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Lincshire Nourishment Scheme Consultation Document

July 2004



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Our work includes tackling flooding and pollution incidents, reducing industry's impacts on the environment, cleaning up rivers, coastal waters and contaminated land, and improving wildlife habitats.

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Background

This document has been produced as part of an environmental impact assessment of the beach nourishment scheme for the Lincolnshire coast between Mablethorpe and Skegness, known as the Lincshore coast. The purpose of this document is to inform you of the progress of the study and invite your comments.

The Environment Agency has permissive powers to maintain the coastal defences that provide protection to the Lincshore coastline. Since 1991, two sea defence strategy reviews (in 1997 and 2003) have concluded that the preferred sea defence option for the Lincshore coast is to hold the line through a series of beach nourishment schemes. The Agency is to carry out an environmental impact assessment of the Lincshore nourishment operations for the next 5 years (2005–2010).



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The study area

The study area lies along the Lincolnshire coast, between the coastal resorts of Mablethorpe and Skegness, approximately 24km long.

This part of the Lincolnshire coast is heavily used for recreation.

The beach and sea defences along the Lincshire coast provide flood protection to a large area of low-lying land, often below mean sea level. The low-lying land extends up to 15km inland and it has a long history of flooding. The defences along the beach protect more than 20,000 ha of land, including more than 15,500 residential properties, caravan sites and extensive commercial, industrial and agricultural areas from flooding by the sea.

Fishing also contributes to the local economy and, landward of the coast, land use is dominated by valuable agricultural holdings. Skegness and Mablethorpe are major tourist resorts, and there is significant tourism development at Ingoldmells and Chapel St Leonards.

Much of the remainder of the coastline is used for caravan sites and other recreational facilities. There is significant nature conservation interest to the south of the Lincshire coastline, namely the Gibraltar Point candidate Special Area of Conservation (cSAC) and the Wash and North Norfolk Coast Marine cSAC, whilst to the north of the study area are the Saltfleetby-Theddlethorpe Dunes Site of Special Scientific Interest (SSSI). The coastal frontage between Chapel Point and Wolla Bank is of importance for the geological features it supports.



Figure 1 Location map

The issue

The Agency is responsible for maintaining the coastal defences that provide protection to Lincshire coastline.

In 1991 it was identified that the main issue affecting the coastal defences was lowering of the beaches, through the effects of wave energy and rising sea level, which left the seawalls vulnerable to attack by the waves. Since 1991, two reviews of the strategy for sea defences have been carried out (Posford Duvivier, 1997 and Halcrow, 2003). Both reviews assessed the technical, economic and environmental viability of the sea defence options listed below:

- Do nothing;
- Maintain seawalls;
- Raise seawalls;
- Beach nourishment;
- Beach nourishment with rock groynes; and
- Beach nourishment with rock reefs

Both sea defence strategy reviews recommend a preferred strategy option for the next 50 years, with detailed requirements for works to be carried out over the next five years (2005 to 2010). The coastal defence strategy implemented along the Lincshire coastline since 1991 is to hold the line through beach nourishment in order to reduce the risk of flooding. Beach nourishment is the artificial recharge of beaches using dredged material taken from offshore. The implementation of beach nourishment provides protection to the seawalls and ensures that a sufficiently thick layer of sand exists to protect the underlying clay from erosion.

The nourishment scheme over the next five years is a continuation of an original nourishment scheme that emerged as the preferred option in technical, economic and environmental terms in the 1991 Mablethorpe to Skegness Strategy Study (Posford Duvivier, 1991). In 1998, an Environmental Impact Assessment for the nourishment works for the

period 1998 to 2003 was carried out by Posford Duvivier. In 2003, a Strategic Environmental Assessment (SEA) of all sea defence options, which were reviewed in the second strategy review (Halcrow, 2003), was produced. The SEA process considered the environmental grounds of all sea defence options (see Table 1) and concluded that the beach nourishment option is considered acceptable to most consultees as it has the benefit of retaining the amenity and tourism value of the beach.

The SEA report (Halcrow 2004) has been circulated to key consultees for their comments.



The sea defence options

The sea defence options reviewed and evaluated for their environmental acceptability in the SEA are listed below.

Table 1 | Sea defence options

Option	Description
1 Do nothing	The do-nothing option would result in the rapid loss of nourished beaches. As a result it was not considered acceptable by any of the consultees.
2 Maintain seawalls	This option reduces the risk of flooding but it does not take into account the effects of sea level rise nor does it allow for any improvement in the standard of coastal protection provided.
3 Raise seawalls	This option takes into account the effects of the sea level rise. However, the erosion of the beach may also be exacerbated by an increase in reflected wave energy from the more extensive seawalls. This would have adverse impacts on the geological, archaeological and ecological features.
4 Beach nourishment	This option reduces the risk of flooding, it takes into account the effects of sea level rise, and it effectively absorbs the energy of approaching waves. This option will be of significant benefit to the tourist economy. The majority of the consultees regarded this option as the most acceptable sea defence option.
5 Beach nourishment with rock groynes	This option reduces the risk of flooding and it also takes into account the effects of sea level rise. However, the impact on the coastal landscape, geological/archaeological features and beach users from the construction of the groynes, 250-300m in length, was considered adverse.
6 Beach nourishment with rock reefs	This option reduces the risk of flooding and it also takes into account the effects of sea level rise. However, the impact on the coastal landscape, geological/archaeological features and beach users from the construction of rock reefs was considered adverse.

