science summary

Environment Agency

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SCHO0307BMKI-E-P

Update of Saltmarsh Management Manual

Science Summary SC030220/SS

The Environment Agency have updated the Saltmarsh Management Manual to assist coastal planners and operating authorities working in Flood and Coastal Erosion Management. The manual provides an understanding of the requirements of saltmarsh and when and how to manage it. An electronic version is available at www.saltmarshmanagementmanual.co.uk.

Saltmarshes are valuable ecosystems which can play an important role in flood and coastal erosion risk management as well as pollution control and waste disposal. They also help maintain water quality for fisheries, agriculture, recreation and tourism. Their value is based on the interaction of their basic components (soil, water, flora and fauna), their physical shape (including channels and saltmarsh surface) and the assemblage of plants and animals they hold.

Within the wider coastal and estuarine environment, saltmarsh maintenance, restoration or enhancement is increasingly being considered as a means of managing flood risk. It also has the advantage of helping to conserve an important natural habitat. To help coastal and estuarine managers and planners to identify potential problems with saltmarshes and find appropriate solutions, the Environment Agency commisioned Royal Haskoning to revise and update the existing *Saltmarsh Management Guide*. This was intended to take account of recent experience in saltmarsh management, and advances in science understanding and management practice since the publication of the original Guide.

The Saltmarsh Management Manual is published both as a hard copy report and as an interactive, electronic platform which is available on the project website (www.saltmarshmanagementmanual.co.uk),or on disk. The Manual covers the following areas:

1. What is the saltmarsh that we might manage?
Addresses the morphology and ecology of estuaries and bays and the processes associated with them and their intertidal sub-systems (mudflats and saltmarshes).

2. Why is saltmarsh worth managing?
Examines the value of saltmarsh, with particular reference to ecosystem and conservation significance, and flood and coastal defence.

3. Factors leading to saltmarsh change.
Explores the factors that may affect saltmarsh habitat and lead to both morphological and ecological change, including past uses that have influenced the development of saltmarshes and current activities that could affect the condition and distribution of saltmarsh.

4. Saltmarsh management.
Discusses a range of techniques that are available for maintaining, restoring or enhancing saltmarshes, along with their potential environmental effects. This chapter also covers saltmarsh creation techniques that can be used in areas where there is no existing saltmarsh and gives a series of case study examples.

5. Survey and monitoring of saltmarsh
Describes the typical components of programmes to monitor the physical and biological systems of a saltmarsh.

In both its versions, the Saltmarsh Management Manual will help coastal and estuarine managers, clients and planners to arrive at sound decisions for maintaining, restoring or enhancing saltmarshes.

This summary relates to information from Science Project SC030220, reported in detail in the following outputs:-

Science Report: SC030220/SR
Title: Saltmarsh Management Manual.
ISBN: 978-1-84432-714-0 **March 2007**
Report Product Code: SCHO0307BMKH-E-P

Electronic Platform:
www.saltmarshmanagementmanual.co.uk

Internal Status: Released to Regions
External Status: Released to Public
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This project was funded by the Environment Agency's Science Group, which provides scientific knowledge, tools and techniques to enable us to protect and manage the environment as effectively as possible.

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