

Freshwater Monitoring Review and Future Strategies Workshop: Disseminating Outcomes

STARTING AT 14:00

Webinar:

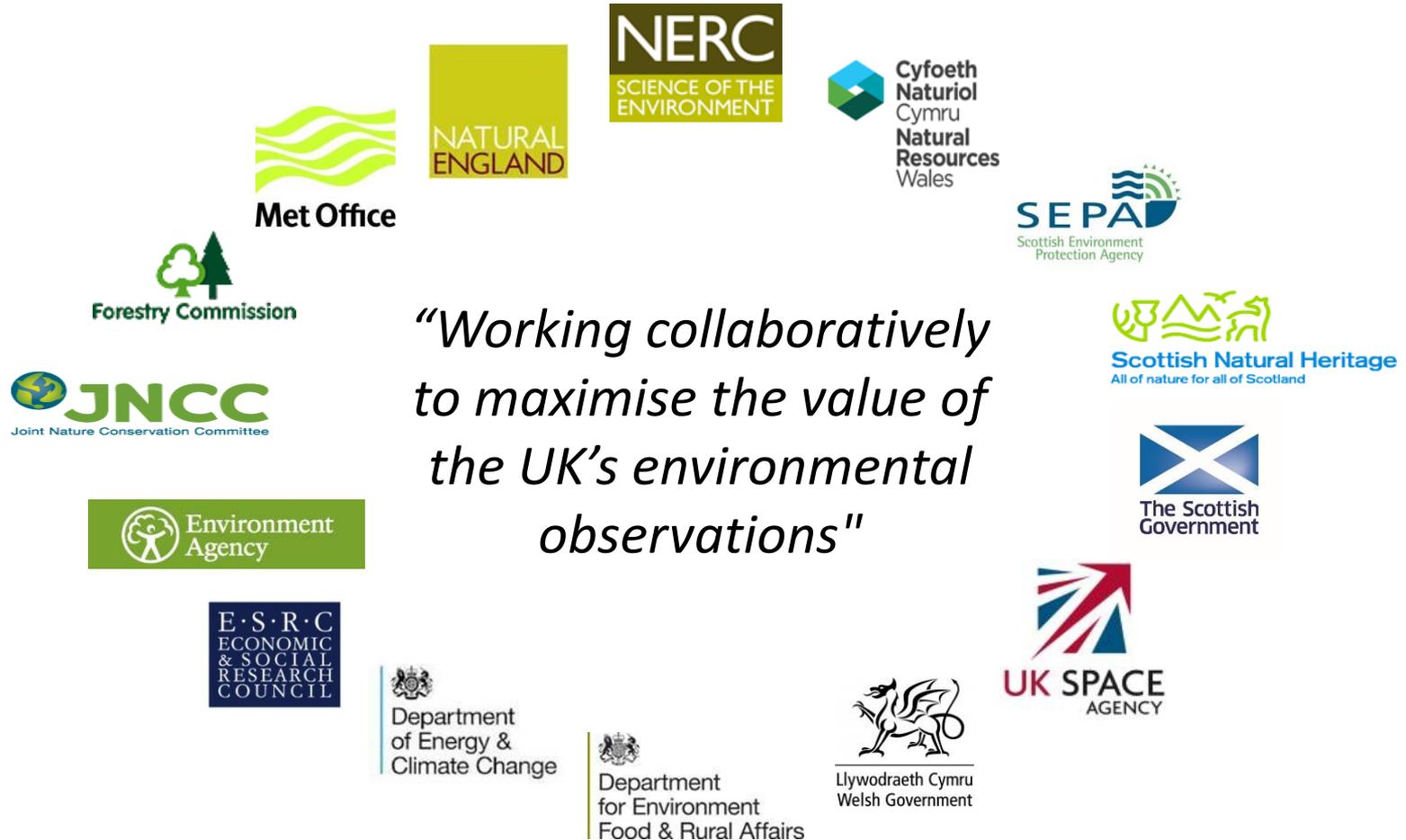
- You will hear presenters and see slides but you cannot speak

PLEASE:

Use QUESTION Box – to type questions for presenters or to relay issues (e.g. interference)



UKEOF Partners



Agenda

1. Welcome
2. Introduction to Workshop Aims – Nathan Critchlow-Watton
3. Presentations from each country
 - Environment Agency – Jennifer Taylor
 - Natural Resources Wales – Alun Attwood
 - Northern Ireland Environment Agency – Wendy McKinley
 - Scottish Environment Protection Agency – Nathan Critchlow-Watton
4. Next steps identified at Workshop – Gareth Old
5. Key messages – Jennifer Taylor

Aims of the Workshop

Nathan Critchlow-Watton



Our Vision:

We use the right evidence or information from a range of sources to drive our actions, and those of others, to manage flood risk and improve the water environment.

