



## Flood and Coastal Erosion Risk Management Research Programme

# A review of skills and guidance in flood and coastal risk management benefit: cost assessment

## Project Summary FRS18201/S

This project looked at how we could help practitioners undertake meaningful early benefit:cost assessments of proposed flood and coastal risk management investment programmes. This will help increase the number of viable schemes being brought forward into the Flood and Coastal Erosion Risk Management Capital Programme<sup>1</sup>. It will also help to better manage expectations of outcomes and the potential funding needs of a scheme.

### Project scope

The project focused on improving awareness and skills of two existing benefit:cost assessment approaches in the Multi-Coloured Manual<sup>2</sup>. These are:

1. the Weighted Annual Average Damages Estimation Tool. This is a simple spreadsheet-based tool that can calculate potential benefits of a flood alleviation scheme based on estimates of the number of properties in the area at risk of flooding with and without the scheme.
2. the Simplified benefit:cost appraisal tool for flood risk management. This is also a spreadsheet tool to calculate the economic damages and potential scheme benefits.

### Approach

We used surveys to find out who uses the approaches and tools, how, when and why they are doing so, and what we could do to make this easier.

The feedback identified potential barriers to using the existing benefit:cost assessment approaches:

- A lack of awareness about the existing approaches and tools
- A lack of clarity over when and how to apply the tools
- Insufficient understanding of the calculations used and several formatting errors within the tools, leading to a lack of confidence in the results
- Users not having the correct data to use the tools, and/or not knowing how to access and interpret the data

Step by step guidance was developed for the two Multi-Coloured Manual tools based on user feedback. The guidance will help users with limited or no experience. Draft outputs were refined through testing with Risk Management Authority groups in a workshop environment.

We will use the evidence gathered through the user testing to support wider training initiatives.

### Conclusions

The two Multi-Coloured Manual tools provide quick and simple assessments of the potential benefits of flood alleviations schemes. However, the work required to get the data needed to carry out the assessments needs more specialist skills and the outputs can be confusing.

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<sup>1</sup> [Flood and Coastal Erosion Risk Management Capital Programme](#)

<sup>2</sup> [Online multi coloured manual](#)

The guidance developed in the study will encourage Environment Agency and Risk Management Authorities to access and use the tools. This may also reduce the number of people developing their own local tools.

This summary relates to information from project FRS18201, reported in detail in the following output(s):

**Report:** FRS18201/R

**Title:** Strengthening investment decisions in Flood and Coastal Risk Management a review of skills and guidance in benefit:cost assessment

**Appendices:**

FRS18201/R Appendix A Literature review

FRS18201/R Appendix B User guide including step-by-step guidance for WAAD Tool and simplified benefit:cost appraisal Tool

**April 2021**

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

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