Environmental Assessment Process

The Agency has statutory duties under the Environment Act (1995) to protect and where possible to enhance the environment when carrying out its work.

An Environmental Impact Assessment (EIA) of the preferred sea defence option, beach nourishment, over the next five years (2005 – 2010) will be carried out in order to identify any significant impacts on the natural and human environment. The objectives of the EIA are to:

- Describe the existing environment;
- Identify views and concerns of potentially affected parties and interested groups;
- Identify the potential environmental impacts of the proposed nourishment works;
- Identify possible mitigation measures; and
- Review the existing monitoring requirements, which have been set after the last environmental impact assessment in 1998.

Although the SEA has studied the objectives listed above for all sea defence options, the EIA will study them in more detail. The EIA will concentrate on the environmental issues, which the SEA has identified as significant, namely the designated geological sites along the Lincshire coast, the

archaeological assets and tourism. An outline environmental action plan (EAP) will be issued as part of the Environmental Statement (ES). This will be amended prior to each of the beach nourishment campaigns over the next five years (2005 – 2010) to reflect, in more detail, activities, location and the required environmental actions for each campaign.

A scoping report has been produced and it reviews and summarises the extensive findings of the SEA. This report is circulated to key statutory consultees, namely English Nature, English Heritage and Countryside Agency, and internally within the Agency. Copies can be made available upon request from Richard Van Gelder, Halcrow Group Ltd, Windsor House, Britannia Road, Waltham Cross, Hertfordshire EN8 7NX, tel 01992 707100, fax 01992 760594, email vangelderra@halcrow.com.

Key environmental issues

The scoping exercise which was significantly based on the findings of the SEA study has identified the following key issues.

The key issues will be incorporated into the Environmental Impact Assessment study of the nourishment works, along with any additional issues identified during this consultation process. The list of issues below is not exhaustive:

- Benefits to the local community from the provision of improved flood protection
- Benefits to local tourism and hence local economy from the provision of good quality and large expanse of a beach
- Benefits to agriculture from the provision of improved flood protection
- Enhancement of the local landscape character of the Lincolnshire Coast
- Prevention of the loss of archaeological and geological assets along the Lincshire coast
- Potential disruption and disturbance to populated residential areas during the nourishment works from noise, traffic and visual intrusion during the nourishment works
- Potential disruption and disturbance to tourists and recreational users during the nourishment works, including temporary closures of access to the beach
- Potential disruption to recreational navigation rights and access to the beach, including beach access for salvage boats
- Potential disruption and disturbance to residents, recreational users and the public at large from possible diversions to public rights of way
- Potential hindrance to outfall discharges
- Potential adverse effects on archaeological assets and sites

- Potential adverse effects on designated geological sites (Huttoft Bank Submerged Forest Regionally Important Geological Site (RIGS), Sutton-on-Sea and Wolla Bank Foreshore RIGS, Chapel Point to Wolla Bank SSSI and Gibraltar Point SSSI)
- Effects on the nature conservation value of designated conservation sites including County Wildlife Sites, Saltfleetby-Theddlethorpe Dunes SSSI (part of the Saltfleetby-Theddlethorpe Dunes), Gibraltar Point Special Protection Area (SPA)/cSAC and the Wash and North Norfolk Coast marine cSAC
- Potential presence of protected species.



Consultation process

Consultation with interested organisations and landowners will be undertaken at key stages throughout the programme as shown in Table 2.

Copies of the Strategic Environmental Assessment report, which widely scopes the environmental issues of the beach nourishment works, have been circulated to key consultees, including non-statutory ones. The nourishment scheme has currently reached the second stage in the programme. This consultation document provides interested organisations with an opportunity to express their opinions and concerns on the beach nourishment works, and a questionnaire is enclosed for this purpose.



Table 2 | Outline of the consultation process

Stage in Programme	Consultation Opportunity	Timescale
1. Strategic Environmental Assessment report	● Distributed to key consultees	May 2004
2. Scoping report	● Distributed to key statutory consultees and internally within the Environment Agency	July 2004
3. Site-specific Environmental Assessment of the nourishment works	● Distribution of a consultation document to interested organisations on the proposed nourishment works	July 2004
4. Consultation exercise	● Consultation with interested organisations who expressed concerns in response to the consultation document	July - August 2004
5. Detailed environmental assessment of the nourishment works.	● Meeting with key consultees and stakeholders to address concerns and recommended mitigation measures	August – September 2004
6. Publication of environmental statement and environmental action plan	● Distributed to key consultees	September - October 2004
7. Nourishment phase	Continued opportunities for interested parties to express their views on the nourishment scheme	2005

Consultees

The organisations listed below will be consulted during the EIA process for their views and concerns on the next nourishment works.

