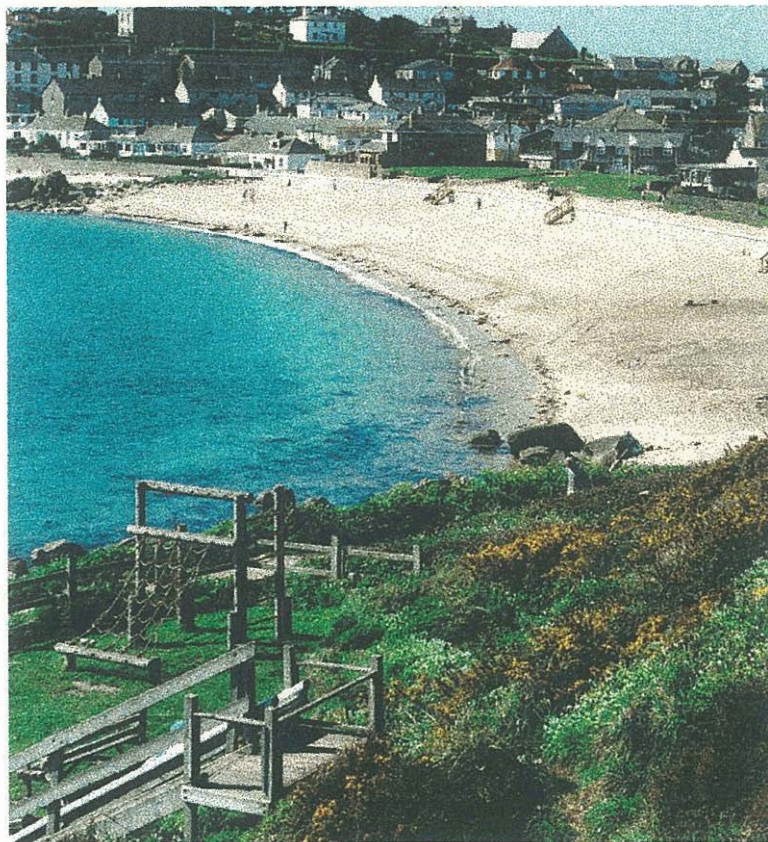




Aspen Burrow Crocker

COUNCIL OF THE ISLES OF SCILLY
SHORELINE MANAGEMENT PLAN
(VOLUME 1 OF 2)



OCTOBER 1997

Council of the Isles of Scilly
Town Hall
St Mary's
Isles of Scilly
TR21 0LW

Tel: (01720) 422537
Fax: (01 720) 422202

**CONTROLLED
COPY
Nr5**

Aspen Burrow Crocker Ltd.
2 York Court
Upper York Street
Bristol
BS2 8QF

Tel: (01 17) 924 0356
Fax: (0117) 924 0416

SHORELINE MANAGEMENT PLAN

EXECUTIVE SUMMARY

What is a Shoreline Management Plan?

A Shoreline Management Plan (SMP) is a document which sets out a strategy of coastal defence for specified lengths of coast taking account of natural coastal processes and human and other environmental influences and needs. England and Wales have been defined in several major sediment cells, i.e. stretches of coastline which are self-contained insofar as the movement of sand or shingle is concerned (regardless of administrative boundaries), and the Ministry of Agriculture, Fisheries & Food (**MAFF**) has, over the last two to three years, grant-funded Shoreline Management Plans (**SMPs**) for each cell. The Isles of Scilly form a sediment cell in themselves since they rise from the deep surrounding seabed and are therefore isolated from the mainland coast and its sediment transport processes.

Consideration for the Environment

The environment is an important feature of the Isles of Scilly and is one of its principal assets in terms of attracting the tourists on which the islands' economy is dependent. The solitude and remoteness of the archipelago together with its pristine waters make it a haven for shy wild animals such as puffins and seals. Furthermore, the position of the archipelago on migratory routes makes it a convenient resting place for birds and the annual spring and autumn migrations bring additional tourists to enjoy the spectacle. Small fields around the islands are farmed for bulbs and other high value crops and contribute to the pleasant scenes presented by nature.

In addition to the natural and farmed environments, the Isles of Scilly are rich in archaeology and historical remains from medieval times to the Roman period through the Civil War to modern history with many listed buildings dotting the inhabited islands.

Coast defence works, where they are appropriate, have to be designed to accommodate the needs of the users of the shoreline (e.g. boat and pedestrian access) while performing their function and doing so with the minimum impact on the built and natural environments. Schemes should be based on an understanding of natural processes and, as far as possible, work with those processes such that they are sustainable.

