



The state of UK seas

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An assessment of the state of UK seas published in 2010 will form the basis of UK efforts to meet the requirements of the EU Marine Strategy Framework Directive. EU marine states have to produce an initial assessment by 2012 as a first stage towards the need to achieve Good Environmental Status for their marine waters by 2020. Scientists including researchers from many institutions around the UK contributed to the report Charting Progress 2, which was commissioned by the UK government Department for Environment, Food and Rural Affairs (Defra). The present author was particularly responsible for marine physics topics: temperature, salinity, currents, sea level, waves, suspended matter as well as pH and partial pressure of carbon dioxide. Nevertheless, the subjects “healthy and biodiverse”, “clean and safe”, “productive” are also covered and there is a specific chapter on climate change.

Findings of raised air and sea temperatures, and rising sea levels, associated with climate change, confirm the original Charting Progress report (2005) with improved evidence. There is evidence for a decrease in pH associated with uptake of CO₂ but measurements in UK waters only started recently. On the other hand salinity, currents, waves and suspended matter are so variable on many time-scales and locally that there is no sensible trend.

The presentation will discuss the process of producing the evidence and report, and some of what the report has to say.