

# Northumberland

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LOCAL DEVELOPMENT ORDERS: BATES SITE, BLYTH;  
AND EAST SLEEKBURN SITES

**NATURE  
CONSERVATION AND  
ECOLOGICAL ASSESSMENT**  
(INCLUDING HABITAT REGULATIONS SCREENING)

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September 2012



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# 1. INTRODUCTION

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- 1.1 The purpose of the Nature Conservation and Ecological Assessment is to understand how delivering development in Northumberland's Enterprise Zone sites may affect nature conservation and ecology.
- 1.2 Together with the Local Plan, Enterprise Zones and associated approaches towards delivering simplified planning can provide a cohesive approach to planning for development in the Blyth Estuary, which could benefit the management of this important area for nature conservation and ecology.

# 2. SCOPE OF WORK

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- 2.1 The assessment focusses on the use of Local Development Orders (LDOs)<sup>1</sup> for two sites at Sleekburn and the former Bates Colliery Site in Blyth. Notwithstanding the focus, the assessment will also help to inform planning, including approaches to simplified planning, for Commissioners Quay, Dun Cow Quay and the wider Blyth Estuary Renewable Energy Zone (BEREZ)<sup>2</sup>.
- 2.2 The assessment specifically examines how the development permitted by the LDOs may affect designated sites (international and national) and non-designated interests (local). It goes on to assess what is required to avoid or mitigate such effects.
- 2.3 The assessment includes a Habitat Regulations Screening exercise. Effectively this is the first stage of a wider process commonly referred to as a 'Habitat Regulations Assessment' or 'Appropriate Assessment'<sup>3</sup>.
- 2.4 The assessment has formed part of a wider iterative process towards drafting LDOs. Other assessments which should be read alongside this report are:
  - The Sustainability Appraisal Report; and
  - Environmental Impact Assessment Screening Decisions.

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<sup>1</sup> Local Development Orders are a tool for simplifying planning. An LDO grants permission for the type of development specified in the Order and by doing so removes the need for a planning application to be made by a developer. LDOs are being advocated by the Department for Communities and Local Government and are being prepared for a number of Enterprise Zone sites across the Country.

<sup>2</sup> BERAZ refers to a wider area and collection of sites which have been identified for employment uses and specifically for the growth of the renewable and low carbon sector. Additional considerations not identified in this assessment may arise in respect of specific sites.

<sup>3</sup> An assessment process to determine whether a plan or project would adversely affect the integrity of a European designate d site.

### 3. APPROACH / METHODOLOGY

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- 3.1 Northumberland County Council is committed to a high level of due diligence in respect of the natural environment of the Blyth Estuary.
- 3.2 This assessment has been therefore been undertaken in accordance with relevant legislation and has taken into account various guidance including ‘Planning for the Protection of European Sites: Appropriate Assessment - Guidance For Regional Spatial Strategies and Local Development Documents’<sup>i</sup>. Reference was also made to English Nature’s Habitats Regulations Guidance Note No.3 (2007)<sup>ii</sup>.
- 3.3 Furthermore, definitions of conservation status, integrity and significance used in this report are defined in accordance with EC Guidance.<sup>iii</sup> These definitions are included in Table 1 below.
- 3.4 Whilst the assessment covers local and national ecological interests as well as European designations, it has been researched and compiled according to the same methodology as that for European Sites.
- 3.5 In summary, the approach has involved:
- Assessing the objectives for the LDO sites and the likely forms of development envisaged.
  - Identifying and assessing the likely effects on the interest features of the SPA/Ramsar (Habitat Regulations Screening); the issues that could affect the interest features of the SSSI; and the issues that could other affect other nature conservation and ecology features.
  - Identifying ways of enhancing, avoiding or mitigating any effects.

Table 1. Definitions of terms relating to European Sites and the Habitat Regulations Screening Assessment.

Term	Definition
Conservation Status – species.	The sum of the influences acting on the species concerned that may affect the long term distribution and abundance of its population.
Conservation status – habitats.	The sum of the influences acting on a natural habitat and its typical species that may affect its long-term natural distribution, structure and functions as well as the long term survival of its typical species.
Integrity of a site.	The coherence of the site’s ecological structure and function, across its whole area, or the habitats, complex of habitats and/or populations of species for which the site is or will be classified.
Significant effect.	The deterioration of natural habitats and the habitats of species as well as disturbance of the species for which the areas have been designated, in so far as such disturbance could be significant in relation to the objectives of the Directives [i.e. the conservation objectives of the site].

## Legislation

- 3.7. As a member of the European Union, the UK is bound by the terms of the EC Birds and Habitats Directives<sup>ivvvi</sup> and the Ramsar Convention<sup>vii</sup>. These are implemented in the UK through the Conservation of Habitats and Species Regulations, 2010 which provide for the protection of areas of European importance for wildlife (European Sites) in the form of Special Areas of Conservation (SACs), designated under the Habitats Directive, and Special Protection Areas (SPAs), designated under the Birds Directive. A central component of the Habitats Directive is the creation of an overall network of European sites *Natura 2000*. The aim is to maintain, protect and enhance a coherent network of sites, reflecting the trans-boundary nature of many species, particularly migratory species. Although Ramsar sites are not European sites as a matter of law, the Government has chosen as a matter of policy to protect and manage them by applying the same procedures to them. Consequently, Ramsar sites are treated as European sites in practice.
- 3.8. The Regulations also afford protection to certain species, including bats and otter. Further species are offered protection under the Wildlife and Countryside Act 1981 (as amended), and the Natural Environment and Rural Communities Act 2006.
- 3.9. Article 78 of the Conservation of Habitats and Species Regulations 2010 relates specifically to Local Development Orders. It states that 'A local development order may not grant planning permission for development which—
  - (a) is likely to have a significant effect on a European site or a European offshore marine site (either alone or in combination with other plans or projects); and
  - (b) is not directly connected with or necessary to the management of the site.
- 3.10. Sites of Special Scientific Interest (SSSIs) are nationally important sites protected under laws including The Wildlife and Countryside Act 1981, Countryside and Rights of Way Act 2000. LPAs must consult Natural England on planning applications that might affect SSSIs. Operations that could damage special interests require consent by Natural England.
- 3.11. The Natural Environment and Rural Communities Act 2006 places a statutory duty on all public bodies and statutory undertakers in England and Wales to have due regard to the conservation of biodiversity in all their functions.
- 3.12. The National Planning Policy Framework refers to the planning system's role in contributing to and enhancing the natural and local Environment, including through minimising effects on biodiversity and providing net gains in biodiversity.

