



# Scoping study for coastal asset management

## Project Summary SC070061/S1

Researchers at HR Wallingford – supported by coastal experts from Halcrow Group, the Environment Agency, local authorities and other consultancy companies – have published the findings of their evaluation of the knowledge and tools available to workers in the field of flood and coastal risk management (FCRM). Their review identified gaps in existing knowledge and highlighted research priorities for the future development of FCRM tools and guidance. The project included a workshop attended by coastal practitioners.

The Environment Agency has taken on the role of overseeing responsibilities for coastal protection and flood defence. This new role has highlighted the need to ensure that adequate methods and tools are available to all coastal practitioners to allow them to:

- determine flood and coastal erosion risks;
- undertake future management of coast protection structures.

The Environment Agency also needs to introduce the practical benefits of the Risk Assessment for Coastal Erosion (RACE) method into the current Performance-based Asset Management System (PAMS) for flood risk management. This will enable coast protection assets to be effectively managed within the context of Shoreline Management Plans, coastal erosion risk, and local amenity and environmental requirements.

The overall aim of the scoping study was to establish a programme of science to provide managers of coast protection assets with improved procedures and decision-support tools for the identification and prioritisation of management interventions.

The report describes existing data sources, methods and tools. It proposes a framework for the development of a coherent set of tools/guidance to support the management of coastal assets, together with an associated programme of supporting science. The elements of the suggested framework include:

- decision support;
- systems analysis;
- inspection and assessment of asset condition;
- common and improved databases.

Potential improvements and research initiatives are grouped depending on whether they are seen as:

- contributing to underpinning the development of a consistent method for a performance and risk-based approach to coastal asset management;
- supporting the development of tools and best practice guidance for managers/practitioners.

The various improvements are categorised under short-, medium- and long-term timeframes, and scored in terms of their priority both to the proposed framework and the flood risk management industry in general.

The report stresses the importance of ensuring that new methods are of use to coastal practitioners and useable by both Environment Agency staff and local authorities. A standardised method would help to promote good working relationships and allow data sharing to occur more readily than it does at present.

The findings from this project will help the Environment Agency, local authorities, Coastal Groups and the flood risk management industry to:

- make appropriate use of existing FCRM tools and techniques;
- prioritise research to develop new tools and procedures for cost-effective management of coastal assets;
- support the implementation of policy and operational changes that will bring a new consistent approach to the strategic planning of coastal defence (flood defence and coast protection).

The report will be of interest to anyone involved in the management of flood and coastal erosion risk management assets in the UK including regulators, maritime councils, drainage authorities and private coastal frontage owners.

This summary relates to information from project SC070061, reported in detail in the following output(s):

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This project was commissioned by the Environment Agency's Evidence Directorate, as part of the joint Environment Agency/Defra Flood and Coastal Erosion Risk Management Research and Development Programme.

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