

**European Community Directive
on the Conservation of Natural Habitats
and of Wild Fauna and Flora
(92/43/EEC)**


**Second Report by the United Kingdom under
Article 17
on the implementation of the Directive
from January 2001 to December 2006**

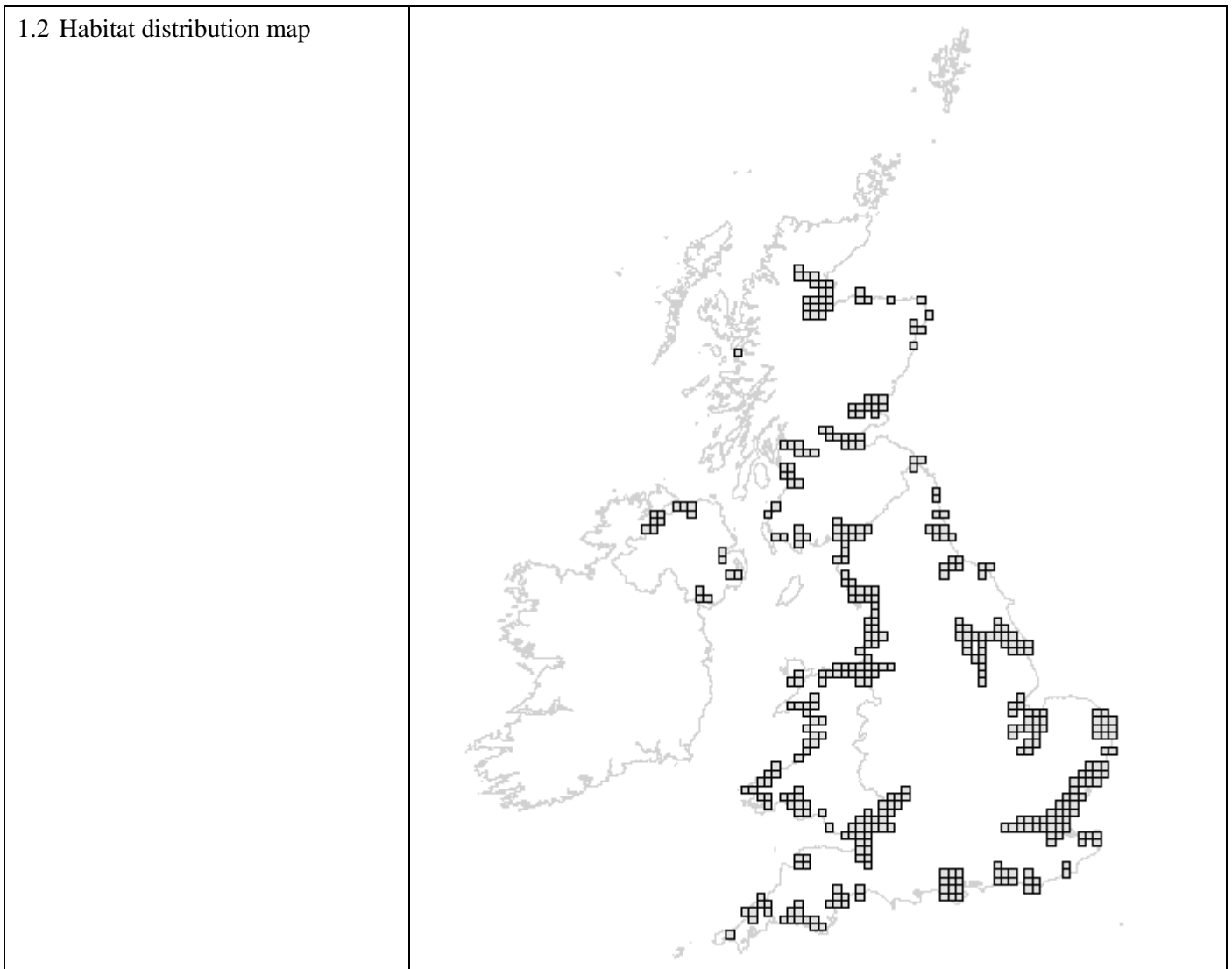
**Conservation status assessment for
Habitat:
H1130 - Estuaries**

