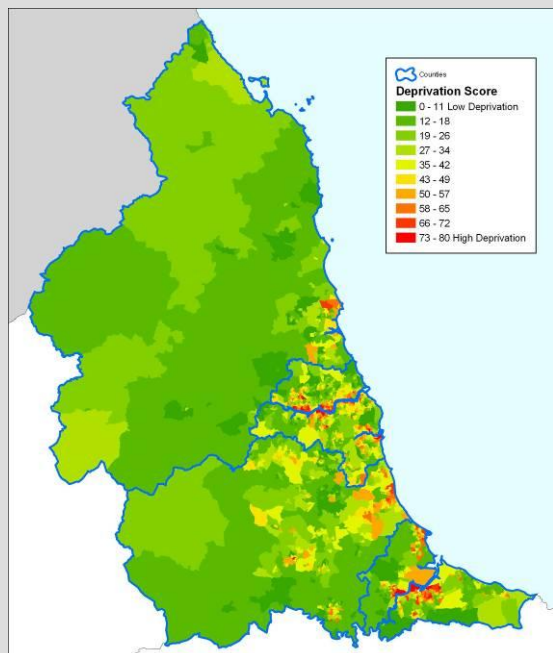


# North-East England Presented by Jeremy Hills

**Gent May 2009**

## Geographical Location

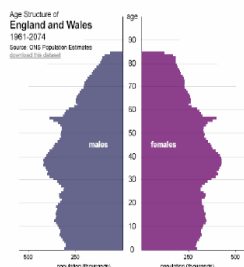


Key projected findings from this assessment are:

- Annual rainfall reductions throughout the region by up to 10 per cent;
- Increased seasonality of rainfall with increases of up to around 21 per cent in winter and reductions of up to around 37 per cent in summer;
- Variability in extreme rainfall events, but increase of up to around 20 per cent will be felt in some areas;
- Average seasonal temperatures to increase, with a region-wide annual average daily temperature change of just under 2°C;
- Extreme hot temperatures will increase by around 3°C;
- Heatwaves are likely to increase in frequency of occurrence;
- A reduction in the number of frost days;
- A major reduction in winter snowfall, of around 45 per cent to 83 per cent across the region;
- There is variability in the projected winter wind climate, but small increases will be felt in some areas;
- An increase in mean sea levels of around 0.3m; and
- An increase in sea surge levels of around 0.30m to 0.35m.

2003

2050



## Geographical Location

- **Local stakeholders: wide compliment.**
- **Management framework:**
  - **unclear beyond statutory jurisdictions.**
  - **Natural England reorganisation setback post ICZM stocktake.**
  - **Government Office NE / council mergers.**
  - **local specificities e.g. Durham Heritage Coast, joint MP for AONB/EMS, land ownership e.g. NT.**
  - **Industrial heritage / community groups.**

## Approaches to coastal management

- **Historical Background of your Expert Couplet Node:** NE Coastal partnership / NE Env. Forum, NE ICZM Stocktake, COREPOINT, IMCORE.
- **Local Issues to be considered (e.g. marina development):** Integration of decision making across sectors, marine spatial planning, regional working.
- **Current Management policy framework:** None! Statutory + local cases.

## Approaches to coastal management

- Existing adaptation strategies (Government or from sectors e.g. tourism)

### 1) NE Climate change action plan

"We all need to act now - our future quality of life depends on it"

Climate Change  
Action Plan for  
North East England

#### The AME Model

- Adaptation:** Accelerated climate change is inevitable – we need to adapt our behaviours, businesses and services to be more resilient
- Mitigation:** CO<sub>2</sub> and other greenhouse gas emissions are rising – we need to change the way we conduct our lives so we produce less greenhouse gases
- Economic:** Our region can gain competitive advantage by taking action now to adapt to and mitigate against climate change

The partnership has set up ten key workstreams that have developed this action plan to ensure that we take action now to protect our quality of life in the future. The workstreams are:

- Reducing greenhouse gas emissions
- Adapting to our changing climate
- Business response
- Transport systems
- Natural environment
- Construction industry
- Local Government
- Engaging leaders
- Communications
- Reducing our reliance on fossil fuels

## Approaches to coastal management

### 2) NE Climate change adaption plan



"We all need to act now - our future quality of life depends on it"

