Seascape Character Assessment for North Devon and Exmoor

User Guide November 2015



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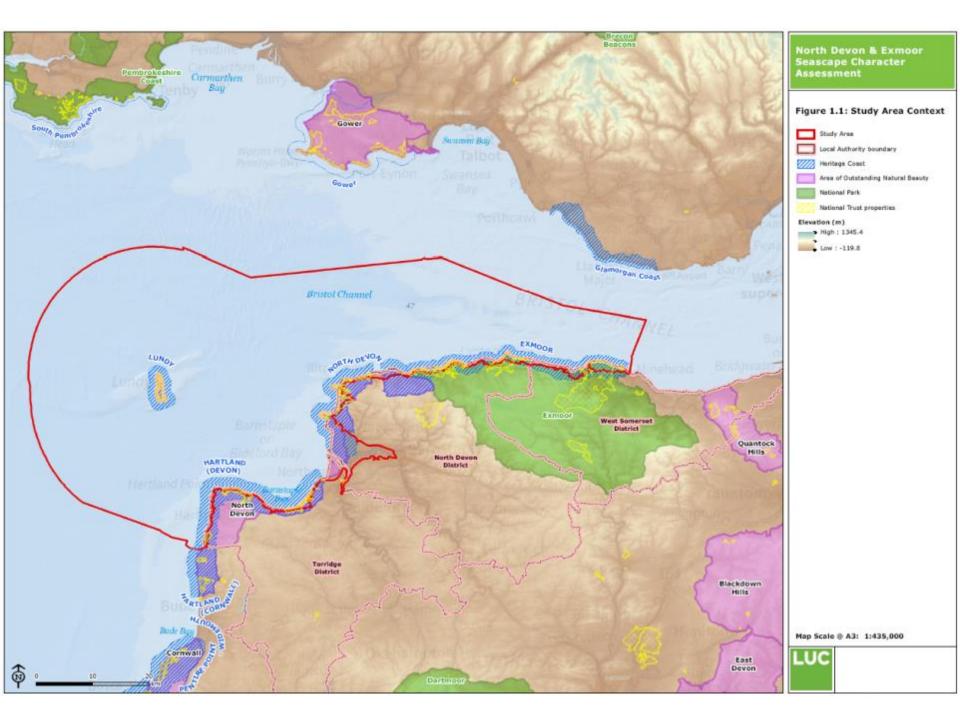
Content of this presentation

- Background to this study and key definitions
- Overview of Seascape Character
- The Seascape Character classification
- How to use the Seascape Character Area profiles
- Understanding the visual resource provided by the North Devon and Exmoor seascapes

Background to the study



- LUC commissioned by a partnership comprising the National Trust, North Devon AONB, North Devon Council, Torridge District Council, Exmoor NPA and Natural England (June-Nov 2015)
- Study area stretches from Marsland Mouth on the Cornish border to the Exmoor NP boundary at Minehead (approx 90 miles). Includes the Taw/Torridge Estuary
- Also extends offshore to the national marine planning limits (12 nautical miles), including Lundy Island



Aim and objectives of the North Devon & Exmoor Seascape Character Assessment



Overall aim to provide a spatial framework, description and analysis of Seascape Character Areas and Seascape Character Types to:

- Assist in spatial planning development at sea and along the coast (including renewables)
- Feed into the SW marine planning process which will take place within the next 5 years
- Help define the 'special qualities' of the coast and seascape
- Provide evidence for future AONB, National Park and National Trust management plans
- Support and link to published Landscape Character Assessments



The UK Marine Policy Statement (2011) recommends that:

"...references to seascape should be taken as meaning landscapes with views of the coast or seas, and coasts and the adjacent marine environment with cultural, historical and archaeological links with each other"

Natural England has taken the above definition in the context of seascape 'character' (in line with the European Landscape Convention definition for 'landscape'):

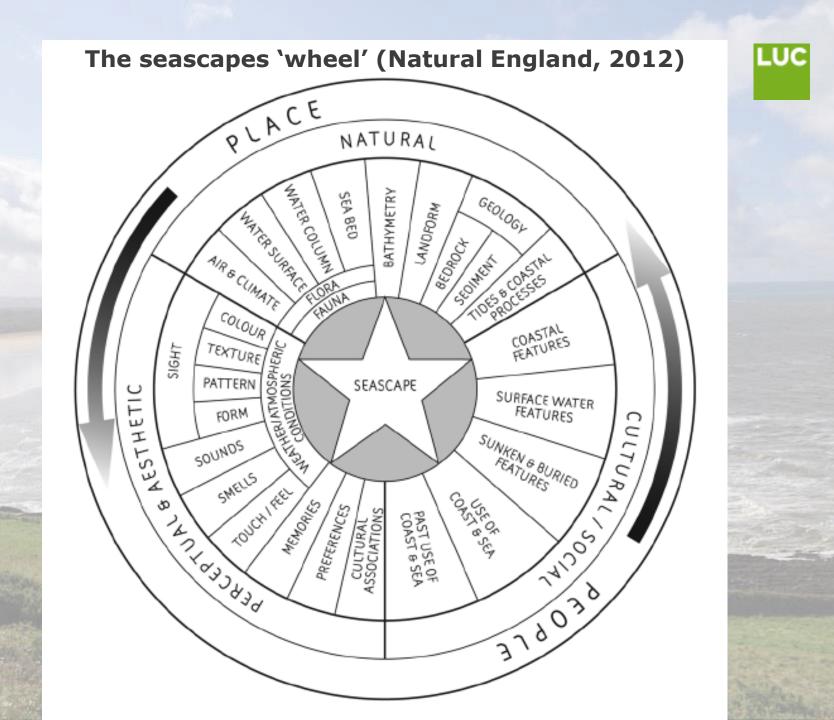
"An area of sea, coastline and land, <u>as perceived by people</u>, whose character results from the actions and interactions of land with sea, by natural and/or human factors".

What is 'Seascape'?