## Evidence Base

- 3.13. The sites around the Blyth Estuary have been extensively surveyed during the past decade. Previous reports and surveys were collated and studied and are referenced throughout (see Bibliography at Appendix 1). The principal reference is the Blyth Cambois Wader Study, 2011 (SKM Enviros) commissioned by Northumberland County Council to inform the development of the Northumberland Core Strategy.
- 3.14. In undertaking this assessment, data was also compiled from a wide variety of development and regeneration-led ornithology reports dating back to 2007. The extensive previous survey work was used to help identify and determine the significance of ecological effects of development in LDO sites.
- 3.15. Further survey work to supplement the existing evidence base included a walkover survey of the Bates Colliery site which was undertaken in June 2012<sup>4</sup>, and a Phase 1 Habitat Survey of the former Blyth Power Station site which was carried out in July 2012<sup>5</sup>.

## 4. DESCRIPTION OF THE PROJECTS TO BE PERMITTED UNDER THE LDO

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- 4.1. At the time of this assessment LDOs were being progressed for three sites. Two sites are referred to as East Sleekburn and are to be addressed by a single LDO. A further site referred to as the Bates is to be subject to a separate LDO.
- 4.2. In summary, for all three sites, the LDOs will grant planning permission for development of B1 (a) Offices; B1(b) Research and development, of parts and processes; B1(c) Light Industry appropriate in a residential area; B2 General Industry (excluding incineration purposes, chemical treatment or landfill or any operation processing or storage) or activity involving hazardous or inert waste; and B8 Storage and Distribution. In addition, small scale ancillary A1 retail and A3 café/restaurant uses to support those uses are allowed.
- 4.3. More specifically the uses permitted will be for target sectors. Notably these include the manufacture and maintenance of plant and parts for off shore industries and advanced manufacturing.
- 4.4. A further description of development to be permitted together with relevant development considerations are detailed in the draft LDOs.

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<sup>4</sup> Walkover survey undertaken by Ann-Deary Francis, MIEEM

<sup>5</sup> Phase 1 Survey undertaken by David Feige MIEEM and Ann Deary Francis, MIEEM

- 4.5. The development permitted can be summarised as potentially including relatively large scale industrial development possibly including industrial shed type developments, smaller scale office type buildings and outdoor storage, assembly and parking areas.

## 5. ECOLOGICAL RESOURCES AND FEATURES

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### European Designated Sites

- 5.1. **The Northumbria Coast Special Protection Area (SPA) and Ramsar Site** includes much of the coastline between the Tweed and Tees Estuaries in north-east England. The site consists of mainly discrete sections of rocky shore with associated boulder and cobble beaches. The SPA also includes parts of three artificial pier structures and a small section of sandy beach. In summer, the site supports important numbers of breeding Little Tern (*Sterna albifrons*), whilst in winter the mixture of rocky and sandy shore supports large numbers of Turnstone (*Arenaria interpres*) and Purple Sandpiper (*Calidris maritima*).
- 5.2. The little tern (*Sternula Albifrons*) breeding colony near the mouth of Long Nanny Burn, Beadnell Bay is around 60 kilometres to the North of the Blyth estuary and is a discrete colony.
- 5.3. The rocky shore and parts of the beach at Cambois are designated as SPA and Ramsar Site for overwintering ruddy turnstone (*Arenaria interpres*) and purple sandpiper (*Calidris maritima*). The designation also includes the East Pier at Blyth Harbour. The Blyth population of overwintering Purple Sandpiper is a central 'hub' with satellite populations of the species between St Mary's Island and Cresswell along the Coast<sup>viii</sup>.

### National Designated Sites

- 5.4. **The Northumbria Coast Site of Special Scientific Interest (SSSI)** includes most of the coastline between the Scottish Border and the Tyne Estuary. Mudflats within the Blyth Estuary are included in this designation.
- 5.5. The SSSI citation states that the SSSI is designated for 'providing important wintering grounds for shorebird, and it is of international or national significance for six species: purple sandpiper (*Calidris maritima*), turnstone (*Arenaria interpres*), sanderling (*Calidris alba*), golden plover (*Pluvialis apricaria*), ringed plover (*Charadrius hiaticula*) and redshank (*Tringa tetanus*). These are referred to in the Blyth-Cambois Wader Study<sup>ix</sup> as 'Primary SSSI Species'.

- 5.6. The citation also specifically mentions curlew (*Numenius arquata*), oystercatcher (*Haemotopus ostralegus*), dunlin (*Calidris aplina*), knot (*Calidris canutus*), bar-tailed godwit (*Limosa lapponica*) and lapwing (*Vanellus vanellus*). The latter species are referred to as Secondary SSSI species.
- 5.7. The estuary has year-round importance for several gull species; including a breeding population of herring gull (*Larus argentatus*) (identified as a Red List Bird of Conservation Concern due to a serious population decline)<sup>x</sup>. In 2009, 37 breeding pairs were estimated in the estuary<sup>xi</sup>.
- 5.8. **Other species of note** which have been observed overwintering in the estuary include;
- *Red List species of Conservation Concern*
  - Common scoter (*Melanitta nigra*)
  - *Amber List species of Conservation Concern*
  - Red breasted merganser (*Mergus serrator*)
  - Shelduck (*Tadorna tadorna*)
  - Red throated diver (*Gavia stellata*)
  - Eider (*Somateria mollissima*)
  - Goldeneye (*Bucephala clangula*),
  - Teal (*Ana crecca*), Wigeon (*Ana penelope*)
  - Tufted duck (*Aythya filigula*).<sup>xii</sup>
- 5.9. The estuary area supports breeding populations of:
- *Red List species of Conservation Concern*
  - Skylark (*Alauda arvensis*) (24 pairs)
  - Starling (*Sturnus vulgaris*) (14 pairs)
  - Linnet (*Carduelis cannabina*) (22 pairs)
  - House Sparrow (*Passer Domesticus*)
  - Song Thrush (*Turdus philomelos*) (2 pairs)
  - Grasshopper Warbler (*Locustella naevia*) (1 pair)
- 5.10. Amber List species of Conservation Concern include:
- Meadow pipit (*Anthus pratensis*) (30 pairs)
  - Shelduck (*Tadorna tadorna*) (2 pairs).
- 5.11. **Foraging** - The mudflats throughout the estuary are important foraging sites for shorebirds, especially for the secondary SSSI species adapted to this habitat type (e.g. curlew, knot, dunlin). Turnstone and purple sandpiper are specialised rocky shore species which by large restrict feeding to the Rockers, Crab Law and Green Skeer to the seaward side of the East Pier (east of the site).
- 5.12. **High Tide Roosts** - SPA and SSSI bird species utilise high tide roosts at Mount Pleasant Peninsula, Sleekburn estuary, North Blyth Staithes and parts of the East Pier/North Harbour.



