

The Tees Estuary: Plans & Potential

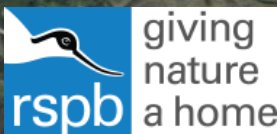
A visual summary of the estuary's assets prepared by the Tees Valley
Nature Partnership





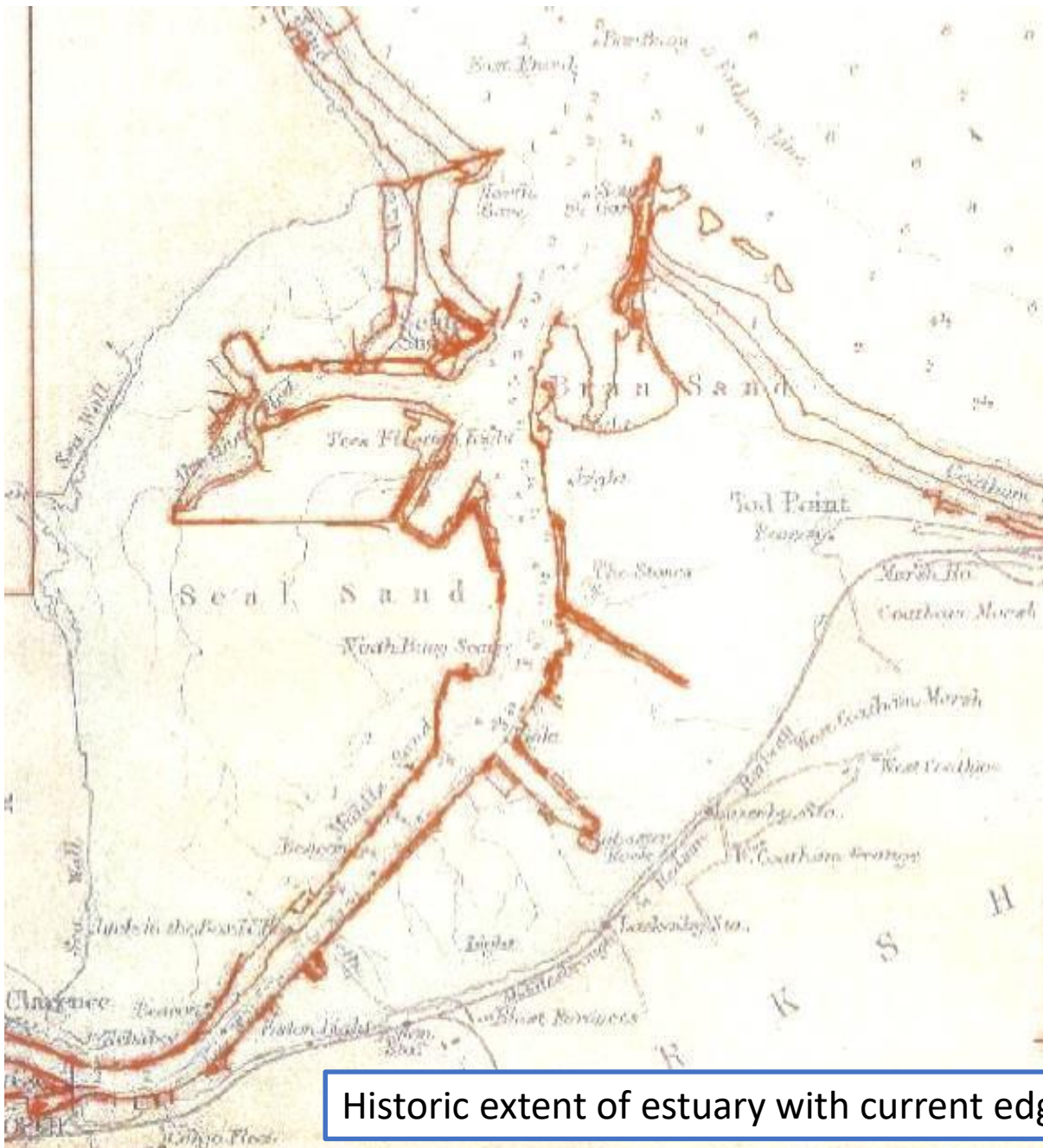
Stockton-on-Tees
BOROUGH COUNCIL

River Tees
Rediscovered





River Scene 1950s – Acute Pollution

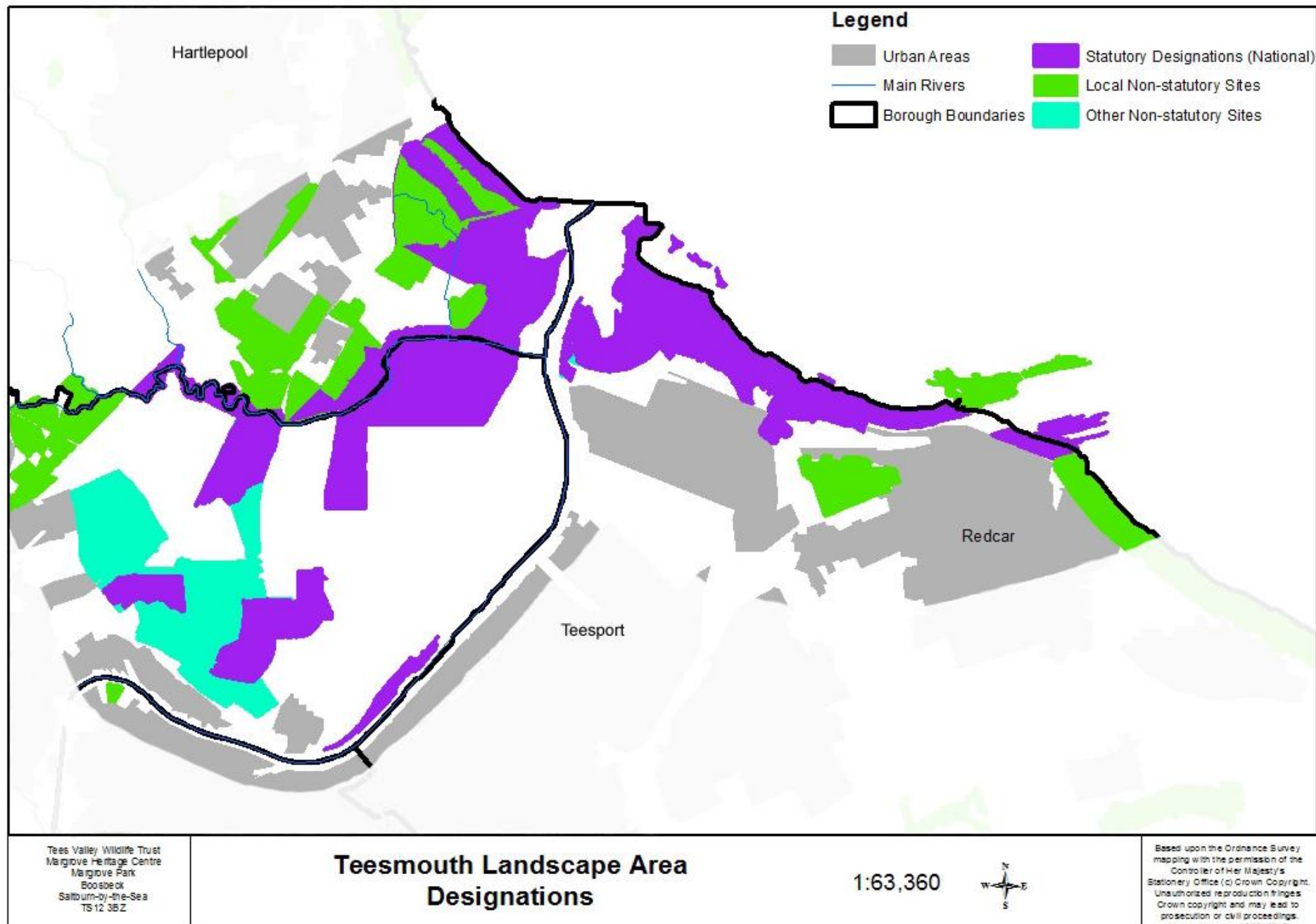




Today – Nature & Industry Successfully Co-exist

VIEW FROM REDCAR LOOKING UPRIVER





[TVNP 'Landscape Area' of Teesmouth](#)