Aspects that can influence character include:

- Geological bedrock and shifting sediments
- Changing weather patterns, tides and coastal processes
- Ecology flora and fauna (e.g. sea bird colonies)
- Activities past (e.g. wars, overseas trade) and present (e.g. fishing, transportation, recreation)
- Views to and from the sea and coast
- Experiences and associations (e.g. notorious wrecking sites)



Consistent with best practice

Natural England Commissioned Report NECR105

An Approach to Seascape Character Assessment

Marine Management Organisation

Seascape assessment for the South Marine Plan Areas: technical report



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Pembrokeshire Coast National Park Authority

Seascape Character Assessment



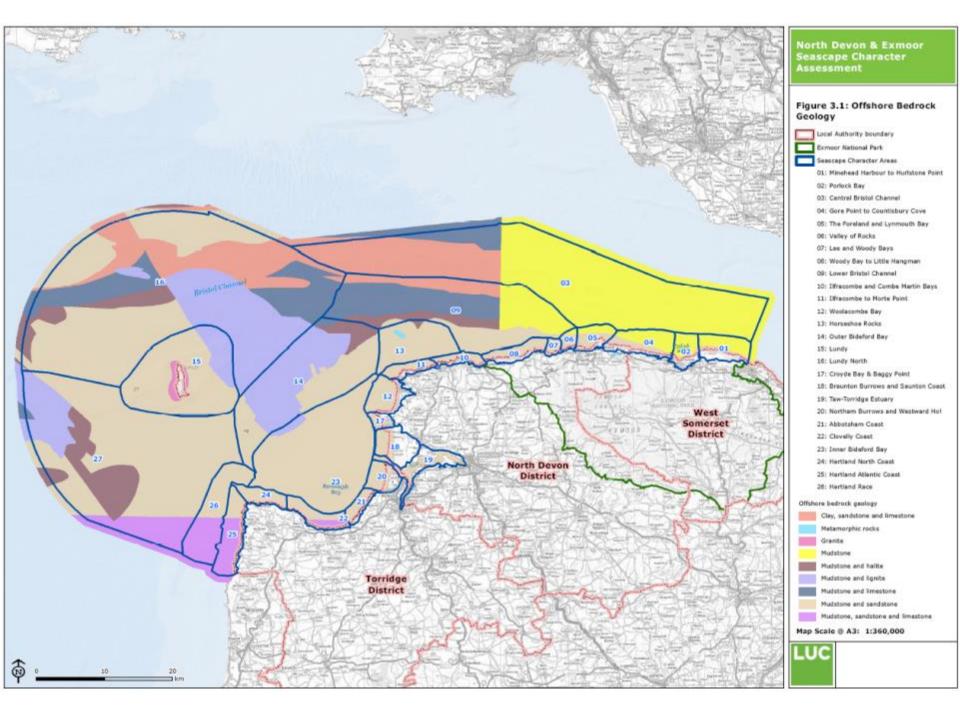
First published 11 October 2012

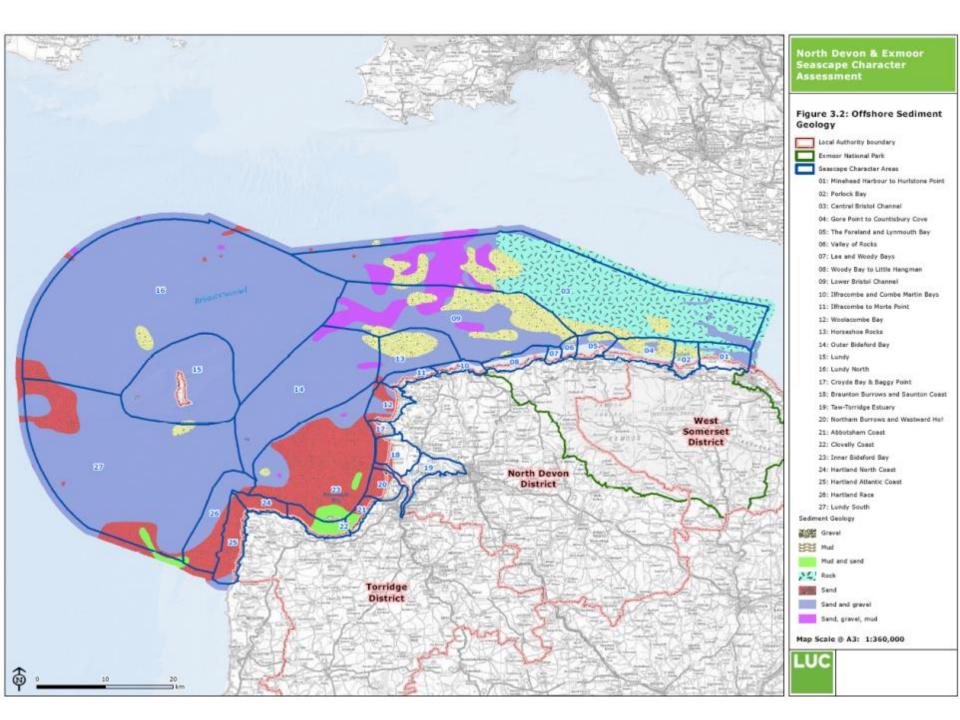
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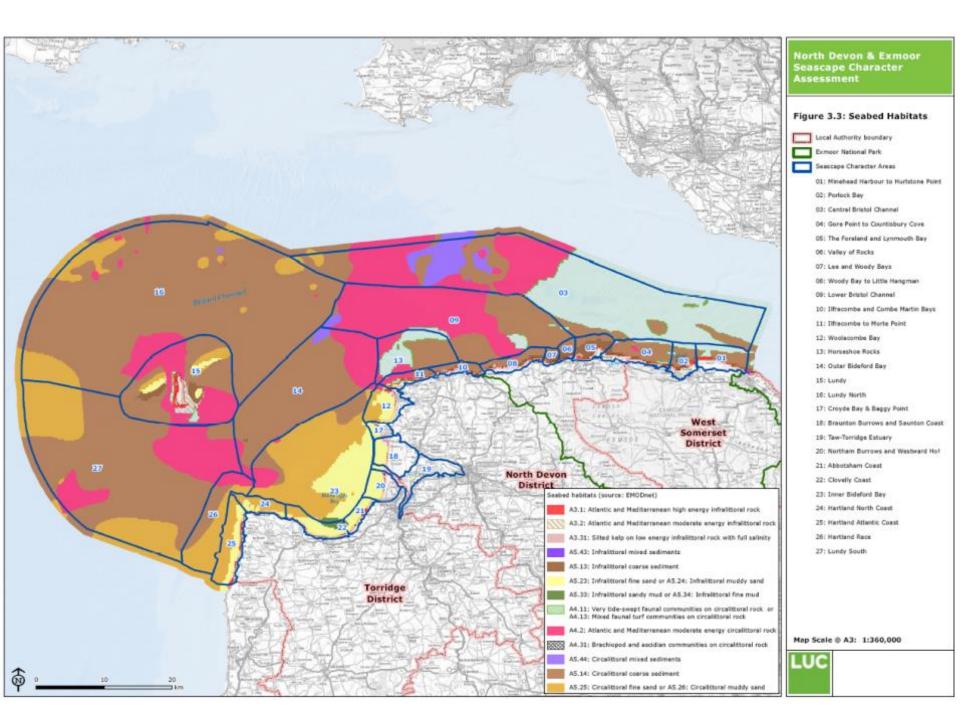
Overview of seascape character