## Local Sites

- 5.13. Blyth Estuary Local Wildlife site increases the area covered by the statutory designations to encompass areas of the mudflats further upstream and including the Mount Pleasant Peninsula area. Other non-statutory designated sites of ecological value in the wider area include:
- Blyth Estuary Local Wildlife Site
  - Wansbeck Estuary Local Wildlife Site
  - Castle Island Local Nature Reserve
  - Choppington Community Woods
  - Bedlington County Park
  - Wansbeck Riverside Park

## Site Specific Ecological Resources and Features

### Bates Site

- 5.14. A Phase 1 survey<sup>xiii</sup> was undertaken in 2007. The area identified in that study as being bare ground has now developed some floral interest (unimproved grassland) with scattered, small areas of bare ground. The substrate is mostly spoil including some large stones.
- 5.15. A walkover survey on June 20<sup>th</sup>, 2012 noted species including red fescue (*Festuca rubra*), yorkshire fog (*Holcus lanatus*), cocksfoot (*Dactylus Glomerata*), horse tail (*Equisetum arvense*), bird's foot trefoil (*Lotus corniculatus*), kidney vetch (*Anthyllis vulneraria*), ribwort plantain (*Plantago lanceolata*), creeping buttercup (*Ranunculus repens*), dandelion (*Taraxacum officinale agg.*), and red clover (*Trifolium pratense*). Orchids (*Dactylorhiza* spp.) were numerous throughout the site (common spotted and northern marsh although with possible hybrids).
- 5.16. There were no field signs of badger, otter or other mammals. The site is completely enclosed by fencing so it is unlikely large mammals can access the site. There is limited foraging value for smaller mammals such as hedgehog. The buildings on the site do not offer potential roost sites for bats, but tunnels below the former engine shed may offer potential roosting sites.
- 5.17. Meadow pipit and skylark were observed (likely as breeding species due to behaviour patterns) during this visit. Goldfinch (*Carduelis carduelis*), starling, and house sparrow were noted bathing in rainwater puddles on the site. Housemartins (*Delichon urbicum*) were collecting nest material from the puddles. Herring Gull were scavenging/loafing at the recycling plant.
- 5.18. A significant number of frog tadpoles were present in the rainwater-filled void beneath the conveyor serving the glass recycling plant to the North West of the site. An area of standing water toward the north

west of the site is of poor quality (no aquatic vegetation, little visible life), with high levels of siltation. No reptiles were observed during the walkover survey, or recorded previously on this site.

#### East Sleekburn Site 1 (west)

- 5.19. Overall site 1 is considered to have relatively low ecological value, and has no designations. A Phase 1 Habitat Survey was undertaken in March 2011<sup>xiv</sup> illustrating a clear distinction between the north and south portions of the site. The north of the site is an area of bare ground surrounded by species poor grassland. The Cow Gut watercourse flows across the site. The south of the site has previously been arable agricultural land with some recent woodland planting. No signs of protected species have been identified on the sites, although watercourses may offer suitable habitat for water vole and otter (the latter being regularly recorded on the Blyth Estuary. This site is less than 1km from the Northumbria Coast SPA and around 700m from the Blyth Estuary (Northumberland Shore SSSI).

#### East Sleekburn Site 2 (quay)

- 5.20. The former Power Station site is mostly hard standing with significant areas supporting a diverse perennial/short ephemeral habitat type. The substrate is mostly spoil including some large stones. Large rubble mounds are present throughout the site and could potentially offer habitat to common lizard although none were recorded (suitable refugia were checked throughout the site).
- 5.21. An extended Phase 1 habitat survey on July 20<sup>th</sup>, 2012 identified several habitat types, with Short Perennial/Ephemeral dominant on disturbed ground interspersed with hard standing (in places transitional to unimproved grassland with some scattered scrub). Species included; rest harrow (*Ononis repens*), common centuary (*Centaurea erythema*), yorkshire fog (*Holcus lanatus*) and cocksfoot (*Dactylus Glomerata*), horse tail (*Equisetum arvense*), bird's foot trefoil (*Lotus corniculatus*), kidney vetch (*Anthyllis vulneraria*), ribwort plantain (*Plantago lanceolata*), Ragwort (*Senecio jacobea*), Self heal (*Prunella Vulgaris*), Black medick (*Medicago lupulina*), White clover (*Trifloium repens*), Wall speedwell (*Veronica arvensis*), Rosebay willowherb (*Chamerion angustifolium*), Spear Thistle (*Cirsium vulgare*), creeping thistle (*Cirsium arvensis*), Daisy (*Bellis perennis*), Creeping bent (*Agrostis stolonifera*), false oat grass (*Arrhenatherum elatius*), perennial ryegrass (*Lolium perenne*), tufted hair grass (*Deschampsia cespitosa*), Wild carrot (*Daucus carota*), Teasel (*Dipsacus fullonum*), Common cudweed (*Filago vulgaris*), Sorrel (*Rumex acetosa*), Mignonette (*Reseda lutea*). Occasional Rose (*Rosa spp.*), Buddleia (*Buddleja davidii*) and sea buckthorn (*Hippophae rhamnoides*) are present throughout the site. Orchids (*Dactylorhiza spp.*) were numerous throughout the site (common spotted and

northern marsh although with possible hybrids). A single musk thistle (*Carduus nutans*) was also noted.

- 5.22. During the visit around 8 grayling butterflies (*Hipparchia semele*) were noted in this habitat type, along with small skipper (*Thymelicus sylvestris*) and meadow brown (*Maniola jurtina*). Common blue damselfly (*Enallagma cyathigerum*) was also noted.
- 5.23. Areas of standing water were present in a drainage channel to the North of the site and a flooded area to the South West Corner, next to the electricity substation. This is most likely to be seasonal flooding prolonged by the wet summer.
- 5.24. The fence line along the northern boundary of the site was dominated by hawthorn (*Crataegus monogyna*), Buddleia, Gorse (*Ulex* spp), Broom (*Cytisus* spp) with some apple trees.
- 5.25. An area of species rich unimproved grassland is present on a raised mound to the South West corner of the site, although this is being colonised by scrub including Bramble (*Rubus fruticosus*) and hawthorn seedlings. Grass species were common to the rest of the site in a very diverse sward with no species being dominant. Meadow vetchling (*Lathyrus pratensis*) Yellow rattle (*Rhinanthus minor*), Oxeye daisy (*Leucanthemum vulgare*), Crested dogstail (*Cynosurus cristatus*) Tufted Hair Grass, Meadow fescue (*Festuca pratensis*), Creeping cinquefoil, (*Potentilla reptans*). This area was also rich in butterflies and moths, with lattice heath moth (*Chiasmia clathrata*), meadow brown, small skipper, and 6 spot burnet (*Zygaena filipendulae*) noted.
- 5.26. A large bank of gorse beside the site gatehouse offers potential habitat to a variety of bird species, with Linnet displaying well during the survey.
- 5.27. An inaccessible strip of land between the Ash Dock and former power station site was a similar mixture of habitat types (although dominated by unimproved grassland with scattered scrub) with one wet hollow with common reedmace (*Typhala tifolia*).
- 5.28. The Ash Dock itself hosted a shorter, sparser short perennial/ephemeral habitat to that of the main site. Additional species were biting stonecrop (*Sedum acre*), and yellow wort (*Blackstonia perfoliata*). A juvenile meadow pipit was seen during the survey. All of the sites have considerable value to breeding birds as they are relatively undisturbed by humans and predators.
- 5.29. There were no field signs of badger, otter or other mammals, with the exception of a single fox scat/lying up place on the bank of unimproved grassland. The site is completely enclosed by fencing so it is unlikely large mammals can access the site. There is limited foraging value for smaller mammals such as hedgehog. The buildings

on the site do not offer potential roost sites for bats, although the listed gatehouse may have low to moderate potential. Tunnels below the site have been capped off and the entrances are flooded. Otter are regularly recorded in the Blyth Estuary and can be curious around accessible construction sites.

