



## Long term costing tool for flood and coastal risk management

### Project summary SC080039/S

The long term costing tool, prepared by JBA for the Environment Agency, summarises the evidence on the costs of a wide range of flood and coastal risk management measures. The evidence is provided as a collection of reports and as a spreadsheet tool that helps practitioners to easily build up whole life cost estimates.

The evidence is summarised in a collection of notes, the first of which includes general advice on how to undertake whole life cost estimates. The remaining notes discuss specific measures, including:

- Fluvial linear defences
- Channel management
- Culverts
- Control assets
- Flood storage
- Coastal erosion and protection
- Managed realignment
- SuDS and urban drainage
- Temporary and demountable barriers
- Household flood protection
- Land use and runoff management
- Flood warning and forecasting
- Habitat creation

The spreadsheet tool supports users in applying this information to develop whole life cost estimates for their own projects. For example, developing a strategy which includes a broad portfolio implemented over a 100 year period. The spreadsheet tool is provided as both a blank document and as a worked example.

The Environment Agency has a number of assessment tools to estimate flood risk and the benefits of flood risk management options. However, the tools to estimate costs were relatively undeveloped. Practitioners need to understand the costs as well as the benefits to support efficient and effective management options. So this project is an important tool for decision makers.

The outputs are designed for use by practitioners who need to rapidly generate outline estimates of costs. The

spreadsheet tool could also be used as a framework for creating detailed cost estimates where practitioners have their own more detailed data to use as inputs.

The evidence summaries and spreadsheet tool are designed to be compatible with standard project appraisal guidance procedures. This should make it easy for practitioners to use the tools when developing business cases and applying for funding.

The outputs have a modular structure with a separate report provided for each type of measure. This will make it easy to update the outputs if better information becomes available.

This summary relates to information from the following project:

**Report:** SC080039/R

**Title:** Long term costing tool for flood and coastal risk management

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**Project manager:** Adam Baylis, Evidence Directorate

**Research Contractor:** JBA Consulting, South Barn, Broughton Hall, Skipton, North Yorkshire, BD23 3AE, 01756 799919

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

Email: [ferm.evidence@environment-agency.gov.uk](mailto:ferm.evidence@environment-agency.gov.uk).

E: [enquiries@environment-agency.gov.uk](mailto:enquiries@environment-agency.gov.uk).

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