

Shoreline Management Planning (SMP)

Description	Shoreline Management Planning is a generic approach to the strategic management of the combined hazards of erosion and flooding hazards in coastal areas, which are key concerns under climate change and sea level rise. New approaches to shoreline management have developed in the United Kingdom over the last 10 years. This involves dividing the coast of England and Wales into a series of natural units (cells and sub-cells). Based on these units, a number of shoreline management plans are then developed which collectively cover the entire coastal length. Each shoreline management plan further divides the coast based on land use and selects a series of strategic options to be applied over the next 50 to 100 years: (1) advancing the line; (2) holding the line; (3) managed realignment; (4) limited intervention; and (5) no active intervention. The practical implementation of these options is not directly considered — this is considered at lower levels of planning. Whatever is proposed must be consistent with a suite of Project Appraisal Guidance Notes (PAGN) that provide guidance (listed at http://www.defra.gov.uk/environ/fcd/pubs/pagn/default.htm). The EuroSION consortium have taken these approaches and developed them for application across the European Union (http://www.euroSION.org/).
Appropriate Use	SMP has been designed for developed countries with extensive coastal defense infrastructure. However, these approaches should find widespread application around the world's coasts, especially if slightly adapted to local circumstances. SMPs are designed as "living" plans, including regular update, so the whole process will stimulate the development of long-term coastal management appropriate to responding to climate change and sea level rise.
Scope	All coastal areas, typically at subnational to national scales pertinent to strategic flood and erosion management.
Key Output	Strategic approaches for flood and erosion management for the next 50 to 100 years.
Key Input	A range of information is required, including ideally historical shoreline change, contemporary coastal processes, coastal land use and values, and appropriate scenarios of change. However, the first generation of SMPs in England and Wales was conducted with incomplete datasets.
Ease of Use	The methods are designed assuming significant expertise and would be best implemented by consultants.
Training Required	With appropriate consultants this would not be necessary.
Training Available	None offered at present.
Computer Requirements	Depends on the approach adopted.
Documentation	DEFRA. 2001. <i>Shoreline Management Plans: A Guide for Coastal Defence Authorities</i> , Department for Environment, Food and Rural Affairs, 71 pp. (downloadable at http://www.defra.gov.uk/environ/fcd/pubs/SMP's/Revised%20SMP%20Guidance%20Final.pdf). See also http://www.euroSION.org/ .
Applications	First generation of shoreline management plans of England and Wales developed using the guidance from MAFF et al. (1995). Second generation plans based on DEFRA (2001) are just beginning.

Shoreline Management Planning (SMP) (cont.)

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Cost	Free download of DEFRA (2001) from http://www.defra.gov.uk/enviro/fcd/pubs/SMP's/Revised_SMP_Guidance_Final.pdf .
References	Ministry of Agriculture, Fisheries & Food (MAFF), Welsh Office, Association of District Councils, English Nature & National Rivers Authority. 1995. <i>Shoreline Management Plans: A Guide for Coastal Defence Authorities</i> . Ministry of Agriculture Fisheries & Food, London, 24 pp. Leafe, R., J. Pethick, and I. Townend. 1998. Realising the benefits of shoreline management. <i>Geographical Journal</i> 164:282-290. Burgess, K., H. Jay, and A. Hosking. 2002. FUTURECOAST: Predicting the Future Coastal Evolution of England and Wales. <i>Littoral 2002, The Changing Coast</i> , EUROCOAST, EUCC, Porto, Portugal, pp. 295-301.