

# **NORTHERN GATEWAY CONTAINER TERMINAL**

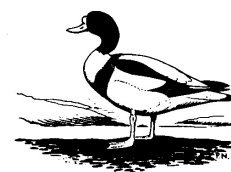
## **COMMENTS BY TEESMOUTH BIRD CLUB ON PD**

### **TEESPORT'S ENVIRONMENTAL STATEMENT**



TEESPORT

Courtesy of PD Teesport



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RPT011/ECP

## 1.0 INTRODUCTION

### Teesmouth Bird Club's Appraisal Process

- 1.1 The Teesmouth Bird Club (TBC) was founded in 1960 and is one of the longest-standing nature conservation bodies in the Tees Valley, with a particularly good knowledge of the Tees Estuary. We produce the annual '*Cleveland Bird Report*' and are responsible reviewing all bird records within our recording area (defined by the boundary of the former County of Cleveland). Our membership now stands at well over 300 and many of our members undertake the monthly estuarine Wetland Bird Survey (WeBS) counts for the Wildfowl and Wetlands Trust. Despite being a non-statutory consultee, we have a huge knowledge of the birds of the Tees Estuary and are pleased to be fully consulted on this proposed development.
- 1.2 The Environmental Statement (ES) was reviewed by the TBC's Conservation Sub-Committee on 12th June 2006 and the comments contained herein reflect the official views of the Club. We are aware that a Planning Application has been submitted with the ES, along with other applications for consents and approvals, which exclude the Bran Sands Lagoon.
- 1.3 Club Chairman, Ted Parker, and Vice-Chairman, John Fletcher, attended a presentation for environmental groups by Royal Haskoning, hosted by PD Teesport at their Middlesbrough offices on 8th March 2006, prior to the publication of the ES. This confirmed that the nature and scale of the development had not materially changed since the issue of the Scoping Report (on which the TBC provided written comments in August 2005), except for the omission of Bran Sands Lagoon from the development proposals as a site for the disposal of dredged material. At the presentation, we confirmed that:
- The development must be considered against the loss of inter-tidal and other wetland habitats around the Tees Estuary over the past 150 years (including large tracts of Seal Sands, Greenabella Marsh, Cowpen Marsh, Hargreaves Quarry and Coatham Marsh.
  - TBC would be strongly opposed to the disposal of dredged material in Bran Sands Lagoon, which is an important ornithological site, and we confirmed that the preferred method of disposal would be at sea.
  - Major reliance on WeBS counts as the sole basis of assessing the relative ornithological importance of particular areas, such as Bran Sands South, in relation to the rest of the Tees Estuary gives an incomplete picture. WeBS counts are carried out at high tide and, therefore, do not reflect the intrinsic value of inter-tidal area as low tide feeding sites. Whilst WeBS data is undeniably important, it must be viewed in context with, for example, non-WeBS monthly maxima figures, which are often significantly, and sometimes dramatically, higher.
  - The creation of new habitat, such as permanent islands for breeding Common Terns, would be welcomed under any mitigation proposals.
- 1.4 As part of our appraisal process, the Conservation Sub-Committee identified the following key issues:
- The possible future loss of Bran Sands Lagoon through reclamation.
  - The likely effects of dredging and deepening of sections of the Tees Estuary.
  - The likely effects of on-land disposal of dredged material.
  - The potential loss of 160m<sup>2</sup> of inter-tidal area at the North Tees Mudflats.
  - The effects of re-mobilisation of potentially contaminated sediments during dredging.
  - Increased sedimentation at Seal Sands.
  - The effects of increased ship movements.

- Any adverse impacts on birds and their habitats not included in the ES.
  - The ecological survey undertaken by ESL (Appendix 6).
  - Mitigation and enhancement measures.
  - The effects of increased artificial lighting.
- 1.5 We have confined our comments to key areas of the ES that lie within our area of expertise, ie:
- Marine and Coastal Ornithology
  - Terrestrial and Coastal Ecology (including Appendix 6).
  - Likely Impacts on the SPA.
- 1.6 We have not appraised highly specialist aspects, such as road and rail traffic, socio-economics, recreation and amenity, archaeology, hydrodynamics, sedimentation, soil quality and geology, marine sediment quality, fisheries, commercial navigation, noise and vibration, air quality, coastal protection and flood defence, and infrastructure and land drainage. We assume that these will be appraised by the statutory consultees, who possess the appropriate resources and knowledge base, such as English Nature, the Environment Agency and Local Planning Authority.

