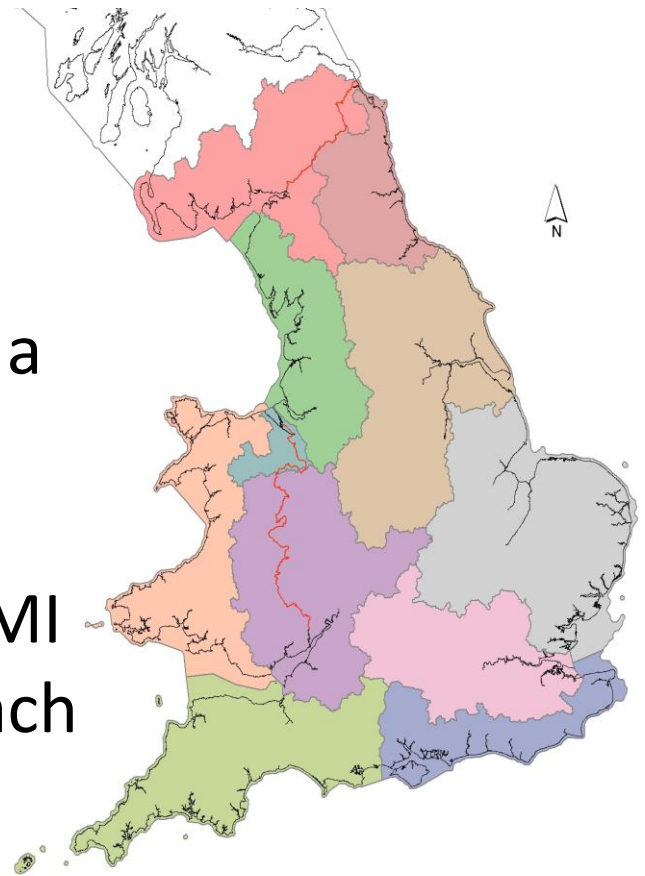
A photograph of a canal with a blue boat in the center. The water is a murky green color, suggesting an algal bloom. In the background, there is a large white metal truss bridge. To the left of the bridge, there are some buildings and a parking lot with several cars. The foreground is filled with tall green grasses and some pink flowers. The sky is overcast and grey.

What's the problem? –
identifying issues in the
context of specific catchments

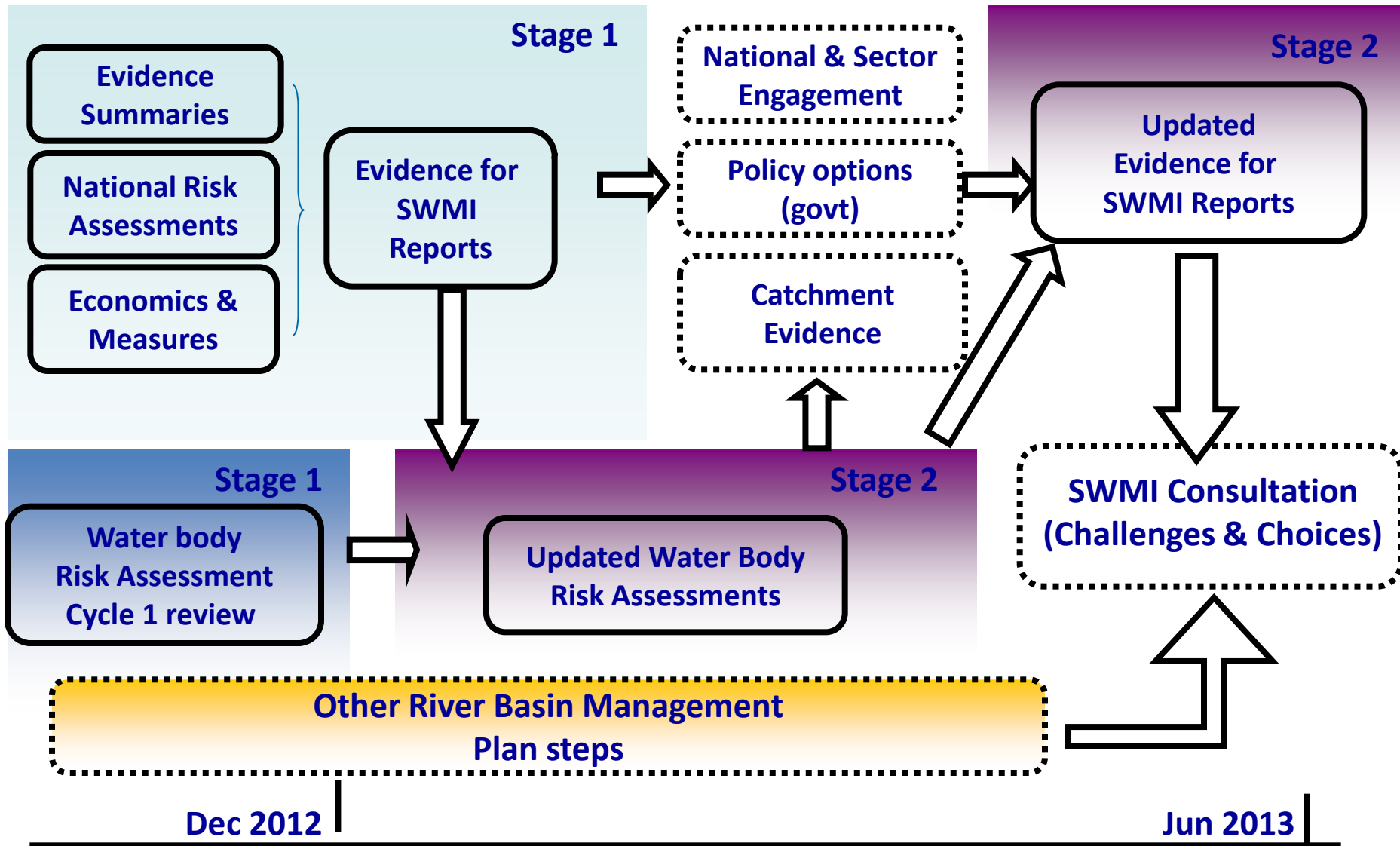
Rachael Dils, Evidence Directorate, Environment Agency