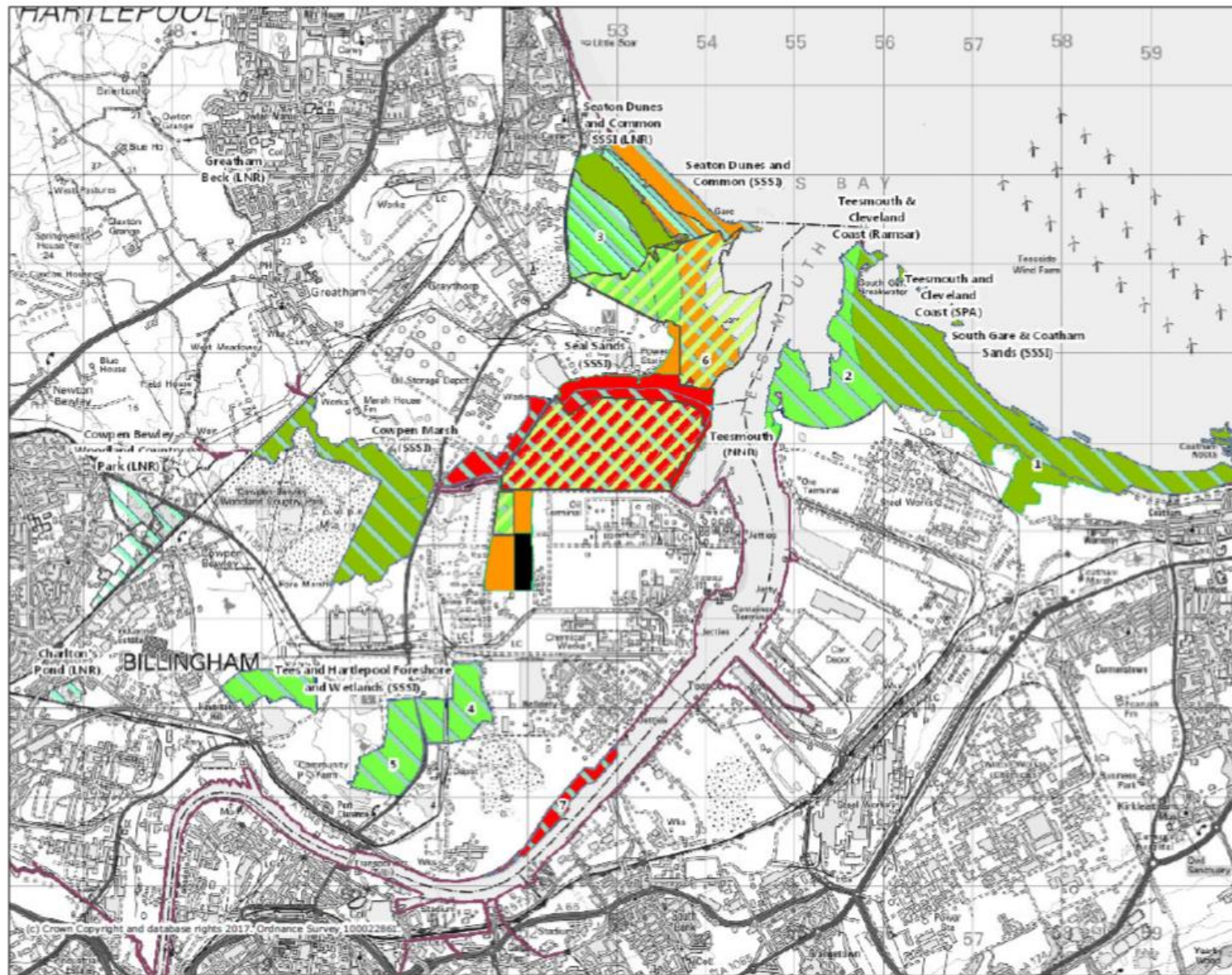
Teesmouth Landscape Area Designations

Statutory designated sites (national)	Site Name	Reason for Designation
Special Protection Area (SPA)	Teesmouth and Cleveland Coast	Non-breeding populations of red knot, common redshank and sandwich tern and a breeding population of little tern. Also designated for water bird assemblage.
National Nature Reserve (NNR)	Teesmouth	Covers two areas - North Gare, an area of dunes and grazing marsh north of Hartlepool Power Station, and Seal Sands, one of the largest areas of intertidal mudflats on England's north-east coast.
Ramsar site (Wetlands of international importance)	Teesmouth and Cleveland Coast	Populations of common redshank and red knot occurring at levels of international importance; assemblages of waterfowl of international importance with peak counts in winter.
Site of Special Scientific Interest (SSSI)	Tees and Hartlepool foreshore and wetlands	Comprises several coastal areas which are an integral part of the complex of wetlands, estuarine and maritime sites supporting the internationally important population of wildfowl and waders on the Tees Estuary.
	Cowpen Marsh	Forms a part of 'Teesmouth Flats and Marshes', a complex of sites of international importance for overwintering shore birds. It includes the largest saltmarsh between Lindisfarne National Nature Reserve to the north and the Humber Estuary to the south.
	Seal Sands	Forms a part of 'Teesmouth Flats and Marshes' a complex of sites of international importance for overwintering shore birds. It is the only extensive area of intertidal mudflats, with tidal channels on the East coast of England between the Lindisfarne National Nature Reserve to the north and the Humber Estuary to the south.
	Seaton Dunes and Common	Forms a part of 'Teesmouth Flats and Marshes'. It is an area of considerable importance for its flora, invertebrate fauna, and bird life. The range of habitats present include sandy, muddy and rocky foreshore, dunes, dune slacks and dune grassland, as well as relict saltmarsh, grazed freshwater marsh with dykes (known locally as fleets and stells) pools and seawalls.
	South Gare and Coatham sands	Forms a part of 'Teesmouth Flats and Marshes'. It is of considerable interest for its flora, invertebrate fauna and birdlife. The range of habitats present includes extensive tracts of intertidal mud and sand, sand dunes, saltmarsh and freshwater marsh which have all developed since the construction of the South Gare breakwater with tipped slag during the 1860s. Also exposed at low tide are areas of rocky foreshore along the breakwater, three slag banks and Coatham Rocks.
	Redcar Rocks	Of national importance in the Geological Conservation Review. It represents the finest exposures of rock in the Lower Lias in the Yorkshire Basin. At low tide the rocks and sands provide an important feeding ground for several species of wading birds.

Local non-statutory sites		
Local Wildlife Sites (LWS) (11 sites)		3 examples of species-rich grassland; 3 examples of urban grassland; 2 wet flushes; 3 saltmarshes; 3 sites for great crested newt; 1 site supporting 3 or more species of native amphibians; 3 sites for a native reptile; 3 sites for water vole; 1 site for overwintering bird populations; 1 site holding high numbers of a key bird species/assemblage on a Tees Valley basis; 1 site supporting a key butterfly species; 1 site supporting a UK BAP Priority Vascular Plant Species
Local Geological Sites (LGS) (1 site)	Coatham Rocks	Wave washed platform of Redcar mudstone with small exposure of overlying Staithes sandstone exposed at low tide
Local Nature Reserves (LNR) (2 sites)	Cowpen Bewley Woodland Country Park	Reclaimed from former brickworks, landfill and ex-agricultural land there are now large variety of habitats and wildlife including grassland, a lake, a series of ponds and a beck.
	Seaton Dunes and Common	Seaton Dunes is one of the largest and diverse dune systems in north east England and Seaton Common is a low-lying marsh habitat ideal for overwintering and migrant wildfowl.