## **2.0 GENERAL COMMENTS**

### **Our Understanding of the Environmental Statement**

- 2.1 It is our understanding that the development will include the following key elements:
- 1km of new, deepwater quayside.
  - The reclamation of land for port development (approximately 27 hectares, excluding Bran Sands Lagoon).
  - On-land development, including buildings, cargo handling structures and large areas of hard standing.
  - A new rail terminal.
  - Road modifications.
  - Dredging in parts of the Tees Estuary, varying in depth from 0.4 to 4.1m below existing bed levels.
  - Deepening and widening of the existing ship turning circles.
  - Disposal of dredged material on land (1.9 million m<sup>3</sup>) and at existing offshore sites (2.9 million m<sup>3</sup>).
- 2.2 Clearly, all of these aspects will have varying environmental and other impacts. We are impressed by the clarity and thoroughness of the ES, which has clearly involved input by a wide range of highly specialist consultants. We are satisfied that, in most cases, all of the key aspects have been identified and their environmental impacts adequately assessed. The ES has brought together a large amount of useful data and information concerning the Tees Estuary, which will be of significant interest to many land-based professions and organisations, including ourselves. PD Teesport and their consultants are to be commended for this.

## Bran Sands Lagoon

- 2.3 **At a general level, we feel that there is major uncertainty about the future of Bran Sands Lagoon and this is an issue of major concern to us.** The ES states that the current Planning Application excludes the infilling of the Lagoon but that it may be the subject of a separate, future Application, and, in view of this, the environmental impact of its reclamation has been assessed and included in the Statement. We understand that PD Teesport has an interest in this site, which is currently owned by ICI, and are concerned that its inclusion in the ES may imply possible future intent. **We consider that the importance of the Lagoon has been under-stated in the ES for the reasons outlined below in our detailed response (Table 1).**
- 2.4 **We stress that our response contained in this document is based on all dredged material being disposed of at sea or on the on-land reclamation sites identified in the current ES and Planning Application. We would wish to review our stance should there be a future application that includes Bran Sands Lagoon.**

## Environmental Impact of the Proposed Development

- 2.5 The ES concludes that virtually every aspect of the development will have *minimal* or *minor significant impact*. Whilst in most cases this may be true, the loss of the Bran Sands is predicted to be of only "*moderate adverse significance*"; an assessment with which we disagree (please see Table 1 below). We also point out that that great reliance has been placed on high-tide WeBS counts to make comparisons between the Bran Sands South WeBs Sector and other parts of the of the Tees Estuary. **There is no real assessment, however, of how important this sector, and the VOPAK foreshore, are at low tide, when feeding areas are exposed. The VOPAK counts also exclude the winter period. We would strongly recommend that low tide counts be the subject of further research.**

## 3.0 DETAILED COMMENTS ON THE ENVIRONMENTAL STATEMENT

- 3.1 Our more detailed comments on the Environmental Statement are outlined in Table 1 and are based on the key issues we identified as part of our appraisal process (see section 1.4 above).
- 3.2 These comments must be viewed against the Tees Estuary being of international and national ornithological importance, reflected in its many statutory and other designations.

## 4.0 FURTHER CONSULTATION

- 4.1 **Should the nature of this Application change, we would wish to be included in the consultation process, particularly if there are proposals that affect Bran Sands Lagoon.**
- 4.2 We would be willing to assist with, or be consulted on, any further survey work identified in this document and would be pleased to provide ornithological information from our own data base, which has been built up over half a century.
- 4.3 TBC has built up a good relationship with PD Teesport over the past several years and we are confident that they would inform us if the nature of the current Planning Application changed significantly.

