive

- Disproportionate Cost Analysis
- To inform minister's decisions on WFD targets
- Carried out by local EA staff
- Based on stated preference values

# What we're facing

## Drivers of change:

- More complex and diffuse problems
- Smaller budgets
- 25 Year Economic Plan, Defra group strategy

## Which lead to:

- Natural capital and integrated approaches
- Partnership working
- Local funding and local decision making

# e.g. in a catchment

## Current way:

- Flood risk management plans lead to individual plans being appraised.
- River basin management plans lead to appraisal of programme of actions for water companies, NGOs and other partners.
- Key issues for local populations are dealt with through these channels, such as consultation after draft plans are published.

→ Multiple appraisals in separate policy contexts

## Possible future way

- Create consultation and communication to work with local preferences and needs
- Design plan around flood, water and wider environmental requirements alongside local preferences
- Develop and appraise schemes within this wider context

→ Appraisals in same context

# What we need

- Better data:
  - Locally and spatially variable values
  - Strong grounding in qualitative research on preferences and tradeoffs
  - Values arising from a clear marginal change in the good/service
- Better skills:
  - Economists who know modelling and GIS
  - Better communication with non-economists
  - Environment and growth
- Pragmatic tools and guidance
  - How do we share them internally and externally?
  - How can we share our expertise and benefit from others'?