Other non-statutory sites		
RSPB Reserves	Saltholme	Managed reserve and visitor centre
Important Bird Area (IBA)	Teesmouth and Cleveland Coast	Passage of common redshank; winter population of red knot; breeding population of little tern; winter population water birds





Legend

- Local Nature Reserves (England)
- National Nature Reserves (England)
- Ramsar Sites (England)
- Sites of Special Scientific Interest Units (England)
- Favourable Condition
- Unfavourable Recovering
- Unfavourable no change
- Unfavourable Declining
- Part Destroyed
- Destroyed
- Not Assessed
- Sites of Special Scientific Interest (England)
- Special Areas of Conservation (England)
- Special Protection Areas (England)

Projection = OSGB 36
xmin = 442100
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xmax = 464100
ymax = 530900

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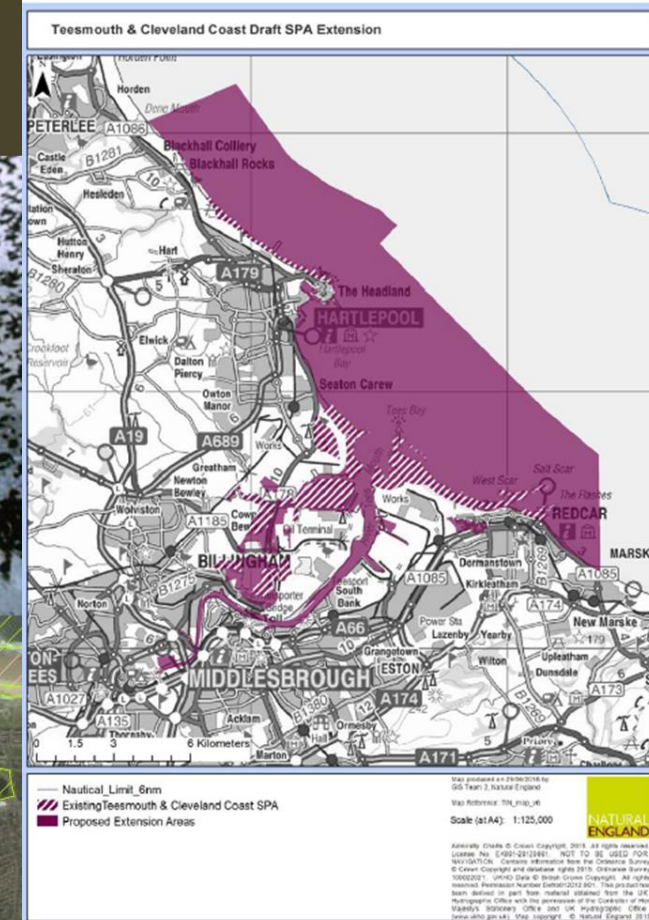
Teesmouth & Cleveland Coast SPA & Ramsar site: designated for its internationally important overwintering waterbird assemblage of 20,000 birds

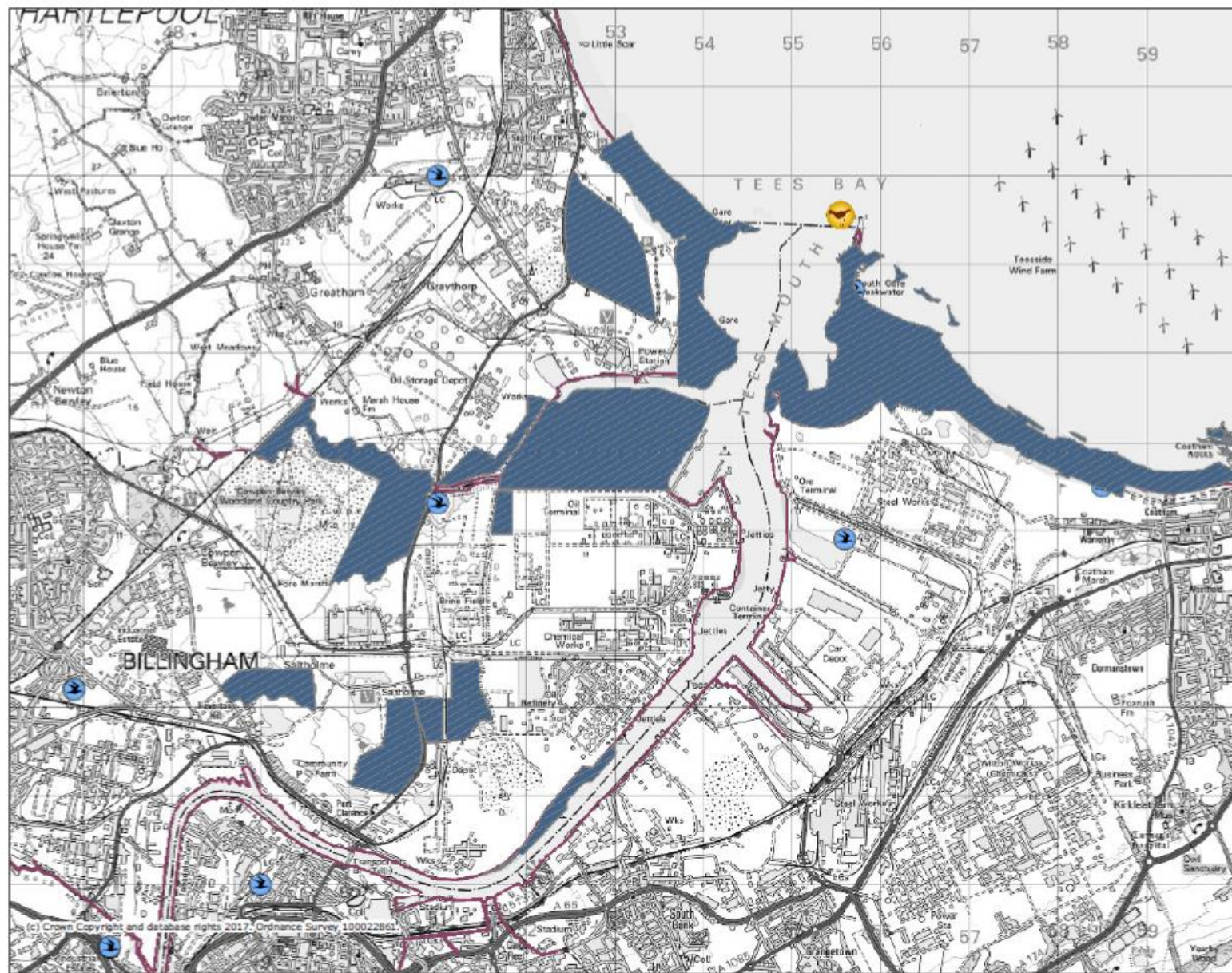
SPA - Designated Area in the Tees Estuary



Numbers of some species have increased, *e.g.* Wigeon, Common Tern, colonisation of Avocet.

Overwintering populations of some species have declined, *e.g.* Knot, Dunlin, Shelduck.