**TABLE 1**  
**TBC'S DETAILED COMMENTS ON THE NORTHERN GATEWAY ENVIRONMENTAL STATEMENT**

KEY ISSUE	TBC'S COMMENTS
<p><b>POSSIBLE RECLAMATION OF BRAN SANDS LAGOON</b></p>	<ul style="list-style-type: none"> <li>• The figures for the decline of inter-tidal areas in the Tees Estuary are alarming: in prehistoric times, these covered a staggering 10,000 hectares; by 1850 they had been reduced by reclamation to 2,400 hectares, while today only 200 hectares remain (7% of the former total area, not 10% as stated in the ES). In addition, the Environment Agency predicts that a further 25 hectares (&gt;12%) of the remaining inter-tidal area will be lost during the next 50 years as a result of 'coastal squeeze', mainly from Bran Sands. Valuable habitat is, therefore, being lost both through human and natural processes. Residual inter-tidal areas, such as Bran Sands Lagoon, therefore, assume much greater importance, particularly with the possible future loss of the Reclamation Pond to heavy industrial development (this also formed part of the original Tees Estuary).</li> <li>• Bran Sands Lagoon is a very large site and was once part of the inter-tidal area of the Tees Estuary. It is now semi-tidal and is linked to the sea by a pipe. It is currently owned by ICI. The <i>Bran Sands South</i> WeBS sector, within which the Lagoon is located, has no major areas of mudflats and most of the bird counts are attributable to the Lagoon. Being partially tidal, it is used for feeding by waders and wildfowl when the other inter-tidal areas are covered. The ES itself shows that, during the 5-year period 1999-2004, 7 species exceeded 10% of the total Tees winter population (with 2 being over 50%) and 8 species exceeded 10% during the spring and autumn periods. The Lagoon formerly held the biggest colony of Common Terns in the country, until most of their islands were destroyed by ICI.</li> <li>• We are concerned that the ornithological value of Bran Sands Lagoon has been significantly under-stated by the consultants, who relate its importance solely to the presence of breeding Common Terns. We strongly disagree with their statement that, as a result of the relocation of the tern islands, "<i>the lagoon is now of minimal interest</i>" and that, consequently, the impact of infilling the lagoon will be of "<i>moderate adverse significance</i>". We believe that the impact would be of major significance because: <ol style="list-style-type: none"> <li>1. Bran Sands Lagoon holds a major proportion of the Tees Estuary's breeding Shelduck population, with 6-8 pairs.</li> <li>2. It is very good feeding area for Ringed Plover, Dunlin, Lapwing and Shelduck, particularly when other inter-tidal sites are covered.</li> <li>3. It holds over 90% of the wintering population of Goldeneye in the Tees Estuary.</li> <li>4. The first ever breeding record of Roseate Tern (a nationally rare breeding bird) in Cleveland was at Bran Sands Lagoon in 2002.</li> <li>5. The Lagoon currently holds up to 40 pairs of breeding Common Terns in the summer of 2006, which is a 50% increase on 2005, suggesting that they are re-colonising from the failed colonies on the artificially-created islands adjacent to Greatham Creek.</li> </ol> </li> </ul>

KEY ISSUE	TBC'S COMMENTS
	<ul style="list-style-type: none"> <li>• The consultants state that relocation of the Common Terns from the Lagoon to other parts of the Tees Estuary through the creation of new artificial islands has been "successful". We point out that this has not always been the case because:               <ol style="list-style-type: none"> <li>1. Bran Sands Lagoon is on private land and the terns are not subjected to human disturbance.</li> <li>2. The Lagoon is semi-tidal and water levels never drop sufficiently to render the breeding colonies prone to predators, such as foxes.</li> <li>3. As a result of being semi-tidal, the Lagoon does not require water level management.</li> <li>4. Common Terns apparently did not nest on the Bran Sands North islands, constructed for this purpose from Tees dredgings.</li> </ol> <p>The problems arising out of relocation are exemplified by the failure of approximately 200 pairs of Common Terns on the artificial islands on the Saline Lagoon and Greenabella Marsh, adjacent to Greatham Creek in 2005. A combination of dry late spring and early summer periods and poor water level management resulted in both colonies being entirely predated within 24 hours. It is, perhaps, no coincidence that these islands have been avoided by breeding terns during the summer of 2006. In addition, the new islands created within the RSPB's Saltholme Reserve have recently experienced severe human disturbance. <b>The relocation of the terns as mitigation is, therefore, not straightforward and certainly not always successful. They are far more likely to succeed in a secluded, private location like Bran Sands Lagoon. We would not wish to see the destruction and relocation of the last remaining islands and would welcome the creation of additional islands as enhancement in order to create a diversity of breeding sites across the Tees Estuary. This will ensure the ability of breeding birds to move between sites, as Little Terns do.</b></p> </li> <li>• The creation of new tern islands to compensate for the loss of Bran Sands Lagoon is not replacing like for like, as the value of this site does not lie solely in Common Terns (see bullet point 3 above).</li> <li>• We point out that an over-reliance on WeBS counts does not represent the full picture (see para 1,3 above) and the consultants' use of a 5-year mean belies the importance of the Brans Sands South Cell, particularly as all of the counts were undertaken at high tide when the feeding areas were covered.</li> <li>• <b>We welcome PD Teesport's decision not to use this site for the disposal of dredged material and hope that this decision will be upheld in the future.</b></li> </ul>
<p><b>EFFECTS OF DREDGING AND DEEPENING SECTIONS OF THE TEES ESTUARY</b></p>	<ul style="list-style-type: none"> <li>• We draw attention to the potential effects of slumping of inter-tidal mudflats adjacent to the dredged areas, particularly the VOPAK foreshore and parts of Seal Sands, North Gare Sands and Bran Sands. The ES concludes that the effects will be minimal.</li> </ul>