- 5.30. The site is immediately adjacent to a High Tide Roost on the Grade 2 Listed West (Power Station) Coal Staithes. The key high tide roost for SPA species is at the North Blyth Staithes, further downstream, but the Power Station Staithes are highlighted in the Blyth Cambois Wader Study as having importance.
- 5.31. An area of marshy grassland with small ponds is situated to the South of the EZ site, between the electricity sub-station and the Blyth estuary.

## **HABITATS REGULATION SCREENING**

### **6. IDENTIFYING AND ASSESSING LIKELY EFFECTS OF DEVELOPMENT ON SPA/RAMSAR SITES/SPECIES**

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#### **Identifying Likely Effects**

- 6.1. In undertaking 'Habitat Regulations Screening' (see para 3.7-3.9) it is important to consider the effects on the whole Natura 2000 network. This is particularly relevant given the North Eastern Enterprise Zone<sup>6</sup> initiative covers a wide geographical area; and the focus of the sites which are mostly in Estuarine or Riparian environments. The aim is to consider sites which are:
- Immediately neighbouring the Northumberland LDO sites.
  - Coastal or riparian in nature and likely to be affected by displacement of local populations of birds.
  - Migratory breeding or foraging sites for overwintering populations of birds.
- 6.2. It is worth noting that Enterprise Zone sites are also developing in the Tees Estuary as part of the Tees Valley Enterprise Zone and therefore consideration has been given to in-combination effects of development pressure on brownfield sites neighbouring the Coast throughout the wider region.
- 6.3. The Natura 2000 sites which could be affected by LDO Development in the Blyth Estuary are briefly described in Table 2 below.

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<sup>6</sup> The North Eastern Enterprise Zone includes sites within Northumberland, North Tyneside, Newcastle and Sunderland.

Table 2. European Sites which could be affected by LDO Development around the Blyth Estuary.

An asterisk \* beside a qualifying feature indicates that the feature is listed as a priority habitat on Annex I of the Habitats Directive.

Site	Distance (km) approx.	Qualifying Features
Northumbria Coast SPA & Ramsar Site	<1	Internationally important breeding population of little tern Internationally important wintering populations of purple sandpiper and turnstone
Berwickshire and North Northumberland Coast SAC	26	Large shallow inlets and bays Intertidal mudflats and sandflats Reefs Submerged or partially submerged sea caves Grey seal
Ford Moss SAC	75	Active raised bog *
Harbottle Moors SAC	40	European dry heaths
North Northumberland Dunes SAC	22	Fixed dunes with herbaceous vegetation * Dunes with creeping willow Embryonic shifting dunes Humid dune slacks Shifting dunes with marram Petalwort
North Pennine Dales Meadows SAC	48	Mountain hay meadows <i>Molinia</i> meadows
Tweed Estuary SAC	90	Estuaries Intertidal mudflats and sandflats River lamprey Sea lamprey
Coquet Island SPA	21	Populations of Annex 1 species of European importance: Arctic tern Sandwich tern Common tern Roseate tern
Farne Islands SPA	68	Populations of Annex 1 species of European importance: Arctic tern Sandwich tern Common tern
Holburn Lake and Moss SPA & Ramsar Site	70	Wintering greylag goose roost Inland roost for mallard, wigeon and teal during unfavourable weather
North Pennine Moors SPA		Internationally important breeding populations of Annex 1 species:

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Site	Distance (km) approx.	Qualifying Features
		Hen harrier, Merlin, Peregrine, Golden plover
Lindisfarne SPA & Ramsar Site	67	Populations of Annex 1 species of European importance: Little tern Roseate tern Whooper swan Golden plover Regularly occurring migratory species of European importance: Purple sandpiper Turnstone Greylag goose Light-bellied brent goose Wigeon Ringed plover Bar-tailed godwit Redshank Wintering wildfowl assemblage of European importance Rare plants: Petalwort Lindisfarne helleborine (endemic to Lindisfarne)
Teeside and Cleveland Coast SPA & Ramsar Site	80	Internationally important numbers of Annex 1 species: Little Tern (breeding) Sandwich Tern (passage) Internationally important numbers of migratory species: Ringed Plover (passage) Knot Redshank (wintering) Internationally important assemblage of wintering waterfowl: Sanderling, Lapwing, Shelduck, Cormorant, Redshank, Knot

- 6.4. N.B. Many European Sites in Northumberland and County Durham are currently receiving acid deposition, nitrogen deposition or both beyond their critical loads. These are detailed in the Northumberland Local Plan Core Strategy Habitats Regulations Assessment Scoping Report (May 2012), but have not been included here. The Enterprise Zone sites are not likely to lead to significant increases in transport emissions and the sector target of renewable and low carbon technology may lead to a net decrease in Large Combustion Plant sources of acid and nitrogen in the long term.
- 6.5. The first stage in determining which, if any, of the European Site (SPA/Ramsar) bird populations could be at risk of effects was to determine which occurred within the potential effect zones of the

project in which birds may be at risk of disturbance and/or displacement.

6.6. The desk top study focussed on the sites subject to proposed Local Development Orders. It confirmed:

- Purple Sandpiper and Turnstone are both present within the zone of influence of two LDO sites (East Sleekburn 2 and Bates Colliery).
- Purple sandpiper feed almost exclusively on rocky shores (which is all within the SPA) and Turnstone mainly so, although both use roosting features within the estuary.
- The development sites do not encroach onto areas designated as SPA but are within 1-2km.
- The East Sleekburn 2 site (former Blyth Power Station) is within 250m of the SPA.
- Little Tern has not been recorded as a breeding species in the Blyth Estuary (the colony being at Long Nanny >50km to the north). It has therefore been concluded that there will be no likely effects on Little Tern.
- East Sleekburn 1 site is >1km from the Northumbria Coast SPA and around 700m from the Blyth Estuary (Northumberland Shore SSSI) and presents no suitable habitat for the birds which are qualifying features of both designated sites. Therefore, it is concluded that East Sleekburn Site 1 will have no likely effects on the designated sites.