The Shoreline Management Plan

An SMP for the Isles of Scilly has been researched since late 1995 and, in compiling the Plan, all those statutory national bodies and local groups with an interest in the islands have been consulted to determine what their requirements from the shoreline are. The Shoreline Management Plan amalgamates all the knowledge identified on the coastal processes within the archipelago. Individual sediment cells and sub-cells have been investigated with "Management Units" within them being defined.

The SMP presents the data acquired for each Management Unit in a tabular form and then assesses each for the four generic options for coastal defence, being:

- do nothing;
- advance the defence line;
- hold the defence line;
- retreat the defence line

The need for coast defence is defined by the Ministry of Agriculture, Fisheries & Food in their published strategy which has an aim of reducing the risks to people and the developed and natural environment from flooding and erosion.

Where the SMP has identified a coastal defence option other than that of doing nothing, it has investigated the options for defending the coast having due regard to the government's policies for flood and coastal defence. The various potential options have been costed in very broad terms and assessed against the assets at risk. The option considered best suited to the environment within each individual management unit has been recommended (bearing in mind, insofar as possible, the aspirations of the **consultees**) where a favourable **benefit/cost** assessment has been possible. The assessment is published in tabular form for each Management Unit.

In some Management Units there are gaps in knowledge and the findings of the SMP are necessarily inconclusive. The document, however, is intended by MAFF to be a "live" document and to be updated as information becomes available. It may then be possible to firm up on recommendations for those management units where data is presently insufficient for decision-making.

SMPs are only one of a number of initiatives affecting the coast and, although they have no statutory status, they are intended by MAFF to be useful in informing decisions on Structure, Local and Unitary Development Plans.

A draft Shoreline Management Plan was widely circulated for six months from October 1996 to March 1997 inclusive. Responses received from the consultees have been incorporated into the final document dated October 1997.

Recommendations of the Shoreline Management Plan

The SMP presents data and assessments in two tables for each of the Management Units. The main recommendations are presented below.

General Development Control

- Developments on the coast should only be permitted where they will be out of the erosion **and/or** overtopping zones for their anticipated lifetimes. The onus should be placed on the developer to demonstrate that new developments would not be in contravention of **PPG20** (Policy Planning Guidance: Coastal Planning).
- It is recommended that the Council should continue to require planning permission for coast protection structures (whether publicly or privately owned) such that they can be properly considered by the public for their **impacts** in the sensitive locations in which they will be situated.

Mineral Extraction

- It is recommended that the practice of "winning" material from the beach for the purpose of supplying building aggregates be reduced or, preferably, stopped as soon as possible in order to mitigate man-made impacts on the erosion process.

Future Works identified *by Island*

- Listed below are the locations at which coastal protection schemes are considered to be a priority on the basis that significant assets are at risk. When considering these and other future works it is recommended that thought be given to combining small schemes in particular in order to mitigate the high cost of **mobilisation** to the Isles of Scilly. This is because **mobilisation** and demobilisation costs of getting equipment and materials to and from the islands and the overhead costs of operating there constitute some 50% of the cost of a contract.

St Agnes

- No needs have been identified other than monitoring the recently completed works.

Bryher

- No needs have been identified other than monitoring the recently completed works.

Tresco

- The *Island* Hotel is on the Council's list of immediate concerns owing to the imminence of undermining of the new dining room. Design work is planned to take place in winter 1997/1998 with construction taking place over the following winter.
- Topographical surveys should be conducted around the south of the island to establish the actual (compared to perceived) risk to the Tresco Gardens shelter belt at Appletree Point and to the Great Pool area and thence to determine the need of any works at these locations.

St Martin's

- No needs have been identified.

St Maw's

- There is a need for post-construction **monitoring** of the beaches at Porth Cressa, Porth Minick and Old Town Bay. The need for and feasibility of potential future coast defence works at Town Beach, Porth Loo, Porth Hellick and Old Town Bay have been identified in the SMP.
- Town Beach should be surveyed at selected chainages to establish the long term trend of erosion. This work still requires to be done and should be logged onto the Council's Geographical Information System (**GIS**) once complete.
- Topographic survey needs to be undertaken at Porth Loo in order to more precisely define the rate of erosion and hence establish the degree of threat presented to the low-lying properties in the hinterland. Stakes (co-ordinated and logged onto the **GIS** system) have been established there from which to monitor rates of erosion.

- It is advisable to monitor Porth Hellick in order to verify or, indeed, to deny its stability. In the latter case, of course, consideration could be given to undertaking any necessary coast defence works.

Inter-Island Areas

- A bathymetric survey of Crow Bar would be helpful in establishing causes of the erosion on Tresco. Such a survey could be co-ordinated with the "in-survey" of the next coast defence project to be carried out on the islands in order to minimise costs.

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October 1997

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