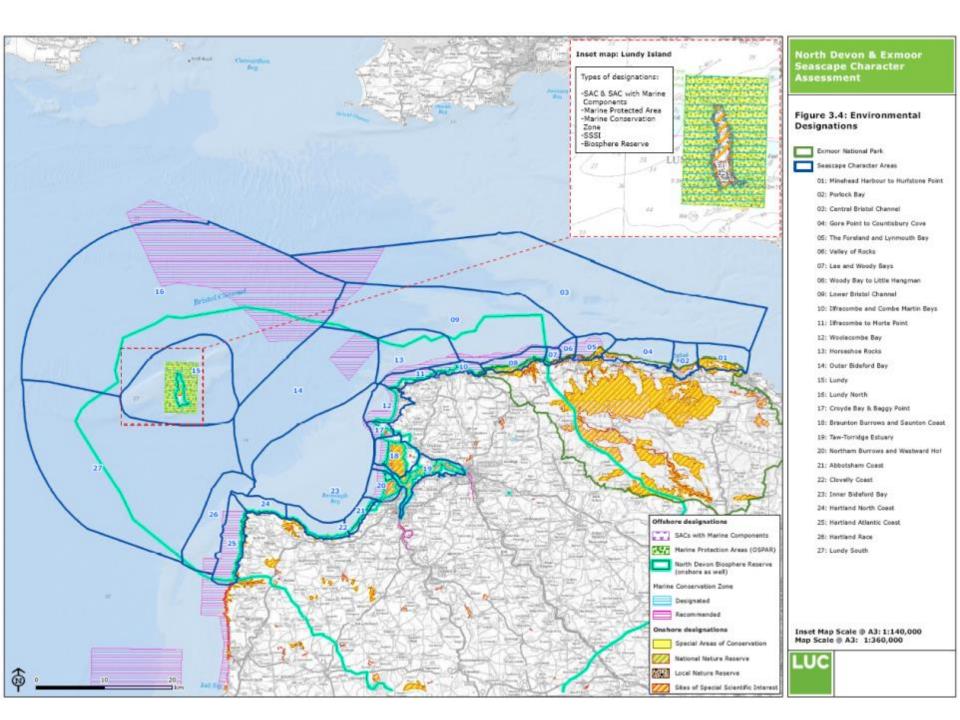
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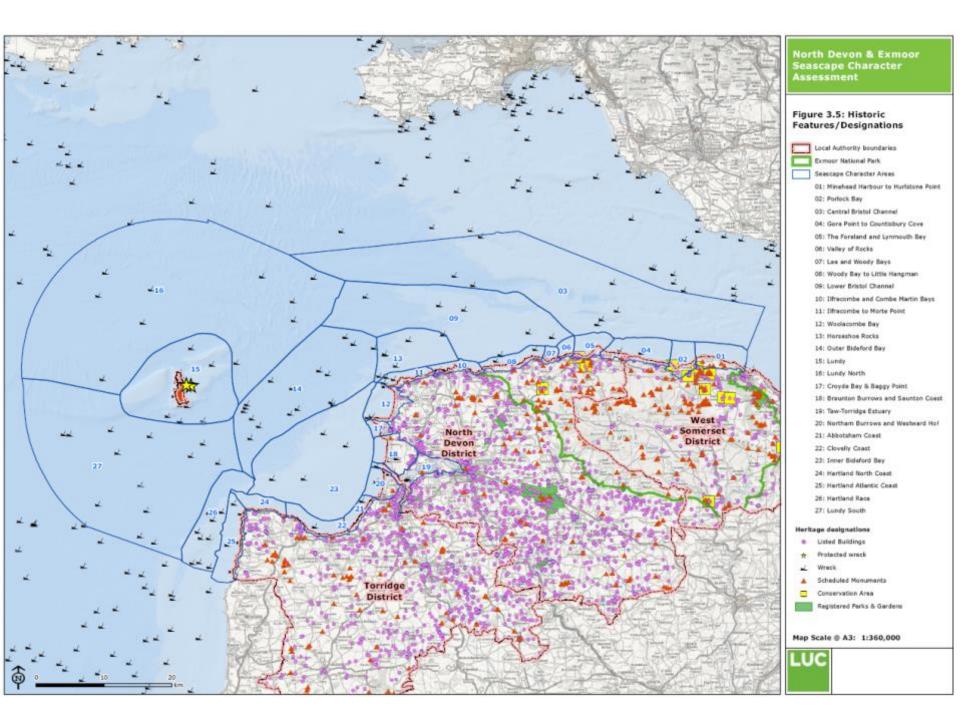
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The Seascape Character Classification

- Seascape Character Areas
- Seascape Character Types
- Link with Landscape Character Assessments

Definition of Seascape Character Areas (SCAs) and Seascape Character Types (SCTs)



Seascape Character Areas (SCAs)

Single areas of seascape, each with its own unique character and identity.

