

## **Temporary and Demountable Flood Protection Guide**

## Project Summary SC080019/S

Defra's strategy for managing flood risk in England as outlined in 'Making Space for Water' calls for a portfolio of measures for managing flood risk. Temporary and demountable systems are increasingly forming an important part of this portfolio. Following publication of the Interim Guidance on the use of Temporary and Demountable Flood Defences by the Environment Agency in 2002, there have been many advances in the variety and forms of flood products available. To capture information on new products, associated developments and lessons learnt from use since 2002 the Environment Agency commissioned this update of the interim guidance.

The new guidance supersedes the interim guidance of 2002 and draws on lessons learned from the experience of use of temporary and demountable flood protection systems to date. It describes the range of temporary and demountable flood protection systems currently available and provides guidance for choosing the most appropriate option in different contexts or against different risk criteria. It also provides guidance on planning, management of operation and reliability.

The guide is intended for use by:

- Flood risk management practitioners and advisers, such as asset managers, emergency planners and responders, designers of flood alleviation schemes and local community groups;
- Developers, manufacturers and other organisations involved with the development or improvement of temporary and demountable flood protection systems.

The key findings of the research carried out to inform the development of the Guide were:

 In the large majority of situations where temporary and demountable systems have been used, they have provided adequate protection;

- There have been some occasions where operational processes or inaccurate hydraulic assessments have led to failures;
- There is a need to fully understand the hydraulic loading and operational management of temporary and demountable systems;
- Systems need to be in place before inundation occurs.

The guide focuses on the whole life cycle of the design and management of the systems and associated products to ensure that the systems used are effective and reliable. This is underpinned by an understanding of the associated risk and performance issues, how risk can be minimised and performance enhanced.

The guide is in two parts. The main body of the guide provides guidance on the why, when and how to use temporary and demountable products and systems, while the Appendices provide more technical detailed information about currently available products and systems.

Several new topics are covered in the updated guidance including typical strategic uses of temporary flood protection, measures to improve reliability and associated operational processes, and the assessment of whole life costs and benefits.

This summary relates to information from project SC080019, reported in detail in the following output(s):

Report: SC080019/R

Title: Temporary and Demountable Flood Protection

Guide

August 2011

**Internal Status:** Released to all regions **External Status:** Publicly available

**Project manager:** Michael Nye, Evidence Directorate **Theme manager:** Geoff Baxter, Sustainable Asset

Management

Research Contractor: Royal Haskoning, Rightwell

House, Bretton, Peterborough, PE3 8DW.

Tel: 01733 334455 E-mail: info@royalhaskoning.com

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.

Email: fcerm.evidence@environment-agency.gov.uk.

Further copies of this summary are available from our publications catalogue: <a href="http://publications.environment-agency.gov.uk">http://publications.environment-agency.gov.uk</a> or our National Customer Contact Centre: T: 08708 506506

E: enquiries@environment-agency.gov.uk.

© Environment Agency.