Editorial

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The first of the two briefings in this issue concerns the EU water framework directive (WFD; Brooke, 2012; EC, 2000). This not only updates us on more recent developments since the last briefing on this topic in 2007 (Brooke, 2007) but also provides a broader context, shedding some light on how the WFD interacts and links with other directives such as the EU floods (EC, 2007), habitats (EC, 2009) and marine strategy (EC, 2008) directives. This provides a useful starting point for those working on the coast, or in estuaries, and trying to sort out how evolving policy and regulation is likely to influence future development opportunities.

A year ago we published a briefing of the 2010 UK Young Coastal Scientists and Engineers Conference, held at University College London, as a set of short abstracts (Simons *et al.*, 2011). There was another exciting mix of papers at last year's conference, which was held at the National Oceanographic Centre, Liverpool, and we are glad once again to provide a selection of the best abstracts from the conference (Brown *et al.*, 2012). The keynote lecture, given by Tim Chesher, and six presentations judged by the organising committee to be of particular merit are combined and presented in this issue. The keynote lecture provided the students with some valuable insights into the use and abuse of numerical models. There was then a wide-ranging mix of papers covering important coastal-management issues, such as the impacts of demersal fishing and the blow-out of sand dunes, and a number of papers on various aspects of modelling including wave run-up, bedform migration and sediment transport at a range of scales.

The first paper in this issue is about the recently completed coast-protection scheme in Blackpool (Cunningham *et al.*, 2012), one of the largest coastal defence projects completed in the UK over the past 10 years. This paper is welcome because it reflects on a completed scheme, documenting the lessons learnt. In doing so it highlights the breadth of issues that now have to be considered when developing coastal defences, particularly in urban environments. As an important tourist destination the scheme had to deliver significantly improved coastal defences, while maximising public amenity, which added a number of additional constraints to the design process. What is particularly nice about this scheme is that it takes full advantage of a major infrastructure investment to secure benefits across a wide range of requirements, not least aesthetic quality and public utility. The authors highlight the importance

of partnering with a range of stakeholders in the delivery of this type of project.

The second paper continues the theme of scour, which was the main focus of the last issue of *Maritime Engineering* (Harris and Whitehouse, 2011). The paper by Guven *et al.* (2012) considers methods to predict wave-induced scour around piles, an issue that was also touched on in the themed issue looking at offshore renewable energy (Prandle, 2009). As well as the practical interest in the subject of this paper it should also be of interest to those seeking to make use of novel analysis and computing methods. The authors explore the application of artificial neural networks (ANN) and gene-expression programming (GEP). Although based on a rather limited data set, the results of this study look promising and support the potential use of these techniques in predicting the non-linear and dynamic wave-induced scour parameters.

Finally, we have a review of the recent textbook by Professor Reeve on the subject of risk and reliability and how this can now be put to practical use in coastal and hydraulic engineering. The author has the benefit of research, teaching and design experience in this topic and this is reflected in the book, where some complex theory is made highly accessible to the student and inexperienced practitioner.

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