



# Northumberland and North Tyneside Shoreline Management Plan 2

Scottish Border to River Tyne

Final, May 2009

  
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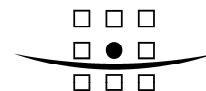
  
50 YEARS  
NORTHUMBERLAND COAST  
AREA OF OUTSTANDING NATURAL BEAUTY

  
NATURAL  
ENGLAND

  
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## GLOSSARY OF TERMS

Term	Definition
Advance the Line (ATL)	Building new defences seaward of the existing defence line.
Area of Outstanding Natural Beauty (AONB)	Designated by Natural England, AONBs are designated solely for their landscape qualities for the purpose of conserving and enhancing their natural beauty (which includes landform and geology, plants and animals, landscape features and the rich history of human settlement over the centuries). In this SMP area there is the Northumberland Coast AONB.
Beach nourishment	Artificial process of replenishing a beach with material from another source.
Benefits (as related to an issue)	The service that the feature provides. In other words, why people value it or use a feature. For example, a nature reserve as well as helping to preserve biodiversity and meet national legislation, may also provide a recreation outlet much like a sport centre provides a recreation function.
Berm crest	Ridge of sand or gravel deposited by wave action on the shore just above the normal high water mark.
Brackish water	Freshwater mixed with seawater.
Breaker zone	Area in the sea where the waves break.
Coastal squeeze	The reduction in habitat area which can arise if the natural landward migration of a habitat under sea level rise is prevented by the fixing of the high water mark, e.g. a sea wall.
Defra	Department for Food, Environment and Rural Affairs
Defra Procedural Guidance	Shoreline Management Plan Guidance produced by Defra to provide a nationally consistent structure for the production of future generation Shoreline Management Plans.
Downdrift	Direction of alongshore movement of beach materials.
Ebb-tide	The falling tide, part of the tidal cycle between high water and the next low water.
Ecosystem	Organization of the biological community and the physical environment in a specific geographical area.
European Marine Site (EMS)	A European Marine Site is any part of a SAC or SPA which occurs on the shore or sea. In this SMP area there is the Berwickshire and North Northumberland Coast EMS.
Environmental Impact Assessment (EIA)	Detailed studies which predict the effects of a development project on the environment. They also provide plans for mitigation of the adverse.
Environmentally Sensitive Area (ESA)	This is an area where special land management payments are available through agreement with Defra to provide farming practices which are beneficial to the environment. This is a non-statutory designation.
Feature	Something tangible that provides a service to society in one form or another or, more simply, benefits certain aspects of society by its very existence. This will be of a specific geographical location and specific to the SMP.
Fetch	Length of water over which a given wind has blown that determines the size of the waves produced.
Flood-tide	Rising tide, part of the tidal cycle between low water and the next high water.
Foreshore	Zone between the high water and low water marks, also known as the intertidal zone.

Term	Definition
Geomorphology/ Morphology	The branch of physical geography/geology which deals with the form of the Earth, the general configuration of its surface, the distribution of the land, water, etc.
Groyne	Shore protection structure built perpendicular to the shore; designed to trap sediment.
Heritage Coast	Heritage Coasts are a non-statutory landscape definition, unlike the formally designated National Parks and Areas of Outstanding Natural Beauty (AONBs) and are defined by agreement between the relevant maritime local authorities and Natural England as having notable natural beauty or scientific significance. Local authorities assist with the management of Heritage Coasts often with Heritage Coast officers.
Hold the Line (HTL)	Maintaining or upgrading the level of protection provided by defences
Local Nature Reserves (LNR)	These are established by local authorities in consultation with Natural England. These sites are generally of local significance and also provide important opportunities for public enjoyment, recreation and interpretation. This is a statutory designation.
Managed Realignment (MR)	Allowing the shoreline to realign, landwards or seawards, sometimes with management to initiate and control change.
Management Area (MA)	A collection of Policy Units that are interdependent and should therefore be managed collectively.
Mean High Water (MHW)	The average of all high waters observed over a sufficiently long period.
Mean Low Water (MLW)	The average of all low waters observed over a sufficiently long period.
Mean Sea Level (MSL)	Average height of the sea surface over a 19-year period.
Modelling and Decision Support Framework (MDSF)	Mapping-linked computer tool used in the evaluation of assets at risk from flooding or erosion.
National Nature Reserves (NNR)	Designated by Natural England. These represent some of the most important natural and semi-natural ecosystems in Great Britain, and are managed to protect the conservation value of the habitats that occur on these sites. This is a statutory designation.
No Active Intervention (NAI)	A decision not to invest in providing or maintaining defences.
Objective	An objective is set, through consultation with key parties, to encourage the resolution of the issue or range of issues. It is a desired state to be achieved in the future.
Offshore zone	Extends from the low water mark to a water depth of about 15 m and is permanently covered with water.
Policy	In this context, "policy" refers to the generic shoreline management options (No Active Intervention, Hold the Existing Line of Defence, Managed Realignment and Advance the Existing Line of Defence).