Jennifer Taylor – Environment Agency

Transforming water quantity evidence



Now

5 years

5 years +

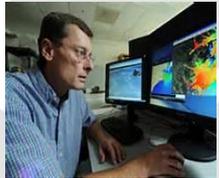


Network Optimisation
Customer requirements,
catchment risk and budgets
combined

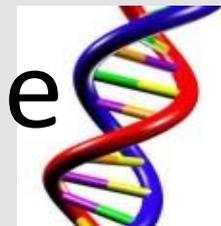


Transforming water quality evidence

Now

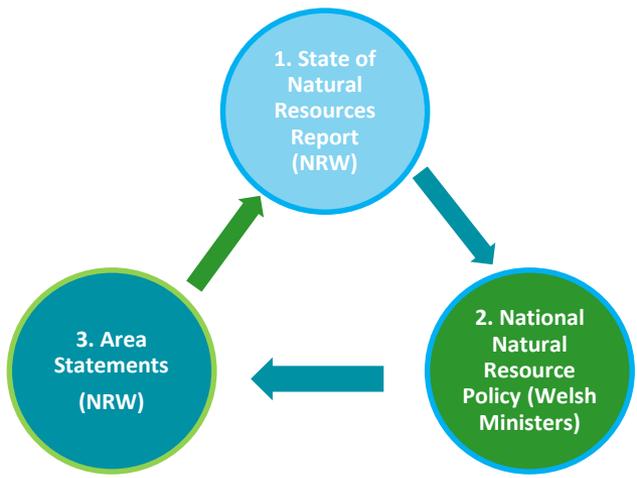


5 years

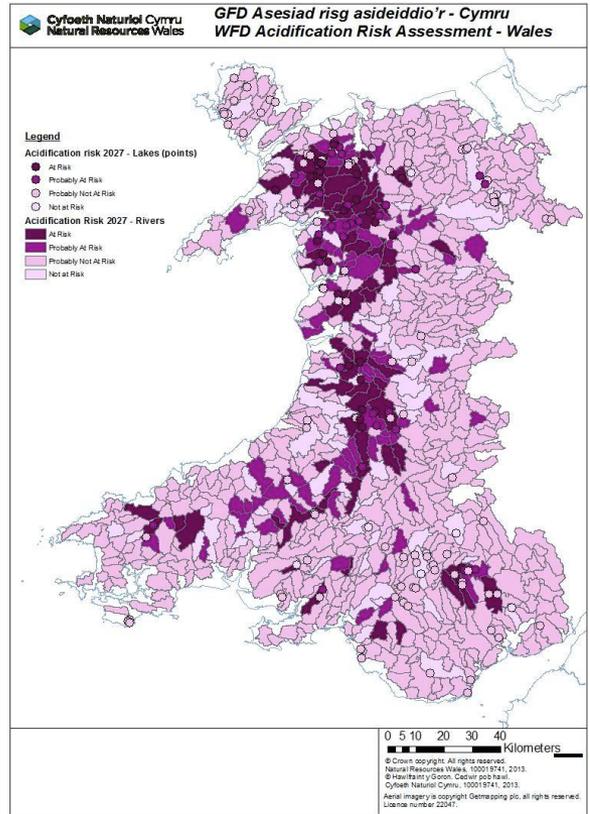
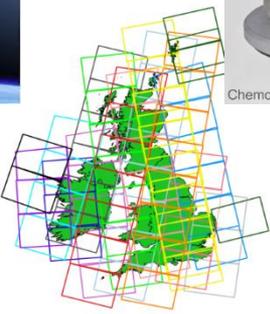