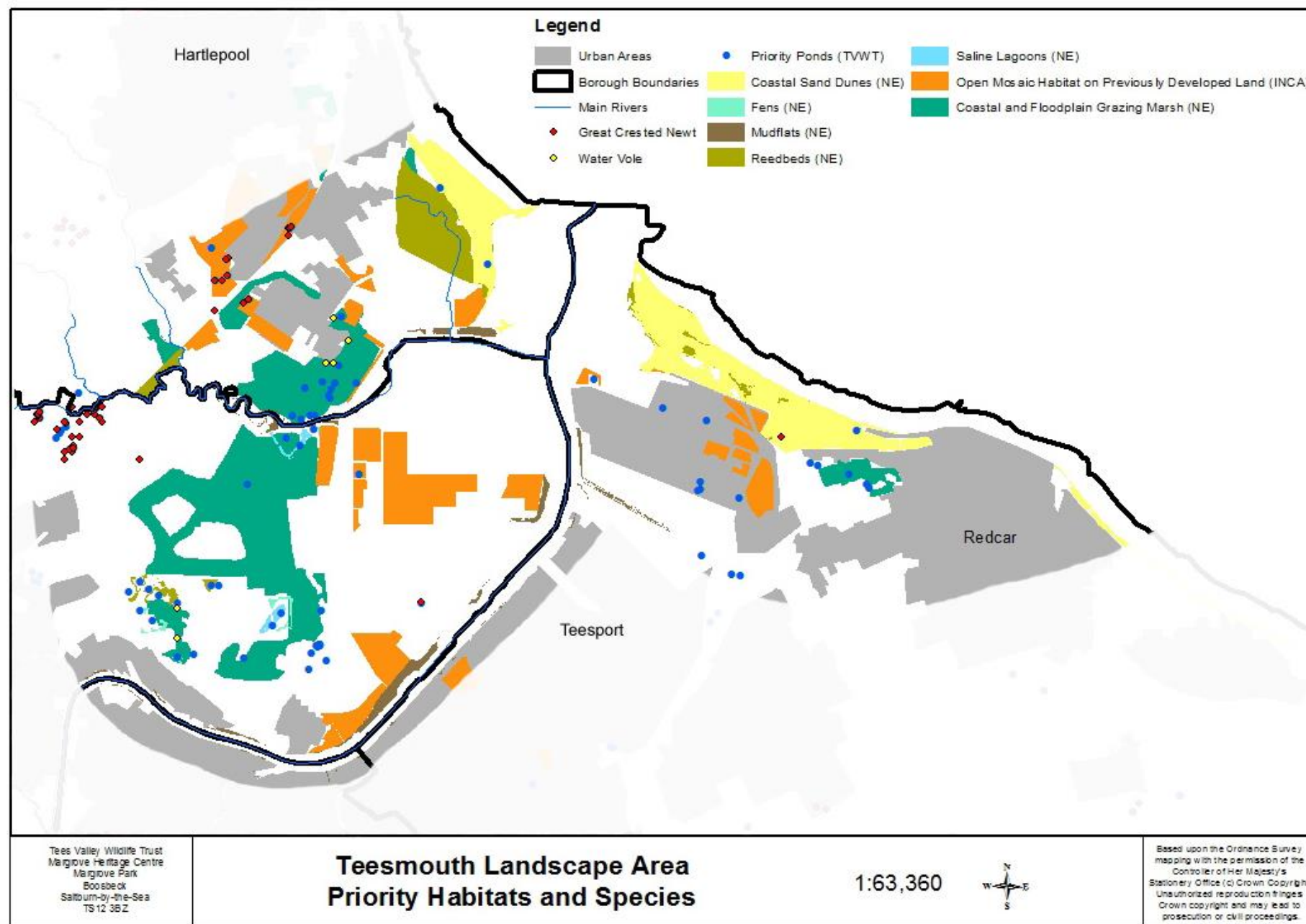
Legend

- Important Bird Areas (GB)
- Seabird Nesting Counts (British Isles)
- Waders and Wildfowl Autumn Mean Peaks (GB)
- Waders and Wildfowl Spring Mean Peaks (GB)
- Waders and Wildfowl Winter Mean Peaks (GB)

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UK BAP Priority Habitats

Mudflat

Teesmouth includes, at Seal Sands within the Teesmouth National Nature Reserve, one of the largest areas of intertidal mudflats on England's north-east coast. These mudflats are an important feeding ground for wading birds, including redshank and dunlin, and also important for harbour seal. Mudflats are also found along the tidal stretches of the River Tees and Greatham Creek.

Coastal and Floodplain Grazing Marsh

Coastal and floodplain grazing marsh covers large tracts of the land east of Billingham and includes extensive areas at Saltholme, Cowpen Marsh and Greenabella Marsh. There is an additional area at Seaton Common and one site south of the river, at Coatham Marsh. Some parts of these areas are included in SSSI, Ramsar and Special Protection Area designations.

Coastal Sand Dune

Coastal Sand Dune occurs on both sides of the River Tees estuary, at North Gare/Seaton Dunes and South Gare/Coatham Sands. The majority of the dunes are covered by a SSSI designation, and Ramsar and Special Protection Area designations also cover approximately half of the dunes.

Saline Lagoon

There are two saline lagoon sites within the Teesmouth Landscape Area, one at the point at which Greatham Creek meets Seal Sands and one within the RSPB Reserve at Saltholme, the latter being covered by SSSI, Ramsar and Special Protection Area designations. The aquatic invertebrates occurring in the shallows of these saline lagoons form an important part of the diet of the avocet, and other important water bird species which are associated with this habitat.

Saltmarsh

The largest area of saltmarsh between Lindisfarne National Nature Reserve to the north and the Humber Estuary to the south is found on Greatham Creek. Other small areas of relic saltmarsh are found within some industrial sites and along the tidal stretches of the River Tees.

Open Mosaic Habitat on Previously Developed Land (Brownfield)

There are 27 open mosaic habitat sites in the Teesmouth Landscape Area. These are distributed mainly within the Boroughs of Hartlepool, Stockton-on-Tees and Redcar & Cleveland, being centred upon areas which were formerly subject to land reclamation.

Many locations have limited public access due to being part of operational industrial sites. The majority of sites consist of open mosaic grassland, often with a small amount of scrub, but also sometimes containing small areas of other specialised habitats, including reedbed, dune grassland (Bran Sands area) and saltmarsh (Brinefields). Important species found within these sites include grey partridge, skylark, brown hare, purple milk-vetch and a number of nationally notable moth species.

Reedbed

Areas of reedbed are found at Seaton Common, Coatham Sands, Cowpen Marsh and within the RSPB Reserve at Saltholme. The majority of these reedbeds are covered by SSSI designations.

Fen

There is one cluster of fen in the Teesmouth Landscape Area, within the RSPB Reserve at Saltholme, some of which is covered by SSSI, Ramsar and Special Protection Area designations.

Priority Ponds

There are three clusters of priority ponds in the Teesmouth Landscape Area, one within the RSPB Reserve at Saltholme, one around Greatham Creek, and one in the Coatham Marsh area. The majority of the ponds meet the priority pond criteria due to the presence of common toad, with many of the ponds within Saltholme meeting the criteria for water vole. There are also a few designated for saline lagoon, a few for great crested newt, three for invertebrates, one for otter, and one for flat-sedge.

Sites of Geological Importance

There is one site, Redcar Rocks, which is the best exposure of rocks belonging to the oldest part of the Jurassic succession in the north-east of England, displaying part of the succession that is missing further along the coast in North Yorkshire. The site is covered by a SSSI designation.



UK BAP Priority species

Harbour or Common Seal

There is a breeding population of 70–80 harbour seal in the Tees estuary, which is the largest known population along the coastline from the River Tees north to the River Tweed. The seal population is focused upon Seal Sands but animals also haul out on Greatham Creek at high tide and are seen on the tidal stretches of Billingham Beck and as far up the River Tees as the Barrage.

Otters

Otters are regularly recorded around the North Tees Marshes from Saltholme to Greatham Creek and have been reported in Seaton Channel and at the mouth of the River Tees. They are also found on the lower reaches of Billingham Beck and Claxton Beck.

Brown Hare

Brown hare is found in good numbers around the industrial sites and grazing marsh areas of Teesmouth.

Purple Milk-vetch

An extensive population of purple milk-vetch occurs on the sand dunes of South Gare with smaller populations on the dune slacks at North Gare. There are also scattered plants at Coatham and the sea wall on Greenabella.