6.7. The likely effects of development were then considered as outlined in Table 3 below.

*Table 3. Potential Effects of LDO Development on SPA/Ramsar bird populations Turnstone and Purple Sandpiper*

<b>Site</b>	<b>Action</b>	<b>Potential Likely Effects on SPA/Ramsar Bird Populations, Turnstone and Purple Sandpiper</b>
Bates Colliery& East Sleekburn Site 2 (quay)	Noise during construction, operation and decommissioning	Seasonal Disturbance to feeding wintering birds; displacement of birds, prevention of adequate levels of foraging/feeding leading to decline in population (with possible indirect effects on breeding population present in Western Arctic Natura 2000 sites)
Bates Colliery& East Sleekburn Site 2 (quay)	Noise during construction, operation and Increased ship movements	As above
Bates Colliery&	Increased human	As above

East Sleekburn site 2 (quay)	interaction via operational staff and new recreational routes	
Bates Colliery & East Sleekburn Site 2 (quay)	New lighting	Disturbance through new lighting, effects as above
East Sleekburn Site 2 (quay)	Development of EZ sites indirectly results in increases the use of Battleship Wharf	Disturbance or loss of High Tide Roost at Staithes <sup>xv</sup> , effects as above

- 6.8. Following on from the identification of likely effects from LDO permitted development illustrated in Table 3, the following considers in combination, or cumulative effects, including effects on the wider Natura 2000 network sites (as identified in Table 2).

**In Combination Effects of the Northumberland LDO Sites**

- 6.9. Development of East Sleekburn 2 (part of the former power station site) and Bates Colliery site concurrently could exacerbate the level of disturbance through construction noise.
- 6.10. In addition, while operational development that uses the Port could increase ship movements which could in turn affect the Blyth Estuary in a range of ways, such as ship wash eroding areas of mudflat, increased requirements for dredging and increased disturbance (noise, visual and wave action) to North Blyth Staithes. However, the potential for increased ship movements is not known. Furthermore, any increase needs to be considered in the context of decreased ship movements from other operations over time. These factors are to be further considered as part of Environmental Impact Assessment Screening.
- 6.11. Projects at Commissioners Quay and Dun Cow Quay may also increase levels of disturbance in the area around the SPA.

**In Combination Effects (with other NELEP Enterprise Zone Sites)**

- 6.12. The development of coastal or riparian EZ sites may generate some level of disturbance on a regional scale to coastal ecological receptors (chiefly birds). However, give the specialised habitat requirements of Purple Sandpiper and Turnstone this is unlikely to be significant in the North East.
- 6.13. Lindisfarne SPA shares qualifying species with the Northumbria Coast SPA. However, displacement of Turnstone and Purple Sandpiper from the Blyth is unlikely to lead to increased competition for food resources within the Lindisfarne SPA due to the extent of suitable habitat between them.



- 6.14. The Teesside and Cleveland Coast SPA does not include Turnstone and Purple Sandpiper in its qualifying features (however, there may be effects on SSSI birds as discussed in Section 7).

**In Combination Effects (with other Plans and Programmes)**

- 6.15. The further development of the Blyth Estuary Renewable Energy Zone (BEREZ), which has been identified in the Northumberland Core Strategy Issues and Options document may affect further areas of high roost habitat and lead to increased levels of disturbance through noise and human activity.
- 6.16. An application for a Biomass Power Station in the Battleship Wharf area is currently being considered and may similarly lead to increased levels of disturbance. The application and accompanying Environmental Statement is currently being assessed by the Infrastructure Planning Inspectorate.
- 6.17. An application for a new housing development on the Vald Birn site at Cambois has been assessed and it has been determined that the proposed development would be unlikely to increase disturbance to the SPA.

**Assessing Likely Effects**

- 6.18. The likely effects identified above must be assessed to consider whether they are likely to be significant.
- 6.19. English Nature's Habitats Regulations Guidance Note No. 3 suggests examples of types of effects which are considered to be significant, including:
- Causing change to the coherence of the site or to the Natura 2000 series (eg presenting a barrier between isolated fragments, or reducing the ability of the site to act as a source of new colonisers);
  - Causing direct or indirect change to the physical quality of the environment (including the hydrology) or habitat within the site;
  - Causing ongoing disturbance to species or habitats for which the site is notified;
  - Causing direct or indirect damage to the size, characteristics or reproductive ability of populations on the site;
  - Altering the vulnerability of populations etc to other effects.
  - Causing a reduction in the resilience of the feature against external change (for example its ability to respond to extremes of environmental conditions);
- 6.20. Likely effects must be assessed in terms of their potential effect on the integrity of the SPA, as measured against its conservation objectives. For the Northumbria coast SPA these are ;  
*“With regard to the individual species and/or assemblage of species for which the site has been classified: Avoid the deterioration of the*

*habitats of the qualifying features, and the significant disturbance of the qualifying features, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving the aims of the Birds Directive.*

Subject to natural change, to maintain or restore:

- The extent and distribution of the habitats of the qualifying features;
- The structure and function of the habitats of the qualifying features;
- The supporting processes on which the habitats of the qualifying features rely;
- The populations of the qualifying features;
- The distribution of the qualifying features within the site.”
- The key environmental conditions to support site integrity are identified as;
- No significant increase in human disturbance or that caused by off-lead dogs.
- Maintenance of sparsely vegetated dunes for nesting (little tern).
- Extent and quality of rocky shore feeding and roosting habitat (purple sandpiper and turnstone)

6.21. In assessing the significance of effects the following factors were taken into account:

- The LDOs<sup>7</sup> do not directly relate to the area designated as SPA/Ramsar site and do not permit any encroachment of development on to the designated sites.
- The LDOs do not permit development that falls within Schedule 1 of the Town and Country Environmental Impact Assessment Regulations 2010. Development has been screened in respect of Schedule 2 of the same regulations and further EIA screening is required ahead of development. Any development determined to fall within the Regulations cannot proceed under the provisions of the LDO(s) and must be the subject of a planning application and Environmental Impact Assessment.
- The recent history of the estuary is of decommissioning and decreased industrial and port uses but until the 1980s the estuary was heavily industrialised.
- The LDOs will not permit any development other than that specified in the Order and within the associated boundary plan.

6.22. Given that Little Tern is not present in the Blyth Estuary as a breeding species (although there are records of this species being present) any potential effects to the features relevant to that species (dune quality) are not considered to be significant.

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<sup>7</sup> For the East Sleekburn and Bates sites

- 6.23. The favourable condition and quality of the rocky shore habitat of the Northumbria Coast SPA around Blyth and Cambois meanwhile means this habitat can be judged according to the needs of the two qualifying species; Purple Sandpiper (*Calidris martima*) and Turnstone (*Arenaria interpres*).
- 6.24. The two qualifying species have specific feeding preferences and habitat requirements which are limited to rocky shores, and cobbled/bouldered beaches. Areas of suitable habitat are limited to the rocky shore and the southern end of Cambois Beach. Some rocky sections of the Blyth Estuary may support foraging Turnstone but this is not considered significant in the context of the evidence (previous surveys).
- 6.25. The High Tide Roost at North Blyth Staithes is a significant feature, with peak counts of 25 Purple Sandpiper and 47 Turnstone noted during the Blyth-Cambois Wader Study in 2010/2011. The quality of this structure as a roost habitat for SPA qualifying species could be affected by any increased disturbance in the immediate area.
- 6.26. Recent work carried out as part of the North Blyth Biomass Project<sup>xvi</sup> application quotes Natural England advice around noise levels as follows;
- Noise levels over 70dB (LA max) – significant bird disturbance effects are likely.
  - Noise levels between 55dB (LA max) and 70dB (LA max) - significant bird disturbance effects possible.
  - Noise levels below 55dB (LA max) - significant bird disturbance effects unlikely.
- 6.27. It is therefore assumed that any noise which can be shown by accepted modelling methods to be likely to exceed 55dB (LA max) at North Blyth Staithes during construction, operation or decommissioning would be likely to have a significant effect on the SPA qualifying features. This is relevant to the overwintering period only.