27 SCAs have been identified for this study

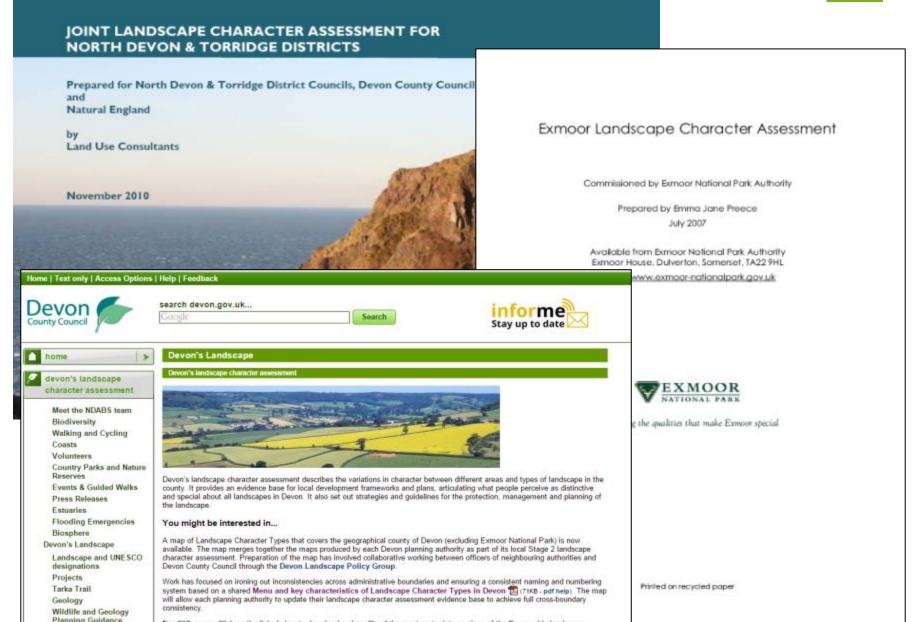
Seascape Character Types (SCTs)

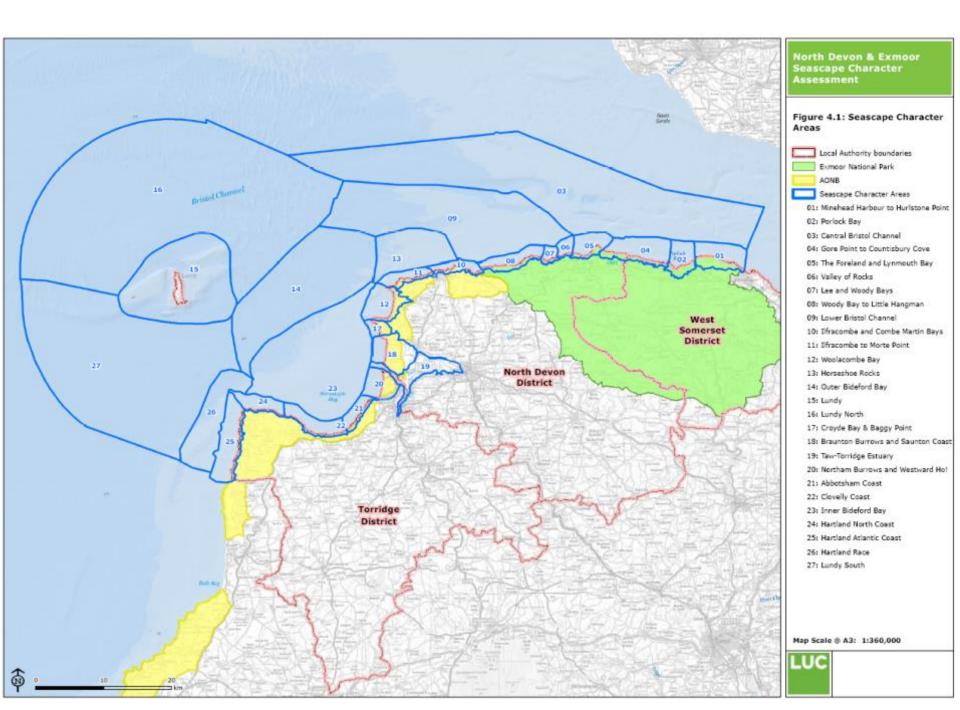
Distinct types of seascape that are relatively homogenous in character. They may occur in more than one Seascape Character Area.

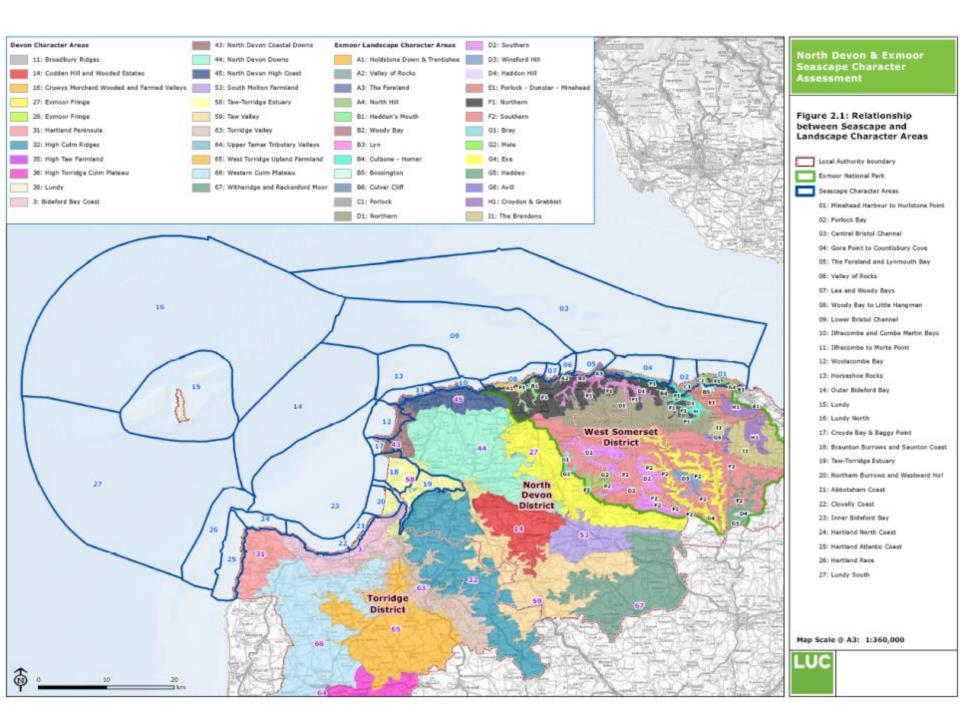
27 SCTs have been identified for this study