Evidence for Significant Water Management Issues (SWMI)

Provide the evidence base to be used *nationally* with key sectors and cross-sector groups to build a common understanding of environmental problems and solutions to help inform the SWMI consultation [national and for each RBD from June 2013]



Significant Water Management Issues (SWMI)

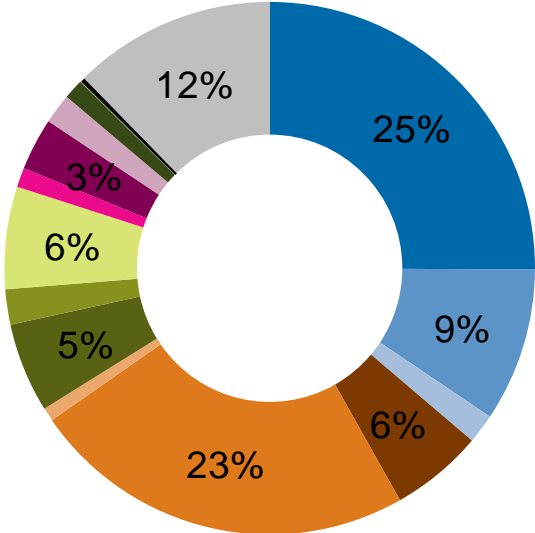


Significant Water Management Issues

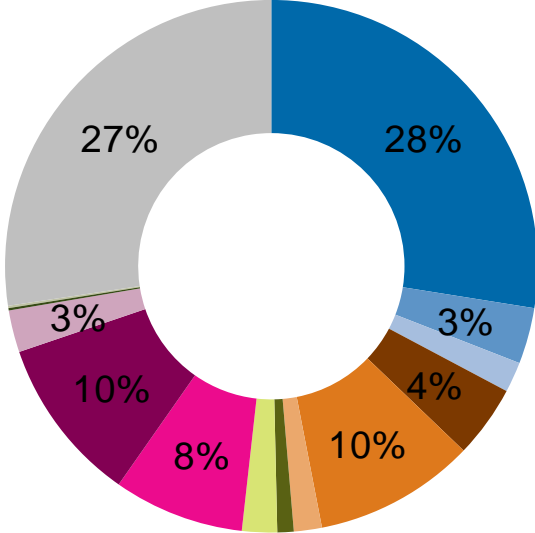
Pressure	Water Category
Phosphorus	Rivers, lakes
Nitrates	TraC, groundwater, DrWPA
Chemicals	Rivers, lakes, groundwater
Metals	Rivers
Sediments	Rivers
Sanitary Pollutants - NH ₃ &DO	Rivers
Faecal Indicator Organisms	Rivers, transitional
Acidification	Lakes, rivers (Wales)
Abstraction	Rivers, groundwater
Physical modification	Rivers, lakes, traC
Invasive Non-native spp.	Rivers, lakes, traC

Pressures causing river water bodies to fail WFD elements (2012)

England



Wales



- Physical Modification
- Nitrate
- Specific Pollutants
- Temperature
- Abstraction and Flow
- Ammonia
- Other Pollutants
- Still under investigation
- Pressure on Ground Water
- BOD
- Priority Substances
- Sediment
- Phosphate
- Dissolved Oxygen
- pH
- Alien Species
- Fish Stocking

Using DTCs to answer the kind of questions requiring better evidence for SWMI

- What is the Evidence base or gaps around significant pressures & impacts?
- How are major pressures on the water environment projected to change in the future (2027, 2050+), how will those changes impact on the environment, and what is the scale and timing of that impact?
- Do current interventions deliver the best outcomes?
- Most cost-effective combination of measures to improve status over the long term
- How to achieve the best possible outcomes for pressures singly and in combination?
- What are the barriers stopping us getting better outcomes?
- What contribution is needed from each sector to achieve outcomes?
- Which decisions need to be taken nationally?
- How do we promote engagement at local and national level?

Yesterdays discussions

- Standards – evidence to support review of standards (e.g. P)
- Biological impacts – are we using the right metrics for ecological integrity? WFD biological measures vs ecological process measures
- Source apportionment – improved models; evidence of non-ag sources; tracking tools (eg sediment)
- Data sources – importance of joint-up with EA and other ALBs eg Catchment Planning System and Catchment Change Management Hub

National and Local River Basin Planning