Non-breeding Birds (overwintering and passage)

Teesmouth Landscape Area encompasses the 'Teesmouth Flats and Marshes' (a complex of sites listed in 'A Nature Conservation Review' edited by D A Ratcliffe (1977)) which are protected through European and International designations because of their importance for non-breeding populations of red knot, common redshank and sandwich tern, and their assemblages of waterfowl of international importance with peak counts in winter. Other important overwintering birds are mistle thrush and woodcock.

Breeding Birds

A large percentage of many breeding populations of bird species of key importance in the Tees Valley are present within the Teesmouth Landscape Area. Eight species are listed as of red level of concern in the UK (for example lapwing, grasshopper warbler, reed bunting and skylark) and 18 species listed as of amber concern in the UK (for example little tern, snipe, little grebe and whitethroat). Nine out of this total of 26 species are also UKBAP priority species.

The Teesmouth area is one of the top five sites in the UK for breeding common tern.

Water Vole

Water voles are present at the RSPB Reserve at Saltholme and have also been recorded at Greenabella Marsh.

Great Crested Newt

There is a cluster of great crested newt records at Cowpen Bewley Woodland Park and they are also recorded as present within several open mosaic habitat sites north of Greatham Creek.

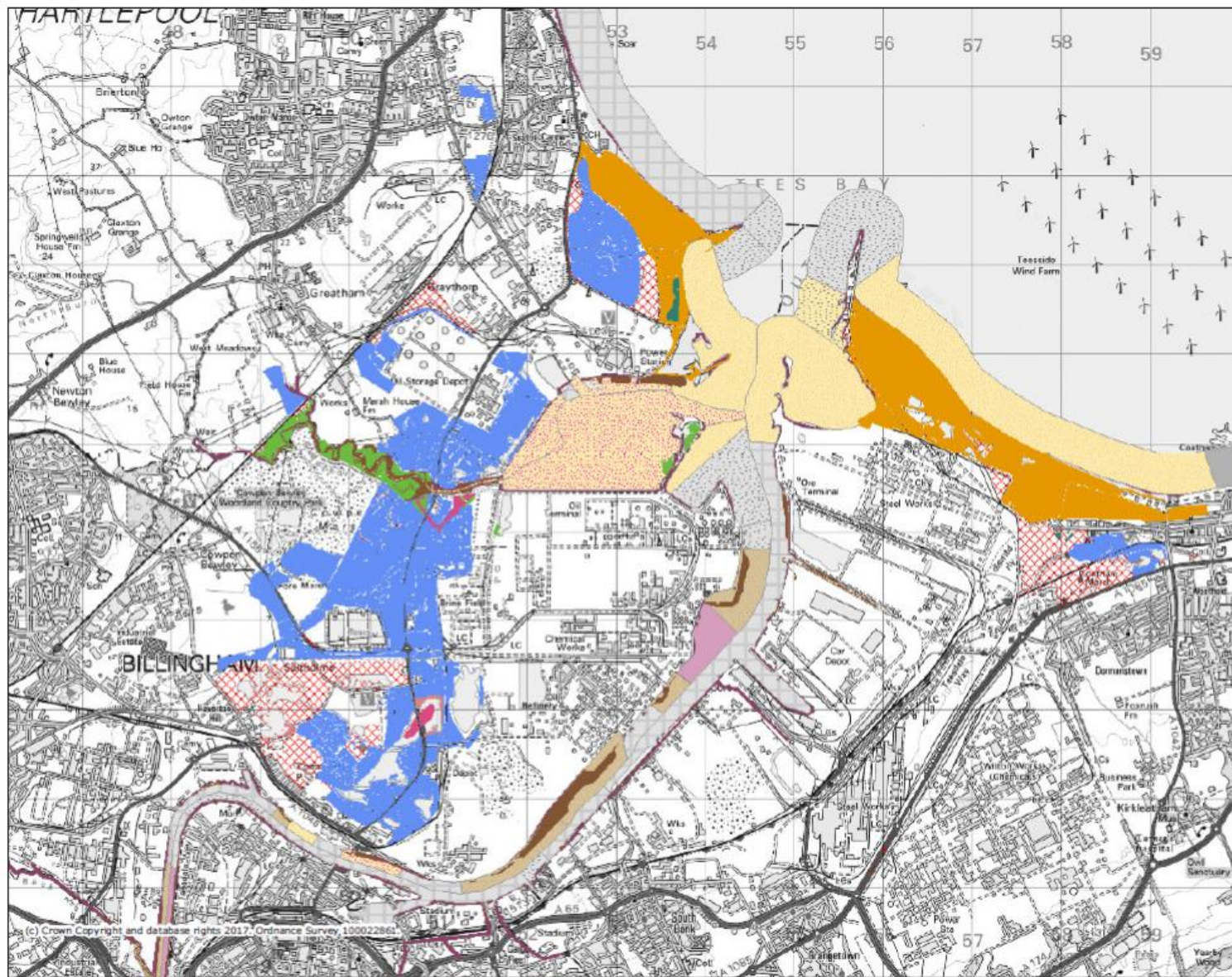
Common Lizard

Populations of common lizard are found south of the river on the South Gare dunes. North of the river the coastal population appears to extend into some of the industrial sites but there are doubts as to whether this is a naturally occurring population or an introduction.

Invertebrates

Open mosaic habitat with a high botanical species diversity is important for many specialised invertebrate species including the dingy skipper and grayling butterflies which have some of their most significant regional populations on the Teesmouth industrial sites. The presence of sizeable populations of these two species on a single site indicates that there are likely to be important invertebrate communities present. Dingy skipper has small populations scattered across locations on both sides of the estuary, while grayling has its largest populations on industrial sites in the Redcar and North Tees areas. There are also assemblages of nationally notable moth species occurring on the saltmarsh in the Greatham Creek area; in the reedbeds of the North Tees area and on the dune grasslands at Bran Sands. A number of these species are also listed as species of conservation priority in the Tees Valley.





Legend

- Priority Habitat Inventory - Coastal Saltmarsh (England)
- Priority Habitat Inventory - Coastal Sand Dunes (England)
- Priority Habitat Inventory - Mudflats (England)
- Priority Habitat Inventory - Saline Lagoons (England)
- Priority Habitat Inventory - Coastal and Floodplain Grazing Marsh (England)

Intertidal Substrate Foreshore (England and Scotland)