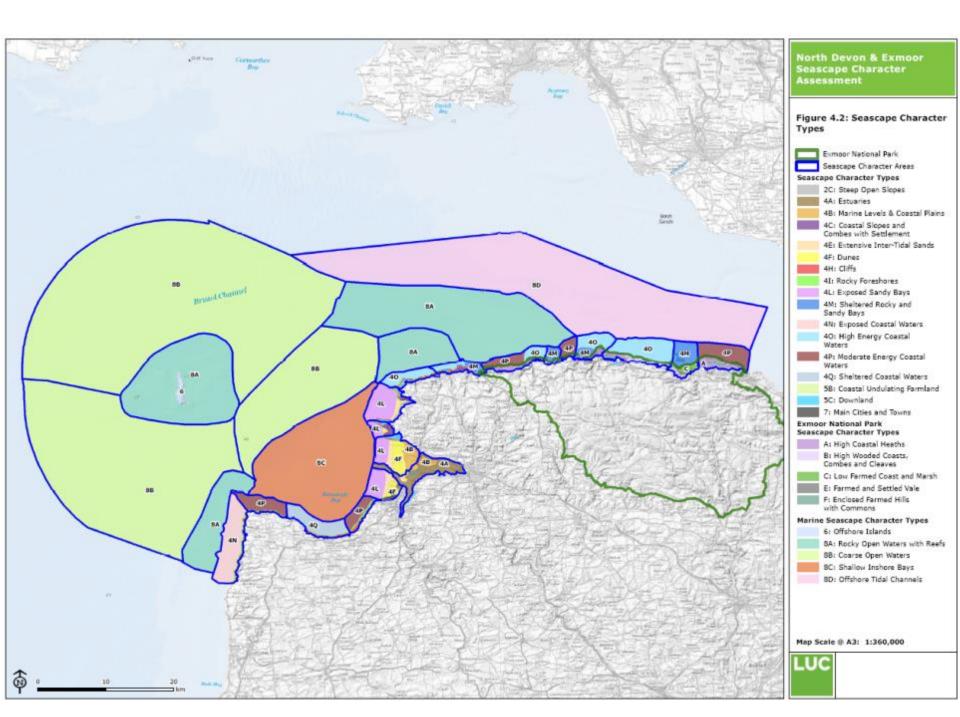
Compatible with existing Landscape Character Assessments