The information in this assessment corresponds to the "habitat fact sheet" submitted by the UK to the European Union in February 2008 (second and final submission). Please note that this is a section of the UK's report. For the complete report visit <http://www.jncc.gov.uk/article17>

Please cite as: Joint Nature Conservation Committee. 2007. *Second Report by the UK under Article 17 on the implementation of the Habitats Directive from January 2001 to December 2006*. Peterborough: JNCC. Available from: www.jncc.gov.uk/article17

Habitat Name: Estuaries

1. National level	
Habitat Code	H1130
Member State	UK
Biogeographic regions concerned within the MS	ATL
1.1 Habitat range map	 A map of the United Kingdom, including Great Britain and Ireland, showing the distribution of estuaries. The map is a black and white line drawing of the coastlines. Dark grey shading is used to indicate the presence of estuaries, primarily along the southern and eastern coasts of England, the southern coast of Wales, and the western coast of Scotland. The map shows the intricate coastline of the British Isles, with numerous bays, peninsulas, and islands.



2. Biogeographic level

2.1 Biogeographic region or marine region ATL

2.2 Published sources and/or websites

BOORMAN, L.A., GOSS-CUSTARD, J.D., MCGRORTY, S. 1989. Climatic change, rising sea level and the British coast. ITE Research Publication No. 1.

BOYES, S., BURDON, D. AND ELLIOTT, M. 2006. Unlicensed Activities: A review to consider the threats to marine biodiversity: Building the evidence base for the Marine Bill. CRO354 Living Land and Seas Science Division, DEFRA.

BROOKER, R. AND YOUNG, J. 2005. Climate change and biodiversity in Europe: a review of impacts, policy responses, gaps in knowledge and barriers to the exchange of information between scientists and policy makers, NERC Centre for Ecology and Hydrology, Banchory research station, Final Report for Defra Research Contract CRO326, Report presented at the European Platform for Biodiversity Research, Strategy meeting held under the UK Presidency. October 2005.

BUCK, A.L. (compiler). 1993/1997. An Inventory of UK Estuaries: Volumes 1 – 7. Peterborough, Joint Nature Conservation Committee.

COHEN, A. N. AND CARLTON, J. T. 1998. Accelerating invasion rate in a highly invaded estuary. *Science*, 279, 555–557.

CONNOR, D.W., ALLEN, J.H., GOLDING, N., HOWELL, K., LIEBERKNECHT, L., NORTHERN K.O., AND REKER, J. 2004. The Marine

Habitat Classification for Britain and Ireland Version 04.05 JNCC, Peterborough
 ISBN 1 861 07561 8 (internet version)
www.jncc.gov.uk/MarineHabitatClassification

CONNOR, D.W., GOLDING, N., ROBINSON, P., TODD, D., AND VERLING, E. 2006. UKSeaMap: The mapping of marine seabed and water column features of UK seas. Final report. Joint Nature Conservation Committee, Peterborough.

DAVIDSON, N.C.D., D'A LAFFOLEY, D., DOODY, J.P., WAY, L.S., GORDON, J., KEY, R., DRAKE, C.M., PIENKOWSKI, M.W., MITCHELL, R. AND DUFF, K.L. 1991. Nature conservation and estuaries in Great Britain. Nature Conservancy Council.

DEFRA. 2005. Physical processes and climate changes and effects, Integrated Assessment, in Charting Progress 5: Integrated regional assessment.

DE GROOT, S.J., LINDEBOOM, H.J. 1994. Environmental impact of bottom gears on benthic fauna in relation to natural resources management and protection of the North Sea. Netherlands Institute for Sea Research, Texel.

DEPARTMENT OF ENVIRONMENT. 1992. Planning policy guidance: coastal planning.
www.communities.gov.uk/pub/94/PlanningPolicyGuidance20CoastalplanningPDF88Kb_id1144094.pdf

ENVIRONMENT AGENCY. 2006a. The Water Framework Directive (WFD)
www.environment-agency.gov.uk/business/444217/444663/955573/

ENVIRONMENT AGENCY. 2006b. Generation and combination of risk outputs.
www.environment-agency.gov.uk/commondata/acrobat/gen_comb_risk_v2_1008518.pdf

ENVIRONMENT AGENCY. 2006c. Surface water bodies at risk of not achieving WFD objectives
 (Combined pressures)
www.environment-agency.gov.uk/commondata/acrobat/sw_at_risk_v1_1007365.pdf

ELLIOTT, M., NEDWELL, S., JONES, N.V., READ, S.J., N.D., CUTTS, N.D., HEMINGWAY, K.L. 1998. Intertidal Sand and Mudflats and Subtidal Mobile Sandbanks (volume II). An overview of dynamic and sensitivity characteristics for conservation management of marine SACs. Scottish Association for Marine Science (UK Marine SACs Project). 151 Pages.

