

Challenges of doing something new: Barriers to natural flood management

World Water Conference, Edinburgh, 25th May, 2015



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Introduction: What is NFM?

- Includes a suite of natural features to hold water in the landscape or slow the flow
- More sustainable, long term, multiple benefits
- More systematic approach and includes more groups
- Flood Risk Management (Scotland) Act 2009



[http://www.macaulay.ac.uk/images/tarland-burn-jan11\(4\).jpg](http://www.macaulay.ac.uk/images/tarland-burn-jan11(4).jpg)



<http://www.floodaction.org.uk/blog/wp-content/uploads/2009/02/streambarrier.jpg>



<http://www.floodaction.org.uk/blog/wp-content/uploads/2009/02/bogdam.jpg>



<http://www.gov.scot/Resource/Img/915/0044323.jpg>

State of the art

- Some barriers have already been examined:
 - Farmers
 - Local Authority
 - Communities
 - Policy

There are some
examples of NFM

... but ...

Why is it still not
really happening?

- But little experience and understanding,
especially role of non-farmers





Our approach

Using multi-level governance literature

- Formal and informal institutions
- Interactions across administrative boundaries
- Actor networks and role of state and non-state actors

What did we do?

18 semi-structured interviews in the UK to understand:

experiences, attitudes and perceptions of NFM and challenges of doing NFM





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What did we find out?

- 1. Resource constraints:**
resource intensive & requires more partnership-working
- 2. Knowledge & evidence gaps:**
can't quantify flood risk reduction.
- 3. Knowledge use and legacy:**
Challenges exacerbated by misfit with existing expertise.



MIND THE GAP



What did we find out? Cont...

4. Legislation and policies

- Can hinder adoption of NFM measures, and reinforce the above challenges
e.g. Cost-Benefit Analysis

5. Coordination and collaboration

- Requires new ways of working – collaboration
- Insufficient time for partnership-building
- Lack of support and skills



Summary



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- Not just about rules, resources and evidence gaps (although they are important)
- Also about less tangible stuff – knowledge, ways of seeing the world

So what?

- This gets hidden behind calls for more evidence but tackling evidence gaps alone won't ever be enough



The future?



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We need to be *radical*

- To deal with change, conflict, complexity and uncertainty

Some ideas how

- Move beyond mono-disciplinarity
- Collaboration and partnership working
- Use different kinds of knowledge
- Focus on learning and adapting

....but it is *messy!* No quick fixes available !



**"I had a miraculous dream in which
our list of questions all had answers."**

Are we ready for this?



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THANKS FOR LISTENING

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❖ **Project information:**

<http://www.hutton.ac.uk/research/projects/exploring-barriers-natural-flood-management>

❖ **NFM blog posts:** *<http://www.hutton.ac.uk/blogs/segs>*

Acknowledgements: This research was funded by Scottish Government Strategic Research Programme 2011-2016