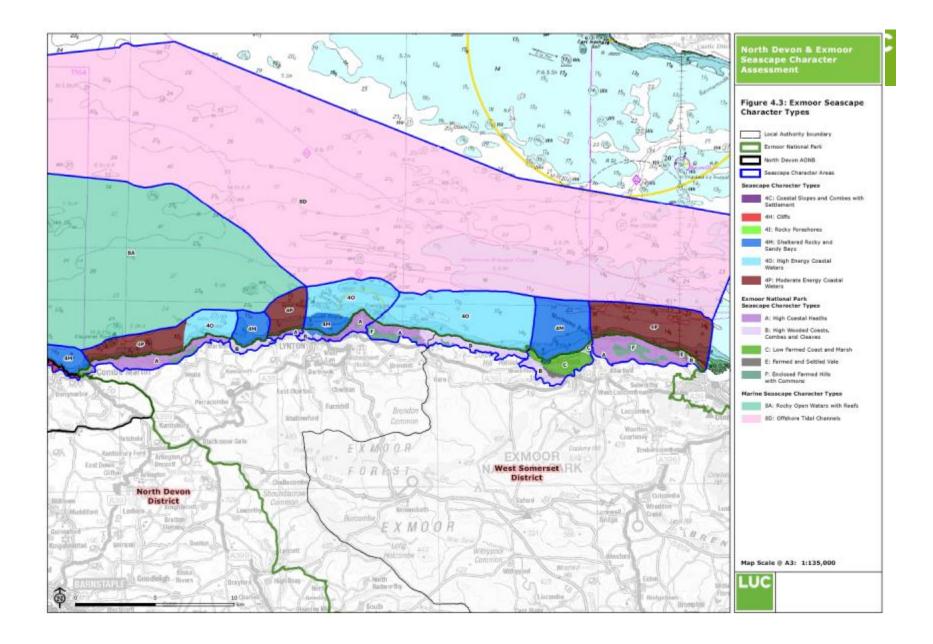


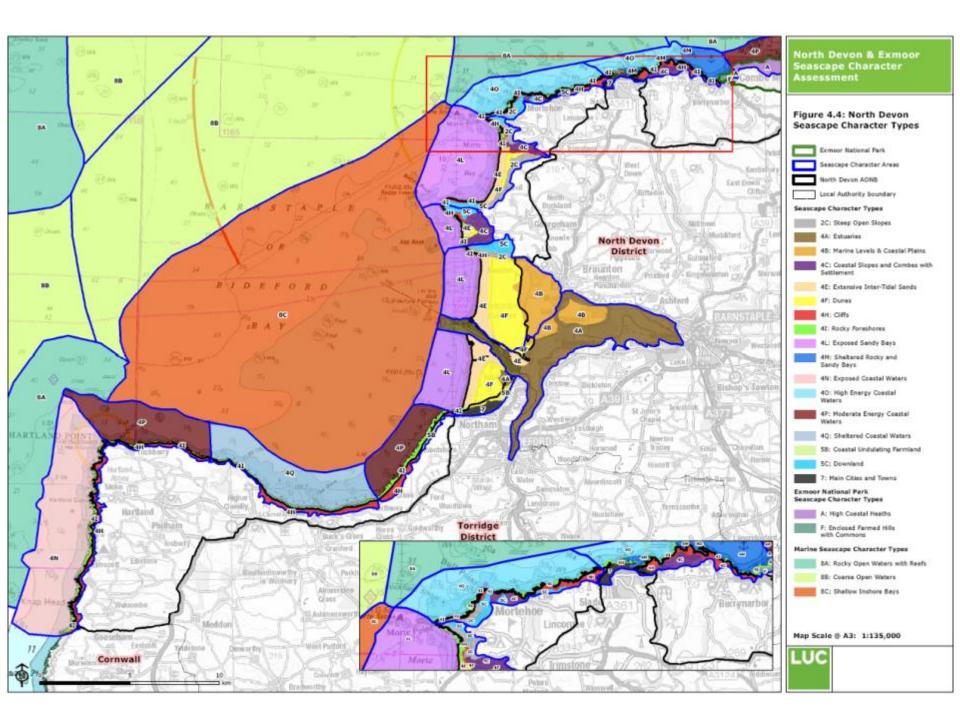


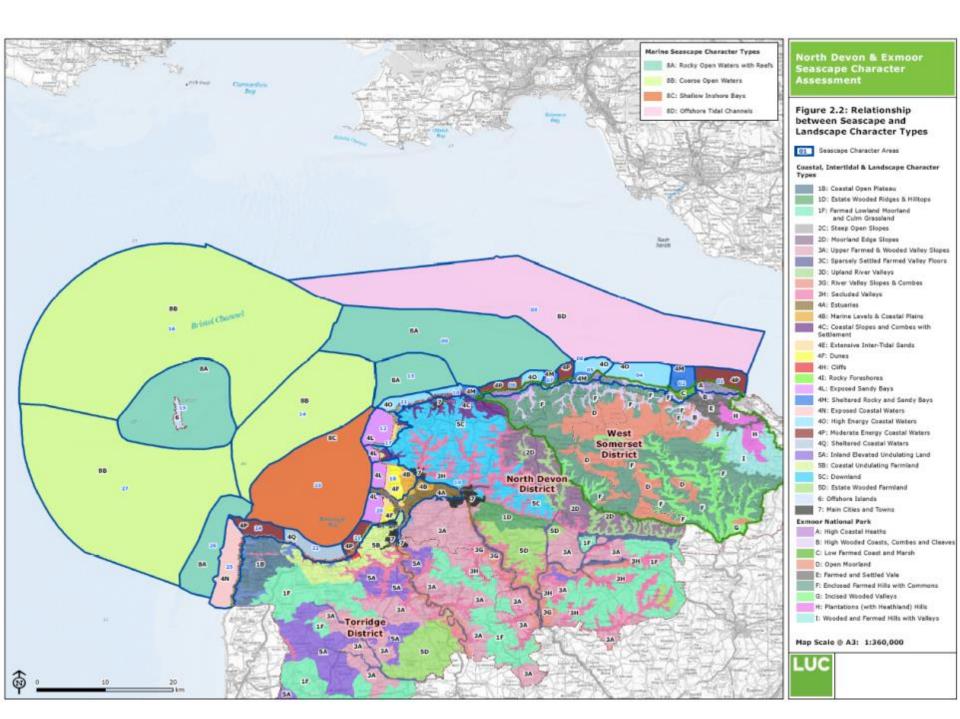














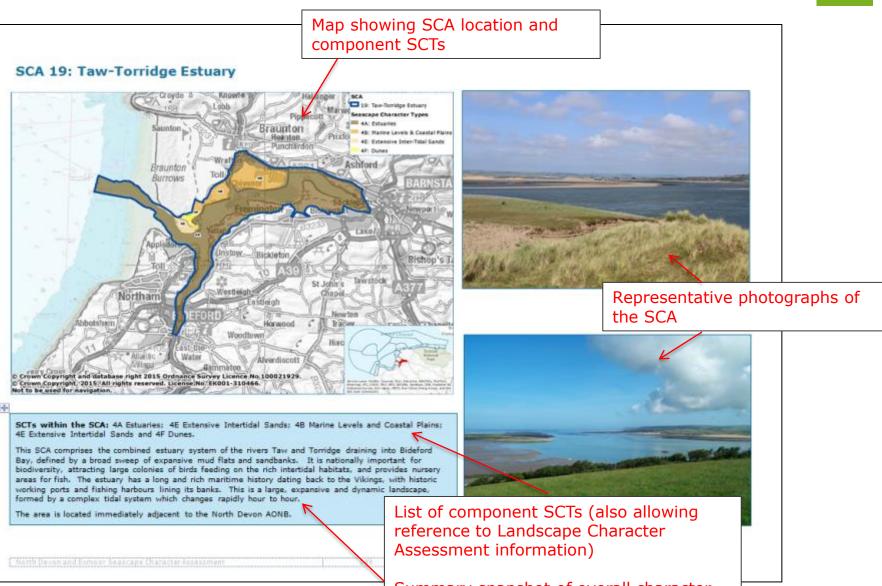
COMPLETE LIST OF CHARACTER TYPES FOUND IN THE STUDY AREA **COASTAL/INTERTIDAL CHARACTER TYPES** (FOUND IN BOTH LANDSCAPE & SEASCAPE CHARACTER ASSESSMENTS) North Devon and Torridge 2C: Steep Open Slopes 4A: Estuaries 4C: Coastal Slopes and Combes with Settlement 4B: Marine Levels & Coastal Plains 4E: Extensive Inter-Tidal Sands 4F: Dunes 4H: Cliffs 5B: Coastal Undulating Farmland 5C: Downland 6: Offshore Islands 7: Main Cities and Towns Exmoor National Park E: Farmed and Settled Vale A: High Coastal Heaths B: High Wooded Coasts, Combes and Cleaves F: Enclosed Farmed Hills with Commons C: Low Farmed Coast and Marsh NEW COASTAL/INTERTIDAL SEASCAPE CHARACTER TYPES (IDENTIFIED BY THIS STUDY) 4I: Rocky Foreshores 4L: Exposed Sandy Bays 4M: Sheltered Rocky and Sandy Bays 4N: Exposed Coastal Waters 4P: Moderate Energy Coastal Waters 40: High Energy Coastal Waters 4Q: Sheltered Coastal Waters NEW MARINE SEASCAPE CHARACTER TYPES (IDENTIFIED BY THIS STUDY) 8A: Rocky Open Waters with Reefs 8B: Coarse Open Waters 8C: Shallow Inshore Bays 8D: Offshore Tidal Channels

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How to use the Seascape Character Area profiles



Seascape Character Area profiles (intro page)



Summary snapshot of overall character

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Seascape Character Area profiles (key characteristics)