EUROPEAN COMMISSION. 2003 Interpretation Manual of European Union Habitats, EUR 25
 October 2003, DG Environment Nature and biodiversity.

INTERNATIONAL MARITIME ORGANIZATION 2004 International Convention for the Control and Management of Ships' Ballast Water and Sediments.
http://www.imo.org/Conventions/mainframe.asp?topic_id=867

JACKSON, D.L. AND MCLEOD, C.R. (EDITORS). 2000. Handbook on the UK status of EC Habitats Directive interest features: provisional data on the UK distribution and extent of Annex I habitats and the UK distribution and population size of Annex II species. Revised 2002, JNCC Report 312, 180 pages, ISSN 0963-8091

JACKSON, J.B.C., KIRBY, M.X., BERGER, W.H., BJORNDAL, K.A., BOTSFORD, L.W., BOURQUE B.J., BRADBURY, R.H., COOKE, R., ERLANDSON, J., ESTES, J.A., HUGHES, T.P., KIDWELL, S., LANGE, C.B., LENIHAN, H.S., PANDOLFI, J. M., PETERSON, C.H., STENECK, R.S., TEGNER, M.J. AND WARNER, R.R. 2001. Historical Overfishing and the Recent Collapse of Coastal Ecosystems. *Science*, 293 (5530), 561-748.

JNCC. 2004. Common Standards Monitoring Guidance for Generic Introduction for Marine Feature Guidance. ISSN 1743-8160 (online).

LAFFOLEY, D. AND TASKER, M. 2004. Marine Environment Analytical paper produced to support the report Net Benefits – a sustainable and profitable future for UK fishing.

MITCHELL, R., PROBERT, P.K., MCKIRDY, A.P., DOODY, J.P. 1981. Severn tidal power: Nature conservation. Nature Conservancy Council.

OSPAR. 2000. Quality Status Report 2000 Chapter 5 – Biology. www.ospar.org/eng/html/welcome.html

PYE, K. AND FRENCH, P.W. 1993. Targets for coastal habitat recreation. *English Nature Science* 13. English Nature, Peterborough.

ROYAL COMMISSION ON ENVIRONMENTAL POLLUTION. 2004. Turning the Tide: Addressing the Impact of Fisheries on the Marine Environment, Twenty Fifth Report.

RUIZ G.M., CARLTON J.T., GROSHOLZ E.D., HINES A.H. 1997. Global invasions of marine and estuarine habitats by non-indigenous species: Mechanisms, extent, and consequences. *American Zoology*, 37: 621–632

SCOTTISH EXECUTIVE. 2006. NPPG13 - COASTAL PLANNING, www.scotland.gov.uk/Publications/1997/08/nppg13-coastal

SEWELL, J. AND HISCOCK, K. 2005. Effects of fishing within UK European Marine Sites: guidance for nature conservation agencies. Report to the Countryside Council for Wales, English Nature and Scottish Natural Heritage from the Marine Biological Association. Marine Biological Association, Plymouth. CCW Contract FC 73-03-214A. 195 pp.

UKBAP. 2006. Habitat Action Plan: Mudflats. www.ukbap.org.uk/ukplans.aspx?id=34

WELSH ASSEMBLY GOVERNMENT. 1998. Technical Advice Note (Wales) 14, March 1998
http://new.wales.gov.uk/docrepos/40371/403823112/40382/40382/403821/403824/TAN_14_Full.doc?lang=en&ts=4

WILLIAMS, J.M., ED. 2006. Common Standards Monitoring for Designated Sites: First Six Year Report. Peterborough, JNCC.

