

EA Water Quality Modelling Strategy

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Water Quality Modelling Strategy

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June 2016

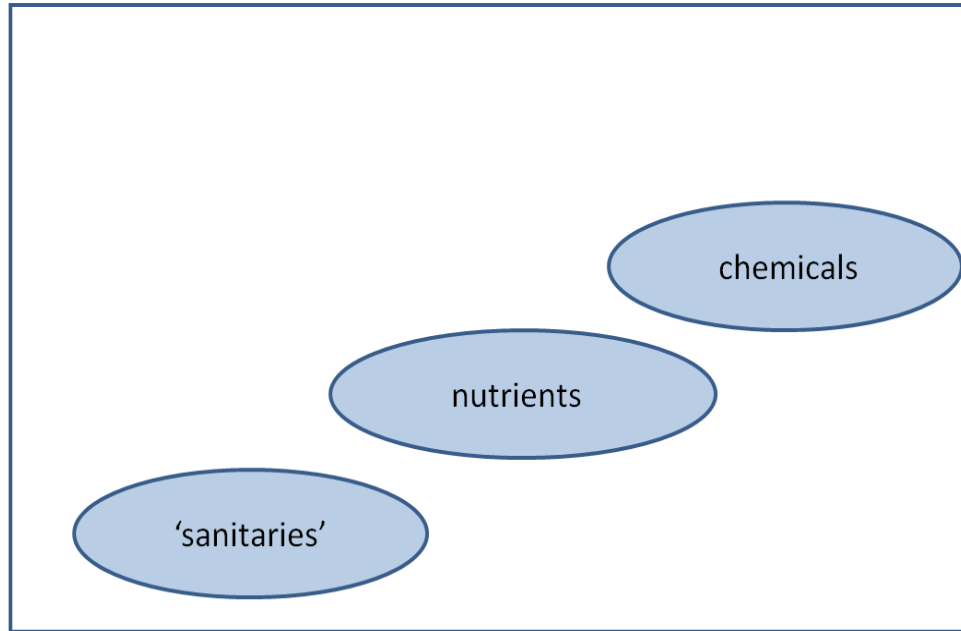
“Improving and protecting our **rivers, lakes and marine waters** is central to what the Environment Agency does. Investments to achieve this and the ensuing benefits are considerable. This requires a strategic approach to ensure that our environment management decisions are well based.

Approximately, **2000 cubic meters of water flows from our rivers each second**, on average. Around **10%** of this water will have passed through a **waste water treatment works**. **Agriculture and industry** will also affect the quality of our water. Calculating the impacts and improvements required from these various sources for over **50,000km of rivers**, and for our **estuaries** and **coastal waters**, is a complex task.

It is the role of modelling to do these computations.

The purpose of this document is to describe how we intend to go about this, currently and in the future, at the strategic level. “

Number of
sectors,
Scale,
Complexity



Future

Highlights

- **Freshwater**
 - EQS - Monte-Carlo – SIMCAT - Freshwater
- **Marine**
 - We will develop more water quality models for all our major marine systems
- **Ecology**
 - We will explore the addition of ecological impact predictions within our models
- **Sectors**
 - Water industry, Agriculture , etc
- **Developments**
 - Shared, Open, collaborative
 - Water Industry, academia, research, UKWIR – SAGIS-SIMCAT