Key characteristics

Natural / physical influences

- A complex estuarine system with contrasting geomorphology. The Taw flows through a broad valley, rising up steeply to the north to <u>Saunton</u> Down. The Torridge estuary is narrower and deeper occasionally enclosed by rocky, often wooded cliffs.
- Underlain by a solid geology of Upper Carboniferous rocks, predominantly sandstones and mudstones, but mostly defined by large deposits of estuarine clays and accumulations of marine sand.
- Dynamic landscape formed by a complex tidal system including rapid inundation, with a tidal range of 7.5 metres where the estuary drains into Bideford Bay.
- Notorious shallow sand bank of the Bideford Bar, forming the crossing point from the bay into the estuary, dangerous in heavy weather and when winds oppose the strong tidal flows.
- Numerous navigation features marking safe passage; estuary approached through a buoyed channel, with further guidance provided by the steel lighthouse at Crow Point (1954) and the beacons on the hills near Instow.
- Nationally important for biodiversity, designated as a SSSI, including salt-marsh, mud and sand-flats and lagoons supporting a wide range of intertidal and marine wildlife, including nursery areas for fish and the endangered European eel.
- Parts of the estuary are a Recommended Marine Conservation Zone, with areas around its mouth within the wider Bideford to Foreland Point Recommended Marine Conservation Zone, including its unique tide-swept channels.
- Taw fringed by tidal grazing marsh, areas of reclaimed saltmarsh and rough grassland and arable fields protected by embankments and walls and divided by brackish ditches.
- Colonies of waders, wildfowl and seabirds, the RSPB reserve at Isley. Marsh Nature Reserve and Gia Trust bird reserves at <u>Rottington</u> and Home Farm Marsh providing opportunities for bird watching.

Cultural and social influences (past and present)

- Long seafaring history, including the legend of 23 Viking ships landing in Appledore. The invaders were eventually defeated by the Saxon army at the Battle of Cynuit.
- Bideford was the largest tobacco importer after Bristol, and has long associations with famous Elizabethan sea captains such as Drake, Raleigh and Grenville.
- Help to understand what is 'key' to seascape character

Use of 3 sub-headings for ease of reference and comparison between profiles:

- Natural/physical influences
- Cultural and social influences (past and present)
- Perceptual and aesthetic influences

- Boat yards, dry docks, numerous jetties (including two between <u>Xelland</u> and <u>Instow</u>) and slipways dotted along the banks.
- 19th century Eremington Quay, formerly a significant port served by rail, developed when access to Barnstaple became difficult due to siltation. Today it is a popular visitor attraction.
- Legacy of the notorious Bideford Bar. <u>Braunton</u> sailors, adept at negotiating the bar, came to be known as 'bar men'. Several wrecks are dotted around the estuary, some visible at low tide.
- Bridge crossings form Long Bridge in Bideford themselves affording lor
- 18th century <u>Japeley</u> I skyline above the Torrid the Taw opposite <u>Exemin</u>
- Working historic port vessels transporting tim sight until the industry's
- Appledore once house historic port town still h ships for the Irish Navy.
- Regionally important and seafood (including r oysters and squid) from
- Commercially and rec nurseries and mussel be flounder, as well as sum are also popular for bait
- Traditionally the wate restrictions are now in p
- Chivenor Airfield, site the Taw. Dating from the works and areas of brow
- Ongoing military acti Instow, and Zeta berth a
- Valued as an importat populations, including v Cycleway. The Tarka Tr local ports to Barristaple closure in 1964).
- The estuary also provide recreational activities, in

- North Devon Yacht Club is based in Instow, and Bideford is the embarkation point for trips to Lundy on the MS Oldenburg.
- The **Appledore Ferry** operates in the summer between **Instaw** and **Appledore**, often used by SW Coast Path walkers. A ferry previously operated for hundreds of years from Crow Point.

Perceptual and aesthetic influences

A sheltered estuarine environment contrasting with the adjacent open and exposed coast.

Rapid and ever-changing tidal character, with expansive mudflats exposed at low tide quickly disappearing as the estuary fills with water.

Rural setting provided by the banks of the Taw Estuary and the wooded hills slopes enclosing the Torridge to the east.

- Adjacent development at Westward Ho! influencing views within the west and Eullabrook wind farm and other turbines often form moving structures on landward horizons.
- Range of contrasting views, from channelled views within the estuary to open coastal vistas at its mouth across Bideford Bay, framed to the west by the protruding form of the Hartland Peninsula.
- Expansive views across the flat marshes, sometimes obscuring the estuary itself to give the impression of being able to walk across a complete expanse of marsh.
- Rugged expansive sand dunes and golden beaches framing the estuary mouth, with contrasting views to the settled enclosing hills and development at <u>Appledore</u>, <u>Instow</u> and Bideford.
- The sounds and movements of thousands of birds and the expansive intertidal habitats contrasting with nearby human activities and noise.
- Strong sensory characteristics: changing colours and qualities of light, sunlight reflecting on the water and rich textures of the salt marshes and exposed sand flats.
- Seascape providing artistic and literary inspiration; perhaps most famously as the setting for Henry Williamson's *Larka the Otter*, its setting focused on the marshes around Horsey Island.



Seascape Character Area profiles (special qualities and key seascape sensitivities)



Special qualities and key seascape sensitivities

The special qualities of this seascape that would be most sensitive to development-led change include:

- Dynamic landscape which changes quickly and dramatically from exposed mudflats fast-flowing tides.
- The sheltered, safe haven of the estuary once the notorious Bideford Bar has been crossed.
- Nationally important coastal and intertidal habitats, supporting a wide variety of plants and animals.
- Ease of access to take part in a wide range of activities, including sailing, walking or cycling along the Tarka Trail, or simply enjoying the view.
- Rich maritime heritage associated with the historic working ports at Bideford and Appledore, still home to regionally important fishing fleets.
- Strong sensory characteristics, with constantly shifting colours, smells and textures and the sound and movements of thousands of birds.
- High levels of relative tranquility, on the doorstep of development and urban populations.
- Range of contrasting views linking land and sea, from enclosed views within to open vistas at the estuary mouth across Bideford Bay.



Key information to assist in development management and the design of proposals:

These are the aspects/features of fundamental importance to seascape character and therefore sensitive to change.