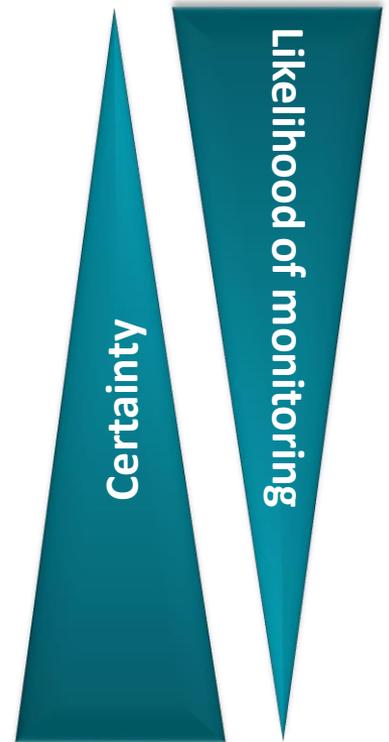
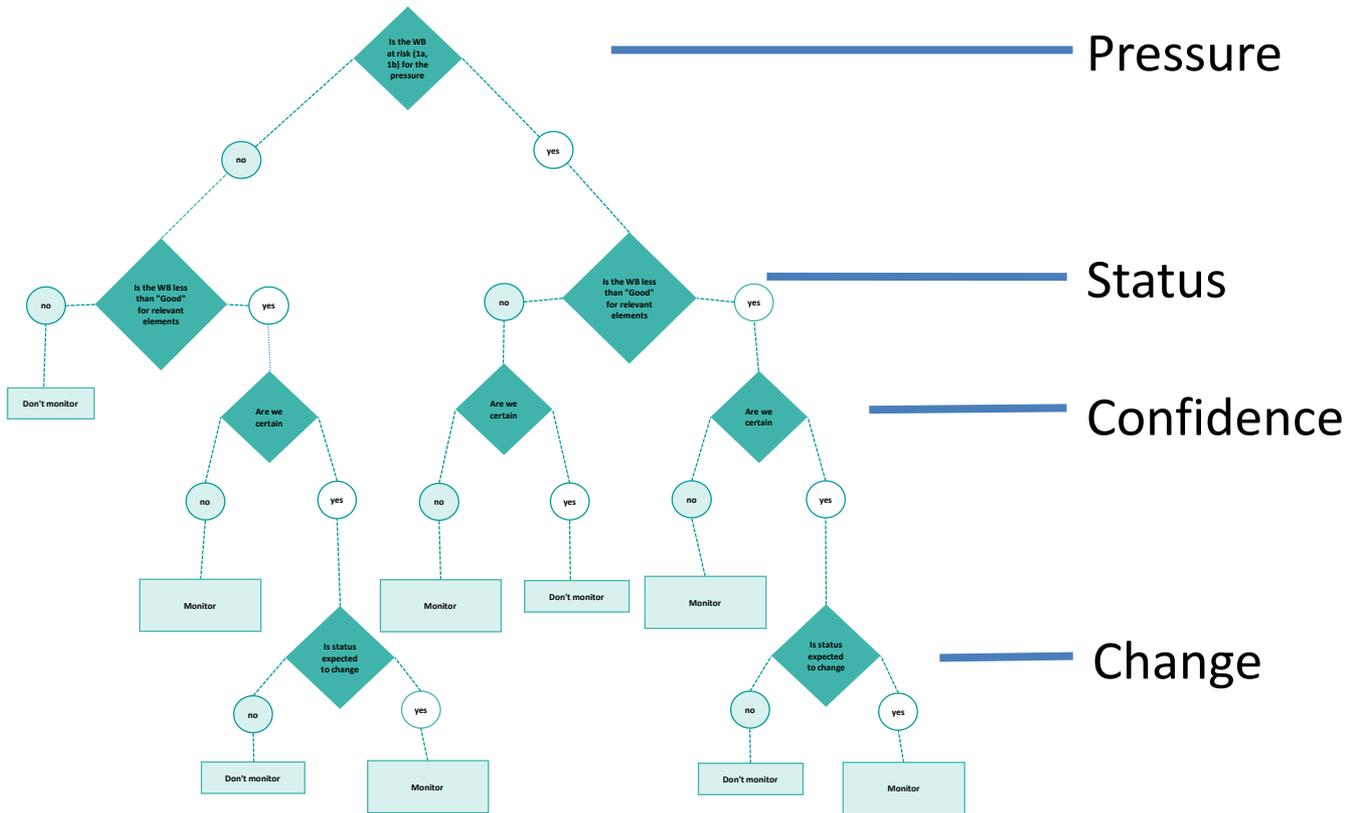
5 years +





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- Orbit_161
- Orbit_169





Risk – what, how much?



