



River and catchment connectivity

Nature Improvement Areas Best Practise Event

Richard Handley
Senior Advisor – National Biodiversity Team

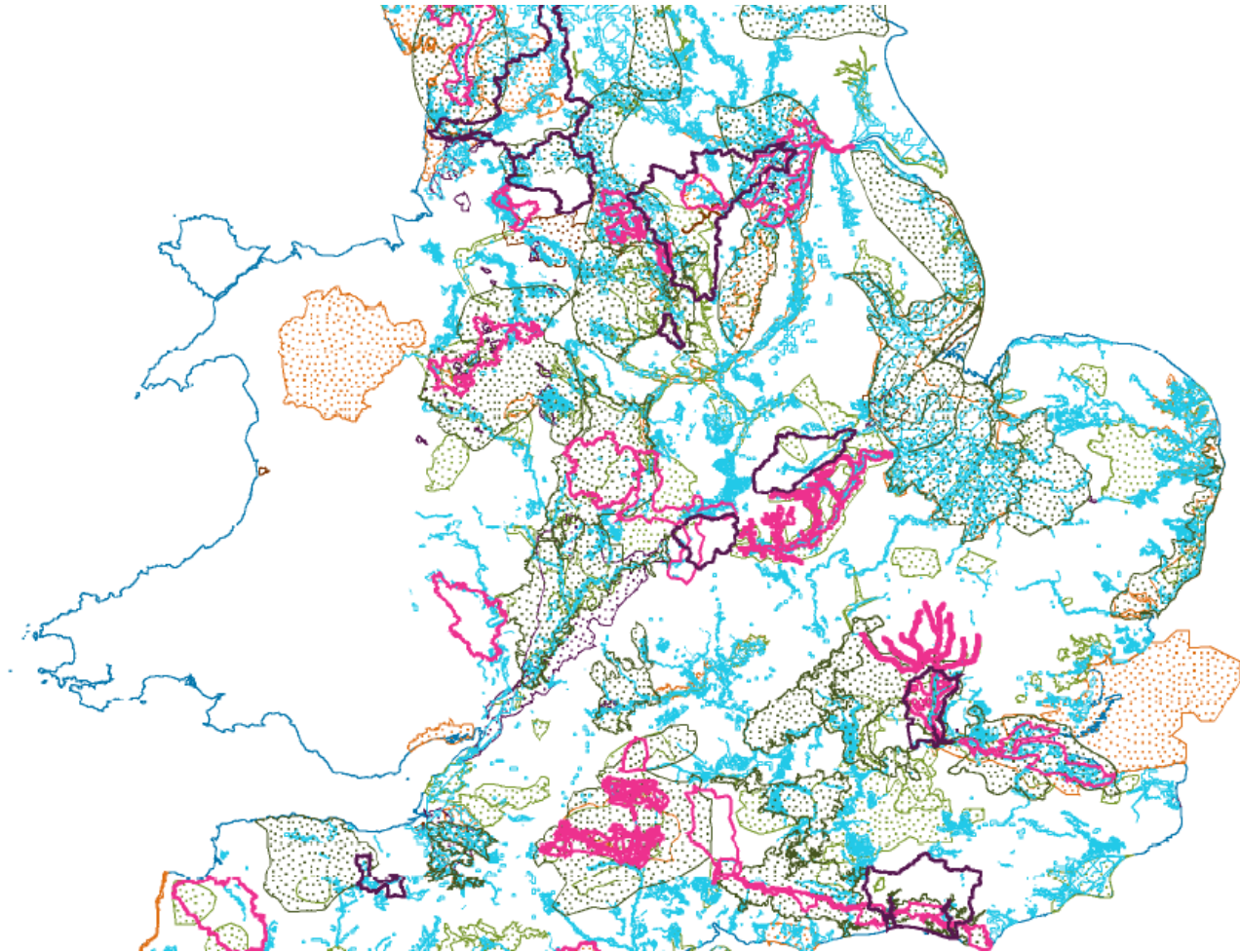
Our priorities

- ➔ To manage the use of resources
- ➔ Increase resilience to risks of flooding
- ➔ Protect and improving water, land and biodiversity
- ➔ Work as a regulator to protect people and the environment

The water environment

- ➔ There has been considerable progress
- ➔ A range of challenges remain
- ➔ We share a vision for the natural environment
- ➔ We need to work together now and in the future

Landscape scale initiatives



Synergies

- ➔ Delivering multiple objectives
- ➔ Delivering multiple benefits
- ➔ Bringing together more partners and more resources
- ➔ Allowing partners to influence or determine priorities
- ➔ Reconnecting people with nature

Catchment based approach

- ➔ To deliver positive and sustained outcomes
- ➔ By promoting a better understanding of the environment at a local level
- ➔ To encourage local collaboration
- ➔ More transparent decision-making
- ➔ Promote integrated catchment management

Multiple benefits

➔ River Quaggy at Sutcliffe Park, South London, before and after flood alleviation work



Multiple benefits

- ➔ **KILLER FACT** from the Middlesex University Socio-economic study of the River Quaggy: The average amount of time spent in Sutcliffe Park increased by 44% after ‘day-lighting’ of the river.



Multiple benefits

➔ Alkborough Flats



Multiple benefits

- ➔ KILLER FACT from Ecosystem Services Case Studies: 400 ha Alkborough Flats managed realignment scheme cost approximately £10M, provides £12M of protection. Other ecosystems services benefits = app. £1M p.a.



Multiple benefits

- ➔ **KILLER FACT** from Moors for the Future: restoration of bare and gullied peat alters the storm flow release from headwater sub-catchments, reducing peak flows by 30% and increasing the peak flow lag times by approximately 20 mins.



Multiple benefits

➔ Operation Peatland, Forest of Bowland



How we are working with NIAs

- ➔ Birmingham and the Black Country
 - ➔ Two river restoration projects and invertebrate network
- ➔ Dearne Valley
 - ➔ Transferred management of wetlands to RSPB
- ➔ Nene Valley
 - ➔ River restoration, species monitoring, eel passage, INNS
- ➔ Northern Devon
 - ➔ Creation/restoration of c.1200ha wet grassland, targeted advisory visits, advisory workshops, community engagement













How we are working with NIAs

- ➔ Partnership funding
- ➔ Issuing consents
- ➔ Engaged with Catchment Partnership
- ➔ Mapping of projects and opportunities to deliver multiple benefits

How can we improve?

- ➔ More consistency in good practise?
- ➔ Better defined 'offer' from us?
- ➔ Understanding each others priorities?

Thank you

Dr Richard Handley CEcol MCIEEM

richard.handley@environment-agency.gov.uk

07770 701941