North East England  
Climate Change  
Adaptation Study



### Adaptation Approaches for North East England

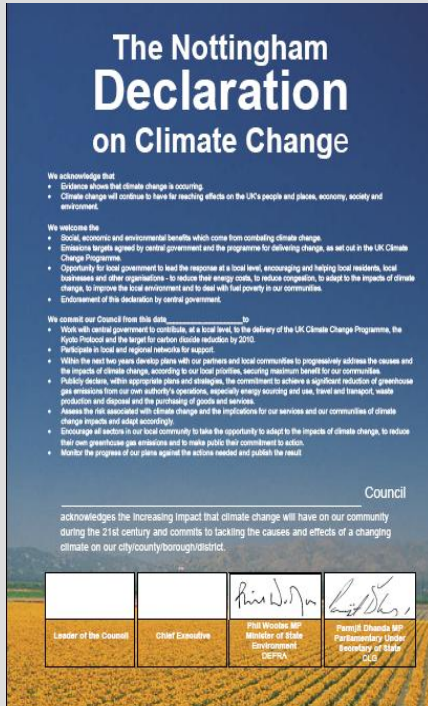
We recommend the following key adaptation strategies for countering the projected impacts from climate change across North East England by the 2050s:

- Gather and share information on climate change trends, impacts assessments, and adaptation activities across the region
- Risk awareness and risk-based management
- Inspection, monitoring and maintenance of assets
- Physical adaptation in the use or structure of buildings and in infrastructure
- Warnings to enable preventative actions
- Prioritisation and delivery of adaptation actions
- Resource planning and management
- Increased use of novel technology and the need for further innovations
- Influence long-term planning
- Encourage cross-sectoral, partnership-based awareness and responses
- Exploit the opportunities presented by climate change
- Lobby for change
- Review the effectiveness of adaptation approaches and revise as necessary

## Approaches to coastal management

### 3) Nottingham Declaration

Signed by all Councils in the NE



- Participate in local and regional networks for support.
- Within the next two years develop plans with our partners and local communities to progressively address the causes and the impacts of climate change, according to our local priorities, securing maximum benefit for our communities.
- Publicly declare, within appropriate plans and strategies, the commitment to achieve a significant reduction of greenhouse gas emissions from our own authority's operations, especially energy sourcing and use, travel and transport, waste production and disposal and the purchasing of goods and services.

## Approaches to coastal management

- **Your views on how the ECN will underpin the delivery of a local adaptive management strategy**
- **Work within NE Adaption and Action plan, and Nottingham Declaration, with the Regional Climate Change Partnership.....**
- **.....but with coastal focus, and issue/locality focussed.....**
- **.....and focus on institutional cohesion as prime issue.**
- **Issue: Not just study, but supported implementation – but that means that has to be wider initiative – therefore no independent choice - and importance of collaborative approach.**
- **Locally need to use inertia from workshop + NE strategic planning + opportunistic.**