These are the consultees who participated in the Strategic Environmental Assessment (SEA) project and whose names are listed in the SEA report (Halcrow 2004).

ADAS	Council for the Protection of Rural England
AMEC	Countryside Agency
Anderby Parish Council	Country Landowners Association
Anglian Coastal Authorities Group	Defence of Britain Project
Anglian Water Services	Defence Estates
Boston Fishermens' Association	Defra
Boston Advisory Group for Wash & North Norfolk Coast European Marine Site	Earl of Scarborough Sports Centre
Bridlington & Flamborough Fishermens' Association	East Lindsey District Council
British Association for Shooting and Conservation	East Midlands Conservancy
British Gas Transco	East Midlands Electricity
British Pipeline Agency	East Midlands Tourist Board
British Telecom	East of England Tourist Board
Butlins	Eastern Sea Fisheries Joint Committee
Carter Jonas	English Heritage
CEFAS	English Nature
Chapel St Leonards Parish Council	English Sports Council - East Midlands
CONOCO	Farming & Wildlife Advisory Group
Council for British Archaeology	Forestry Commission
	Government Office East Midlands

Heiploeg & Lynn Shrimpers Ltd
 Heritage Trust of Lincolnshire
 HM Coastguard
 Hogsthorpe Parish Council
 Humber Coastguard
 Humber & East Coast Fishermans Association
 Huttoft Boat Club
 Huttoft Parish Council
 Individuals
 Ingoldmells Parish Council
 John Lake Shellfish
 King's Lynn Fishing Vessel Owners & Skippers Association
 Kings Lynn & West Norfolk Advisory Group)
 Lincolnshire Bird Club
 Lincolnshire Chamber of Commerce and Industry
 Lincolnshire Coast Fishermen's Association
 Lincolnshire County Council
 Lincolnshire Fieldpaths Association
 Lincolnshire Landyacht Club
 Lincolnshire Naturalists Union
 Lincolnshire Tourism
 Lincolnshire Wildlife Trust
 Lindsey Archaeological Services
 The Landmark Trust
 The National Grid Company plc
 The Woodland Trust
 Wash Seafoods – King's Lynn Fishing Industry Cooperative Ltd.
 Wildfowl and Wetlands Trust
 Wells and District Inshore Fishermen's Association
 UK Piers Ltd
 Unipen
 Lindsey Marsh Drainage Board
 Mablethorpe Motorcycle Sand Racing Club
 Mablethorpe Tourist Information Centre
 Mablethorpe & Sutton Town Council Association
 Marine Conservation Society
 Marine Estates
 Maritime and Coastguard Agency
 National Association of Boat Angling Clubs
 National Farmers Union
 National Federation of Anglers
 National Federation of Sea Anglers
 National Federation of Fishermen's Organisations
 National Monuments Record Centre, Maritime
 National Trust
 North Eastern Sea Fisheries Committee
 North Lincolnshire Wildfowlers Club
 North Norfolk Coast Advisory Group

North Norfolk District Council	Shellfish Association of Great Britain
North Norfolk Shellfisheries Association	Skegness & Alford Drainage Board
North Shore Hotel & Golf Club	Skegness Boating Club
North Shore Sailboard Club	Skegness Canoe Club
Nottingham University	Skegness and District Environmental Action Group
Offshore Wind Power Ltd	Skegness Electric Tramway
Port of Boston Ltd	Skegness Nature Land Seal Sanctuary
Port of Sutton (Harbour Master)	Skegness North Shore Holiday Centre
Port of Wisbech, (Port Manager & Harbour Master)	Skegness Pier Angling Club
Ramblers Association	Skegness Ramblers Association
Royal National Lifeboat Institution	Skegness Sea Angling Club
Royal Yachting Association	Skegness Sub Aqua Club
Royal Society for the Protection of Birds (RSPB)	Skegness Town Council
Royal Society for Nature Conservation	Skegness Tourist Information Centre
Salmon and Trout Association	Skegness and Wainfleet & District Wildfowlers
Sandilands Golf Club	Skegness Yacht Club
Sandilands Marina Local Action Group	Society for Lincolnshire History and Archaeology
Saltfleet and Skidbrooke Wildfowling & Shooting Club	South Lincolnshire Wildfowlers Club
Seacroft Golf Club	Southview Golf Club
Sea Defence Flood Committee	Sport England (East Midlands)
Sea Fish Industry Authority	SUSTRANS
Seafish Technology	Wash Estuary Strategy Group
Sealands Caravan Park	Wash and North Norfolk Coast European Marine Site Management Scheme

This consultation document will also be distributed to landowners and internally within the Agency. Response from any other interested parties are welcome.

Consultation contact

If you have any queries or issues you wish to discuss please contact:

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