#### **Assessment of Potential Mitigation(Spa/Ramsar)**

- 6.28. Table 4 considers the aforementioned likely effects and identifies measures to avoid or mitigate such effects. The measures principally relate to the imposition of conditions within the LDOs.
- 6.29. As long as developers conform to the identified conditions, it can be concluded that the LDOs will not lead to significant effects on the qualifying features of the Northumbria Coast SPA/Ramsar site.

**Table 4 Measures to Avoid or Mitigate Likely Effects of LDO development on SPA/Ramsar Sites/species.**

<b>Site</b>	<b>Action</b>	<b>Likely Effects on SPA/Ramsar Bird Populations, Turnstone and Purple Sandpiper</b>	<b>Mitigation</b>
Bates Colliery & East Sleekburn Site 2 (quay)	Noise during construction, operation and decommissioning	Seasonal Disturbance to feeding wintering birds; displacement of birds, prevention of adequate levels of foraging/feeding leading to decline in population (with possible indirect effects on breeding population present in Western Arctic Natura 2000 sites)	Condition to ensure - No Construction or Operational noise shall exceed a specified noise threshold of 55db(LAmax) at Blyth North Staithes and wider SPA/Ramsar during the overwintering period October-March. The applicant to demonstrate this through sound modelling.
Bates Colliery & East Sleekburn Site 2 (quay)	Increased human interaction via operational staff and new recreational routes	As above	Development shall not enhance recreational access to the Estuary and where practicable and enforceable, existing access shall be restricted.
Bates Colliery & East Sleekburn Site 2 (quay)	New lighting	Disturbance through new lighting, effects as above	Condition to ensure -New lighting to be designed in accordance with ILE guidelines for sensitive sites and positioned away from estuary reducing light spill
East Sleekburn Site 2 (quay)	Development of EZ sites indirectly results in increases the use of Battleship Wharf	Disturbance or loss of High Tide Roost at Power Station staithes <sup>xvii</sup> , effects as above	Use of Battleship Wharf not included in the LDO ( <i>would be assessed if development was proposed through regular planning/consent processes</i> )
Cumulative Effects	Development of several sites adjacent to SPA	Seasonal Disturbance to feeding wintering birds; displacement of birds, prevention of adequate levels of foraging/feeding	Where practicable and enforceable place restrictions on access to SPA adjacent to beach and pier to provide quiet refuges during development

## **7. IDENTIFYING AND ASSESSING LIKELY EFFECTS OF DEVELOPMENT ON THE NORTHUMBERLAND SHORE SSSI & LOCAL BIODIVERSITY INTEREST OF SITES**

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### **Identifying Likely Effects**

#### **Northumberland Shore SSSI**

- 7.1. The likely effects of development on the Northumberland Shore SSSI are identical to those detailed at section 6 for the SPA/Ramsar species, with the further consideration of construction noise and disturbance/displacement having a more immediate effect on birds which are present in the estuary itself, feeding and/or loafing on the mudflats.
- 7.2. An additional concern for SSSI species is the barrier that new development on the Power Station site may present to them reaching an important high tide roost to the North of the LDO sites, at the former Coal Stocking Yards and ash lagoons. Significant numbers of ringed plover, redshank, dunlin and curlew are reported as using this site in the Blyth-Cambois Wader study, and in almost all of the previous ornithological survey work around the estuary.
- 7.3. SSSI species do not breed on the estuary, but Shelduck are recorded nesting on the North shore of the estuary.

#### **Local Biodiversity Interest<sup>8</sup>**

- 7.4. Skylark and meadow pipit have been recorded breeding on the Bates Colliery site. It is likely that similar habitat conditions to allow breeding are available on the other EZ sites.
- 7.5. Successional grassland on brownfield sites can host interesting floral communities which are often locally rare and may be reliant on poor quality substrate for floral diversity. This is particularly true for the areas around the former power station where the BAP species Grayling butterfly has been recorded in significant numbers, although such habitats are of value to a range of invertebrates. Common lizard has also been recorded in significant numbers on the Cambois coast/wharf areas, and is similarly reliant on such habitats.
- 7.6. Standing water (albeit mostly temporal) has value to local species of birds and amphibians.
- 7.7. Protected species may be present or likely to commute across the LDO sites. Great Crested Newt have not been recorded in ponds on LDO

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<sup>8</sup> See paragraphs 5.14 – 5.31 for further site descriptions

sites and distance combined with the barrier effect of the sub-station and lack of suitable habitat on the LDO sites themselves suggests a low level of risk of encountering these species. Otter is present on the Blyth estuary and will range widely; however the LDO sites do not provide habitat features of particular value to otter. There are underground voids at these sites, but these are capped and/or flooded and so are unlikely to provide any roosting opportunities for bats.

**Table 5 Potential Likely Effects of LDO Development on SSSI and Local Biodiversity Interest of the sites.**

Site	Action	Potential Likely Effects on SSSI and Local Biodiversity interests
Bates Colliery& East Sleekburn Site 2 (quay)	Noise during construction, operation and decommissioning	Seasonal Disturbance to feeding wintering birds; displacement of birds, prevention of adequate levels of foraging/feeding leading to decline in populations. Cumulative (both sites)
Bates Colliery& East Sleekburn Site 2 (quay)	Noise during construction, operation and Increased ship movements	As above
Bates Colliery& East Sleekburn Site 2 (quay)	Increased human interaction via operational staff and new recreational routes	As above
Bates Colliery& East Sleekburn Site 2 (quay)	New lighting	Disturbance through new lighting, effects as above
East Sleekburn Site 2 (quay)	Increased use of Battleship Wharf	Disturbance to High Tide Roost at Blyth Staithes <sup>xviii</sup> , effects as above
Bates Colliery and East Sleekburn 2 (quay)	New buildings and structures	'Barrier Effect' to birds accessing high tide roosts  N.B. High Tide roosts outside of EZ sites with the exception of Battleship Wharf
Bates Colliery& East Sleekburn Site 1 (west)	Site Clearance and construction	Breeding Birds (skylark and meadow pipit) Loss of nesting habitat Destruction of nests Disturbance of birds and young
Bates Colliery, East Sleekburn Site 2	Site Clearance and construction	Successional Grassland on spoil – developing floral