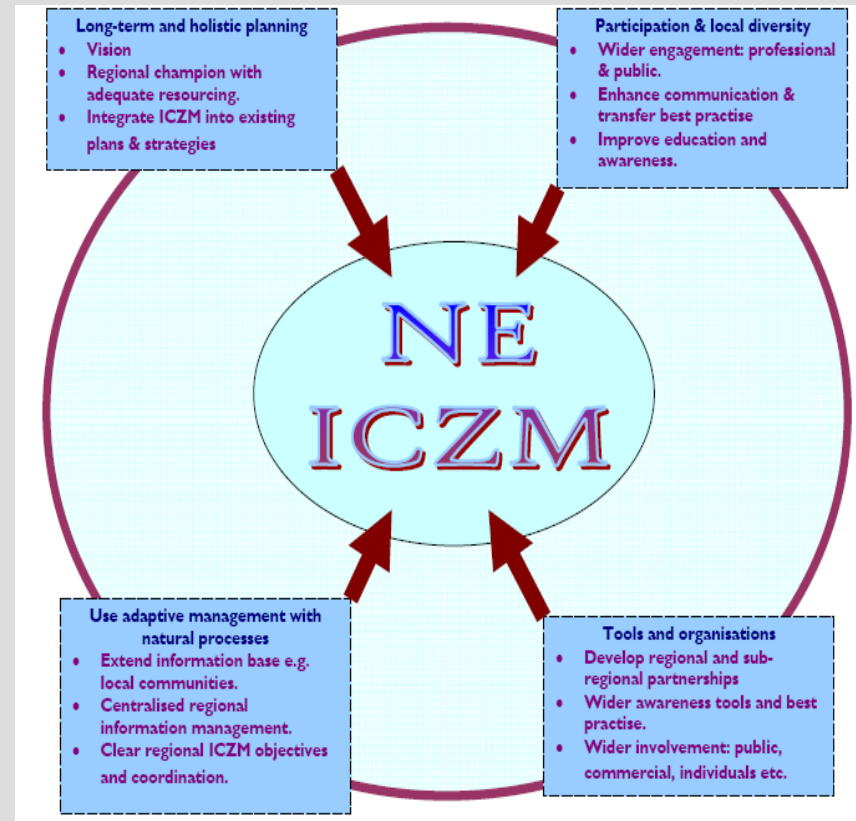
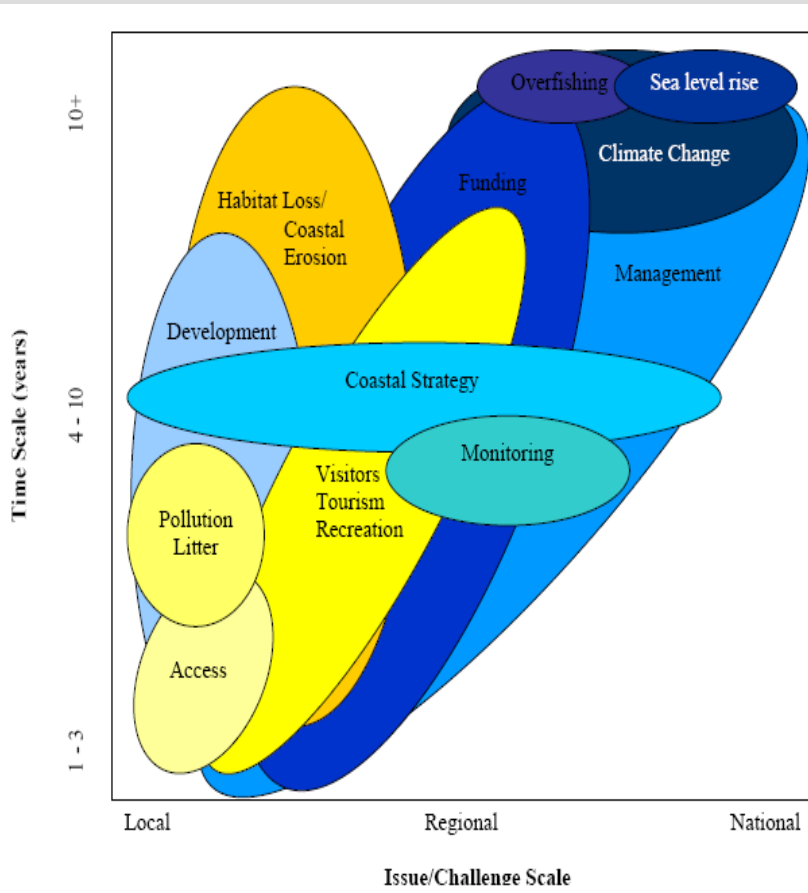
## Drivers for climate change and related issues

- Did your ECN succeed in identifying the local drivers / issues at your local workshop?

Workshop held in March (40 people, variety of organisations).

- ISSUES – the dominant theme is institutional, with social and environmental issues coming in joint second.
- INFORMATION NEEDS – the dominant theme is presentation and collation of material, with the overall approach, development of linkages for communication and technical issues running up behind.
- CONSTRAINTS – then people's skills and attitudes and institutional issues were top, with policy & strategies and money less commonly noted.
- How do you intend to utilise the outcomes during the development of your local adaptive management strategy?

