# EA Anglian Managing the Humber Estuary

## The Environment Agency's Approach

The Humber estuary presents one of the greatest challenges in this country in maintaining the balance between economic importance and environmental well-being...' AGRICULTURE



FISHERIES

INDUSTRY

WILDLIFE



SHIPPING









## Managing the Humber

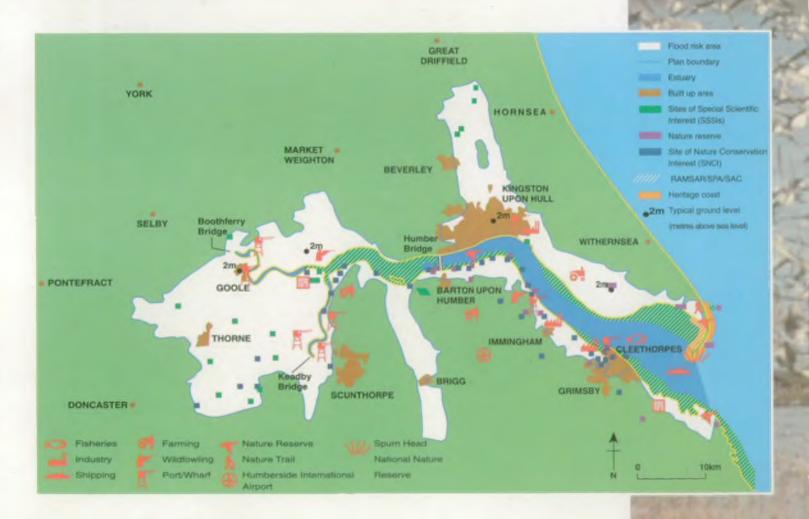
Management of the Humber estuary is a major task for the Environment Agency. As one of the most powerful environmental regulators in the world, it has a duty to work towards sustainable management of land, air and water. The Humber estuary presents one of the greatest challenges in this country in maintaining the balance between economic development and environmental well-being. The Agency's approach to managing this balance demands openness and clarity, partnership with the many organisations involved, consistency in planning for the necessary improvements and the use of the latest science and technology. This leaflet explains how the Agency will make its contribution to achieving a sustainable estuary.

## The Humber estuary: the conflicts

The Humber estuary drains one fifth of England. It is the country's largest freshwater input into the North Sea, with approximately 11 million people living in its catchment area.

As the fastest-growing port complex in the

UK, the Humber supports a successful and broadly-based commercial and agricultural economy. Five urban centres lie close by: Kingston-upon-Hull, Goole, Scunthorpe, Grimsby and Cleethorpes.



- 11 million people live in catchment area
- fastest growing port complex in UK
- 500,000 people live and work below normal high tide level

The Humber is also unique in terms of its environmental significance. It is one of the top five estuaries in the UK for habitat, ranks within the top 10 in Europe for much of its birdlife and is a globally important site for over-wintering birds. Much of the estuary is internationally or nationally designated as an important area for conservation. It is also a major breeding and nursery ground for the commercially important North Sea Fishery. With so many demands and pressures, it is not surprising that there is conflict over priorities for the management and use of the Humber. There is competition for space and a risk of making short-term piecemeal decisions, which can prejudice long-term plans.



"....not suprising that there is conflict over priorities for the management and use of the Humber... a risk of making short-term piecemeal decisions, which can prejudice long-terms plans..'

## Strategic planning framework for a sustainable estuary

The Agency has a wide-ranging interest in managing the estuary. It has responsibility for flood defence, water resources, water quality, air quality, fisheries, recreation, conservation and waste regulation.

Planning to make sustainable improvements to the estuary that will last through future generations is not an easy task. Until recently there was no framework to aid long-term estuary-wide decision making. Now, however, the Humber Estuary Management Strategy (HEMS) provides this essential guidance. Produced in 1997 after wide consultation and participation with the public and interest groups, the strategy is of fundamental importance to the future of everyone who lives and works in the area.



