WFD Monitoring

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Current situation

- WFD monitoring operational from 22nd December
- Classification in 1st plans
- Improve risk assessments
- Drive 2nd planning cycle and beyond
Types of monitoring

- **Surveillance** - all parameters
  - trends and overview
- **Operational monitoring** - specific parameters
  - pressures and risks
- **Investigative monitoring**
  - cause and solutions
Starting point

- organic enrichment
- nutrient enrichment
- abstraction
- chemical pollution
- dredging and shoreline reclamation (TraC)
- mining and acidification (Wales)
# Pressures and biological elements

<table>
<thead>
<tr>
<th>Pressure Type</th>
<th>River</th>
<th>Lake</th>
<th>Transitional</th>
<th>Coastal</th>
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<tr>
<td>Organic</td>
<td>Macro-invertebrates</td>
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<td>Fish Benthic invertebrates</td>
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<td>Phytoplankton Macrophytes</td>
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<td>Morphological</td>
<td>Macrophytes RHS</td>
<td>Macrophytes LHS</td>
<td>Aerial extent</td>
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</tbody>
</table>
Rivers monitoring

- 432 surveillance waterbodies
  - 125 waterbodies for Annex 8 and 10 substances
- 2967 operational waterbodies
- maximises use of historic data and existing monitoring programme
Surveillance Water Body
River Tone (Somerset)

Key
- Invertebrate survey
- Diatom survey
- Fish survey
- Water Quality sampling (FWF)
- Water Quality sampling plus scan
- DSD sampling

- All elements monitored 1 in 3 yrs
- Hydromorphology and hydrology data to be collected
Groundwater monitoring

- Strategic quality and existing level networks
- Quality network covers 265 groundwater bodies
- No specific surveillance or operational monitoring
Lakes monitoring

- 50 surveillance lakes
- operational monitoring of 73 natural lakes
  - nutrient enrichment, acidification in Wales
- relies on water company data for reservoirs
Transitional and coastal waters

- 52 surveillance waterbodies
- Further operational monitoring will be developed as we classify waterbodies
- Need dynamic monitoring programmes
Future developments

- Network onto WISE (March ‘07)
- Third party data (2007)
- Monitoring for groundwater fed wetlands (2008)
- Annual review of monitoring programme
  - input from Liaison Panels
  - results from initial classifications
  - changing pressures
Summary

- Significant increase in coverage of lakes, coasts and estuaries monitoring
- Some areas for further work
- Maximises use of existing data and monitoring programmes
- Annual review is key
- Dynamic and innovative