NIEA WMU

Water Assessment Data and Evidence Group

Wendy McKinley

Aspiration

- To be smarter in targeting monitoring using current data sets, trends, and pressures analysis
- To balance resource pressures vs. a need for more catchment projects and investigations
- To extend the use of in situ methods, technology and rapid assessments
- To maintain continuity in the network to measure long term trends, eg for nutrients.

Approach

- **Background**
 - Programmes evolved over last 30-40 years, continuous data sets back to 1990's,
 - Major review and expansion to meet WFD requirements in 2005, but also to continue FFD, Nitrates and UWWTD
 - Ongoing adjustments and substantial cuts to programmes since 2010 and again in 2015
- **Progress to date**
 - Reactive, iterative process, with no overarching strategy or target
 - Welcome the opportunity to share experiences of how others are dealing with this – to enable bench marking current practice and procedures

‘Take Home’ Messages from Workshop

- Took reassurance, confidence and informal peer review of an approach which was reactive rather than proactive
- Need to clarify relationship between UKEOF (Strategic?) and UKTAG (Technical?)
- Need to get a better understanding of different types of risk : reputational and technical
- Need to identify appropriate methods
 - Reliability, robustness, confidence in result vs risk of getting it wrong

Cultural change

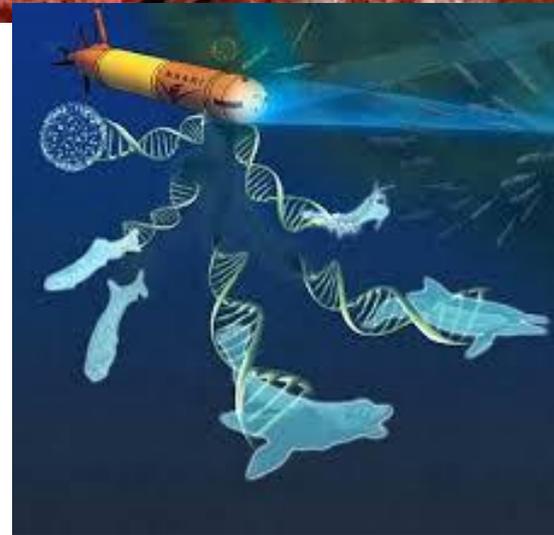
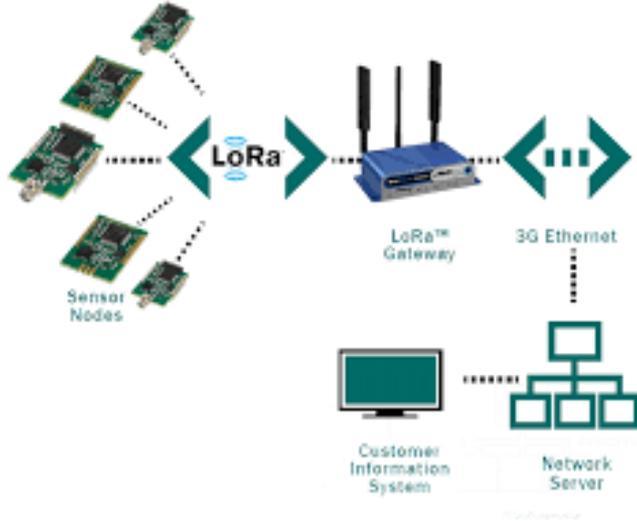
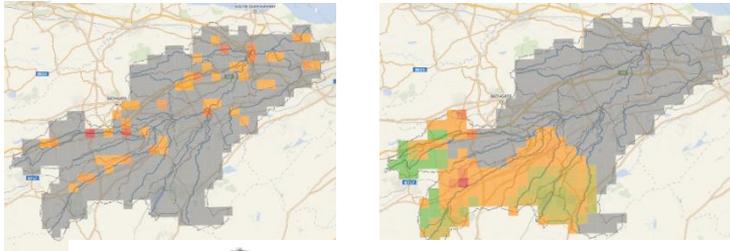
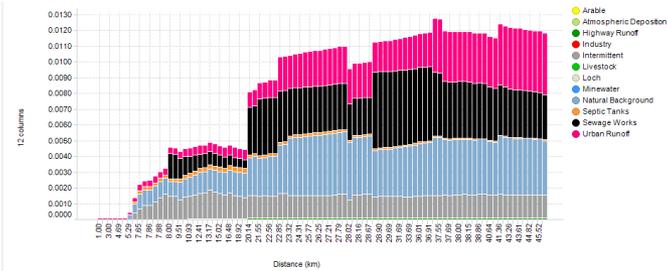
Organisational change