"...HEMS provides the essential framework for long-term estuary-wide decision making."

HEMS has developed a series of community led objectives and a single visionary plan, balancing the interests of all who use the estuary. It aims to produce a sustainable estuary, ensuring that we hand on a healthy environment to future generations. It does not and cannot give all the answers: but it does provide the foundation for partnership and co-operation, forming the platform for discussing conflicts, building consensus and providing guidance on the difficult issues that must be faced.

HEMS is a voluntary partnership of over 80

## Intentions and aspirations of the Agency

In 1994, a Catchment Management Plan for the regulation and improvement of water resources, flood defences, fisheries, water quality, conservation and recreation was produced. Agency managers have now updated these earlier findings and widened them to include the more extensive responsibilities of the new Agency. These organisations with an active interest and responsibility in the sustainable development of the estuary. The HEMS report and action plans will be regularly updated, setting out publicly the plans and actions of all the partners including the Environment Agency.

have also been included in HEMS as a record of the intentions and aspirations of the Agency.

'The Agency has taken a hard look at what was happening in the estuary and how to make things better for the future.'

## What next for the Agency?

Managing the environment of the estuary does not end with the production of HEMS in fact the hard work now starts with each partner developing detailed action plans within the broad guidelines and the common objective of sustainability. Commitment, co-operation and openness are the key ingredients. The Agency is already doing its upmost to ensure success of the partnership: a full-time project manager has been appointed to oversee the Agency's plans.

Managers, engineers and scientists will work together, across the three Agency Regions, (Anglian, Midlands and North East), towards achieving the goals of HEMS as well as the other interests.



#### **MANAGEMENT AND CONTACTS:**

The Environment Agency delivers a service to its customers, with the emphasis on authority and accountability at the most local level possible. It aims to be cost-effective and efficient and to offer the best service and value for money.

Head Office is responsible for overall policy and relationships with national bodies including Government.

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### **Information Services Unit**

Please return or renew this item by the due date

Due Date

# SA ANGLIAN



For general enquiries please call your local Environment Agency office. If you are unsure who to contact, or which is your local office, please call our general enquiry line.

The 24-hour emergency hotline number for reporting all environmental incidents relating to air, land and water.



ENVIRONMENT AGENCY EMERGENCY HOTLINE 0800 80 70 60



important common thread through all of the Agency's work working closely with others who have similar responsibilities supporting work on understanding of coastal processes

 an such as English Nature and the Countryside Commission. The Agency will continue to Agency develop a proactive approach to the This conservation, heritage and recreation, rough encouraging public access, implementing habitat improvements and supporting further work in the understanding of estuary IPC or and coastal processes.

water quality it involves integrating the work of all the Agency's functions as well as

working closely with other organisations,





#### **CONSERVATION, HERITAGE AND RECREATION -**

Planning, promoting and improving conservation, heritage and recreation opportunities in the Humber estuary - an area with national and international conservation status - means that the Agency needs to maintain a sensitive approach. This responsibility is a common thread through all of the Agency's work on the Humber estuary whether flood defence, water resources, fisheries, waste regulation, IPC or

## PLANNING FOR THE HUMBER

PLANNING FLOOD DEFENCE - The Agency is responsible for managing, maintaining and improving flood defences. The Agency's biggest investment on the Humber estuary is in flood defence. Flood defences have a major benefit to the local economy by preventing catastrophic flooding but must be undertaken in a way that does not damage the estuary's enviroment, for example by changing the natural movement of silt in the estuary causing damage to and loss of sensitive and valuable wildlife habitats. In searching for a solution that balances all interests, the Agency is planning a long-term tidal flood defence strategy.