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	<ul style="list-style-type: none"> <li>The timing of the capital dredging has not been stated. There may be differing impacts depending upon the time of year and we would recommend summer dredging, if possible, before the build up of autumn and winter flocks of waders and wildfowl.</li> <li>The counts for the VOPAK foreshore are at high tide and exclude the winter period, so there is no clear indication as to how important it is ornithologically. We find it surprising, therefore, that the consultants conclude that the impacts on this site will be negligible. <b>This area should be the subject of further ornithological research, involving low-tide counts over a one-year period.</b></li> </ul>
<b>EFFECTS OF ON-LAND DISPOSAL OF DREDGED MATERIAL</b>	<ul style="list-style-type: none"> <li>Our site visit to the proposed terrestrial reclamation sites on the Teesport Estate at the Scoping Report stage in 2005 and ESL's subsequent ecological survey reveal that UK and Local BAP species are present, including Grey Partridge, Skylark, Linnet and Reed Bunting. There are also healthy populations of Grayling, a relatively scarce species of butterfly in the region, which often favours brownfield sites. Brown Hare was also present and ESL's survey found Smooth Newts in several of the ponds. The latter will need to be relocated.</li> <li>We have no major concerns about the sites identified in the ES being used for the deposition of dredged material, though the presence of ponds containing Smooth Newts must be addressed. It is likely that the ponds also provide good habitat for butterflies, dragonflies and other aquatic life.</li> <li>We are pleased to note that the former Leathers Chemicals site has now been dropped as a potential disposal site following comments we made on the Scoping Report. In May 2006, this site was flooded and provided high tide feeding for up to 1,000 migrant Ringed Plovers and 1,000 Dunlin.</li> <li><b>We would recommend that, by way of mitigation and enhancement, several new ponds be created in suitable locations on the Teesport Estate to make good the loss of those to be reclaimed. Many ponds and small wetland habitats have been destroyed in and around the Tees Basin, as evidenced by the current loss of wetland at Hargreaves Quarry under a waste tip. The creation of new ponds will be good mitigation at relatively low cost.</b></li> </ul>
<b>THE POTENTIAL LOSS OF 160m<sup>2</sup> OF INTER-TIDAL AREA AT THE NORTH TEES MUDFLATS</b>	<ul style="list-style-type: none"> <li>It is our understanding that 160m<sup>2</sup> of mudflats will only be lost during periods of low spring tides.</li> <li>Although the loss of any inter-tidal feeding area is to be regretted, even if transient, we consider that this is relatively insignificant and will not have a serious adverse impact on birds.</li> </ul>
<b>THE EFFECTS OF RE-MOBILISATION OF POTENTIALLY CONTAMINATED SEDIMENTS DURING DREDGING</b>	<ul style="list-style-type: none"> <li><b>We note the comments in the ES regarding the general low level of contaminants in the main channel. Mercury and Lindane levels, however, exceed the Canadian Sediment Water Quality Guideline at several sites. Dredging of these areas could have a potentially harmful effect, though the ES concludes that the effects are predicted to</b></li> </ul>