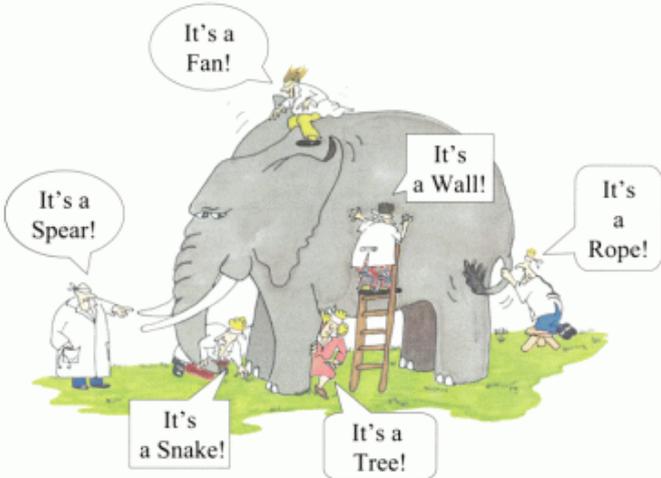


Questions changed

Technological change

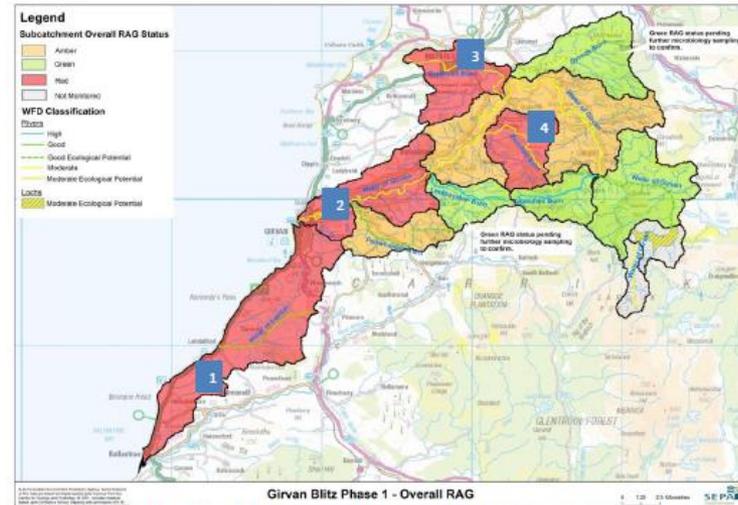
Nathan Critchlow-Watton - SEPA





Girvan Catchment Blitz Monitoring Report Phase 1 & wet weather microbiology survey

SECTION 1



For the purposes of this project results have been given a Red Amber Green (RAG) status based on the level of pollutants found, with Red being high, Amber medium and Green low.

Headlines

The main areas of impact identified by monitoring or GBR breaches are shown in red:

1. Water of Lendal - impacts from nutrients, organics and FIOs
2. Water of Girvan (lower) - organic impacts
3. Barlewan Burn - impacts from organics and FIOs
4. Burnton Burn - impacts from nutrients, organics, FIOs and GBR breaches

WFD classification using mainly rapid techniques - 2016

Focused sentinel network - 2017

Use of EO – modelling and compliance - ??

More targeted and more flexible – continual process

SAGIS modelling for classification and regulation - 2019

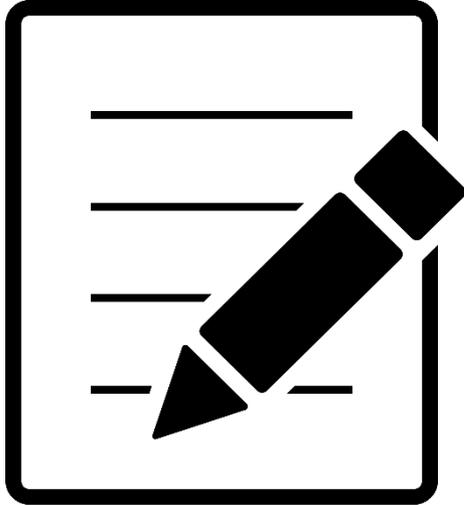
Eight Next Steps....



