

MAKING MITIGATION OF RURAL DIFFUSE POLLUTION WORK: FACTS AND GAPS REGARDING STAKEHOLDER'S VIEWS AND PERCEPTIONS

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WWC congress – PS 11.2 Key vulnerabilities and Security risks: Participatory approaches



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Contents

This presentation will mainly cover...

- Why to focus on uptake of diffuse pollution measures?
- What evidence already exists for Scotland?
- What are the key policy messages?
- What are the main knowledge gaps?



Rural diffuse pollution

- Affects the resilience and capacity of water systems to adapt to change (Paterson et al., 2013; Walker et al., 2004)
- ‘Wicked problem’ that needs to be managed: need for participatory approaches
- Beyond technical barriers, our aim is to explore:
 - Barriers and opportunities for improving implementation of measures
 - Behaviours influencing uptake of measures
 - Stakeholders’ perceptions of measures

Case study: Scotland



- SEPA's paradigm change: from 'command-and-control' to evidence-based and stakeholder awareness and participation
- 10 years+ of Strategic Research on Rural Diffuse Pollution

Methodological approach: systematic review



Database
search

- Review of academic and grey literature (conducted in 2012)
- Search terms: ‘water’, ‘wate quality’, ‘diffuse source pollution’, ‘behaviour’, ‘Scotland’, ‘general binding rules’, ‘River Basin Plan’, ‘priority catchments, catchment management’ and ‘water quality Scotland’

Methodological approach: systematic review



- Abstracts were reviewed
- Those matching the search criteria were examined entirely
- Reference scanned ('snowballing')

Methodological approach: systematic review



- 35 projects identified
- Key information in the database included:
 - Funding source (e.g. Scottish Government, European Framework Programme, etc.)
 - Project general objectives
 - An analyst judgement on why the project was considered relevant for this research
 - Key results (in relation to our three research questions)

Methodological approach: systematic review



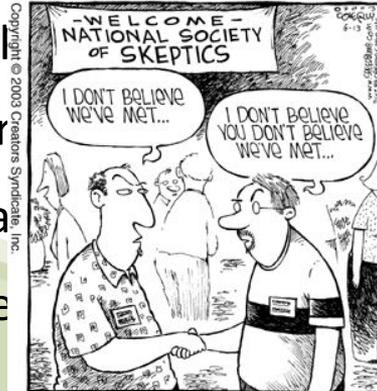
- Find common set of policy messages & gaps
- Thematic analysis

Key policy messages: what do we know?

- Barriers for the implementation of measures
 - Financial barriers: incentives, access and transaction costs
 - Cultural and social barriers: resistance to change, different world views, lack of perception of the source of the problem
 - Lack of scientific evidence on the effectiveness of measures, time lags and



- Opportunities for implementation
 - Farmer-to-farmer and community engagement
 - Demonstration farms
 - Make advice accessible and preferable one to one (e.g. focus farms)



Key policy messages: what do we know?

- Behaviours influencing uptake of measures
 - Farmers' behaviour and attitudes clearly conditioned by their business and profitability focus
 - But not all about finance
 - ▶ Self-perception of responsibility
 - ▶ Cultural aspects and personal characteristics
 - ▶ Existing social networks, trusted agents and communication
 - Mixed messages and inconsistencies across regulations

Key policy messages: what do we know?

- Stakeholder's perceptions of measures
 - Local level (sub-catchment or catchment) is the appropriate scale to understand perceptions of specific measures
 - Different attitudes from land managers: 'resistants', 'apathists' and 'multifunctionalists'
 - Buffer strip measures generally perceived as cost-effective. Others (as wetland management) seen as promising but with low practicality...though general lack of clarity around CE!
 - Victimization and unfairness in some approaches as NVZ
 - Low awareness about SRDP (CAP): seen as promising but also as measures that have not delivered much yet (emerging skepticism)

Conclusions and knowledge gaps

- Key messages: we already knew about the **WHY** (financial, cultural, network support, advice and information)
- We need to find out about the **HOW**
- What are the main **knowledge gaps**
 - How can consistency across regulations and over time be increased to prevent mixed messages and scepticism?
 - How can the effect of a lack of scientific knowledge and uncertainty of uptake be reduced?
 - How can flexibility, local targeting, practicality and output-based approaches be introduced into programmes?
 - How has the awareness of diffuse pollution measures changed over time and what changes in management/behaviour have resulted in?



Thanks for your attention

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