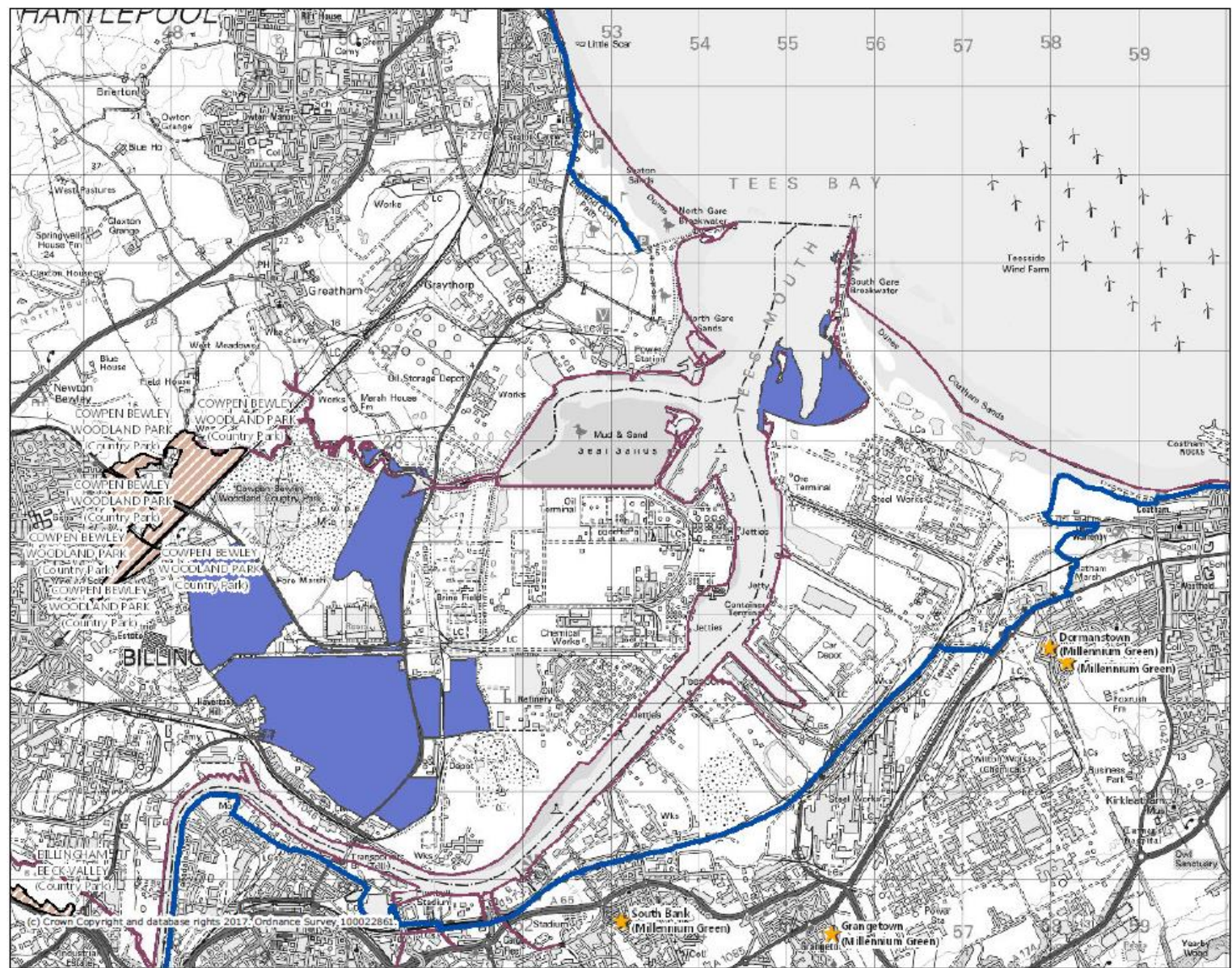
- Boulders/Loose Rock
- Gravel
- Made Ground (Man Made)
- Mud
- Mud and Gravel
- Not Present
- Rock Platform
- Rock Platform with Bank of Gravel
- Rock Platform with Boulders/Loose Rock
- Sand
- Sand and Gravel
- Sand and Mud
- Unspecified
- Priority Habitat Inventory - Lowland Fens (England)
- Priority Habitat Inventory - Reedbeds (England)
- Priority Habitat Inventory - No main habitat but additional habitat exists (England)

Projection = OSG836
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Important Intertidal Areas on the Industrial Tees



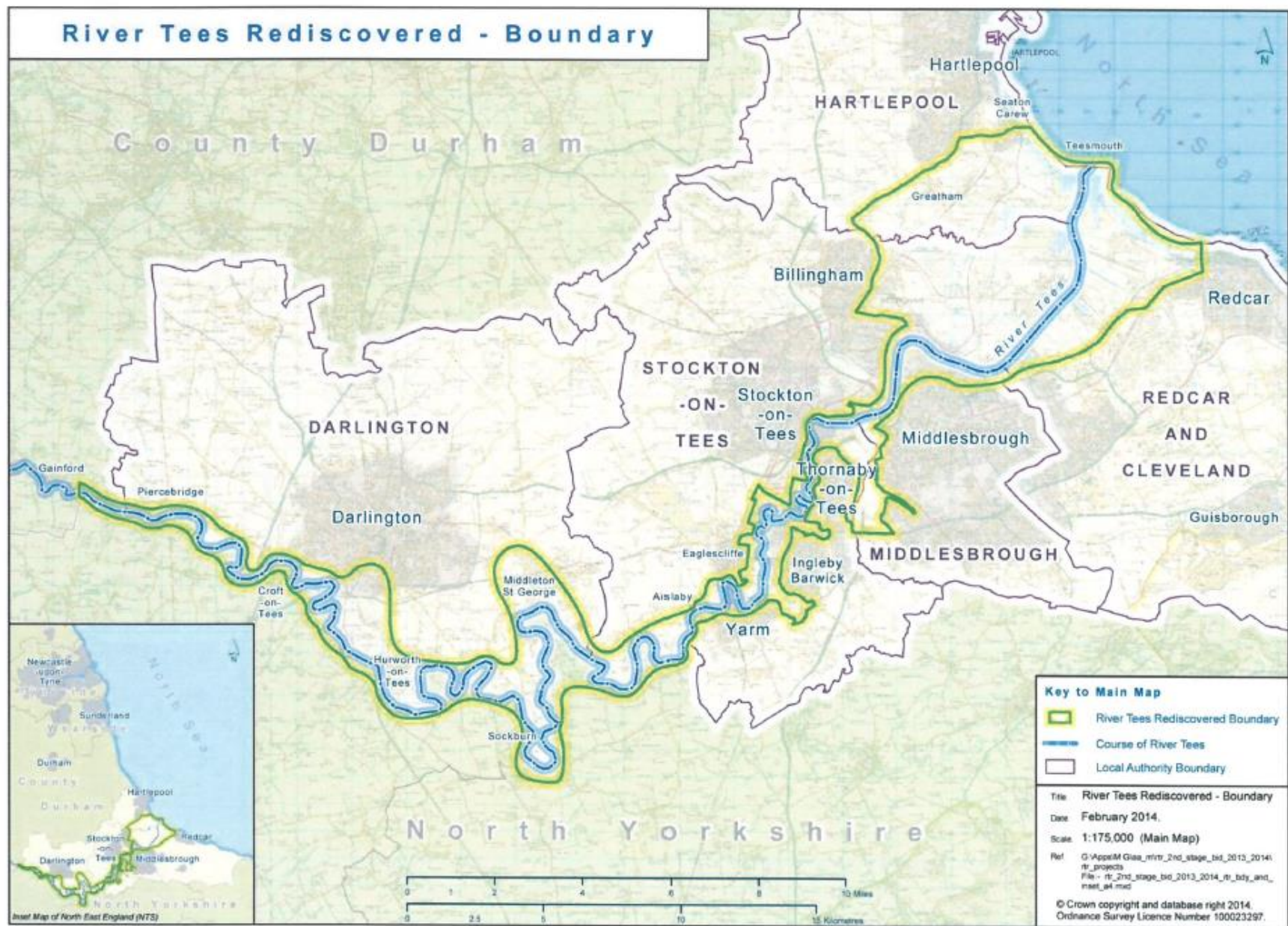
Legend

- England Coast Path Route
- ★ Millennium Greens (England) - points
- ▨ Country Parks (England)
- RSPB Reserves (GB)

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Map of Seascape Partnership Area



