



# Policy messages arising from water scenarios and their impacts

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# Overview

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- The current policy context
- How SCENES inputs to policy development
- Water Framework Directive issues
- Participation
- Quality, quantity and sectors
- Integration
- Conclusions



# Critical policy environment

- Range of policy activities all ongoing:
  - Review of WFD implementation and water scarcity and droughts Communication – 2012 Blueprint to Safeguard Europe's Waters
  - Fitness check of EU water law – smart regulation
  - Debate on revision of the CAP
  - Taking forward thinking on climate adaptation
- Plus context of other major policies:
  - Europe 2020, roadmaps on climate (2050), resource efficiency, etc.





# SCENES input to policy development

- SCENES is multi-scale – catchment to pan-Europe – policies implemented at all scale
- SCENES has a strong interaction with stakeholders – interpreting understanding, expectations, etc.
- SCENES is examining implications for broad issues, e.g. climate, agriculture, etc.
- SCENES has examined decision support systems (use/limits to use of models, stakeholder involvement methods, etc)
- SCENES scenarios – integrate range of activity (models, stakeholders, expert assessment) - divergent worlds and backcasting for robust decision making





# Water Framework Directive to the rescue?

- Divergent stakeholder expectations:
- The WFD will deliver outcomes quickly
- Local constraints will prevent delivery of outcomes
- EU level constraints will prevent delivery of outcomes
- Is there clarity about local implications for sectors – domestic (individual), agriculture, tourism, etc?
- Has the WFD become a framework for action or only a framework for analysis and debate?





# Climate change and ecological status

- WFD has at its heart the idea of un-impacted waters – an historical measure against which we judge progress
- Climate change changes this – for decades to come
- Species change; warmer; drier; wetter; melting; average, peak, low flows; chemistry – without changes to the human relationship
- WFD needs to be re-examined in light of these changes, while maintaining pressure on impacts that can be managed
- SCENES:
  - Analytically climate impacts identified
  - But stakeholders more focused on immediate problems
  - Local policies/ management plans not yet incorporating climate adaptation or mitigation issues





# Challenge of water management

- Different perspectives (WFD, scenarios, etc) are integrating tools
- Challenge to bring together data, analysis, participation, measures, etc. at relevant spatial scales
- Some cases SCENES identified serious governance capacity problems – will result in failure to meet targets
  - Need for clear legal objectives – is there clarity about what is required?
  - Problems with lack of co-ordination between authorities
  - Can be problems of bringing stakeholders together regarding aims across an entire river basin





# Stakeholder involvement

- Need good methods and organisation to ensure good involvement
- Stakeholders may be enthusiastic or have low interest
- Interest and concerns vary across river basin and may conflict
- Stakeholders may focus on obvious policies (e.g. CAP, WFD), while wider thinking may be useful.
- May be reluctant to reach unpleasant conclusions





# Participation and scenarios

- Can be resistance from local stakeholders to participate if they do not see the point
- In contrast, some are highly willing
- Good approach, but not guaranteed
- Results can enthuse range of stakeholders, but can be problems communicating to policy makers
- Participation increases knowledge
- Issue of distinguishing an imagined world from current policy constraints





# Water quality



- Historically quality has been the major focus of EU policy
- Some 'traditional' pollutants are still a major issue, e.g. nitrogen
- Phosphorus is a major problem across much of Europe – RBMPs not ambitious to tackle it
- Lakes are slow to change
- Changes to point source loading over ride climate effects – it is worth tackling the problem
- Improved pan-European modelling of water quality will help define uncertainties, specific questions for policy makers, etc.



# Water quantity



- EU Communication WSD yet to result in hard policy choices – will need to be made as problem gets worse
- Irrigators may complain, but may show low compliance with policies
- Identify new supply opportunities – re-use of waste water, dam capacity
- Scenarios can result in extreme scarcity outcomes
- Flood policy cannot be directed at EU level – local priorities, objectives, choices
- Transboundary rivers require significant co-ordination – different priorities across boundaries



# Agriculture



- CAP currently under examination – integrate env objectives, esp EU policies such as WFD – support farmers as guardians of env
- Care with energy crops, some organic farming, etc., for water, but right answer in some cases
- Full cost recovery of water use!
- Support rural communities not specific sector – links to env sustainability, public goods
- Distinguish ‘framework’ of CAP from national/regional decision making



# Energy, manufacturing industry

- Some at risk from low flows and high temperatures
- Interactions with 'green energy' – bioenergy production and hydro – with consequences for water quantity and quality – integrate policy approaches (policy not at same scale)
- Industry – new round of IPPC BREFs should take water use more seriously





# Integration

- Integrate objectives of WFD into CAP!
- Lots of different plans – RBMPs, RDPs, LUP, etc. – need to integrate to optimise delivery of goals
- Lack of co-ordination between administrations inhibits policy implementation – but progress has started
- Can be a challenge to integrate management in different parts of a major river basin (e.g. different irrigation pressures, stakeholder objectives, etc.)
- Need integration between MS and non-MS across boundaries in river basins – needs enhanced governance capacities





# Modelling needs

- Databases are insufficient to allow v accurate water quality loading estimates from manufacturing – confidence in river concentrations is low
- Need to collect national estimates on diffuse pollution to evaluate models
- Problem in integrating local models with pan-European models





# EU water law – ‘fit for purpose’?

- SCENES outputs not challenge integrated analysis, planning, etc., of WFD
- Is a question on objectives – can they address changing circumstances?
- Are there gaps, or simply lack of ambition regarding WFD? (water scarcity?)
- Not all problems require an EU level solution?
- What happens if you give Member States flexibility in implementation?





# Conclusions

- SCENES is providing messages for decision makers at different scales
- Messages on decisions themselves:
  - Pollutants and scarcity
  - Dangers of non-compliance
- Messages on how to make decisions:
  - Range of key data and analytical process
  - Importance of modelling at different scales (opportunities and limits of models)
  - Opportunities of participatory processes