(quay)		interest
Bates Colliery	Site Clearance and construction	Standing water – frogs (tadpoles) and birds (bathing, housemartins collecting nest material).
Bates Colliery	Site Clearance and construction	Tunnels underneath site may be used by bats
East Sleekburn Site 1 (west)	Surface Water run off into local watercourses (Cow Gut and Maw Burn)	Local pollution, flooding and loss of suitable riparian mammal habitat
East Sleekburn Site 1 (west)	Site Clearance and construction	Loss of woodland planting and hedgerows, loss of some wet areas
East Sleekburn Site 2 (quay)	Site Clearance and construction	Loss of suitable reptile habitat - significant population of common lizard recorded in the area.
East Sleekburn Site 2 (quay)	Site Clearance and construction	Loss of Grayling butterfly habitat – significant population recorded in the area
East Sleekburn Site 2 (quay)	Site Clearance and construction	Disturbance of protected species (Otter)

### **In Combination Effects**

- 7.8. In combination effects taken into account for SSSI reflect those identified in section 6 in respect of Ramsar / SPA sites / species (i.e. in respect of the Northumberland LDO sites, the wider NELEP EZ sites, the Core Strategy, the Biomass Power Station proposals, Vald Burn). In addition, proposals for the development of the southern part of the Bates site for residential uses were taken into account.
- 7.9. In summary, it is considered SSSI species could be vulnerable to cumulative development in the Blyth and Cambois areas, through increased disturbance from both industrial and recreational activities.

### **Assessing Likely Effects**

- 7.10. The likely effects identified above have been assessed to consider their significance.
- 7.11. In assessing the significance of effects the factors identified in paragraph 6.21 were taken into account – i.e. that no development constituting Environmental Impact Assessment Development will be permitted; that there has been significantly reduced activity at the Port; that only the development specified in the Orders will be permitted. In addition, the LDOs do not directly relate to the area designated as SSSI and do not permit any encroachment of development on to the designated SSSI.

- 7.12. The Conservation Objectives for the Northumberland Shore SSSI are identical to those for the Northumbria Coast SPA. Therefore, any change to levels of disturbance on the estuary itself or the areas nearby used by the qualifying species could have a likely effect on the SSSI.
- 7.13. SSSI species have a wider feeding area and more roost sites than the SPA qualifying species, and therefore have the potential to be more at risk of effects.
- 7.14. Disturbance from high levels of noise may displace or disturb qualifying species. More specifically noise which can be shown by accepted modelling methods to be >55dB (LA max)(see para 6.23) at North Blyth Staithes during construction, operation or decommissioning will be likely to have a significant effect on the SSSI qualifying features. This is relevant to the overwintering period only.
- 7.15. The High Tide Roost at North Blyth Staithes is a significant feature, along with major high tide roosts at Mount Pleasant and the former Coal stocking yards. The quality of these roost habitats for SSSI qualifying species could be affected by any increased disturbance in the immediate area.
- 7.16. The favourable condition of the local section of the Northumberland Shore SSSI is, without mitigation, subject to levels of disruption to flight lines, access to roosts, and feeding areas. This may lead to disturbance or displacement of birds (with possible indirect effects on other sites on the North East coast).

### **Assessment of Potential Mitigation for SSSI & Local Biodiversity Interest**

- 7.17. Table 6 considers the aforementioned likely effects and additional potential effects on local biodiversity interests, and identifies measures to avoid or mitigate such effects. The measures principally relate to the imposition of conditions within the LDOs.
- 7.18. As long as developers conform to the identified conditions and mitigation measures are put in place it can be concluded that the LDOs will not lead to significant effects on the qualifying features of the SSSI or on local biodiversity interests.



**Table 6 Mitigation Measures to Avoid Potential Likely Effects of LDO Development on SSSI & Local Biodiversity Interest.**

<b>Site</b>	<b>Action</b>	<b>Likely Significant Effects on SPA/Ramsar Bird Populations, Turnstone and Purple Sandpiper</b>	<b>Condition as Mitigation</b>
Bates Colliery& East Sleekburn Site 2 (quay)	Noise during construction, operation and decommissioning; Increased ship movements	Seasonal Disturbance to feeding wintering birds; displacement of birds, prevention of adequate levels of foraging/feeding leading to decline in populations.	Condition to ensure - No Construction, operational or decommissioning noise to exceed a specified noise threshold of 55db(LAmax) at the SSSI during the overwintering period October-March. The applicant to demonstrate this through sound modelling at reserved matters stage. Cumulative effects to be mitigated through alternative feeding/roosting opportunities for wading birds (discussed further in section 8).
Bates Colliery& East Sleekburn Site 2 (quay)	Increased human interaction via operational staff and new recreational routes	As above	No new access to the estuary/SSSI and where practicable and enforceable seasonal closure of existing access.
Bates Colliery& East Sleekburn Site 2 (quay)	New lighting	Disturbance through new lighting, effects as above	New lighting to be designed in accordance with ILE guidelines for sensitive sites and positioned away from estuary reducing light spill.
Bates Colliery and East Sleekburn Site 2 (quay)	New buildings and structures	'Barrier Effect' to birds accessing high tide roosts	Condition to ensure - No new buildings to create barrier effect through scale and massing greater than that of the existing sub-station.
Bates Colliery and East Sleekburn Site 2 (quay)	Construction, Operational and decommissioning Noise	Disturbance of nesting coastal birds	Condition to ensure - No Construction, operational or decommissioning noise to exceed a specified noise threshold of 55db(LAmax)at North Blyth Staithes/SSSI during the over wintering period.
Bates Colliery &	Site Clearance	Breeding Birds (skylark and meadow	Advisory note re no site clearance to take place during

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East Sleekburn	and construction	pipit) Loss of nesting habitat Destruction of nests Disturbance of birds and young	the nesting season (March to August inclusive) unless a suitably qualified ecologist confirms no nests are present (discussed further in section 9)
Bates Colliery, East Sleekburn Site 2 (quay)	Site Clearance and construction	Successional Grassland on spoil – orchids, developing floral interest	Condition to include – Successional Grassland / Floristic interest to be retained or trans-located to landscaping within or outwith site (ideally in Autumn)
Bates Colliery	Site Clearance and construction	Standing water – frogs (tadpoles) and birds (bathing, house martins collecting nest material).	Encourage the site to be checked for amphibians before works begin and recommend draining breeding areas outside of breeding season. Encourage the creation of new wetland scrapes/ponds.
Bates Colliery& East Sleekburn Site 2 (quay)	Site Clearance and construction	Tunnels underneath site may be used by bats	Condition to include – checking for bats and prior to filling, sealing or working in any tunnels include escapes.
East Sleekburn Site 1 (west)	Surface Water run off into local watercourses (Cow Gut and Maw Burn)	Local pollution, flooding and loss of suitable riparian mammal habitat	Encourage sustainable drainage and SUDS schemes where practicable
East Sleekburn Site 1 (west)	Site Clearance and construction	Loss of woodland planting and hedgerows, loss of some wet areas	Encourage landscaping to include pond/wetland creation, potentially linked to sustainable drainage
East Sleekburn Site 2 (quay)	Site Clearance and construction	Loss of suitable reptile habitat - population of common lizard recorded nearby	Condition to include – creation or retention of landscaping to include suitable habitat. Recommend rubble mounds to be cleared during the active season to avoid hibernation period.
East Sleekburn Site 2 (quay)	Site Clearance and construction	Loss of Grayling butterfly habitat – significant population recorded in the area	Condition to include – creation or retention of landscaping to include suitable habitat.
East Sleekburn Site 2 (quay)	Site Clearance and construction	Damage to protected species (Great Crested Newts, Otter)	Advisory note re protected species. Condition to include - any construction pits/trenches/foundations to include 'escape ramps' for otter

