Farmers' perception of Scotland's diffuse water pollution regulations in the Eye Water and Pease Bay Priority Catchment

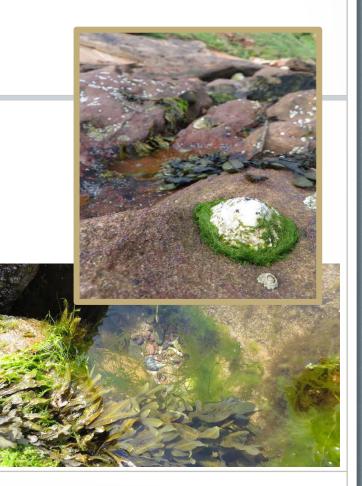
> International Water Resources Association (IWRA) World Water Congress XV

> > 27th May 2015, Edinburgh Scotland

Presenter: Kimberly McLeod Global Institute for Water, Environment and Health (GIWEH) <u>kimberly.mcleod@giweh.ch</u>

Agenda

- 1. Introduction: The Concern
- 2. Legal and Regulatory Approaches: Scotland
- 3. Engagement of Stakeholders
- 4. Case Study: Eye Water and Pease Bay, Scotland
- 5. Recommendations

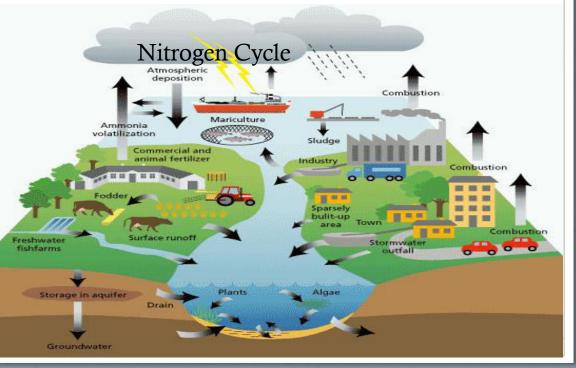


Introduction: The Concern Water Quality

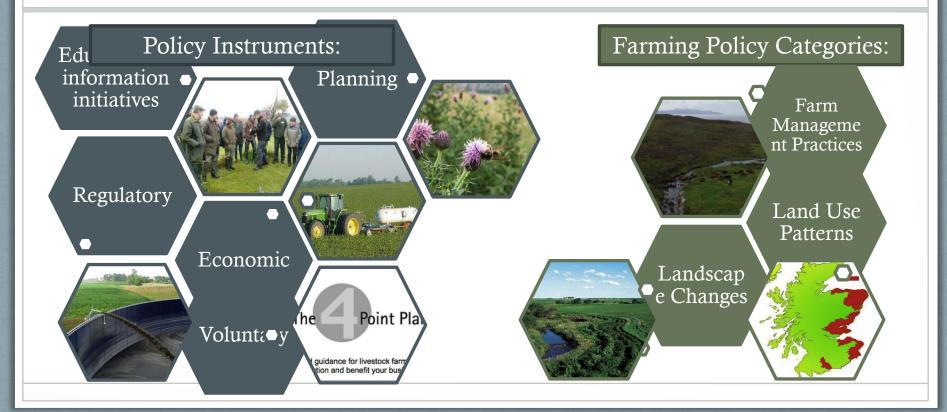
Diffuse/Non-Point Pollution Impacts:

- Ecosystems
- Human health
- Food production
- Economy

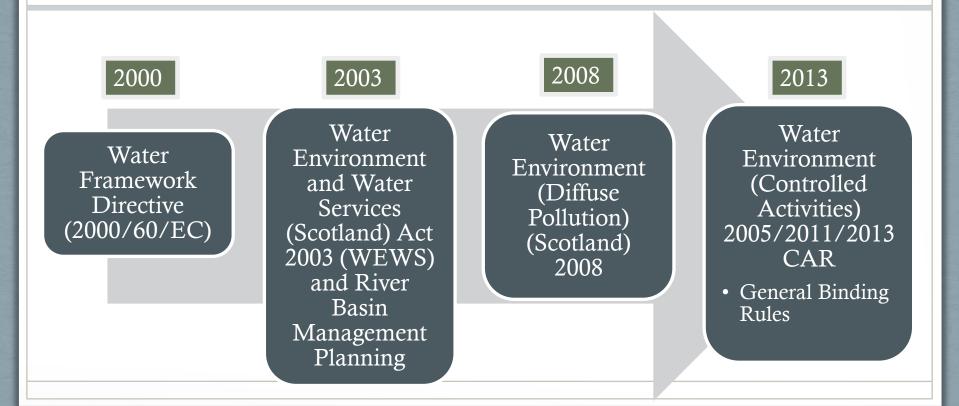




Legal and Regulatory Approaches



Scotland's Policies



Scotland's Engagement of Stakeholders in Policy

Diffuse Pollution Management Advisory Group (DPMAG)

- For the delivery of RBMP
- Established late 2009
- Under Section 17 of WEWS Act
- SEPA, Scottish Government, National Farmers Union Scotland, Scottish Natural Heritage, James Hutton Institute, etc

Implementation Plan for DPMAG

National and catchment scale awareness raising, guidance and support.



Evidence and information, support materials, best practice, codes and advice

Regulations; NVZ, GBR

Economic support and incentives

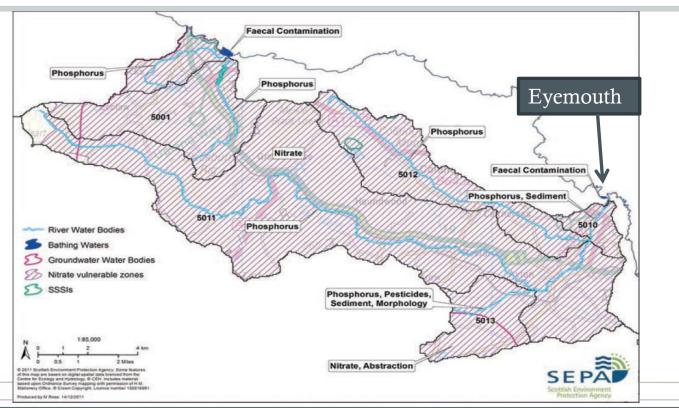
On the ground changes in land management Environmental improvements; progress towards good ecological status

Review of

strategy

Case Study on Eye Water and Pease Bay Catchment: Pollution Pressures





Case Study: Methods

Qualitative semi-structured interviews

1. Farmers (10 farmers and the National Farming Union)

2. Government (Scottish Government, SEPA)

3. Environmental experts (SAC Consulting, Tweed Forum) -General Information

Diffuse pollution and its importance

Regulations and participation

Mitigation

Case Study: Results & Conclusions

1. Farmers and understanding diffuse pollution

- Most farmers do not fully understand the negative impacts
- 'I can't understand how they work it out...So the experts tell me that 1,000 sheep are dirtier than 4,000 people in Eyemouth somebody said...There's no better fertilizer for the land than sheep dung. No not much of it gets down to the rivers. I don't see.' – Farmer

2. Farmers understanding regulations and their participation

- 'As far as I am aware I endeavour. If I don't achieve it, it's not because I haven't tried.' – Farmer
- 'It all has to do with the finance...particularly provision of water supply for livestock and which fields you put animals into, access to pasture...' – Farmer
- 'pretty annoyed if action wasn't taken against, basically they've gotten away with doing nothing and we've spent a lot of money... - Farmer

3. Change in relationship between SEPA and Farmers

- Farmers have seen an improvement between their relationships from the increase of effective collaboration, educated personnel, and advisory approaches
- 'someone like [the catchment coordinator] comes along and they speak to them for half an hour over a cup of coffee and they change their mind because he and his common sense. He understands the practicalities and is able to make change..' – Farmer

Recommendations

Approaches tailored towards the farmer and his needs
Meetings, workshops, site-visits or just a good chat with a trusted person

- 2) Develop a two way communication to share the objectives, successes and frustrations
- 3) Provide financial outputs

4) Address the inequality of those not complying

Thank you for listening!

'In every respect, the valley rules the stream'

H.B.N Hynes (1975)

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