## Why a long-term tidal flood defence strategy?

Tidal flood defences are crucial to the local economy and the well being of the local population: an area of 800km<sup>2</sup> is protected including valuable agricultural land, industry and over 100,000 homes. Much of this land and property is 2m or more below tide level. Over a span of several centuries a chain of earth and clay banks and concrete defences has been constructed to reclaim land for agriculture and to protect areas of population from flooding - this chain now extends for over 233km on both banks of the Humber. Many have been rebuilt since the East Coast flood of 1953 and are now reaching the end of their useful life. At the same time there are concerns and uncertainty about the impacts of sea level rise, climate change and flood defences on the natural estuary processes; the possible loss of wildlife habitats and the demands of agricultural land. The time is now right to develop a long-term strategy for tidal flood defences and work for this is already underway.

## Producing the strategy

The environmental sensitivity and importance of the Humber and its complex shoreline and system of currents and sediment movements, requires careful study in order to assess the possible impacts of flood defence proposals. Therefore, the Agency will produce a Humber Estuary Strategic Environmental Assessment and a Humber Estuary Shoreline Management Plan. The understanding of these two vital aspects will form the basis of the long-term flood defence strategy.



## Urgent defences required before completion of strategy

Due to the need for research and modelling, the final strategy will not be available for some time, whilst defences will continue to deteriorate, possibly putting property, and lives and the environment at risk. It is essential that the Agency, pending the completion of the strategy, continues to invest in and maintain existing defences. The Agency is identifying urgent flood defence needs and will consult widely on these before carrying out essential work.

#### PLANNING ENVIRONMENTAL QUALITY -

The Agency regulates discharges to all rivers, both directly and indirectly draining to the estuary, and monitors the chemical quality of the water and the health of the estuary. Sewage treatment for the first time, is to be provided for Hull, Grimsby, Immingham and Goole. As the Humber is a silt-laden estuary, with a large amount of fine mud in suspension, it gives the impression that it is a dirty river: the reality is quite different - the Humber is now a relatively clean estuary. Nevertheless, the Agency will continue to be vigilant and seek further improvements to treatment plants that can be justified on environmental and health grounds and to meet National and European standards. In particular the Agency will develop the Integrated Pollution Control (IPC) concept for major industrial process. IPC aims to minimise at source the generation of waste and to render harmless any residual emissions to air, land or water.



- in the past five years over £300m invested in treatment plants by industry and water companies
- Agency aims to reduce waste generation at source
- 'dangerous substances' will be strictly controlled

PLANNING FISHERIES - The Agency regulates commercial eel fisheries and the protection of migratory fish (sea trout and salmon). Over the past one hundred years there has been a decline in salmon and sea trout stocks, the Agency intends to look at the feasibility of restoring a run of migratory sea trout and salmon to the estuary. This will be achieved by maintaining water quality improvements and assesing the feasability of reintroducing migratory Salmonids which will require free passage and access to spawning areas in the upper freshwater reaches. Further regulation and control of the catching of migratory fish and eels will be examined.

feasibility of restoring run of salmon and sea trout

further regulation and control of migratory fish and eels

WATER RESOURCES PLANNING - The Agency is responsible for the regulation of water extraction from the rivers feeding the estuary and from underground, and the monitoring of water levels and flows. Water quantity information is vital to ensure that the water resources are not over exploited - taking too much could cause water quality changes and destroy important wildlife habitats. Deciding on what is the safe level of abstraction from rivers is important for economic reasons (to allow commercial use of spare water) as well as protecting the river environment from damage. Setting flow control rules will help the Agency to determine the safe levels of extraction. The Agency will be working closely with all river users for all of the rivers discharging into the Humber.

- setting Minimum Residual Flows(MRFs) or flow control
- working with all river users to set MRFs

## How to obtain more information

This leaflet summarises the responsibilities and actions of the Agency in planning for a sustainable estuary. More detailed reports and papers produced by the Agency and the partner organisations are available. The Agency will also produce regular information on the action plans and progress. If you would like more information please contact:

Peter Barham, Humber Strategies Manager, The Environment Agency, Waterside House Waterside North Lincoln LN2 5HA Tel: 01522 513100 Additional copies of this leaflet and other leaflets on the Agency's work may be obtained from your local Environment Agency office.

(see addresses on reverse of this leaflet).