South Tees Development Corporation Area

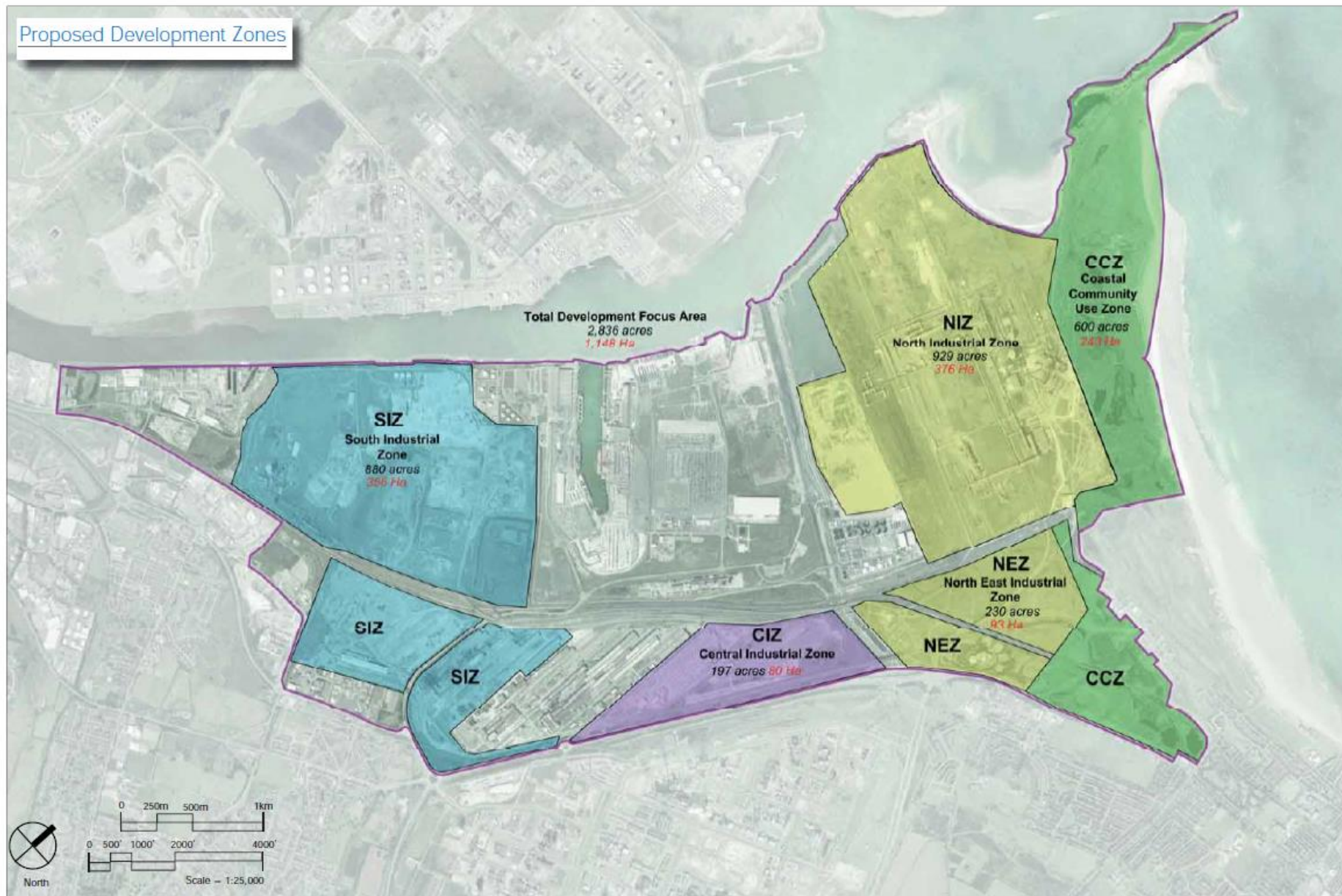


VIEW ACROSS THE REDCAR WORKS COMPLEX TO THE ESTUARY





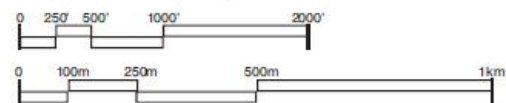
Proposed Development Zones



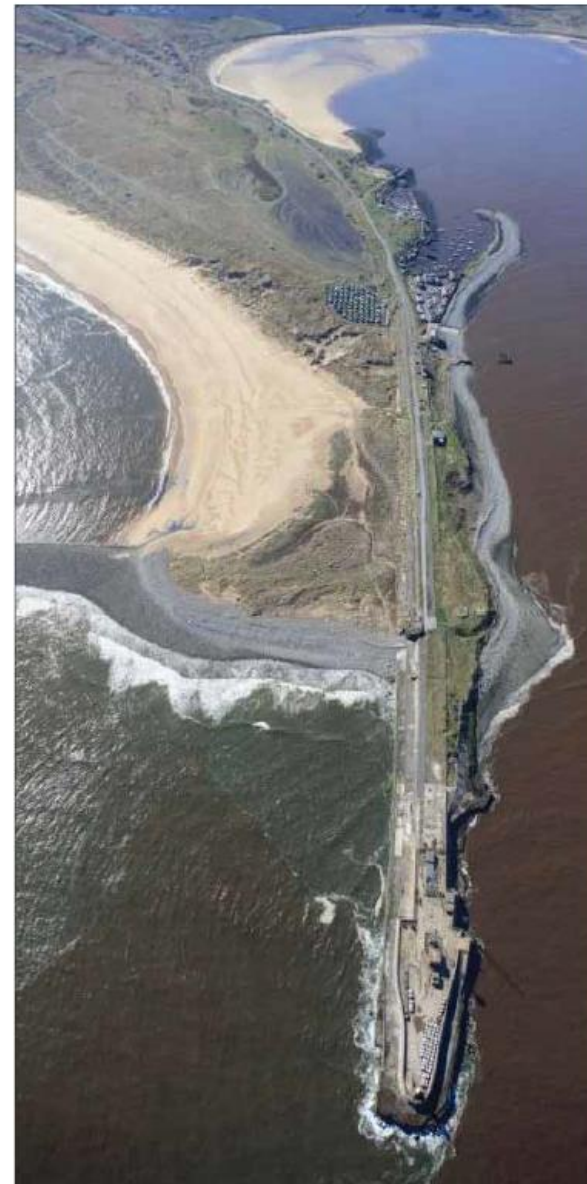
9.01 Coastal Community Zone Overview

The area designated as the Coastal Community Zone (CCZ) encompasses the important environmental assets of South Gare/Coatham Sands and Coatham Marsh, which collectively provide a land area opportunity in the region 530 acres (215 hectares). South Gare also provides access to PD Ports land at the end of the Gare, which must be preserved. The zone benefits from 2 miles of spectacular sea frontage and vantage points offering stunning vistas of both natural and man-made landscapes, including Redcar, Huntcliff (Saltburn), and across the estuary to Seal Sands.

The plan is that the CCZ preserves for continued use and enhancement the protected existing environmental habitats, given the current environmental designations that are in place. The regeneration programme will see the CCZ further improved by the introduction of discrete leisure-oriented projects that offer the potential for improved community use and visitor experience, so that the assets are of greater value to Redcar and provide a revenue stream to help support future management and operation of the CCZ. Measures will be put in place to ensure that future use of the CCZ by the public is realised in a controlled, regulated manner, to ensure long term protection of environmental habitats.