Term	Definition
Policy Development Zone (PDZ)	The coastline was divided into reasonably sized sections or PDZ's for the purpose of assessing all of the issues and the interactions in order to develop the preferred management policy. These zones are only used in the procedure of developing policy. Policy Units and Management Areas are then used for the final definition of the policies and the management of the coast.
Policy Scenario	The combinations of policies selected against the various feature/benefit objectives for the whole SMP frontage.
Policy Unit (PU)	Sections of coastline for which a certain coastal defence management policy has been defined. These are then grouped into Management Areas for management purposes.
Present Value (PV)	The value of a stream of benefits or costs when discounted back to the present day. For this SMP the discount factors used are the latest provided by Defra for assessment of schemes, i.e. 3.5% for years 0-30, 3.0% for years 31-75, and 2.5% thereafter.
Ramsar Site	Designated under the Ramsar Convention on Wetlands of International Importance especially as Waterfowl Habitat 1971. The objective of this designation is to stem progressive encroachment into, and loss of, wetlands.
Regionally Important Geological / Geomorphological Sites (RIGS)	These are identified by locally developed criteria, and are currently the most important places for geology and geomorphology outside statutorily protected land such as SSSI's. This is a non-statutory designation.
Scheduled Ancient Monuments (SAM)	The main legislation concerning archaeology in the UK is the Ancient Monuments and Archaeological Areas Act 1979. This Act, building on legislation dating back to 1882, provides for nationally important archaeological sites to be statutorily protected as Scheduled Ancient Monuments.
Sensitive Marine Area (SMA)	A generic term used to describe nationally important locations around our coast which require a cautious and detailed approach to management. They are identified by Natural England for their important benthic populations, spawning or nursery areas for fish, fragile intertidal communities, or breeding, feeding, and roosting areas for birds and sea mammals. This is a non-statutory designation.
Setback	Prescribed distance landward of a coastal feature (e.g. the line of existing defences).
Shoreline Management Plan (SMP)	A document that provides a large-scale assessment of the risks associated with coastal processes and presents a policy framework to reduce these risks to people and the developed, historic and natural environment in a sustainable manner.
Site of Nature Conservation Importance (SNCI)	These sites are defined by the Wildlife Trusts and Local Authorities as sites of local nature conservation interest. These are non-statutory but form an integral part of the formulation of planning policies relating to nature conservations issues.
Sites of Special Scientific Interest (SSSI)	These sites, notified by Natural England, represent some of the best examples of Britain's natural features including flora, fauna, and geology. This is a statutory designation.

Term	Definition
Special Area of Conservation (SAC)	This designation aims to protect habitats or species of European importance and can include Marine Areas. SACs are designated under the EC Habitats Directive (92/43EEC) and form part of the Natura 2000 site network. All SACs are also protected as SSSI, except those in the marine environment below the Mean Low Water (MLW).
Special Protection Area (SPA)	These are internationally important sites, designated under the EC Habitats Directive (92/43EEC) and form part of the Natura 2000 site network..
Special Landscape Area (SLA)	An area identified as having a strategic landscape importance.
Strategic Environmental Assessment (SEA)	Assessment under European Directive 2001/42/EC (the SEA Directive) 'on the assessment of the effects of certain plans and programmes on the environment' requires a formal environmental assessment of certain plans and programmes which are likely to have significant effects on the environment. Authorities which prepare and/or adopt such a plan or programme must prepare a report on its likely significant environmental effects, consult environmental authorities and the public, and take the report and the results of the consultation into account during the preparation process and before the plan or programme is adopted. They must also make information available on the plan or programme as adopted and how the environmental assessment was taken into account.
Storm surge	A rise in the sea surface on an open coast, resulting from a storm.
Swell	Waves that have travelled out of the area in which they were generated.
Tidal prism	The volume of water within the estuary between the level of high and low tide, typically taken for mean spring tides.
Tide	Periodic rising and falling of large bodies of water resulting from the gravitational attraction of the moon and sun acting on the rotating earth.
Topography	Configuration of a surface including its relief and the position of its natural and man-made features.
Transgression	The landward movement of the shoreline in response to a rise in relative sea level.
Updrift	Direction opposite to the predominant movement of longshore transport.
Water table	The upper surface of groundwater; below this level the soil is saturated with water.
Wave direction	Direction from which a wave approaches.
Wave refraction	Process by which the direction of approach of a wave changes as it moves into shallow water.



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APPENDIX E – Issues and Objective Evaluation

APPENDIX F – Scenario Testing

APPENDIX G – Economic Appraisal and Sensitivity Testing

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APPENDIX I – Appropriate Assessment

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