KEY ISSUE	TBC'S COMMENTS
	<p>be "<i>minor adverse</i>".</p> <ul style="list-style-type: none"> <li>• <b>We would suggest further sampling of areas to be dredged to ensure that the risks to water quality and, consequently, birds and their habitats are minimal.</b></li> </ul>
<b>INCREASED SEDIMENTATION AT SEAL SANDS</b>	<ul style="list-style-type: none"> <li>• We do not have the specialist knowledge to comment on this aspect.</li> </ul>
<b>THE EFFECTS OF INCREASED SHIP MOVEMENTS</b>	<ul style="list-style-type: none"> <li>• It is our understanding that there will be between 6-8 extra big ship movements per day into the new dock.</li> <li>• We do not believe that this will have an adverse impact and, therefore, have no comments to make on this aspect.</li> </ul>
<b>ADVERSE IMPACTS ON BIRDS AND THEIR HABITATS NOT INCLUDED IN THE ES</b>	<ul style="list-style-type: none"> <li>• We consider that all of the relevant areas have been covered but draw attention to the following: <ol style="list-style-type: none"> <li>1. <b>Over-reliance on WeBS data creates an inaccurate picture of the true numbers of birds using the Tees Estuary. WeBS counts are carried out <u>once per month at high tide</u>.</b></li> <li>2. We query the comparison between Bran Sands South and the rest of the Tees Estuary and suggest that some important Ornithological data is omitted, particularly concerning Bran Sands Lagoon (see page 5 above). The ES itself states that this area is of "<i>some importance</i>".</li> </ol> </li> </ul>
<b>THE ECOLOGICAL SURVEY UNDERTAKEN BY ESL (APPENDIX 6)</b>	<ul style="list-style-type: none"> <li>• TBC was not consulted prior to or during this survey, despite the fact that we indicated in our Scoping Report response that we possess much useful data on some of the sites concerned.</li> <li>• ESL's Ecological Survey has been well conducted and contains much useful data on previously un-surveyed sites, though some of the maps in Appendix 6 (Figures 2-4) are difficult to read. Of particular interest is the density of some UK BAP species, including Grey Partridge, Skylark, Reed Bunting and Linnet and the presence of <i>Schedule 1</i> species, Little Ringed Plover, in suitable breeding habitat on the Teesport Estate and VOPAK foreshore, and Little Tern at North Gare Sands. It is highly likely that Little Ringed Plovers are breeding on un-watched, private sites around the Tees Estuary, as evidenced by the density of breeding pairs on the former Teesdale reclamation site at Stockton-on-Tees (now developed). ESL concludes that the Teesport Estate is "<i>probably of local importance for its assemblage of breeding birds</i>".</li> <li>• The presence of 6 pairs of breeding Shelduck at Bran Sands Lagoon represents over half the total Tees Estuary breeding population.</li> </ul>

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	<ul style="list-style-type: none"> <li>• ESL's survey of the VOPAK foreshore states that "<i>The presence of breeding Ringed Plover, Lapwing, Shelduck and Skylark probably make the site of local importance for its breeding birds</i>"; a statement we endorse. The presence of over 40 Wheatears during spring passage on the Teesport Estate is also significant, reflecting the importance of brownfield sites as staged feeding areas for migrant birds.</li> <li>• <b>We point out that the breeding Common Tern count on Bran Sands Lagoon for 2005 is now superceded by our own count made during the spring and early summer of 2006, which indicates that up to 40 pairs are present. This shows the terns' preference for this site, if habitat is available.</b></li> <li>• TBC is currently undertaking a Breeding Bird Survey of Cleveland and the Teesport Estate is currently being surveyed. This will produce new ornithological information on a previously little known site.</li> <li>• <b>The bird counts for the VOPAK foreshore are high tide figures and do not reflect the true value of this site. We recommend that low tide counts should be undertaken as part of further research. Being a Schedule 1 species, we also recommend that further survey work be undertaken to establish the status of Little Ringed Plover on the Teesport Estate and VOPAK foreshore. The possibility of breeding Wheatear on the latter site is of major significance, as this species is a rare breeder in Cleveland.</b></li> </ul>
<b>MITIGATION AND ENHANCEMENT MEASURES</b>	<ul style="list-style-type: none"> <li>• Very few mitigation or enhancement measures are proposed in the ES.</li> <li>• <b>We would recommend consideration of the following:</b> <ol style="list-style-type: none"> <li>1. <b>The creation of permanent new tern islands in appropriate locations using dredged material, in order to diversify the number of available sites in the Tees Estuary.</b></li> <li>2. <b>The creation of several new ponds within the Teesport Estate to compensate for the loss of those in reclaimed areas.</b></li> </ol> </li> <li>• <b>There can be no satisfactory mitigation for the loss of Bran Sand Sands Lagoon.</b></li> <li>• <b>As part of the ES we would have expected to see an <i>Environmental Action Plan</i>, which sets out how mitigation and enhancement measures are to be implemented and who is to be responsible for overseeing these.</b></li> </ul>
<b>THE EFFECTS OF INCREASED ARTIFICIAL LIGHTING</b>	<ul style="list-style-type: none"> <li>• In view of the existing levels of illumination around the Tees Estuary, we do not consider this to be a significant problem and have no comments to make.</li> </ul>