1. Monitoring workshop dissemination

Description

- Share thinking of agencies



Suggested actions

- Written report and webinar



2. Rapid assessment techniques

Description

- Discuss and share best practice
- To promote confidence



Suggested actions

- Share workshop note with UKTAG - consider inclusion in workplan
- Possible development of a Rapid Assessment Framework

3. Case studies: Questions and approaches

Description

- Share examples of questions and approaches
- Using data to meet policy / monitoring requirements whilst reducing costs



Suggested actions

- Citizen science working group to discuss data for early warnings
- Potential speakers set up teleconference or webinar

4. Risk based approach

Description

- Sharing understanding and best practice

Suggested actions

- Dissemination teleconference
- Identify any ongoing actions



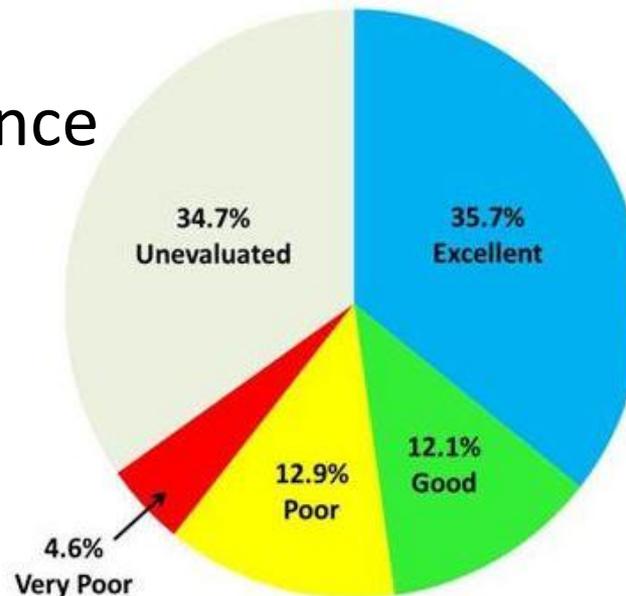
5. Classification and confidence

Description

- Use of biological quality elements (BQEs)
- Integrating and weighing evidence

Suggested actions

- Teleconference
- Raise with UKTAG



6. Sentinel network design

Description

- Share approaches to design
- What they provide and how they are used
- How they link to agile monitoring

Suggested actions

- Individuals propose follow up activities



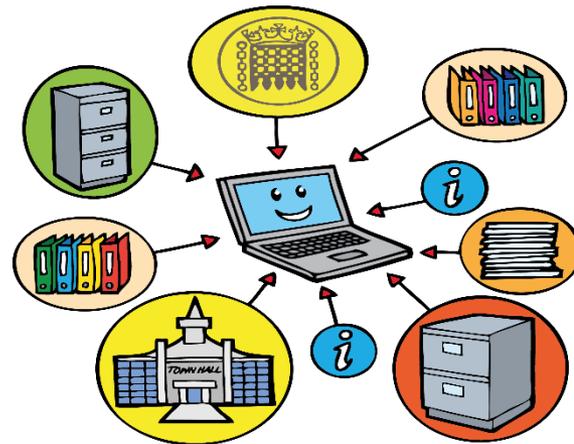
7. Explore robust approaches to using varied data

Description

- Discuss use of varied data (e.g. non environmental data - early warnings of changes)
- How do we obtain them and use them in decision making

Suggested actions

- Teleconference and invite speaker from organisations that use varied data



8. Initiate strategic cross agency discussions

Description

- Quarterly meetings arranged by each agency in turn
- Share experience, identify collaborations and update on progress (re: joint workplan)

Suggested actions

- Teleconference



Key Messages

- SEPA/NRW/EA/NI are all changing approach
- Changes to approaches are big steps
- Sharing approaches gives reassurance and confidence.
- The appetite for risk is increasing.
- Different types of risk – technical risk and reputational.
- The UKEOF management is important role as the voice of UK monitoring.
- Do we need a UK(EOF) evidence framework to give robustness?

Thank you

Please email office@ukeof.org.uk with any
comments or questions