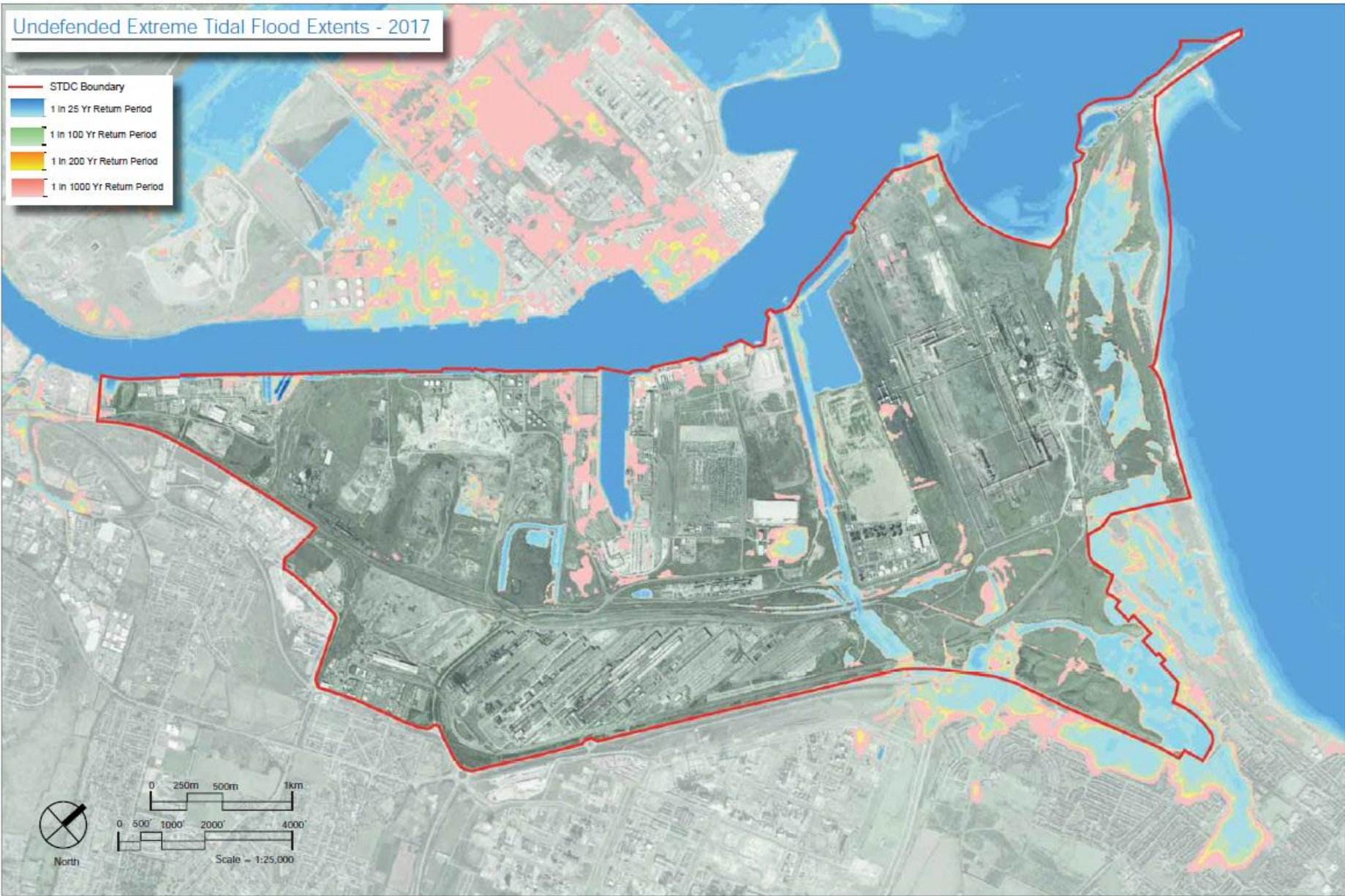
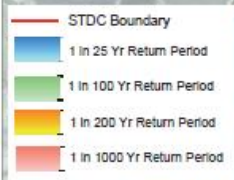
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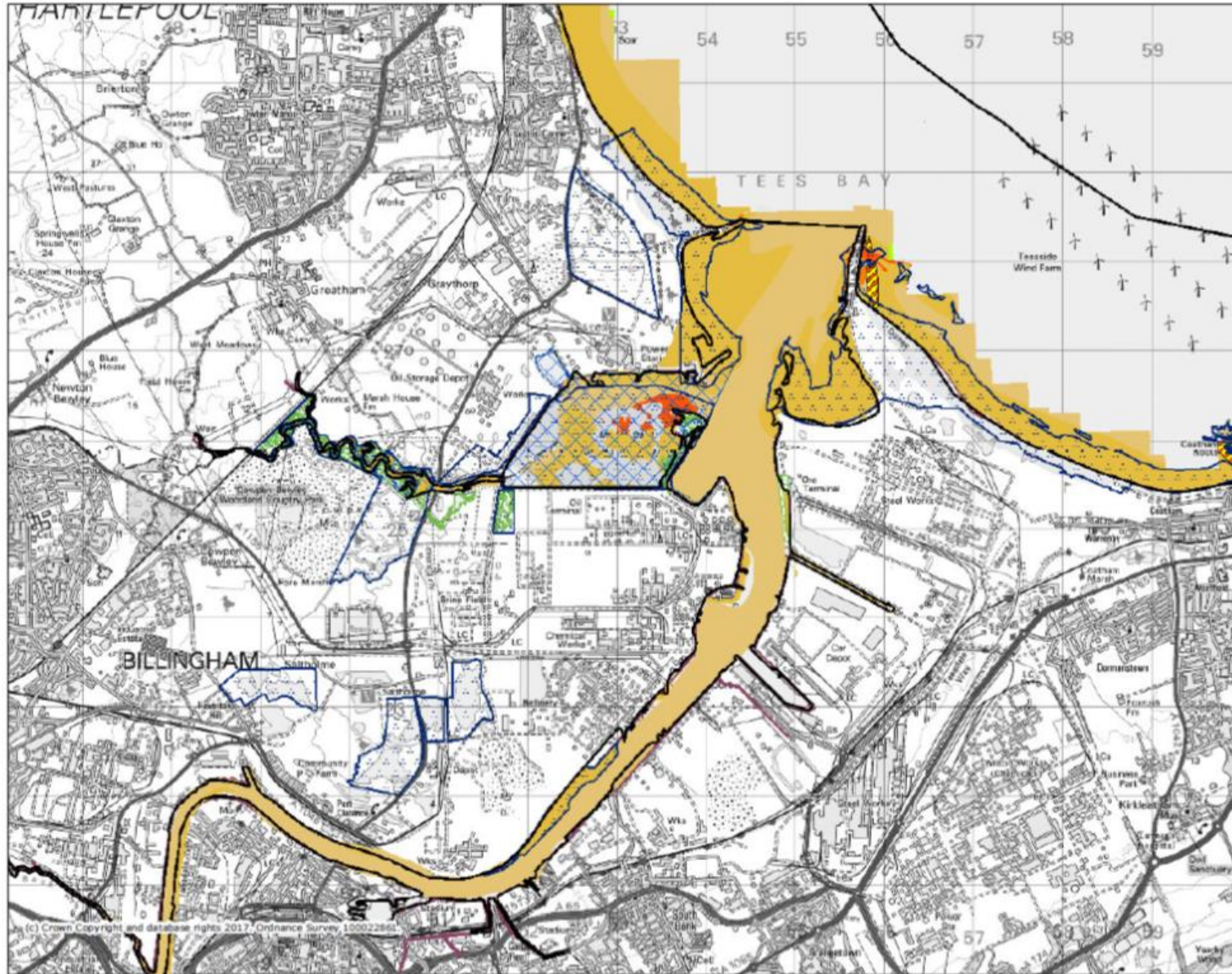


South Gare and Coatham Sands Community Zone Illustrative Plan



Undefended Extreme Tidal Flood Extents - 2017





Legend

- WFD Estuarine and Coastal Water Bodies Cycle 2 (England)
- Special Areas of Conservation (England)
- Special Protection Areas (England)
- Coastal Sensitive Areas - Eutrophic (England)
- Saltmarsh (A2.5) (England)
- Mussel Beds (*Modiolus modiolus*, *Mytilus edulis* & others) (A1.22, A2.72, A5.62, A4.24, A3.361) (England)
- Subtidal Kelp Beds (A3.11, A3.21, A3.22, A3.31, A3.32, A5.52) (England)
- Gravel & Cobbles (intertidal & subtidal coarse sediment A2.1, A5.1) (England)
- Intertidal Soft Sediment (Sand, Mud & Mixed A2.2, A2.3, A2.4) (England)
- Subtidal Soft Sediment (Sand, Mud & Mixed A5.2, A5.3, A5.4) (England)
- Rockyshore (Intertidal rock A1) (England)
- Subtidal Rocky Reef (Infralittoral and Circalittoral rock A3, A4) (England)

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