Guide to Public Safety on Flood and Coastal Risk Management Sites

Science Summary SC060076/SS

There are many inherent dangers on flood and coastal risk management sites and in many locations equipment is provided for the safety of the public who have gone outside to experience the beauty of the natural environment. A new report from the Environment Agency/Defra provides guidance for those responsible for the management of such sites so that they can be confident that the safety of the public is maintained whilst the natural beauty of our countryside is not compromised.

The need for safety equipment or "control measures" to protect the public from harm is an essential part of modern day life and keeping their whole life costs down whilst maintaining safety and the environment is a goal worth striving for. To achieve this the asset manager must strike a balance between safety, maintenance, cost and sustainability. Existing assets are often re-assessed for their suitability throughout their life and for many reasons the decisions made regarding these parameters at one time in the lifespan of the asset are often modified at another time.

Regular monitoring of control measures must be undertaken between the reviews to ensure the control measure remains in place. Anyone giving instructions on modifying or altering new or existing sites, or installing control measures will be a "designer" as defined by the Construction (Design and Management) Regulations 2007 (CDM). These people should include technically trained asset managers and assessors who are responsible for flood and coastal risk management sites within Defra organisations. The report outlines where the responsibility lies, and why, as well as providing a background to the law and the relevant legislation in England and Wales.

On any potentially dangerous site, planning the necessary precautions properly can save not only time and money, but also significantly reduce the numbers of accidents. Good management systems prompt the project team to think about public safety at all stages of the project, from conception through to eventual decommissioning or abandonment.

They will also clarify where any duties of care lie, and how to know when they have been discharged.

Making sure that any measures put in place to keep the public safe are neither extreme or inadequate is made easier by accurately assessing the risk, and then understanding how that risk is mitigated by the actions taken. Understanding the environment, both the natural and man-made elements, and how people use it is the first step in identifying any hazards. How risky these hazards are depends on how much harm they can cause, and how often it is likely to happen.

All significant risks need to be clearly recorded, along with any proposed actions. Once the actions have been implemented the risk assessment should be reviewed and updated, highlighting how the risks have been reduced, and suggesting a suitable period for further reviews. It is important to make sure that any measures put in place do not cause additional hazards, either to the public or operations staff who need to maintain the site. The report covers risk assessment in detail, with examples to demonstrate how the straightforward processes can be applied to real life situations.

In addition to the risk assessment examples, the report includes a number of case studies which look at real flood and coastal risk management sites. They show the control measures that have been put in place, and discuss possible alternatives, balancing the need for information or control measures, based on adequate risk assessment, with the impact on the environment and any access requirements.

Asset managers, assessors and other personnel involved in specifying public safety control measures must use their experience and judgment to determine the level of protection needed at any given site.

The *Guide to public safety on flood and coastal risk management sites* is intended to be used as a support tool to the decisions being taken by the technically competent practitioner.

This summary relates to information from Science Project SC060076, reported in detail in the following output:

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