2.3 Range of the habitat within the Biogeographic or marine region

2.3.1 Surface area of range in square km

3084

2.3.2 Date of range determination

05/2007

2.3.3 Quality of data concerning range	Good
2.3.4 Range trend	Stable (=)
2.3.5 Range trend magnitude in %	Not applicable
2.3.6 Range trend period	1994-2006
2.3.7 Reasons for reported trend	Not applicable
2.4 Area covered by habitat type within the range in the biogeographical region concerned.	
2.4.1 Surface area of the habitat type (sq km)	3083.55
2.4.2 Date of area estimation	05/2007
2.4.3 Method used for area estimation	3 - Ground based survey
2.4.4 Quality of data on area	Good
2.4.5 Area trend	Unknown (X)
2.4.6 Area trend magnitude in %	Not applicable
2.4.7 Area trend period	1994-2006
2.4.8 Reasons for reported trend	Not applicable
2.4.9 Justification of % thresholds for trends (optional)	Not applicable
2.4.10 Main pressures	200 - Fish and Shellfish Aquaculture; 210 - Professional fishing; 211 - fixed location fishing; 220 - Leisure fishing; 221 - bait digging; 240 - Taking / Removal of fauna, general; 250 - Taking / Removal of flora, general; 290 - Hunting, fishing or collecting activities not referred to above; 300 - Sand and gravel extraction; 400 - Urbanised areas, human habitation; 410 - Industrial or commercial areas; 420 - Discharges; 504 - port areas; 510 - Energy transport; 512 - pipe lines; 520 - Shipping; 621 - nautical sports; 623 - motorised vehicles; 700 - Pollution; 701 - water pollution; 720 - Trampling, overuse; 800 - Landfill, land reclamation and drying out, general; 801 - polderisation; 802 - reclamation of land from sea, estuary or marsh; 803 - infilling of ditches, dykes, ponds, pools, marshes or pits; 820 - Removal of sediments (mud...); 830 - Canalisation; 840 - Flooding; 850 - Modification of hydrographic functioning, general; 851 - modification of marine currents; 853 - management of water levels; 860 - Dumping, depositing of dredged deposits; 870 - Dykes, embankments, artificial beaches, general; 871 - sea defense or coast protection works; 900 - Erosion; 951 - drying out / accumulation of organic material; 952 - eutrophication; 953 - acidification; 954 - invasion by a species; 960 - Interspecific faunal relations; 970 - Interspecific floral relations; 974 - genetic pollution;

2.4.11 Threats	200 - Fish and Shellfish Aquaculture; 210 - Professional fishing; 211 - fixed location fishing; 220 - Leisure fishing; 221 - bait digging; 240 - Taking / Removal of fauna, general; 250 - Taking / Removal of flora, general; 300 - Sand and gravel extraction; 400 - Urbanised areas, human habitation; 410 - Industrial or commercial areas; 420 - Discharges; 504 - port areas; 510 - Energy transport; 512 - pipe lines; 520 - Shipping; 621 - nautical sports; 623 - motorised vehicles; 720 - Trampling, overuse; 800 - Landfill, land reclamation and drying out, general; 801 - polderisation; 802 - reclamation of land from sea, estuary or marsh; 803 - infilling of ditches, dykes, ponds, pools, marshes or pits; 820 - Removal of sediments (mud...); 830 - Canalisation; 840 - Flooding; 850 - Modification of hydrographic functioning, general; 851 - modification of marine currents; 853 - management of water levels; 860 - Dumping, depositing of dredged deposits; 870 - Dykes, embankments, artificial beaches, general; 900 - Erosion; 910 - Silting up; 920 - Drying out; 954 - invasion by a species; 960 - Interspecific faunal relations; 970 - Interspecific floral relations; 974 - genetic pollution;
Complementary information	
2.5.1 Favourable reference range (sq km)	3084
2.5.2 Favourable reference area (sq km)	3083.55
2.5.3 Typical species	none listed
2.5.4 Typical species assessment	Not applicable
2.5.5 Other relevant information	
2.6 Conclusions (assessment of conservation status at end of reporting period)	
(2.3) Range	(FV) - Favourable
(2.4) Area	(FV) - Favourable
(2.5) Specific structures and functions (incl. typical species)	(U2-) - Bad and deteriorating
Future prospects	(U2-) - Bad and deteriorating
Overall assessment	(U2-) - Bad and deteriorating