## Drivers for climate change and related issues

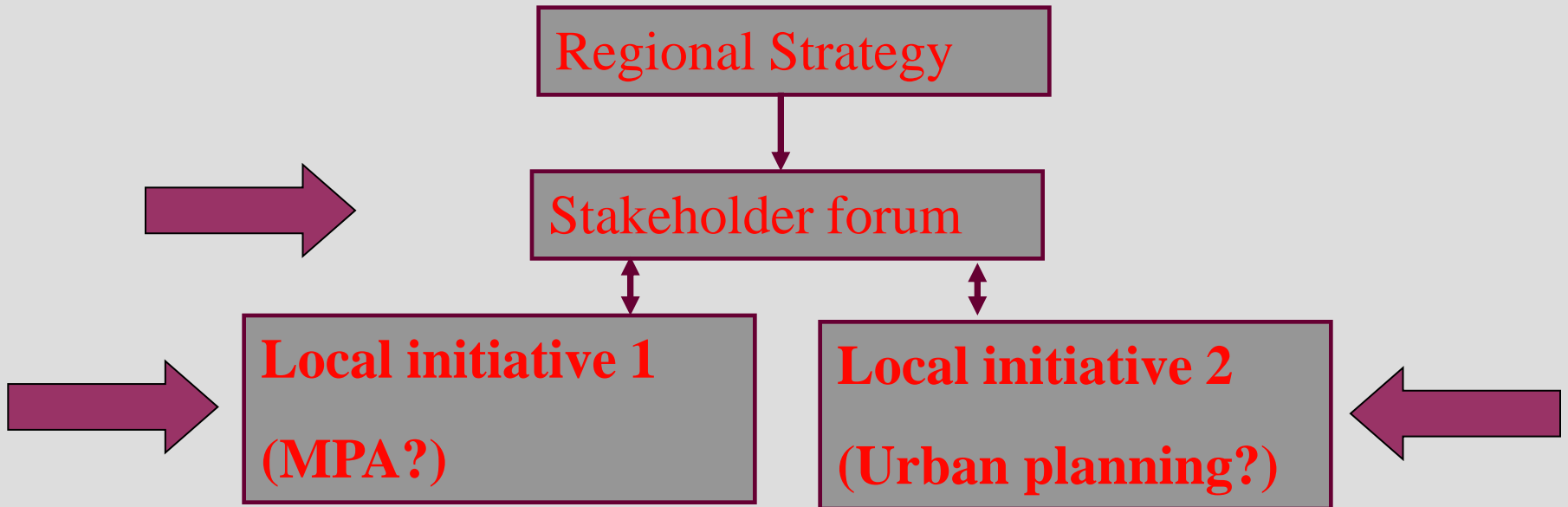


## Future scenario building

- **What sectors are you considering building scenarios for:**
  - Fisheries / conservation (MSP / MPA-approach)
  - Land / urban planning?
  - NE stakeholder coastal forum?
- **What visualisation tools do you intend to employ at your site?**
  - Don't know – but stakeholder led / LIS...maps not GIS?
- **Do you feel that ICZM will be important for the future management of your site?**
  - **Less:**
    - Regional sectoral focus (e.g. ONE tourism),
    - Marine Bill,
    - MSP,
    - MSFD.

## Future scenario building

- How do you intend to use these scenarios to inform the development of your local adaptive management strategy?



## Learning to adapt

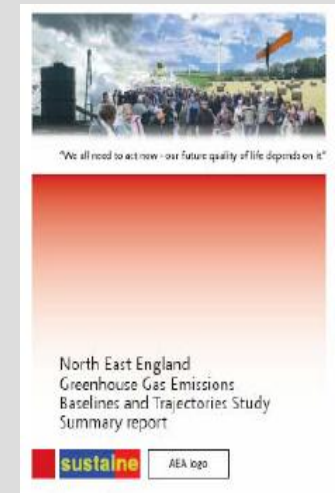
- How do intend to test the tools developed under IMCORE?

*3.4 To develop an adaptive suite of visualisation and other tools to build the local case study scenarios visions, ranging from basic narratives to highly sophisticated computer simulation approaches....tools to be determined.*

- Have you considered your training needs and who you are going to send on the training of trainers workshop?
- 4.2 – ToT: Envision + DCC + NE Climate Change Partnership
- Are you in a position to assess the ability of local planning / policy / legislation to deal with future scenarios?
- At a strategic level well documented; at an operational level unclear.
- How can you feel you can benefit from the experience of the other sites?
- Issues or sectoral parallels
- How are you intending to capture the processes that you are going through to develop your adaptive management strategy?
- 4.3?

## Influencing change

- Awareness raising just started – using website / leaflets / bookmark.
- Must focus on relevant groups related to adaptive scenarios – i.e. targeted,
- Have first outputs to communicate (workshop report) – and will discuss dissemination approach (summary report?), and use for leverage into next activity.
- Have you thought about how you will eventually publish / publicise your local adaptive management strategy?
- Through Regional Partnership for Climate Change?



NE status – recognition of problem



NE status – data increasingly available.....