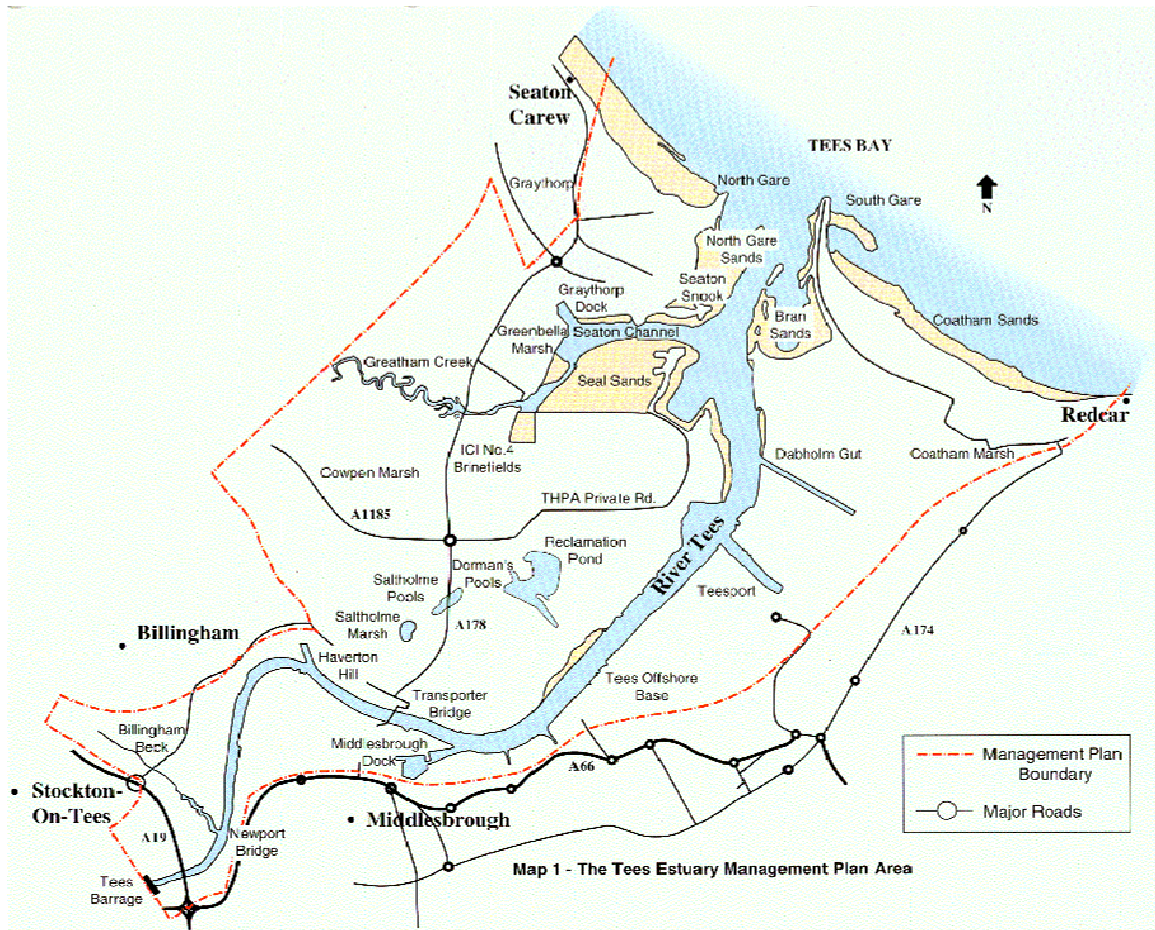
**PHOTOGRAPHS**



**ARTIFICIAL TERN ISLAND, GREENABELLA MARSH:** This has been abandoned in 2006 following predation of the whole colony in 2005.



**COMMON TERN RAFTS, HOLME FLEET, COWPEN MARSH:** These have been more successful due to higher water levels.



**RESIDUAL AREAS OF INTER-TIDAL MUDFLATS, TEES ESTUARY:** Out of a former total of 10,000 hectares, only 200 hectares remain, largely confined to Seal Sands, Bran Sands and North Gare Sands. The location and size of Bran Sands Lagoon and the Reclamation Pond, both formerly part of the Tees Estuary, are apparent and they are of major importance to birds. It is calculated by the Environment Agency that coastal squeeze will further reduce the inter-tidal area by approximately 25 hectares over the next 50 years. *(Plan courtesy of the Environment Agency)*