## 8. CONSIDERATION OF MANAGEMENT AND MITIGATION MEASURES

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- 8.1. Tables 5 and 7 include a number of mitigation measures that can be addressed through appropriate conditions either as part of a planning consent or as part of Local Development Orders; or through other measures, independent of development of the sites.
- 8.2. Some of the identified measures could fulfil more than one function and therefore are cost effective to deliver. For example, low cost landscaping options could also serve to create requisite habitats and contribute towards sustainable drainage. Furthermore, ecological enhancements could contribute to sustainable construction measures – notably BREEAM ratings.
- 8.3. Some measures are targeted at addressing cumulative effects and/or addressing effects of development off-site. These principally only become relevant in certain circumstances e.g. during the most disruptive stages of construction or where all of the identified potential development comes forward.
- 8.4. Should the new Biomass Power Station and Vald Birn developments progress, if practicable and enforceable it is recommended a section of Cambois Beach should be closed to off-lead dogs during winter. Similarly the closure of the East Pier to human access is recommended. This could provide a quiet refuge for the SPA species during intense periods of development.
- 8.5. As SSSI species have a wider feeding area and more roost sites than the SPA qualifying species they are potentially subject to more effects (especially in the face of cumulative development). Measures are therefore identified to control that pressure and/or create alternative feeding and roosting sites, which provide a quiet refuge, particularly whilst construction is underway. In this context it is recommended that suitable mitigation habitats are identified secured and agreed. Fields to the south of the River Wansbeck or to the north of the River Blyth could provide valuable roosting and feeding habitat for displaced birds, in relatively secure and undisturbed locations (e.g. lapwing, golden plover, curlew, redshank and for a range of other species which are not interest features of the Northumberland Shore SSSI but are still of some conservation importance).
- 8.6. It is also recommended that consideration be given to increasing the opening of the Wansbeck Barrage during winter. This could potentially replace an estuarine habitat almost 'like for like' by allowing an alternative area of mudflats to replace the disturbed habitat at the River Blyth Estuary.

- 8.7. Consideration for the protection established high tide roost at Mount Pleasant Peninsula and a buffer zone around may also offer valuable mitigation. The site could potentially receive some form of recognition through the planning system. This is possibly best achieved through designation as a Local Wildlife Site.

## **9. SUMMARY AND CONCLUSIONS**

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- 9.1. This Nature Conservation and Ecological Impact Assessment appraises the likely effects of LDO site development upon nature conservation and ecological interests. Specifically it considers likely effects of development permitted by the East Sleekburn and Bates Local Development Orders on Ramsar/SPA (and fulfils the screening stage of the Habitat Regulations Assessment process) and SSSI sites and species; and local biodiversity interests.

### **Limitations of the Assessment**

- 9.2. The assessment has been informed by a comprehensive evidence base including up to date surveys as detailed in the Appendix. However, habitats evolve and wildlife interest can quickly develop. As time passes (including during the operational lifespan of the proposed Local Development Orders) further ecological surveys may be required. Standard practise suggests updating every 2 years.
- 9.3. The Assessment is also based in the most part on the development to be permitted by Local Development Orders at the East Sleekburn and Bates sites. Development not identified in the Local Development Orders would therefore need to be further appraised in the context of a planning application<sup>9</sup>.

### **Conclusions**

- 9.4. The Blyth Estuary is the focus of a number of policies and initiatives targeted at creating conditions for economic growth and bringing former employment sites back into productive use. The use of Local Development Orders is one such initiative and at the time of this report is being pursued for sites at East Sleekburn and Bates.
- 9.5. It can be concluded the development permitted by the Local Development Orders will have 'no likely significant effects'.

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<sup>9</sup> The following advice may be helpful in considering development not permitted by the LDOs i.e. through a planning application.

European Commission: Ports and Biodiversity Guidance.

[http://ec.europa.eu/transport/maritime/doc/comm\\_sec\\_2011\\_0319.pdf](http://ec.europa.eu/transport/maritime/doc/comm_sec_2011_0319.pdf)

Wind Turbines

<http://publications.naturalengland.org.uk/publication/23024>

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<sup>i</sup> *Planning for the Protection of European Sites: Appropriate Assessment Under The Conservation (Natural Habitats, &C) (Amendment) (England and Wales) Regulations. Guidance For Regional Spatial Strategies and Local Development Documents.* Department for Communities and Local Government, 2006.

<sup>ii</sup> *'HRGN 3: The Determination of Likely Significant Effects under The Conservation (Natural Habitats & c) Regulations 1994'*, English Nature , 2007.

<sup>iii</sup> *'Managing Natura 2000 sites: The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC'* (European Commission, 2000)

<sup>vi</sup> *Council Directive on the Conservation of Wild Birds, 1979 (79/409/EEC) and the Council Directive on the Conservation of Natural Habitats and Wild Flora and Fauna, 1992 (92/43/EEC the Habitats Direct).*

<sup>vii</sup> *Convention on Wetlands of International Importance especially as waterfowl habitat, Ramsar, Iran, 1971.*

<sup>viii</sup> *Blyth Birds*, Steve Holliday, 2000.

<sup>ix</sup> *Blyth-Cambois Wader Study*, SKM Enviro, July 2011

<sup>x</sup> *Birds of Conservation Concern 3*, BTO/RSPB, 2009

<sup>xii</sup> *North Blyth Biomass Project, Environmental Statement Chapter 12, Ornithology.* Ecology Consulting, March 2012.

<sup>xiii</sup> *'Bates Coliery Survey Report'*, Northumberland Wildlife Trust, May 2007

<sup>xiv</sup> *'Northumberland County Council, East Sleekburn Final Report'* (Chapter 3), ARUP, May 2011.

<sup>xv</sup> Consistent records throughout previous ornithological studies 2007-present and in local Bird Club records and publications (see bibliography)

<sup>xvi</sup> *North Blyth Biomass Project. The Proposed North Blyth Biomass Power Station Order, Habitats Regulations Report.* Document Number 5.4, Ecology Consulting, February 2012.

<sup>xvii</sup> Consistent records throughout previous ornithological studies 2007-present and in local Bird Club records and publications (see bibliography)