These also reflect what local people feel is particularly important – information gauged through consultation



Seascape Character Area profiles (forces for change affecting

seascape character and condition)

Forces for change affecting seascape character and condition

Coastal land / marine resource management

- Some fields fringing the estuary suffering from a lack of grazing, with a spread of brambles and scrub changing the cha conveying an 'urban fringe' feel.
- Deterioration of the estuary's water quality due to diffuse pollution from surrounding agricultural land, as well as sewag rainfall. Nutrient loading can impact on the seascape's characteristic mussel beds, with periodic E. coli breakouts linke
- Changing frequency and extent of dredging within the estuary (including due to cost) leading to the silting up of entran
 on Crow Point. Restricted access by larger vessels could impact on the economic sustainability of the working ports at

Aquaculture and fishing

- Uncertainty surrounding future Marine Conservation Zone designation (recommended sites awaiting a decision by Defra
 itself and the wider waters frequented by local fishermen. This is particularly in terms of the impacts any future design
 activity both commercial and recreational. Fixed netting restrictions are already in place across much of the SCA.
- Perceived conflicts between the conservation of the marine resource and the economic importance of fishing activity to South Wales) economy. This is being addressed across North Devon by ongoing dialogue and research by the Devon a Conservation Authority (IFCA), the Marine Management Organisation (MMO), Natural England, the North Devon Fisherr Devon Biosphere Marine Working Group.
- Uncertainty over the long-term economic viability of the remaining commercial fishing fleet at Bideford and <u>Appledore</u>, the community, local economy and heritage of the area.
- The Estuary is currently being investigated as a potential location for a Marine

Access, recreation and tourism

- Further growth in popularity of the area and the surrounding coast for both colevels of tranquillity (for example through an increased use of jet skis), leading
- Lack of a marina to support the growing water-based tourism economy of the v date have come attached with larger housing development requirements to ma the special qualities of the estuary and its wider rural setting.
- Concerns regarding wildlife disturbance as a result of increased use of the estu being addressed by a voluntary Code of Conduct developed and promoted by ti

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Other development pressures / impacts

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An understanding of forces for change

to guide management and planning response to help conserve and enhance seascape character. Organised under headings to allow ease of reference and comparison:

- Coastal land/marine resource management
- Aquaculture and fishing
 - Access, recreation and tourism
- Other development pressures/impacts
- Natural processes and climate change

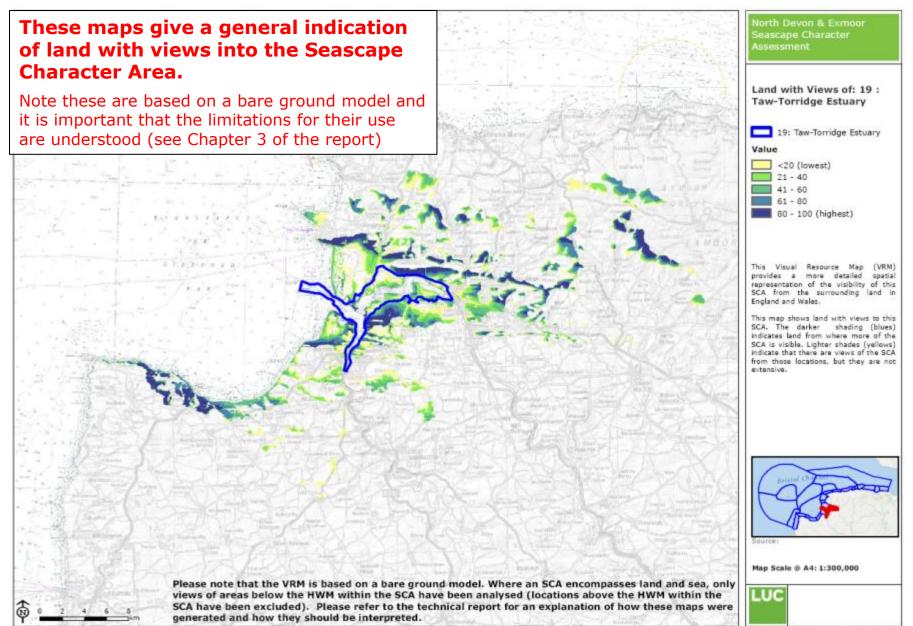
Development pressures and new development proposals on brownfield land fringing the estuary (e.g. the former <u>Xelland</u> power station site), impacting
on the estuary's naturalistic and tranquil qualities, levels of light pollution, and potentially its wildlife. The setting of the North Devon AONB and the
nearby <u>Braunton</u> Burrows (SCA 18), known for its 'wild' qualities, may also be affected by future development.

- Future growth of Barnstaple, Braunton and Bideford/Northam/Appledore as the main towns serving the two districts, extending into the open estuary landscape and on its open skylines. Particular pressure for housing development in southern areas where there are good existing links to transport networks. This could lead to the coalescence of Bickington, Eremington and Yelland.
- Present uncertainties relating to planning policy... the current Torridge District Local Plan includes their part of the estuary within the Coastal
 Preservation Area; whilst the North Devon side falls outside. A specific 'Coast and Estuary Policy' is proposed within the emerging Joint Local Plan for
 North Devon and Torridge, to help guide development to take account of the special qualities of the whole Estuary.
- Wind turbine developments on the elevated hills that form a distinctive rural setting to the estuary, particularly the large-scale development at Eullabrook. Skylines are also marked by overhead powerlines, particularly along the Great Bank/Toll road on Braunton Marsh and around Eremington and Xelland.
- Ongoing national demand for alternative sources of renewable energy production, including tidal energy. The strong tidal resource of the estuary may
 see particular interest from developers in future (e.g. barrage/lagoon/tidal stream devices) with potential impacts on the special landscape, seascape
 and ecological characteristics of the area.

Natural processes and climate change

- Sea level rise and coastal erosion as a result of climate change, potentially seeing a significant rise in the estuary's water levels and a consequential
 widening of its channels, with possible loss of habitats, coastal archaeology and flooding of settlements.
- Uncertainty over the impacts of managed realignment within the estuary currently the Shoreline Management Plan recommends 'managed realignment' across much of its length, although a 'hold the line' policy is recommended where assets are at risk, such as along existing defended sections at <u>Yelland</u>, Ercemington, Braunton, Barnstaple and Bickington.
- Divisions in option, both expert and local, regarding the future of Crow Point and Neck a fast-eroding spit linking to <u>Braunton</u> Burrows. Ongoing
 debates include whether the feature should be left to fully breach, and if so, the impacts this might have on the landscape and its surrounding
 communities (e.g. storm surges travelling up the River Taw).

Seascape Character Area profiles (land with views of the SCA)





Understanding the visual resource provided by the North Devon and Exmoor Seascapes

- Land with views to the study area

- Sea surface visibility



