



Snowdonia National Park Authority Supplementary Planning Guidance: Landscapes and Seascapes of Eryri *July 2014*

07



SNOWDONIA NATIONAL PARK AUTHORITY



SUPPLEMENTARY PLANNING GUIDANCE: LANDSCAPES AND SEASCAPES OF SNOWDONIA

July 2014

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Appendix 1	

Introduction

- 1.1 This note is one of a series of Supplementary Planning Guidance Notes (SPGs) which provide further detailed information in support of the policies contained in the Eryri Local Development Plan. The Supplementary Planning Guidance is intended to give greater detail on specific issues than is possible or appropriate in the Eryri Local Development Plan.
- 1.2 This particular guidance identifies the key characteristics of individual Landscape Character Areas (LCAs) and Seascape Character Areas (SCA's) and sets out information on how to manage change within them.

Purpose

- 1.3 Although almost all of the landscapes and seascapes in Snowdonia are of outstanding quality, reflected in its designation as a National Park, it is necessary to define landscape and seascape character areas and to appreciate individual characteristic qualities as well as influences which may lead to changes in character. The main purpose of this guidance is therefore to:
 - Define the boundaries and name individual Landscape Character Areas (LCAs) and Seascape Character Areas (SCA's) in Snowdonia National Park;
 - Identify their key characteristics and valued attributes. These are included as separate documents for each LCA and SCA;
 - Identify forces for change which are likely to influence changes in the landscape – both for the individual LCA's and SCA's and the National Park more generally; and
 - Identify landscape strategies for each LCA, setting out how they should be managed and protected in the future.
 - Identify the sensitive factors for each SCA
- 1.4 In so doing, the information contained in this SPG will enable the National Park Authority to effectively apply the relevant policies in the ELDP and actions in the National Park Management Plan in order to manage and mitigate against any adverse impacts on the landscape and the seascape.

Status

- 1.5 This Supplementary Planning Guidance will be a material planning consideration when decisions are made on planning applications. Developers are advised to assess the landscape impact of any individual proposal on the character of individual or groups of LCAs and consider mitigation measures if there are adverse impacts. A record of this analysis should be included within individual Design and Access statements accompanying planning applications, or in a separate document analysing landscape impacts.
- 1.6 This Supplementary Planning Guidance Note supplements policies contained within the Eryri Local Development Plan (ELDP, 2007-2022) and the National Park Management Plan (NPMP, 2010-2015). Many of the land use policies contained in the ELDP and the objectives in the NPMP are underpinned by the identification in both documents of the '*Special Qualities*' of Snowdonia. The special qualities are essentially the defining characteristics of the National Park; they are distinctive and pronounced and set the area apart.
- 1.7 Not surprisingly, many of the special qualities relate or derive from the landscape and the interaction of people over many generations with it. They assist in our understanding, appreciation and perception of the National Park and are listed below;
- the diversity of high quality landscapes and coastal areas within a small geographic area - ranging from coast to rolling uplands to the rugged mountains for which Snowdonia is famed;
 - the robust sense of community cohesion, belonging and vibrancy which combine to give a strong 'sense of place';
 - continuing vibrancy of the Welsh language as the primary language in many social and professional environments. This aspect is evident in local place names that reflect the area's cultural heritage;
 - an area which has inspired some of the nation's most notable culture, folklore, art, literature and music, an influence which continues to the present day;
 - the opportunity for people to understand and enjoy the National Park actively, whilst maintaining areas of tranquillity and solitude, thus promoting aspects of health, well-being and personal reflection;
 - extensive opportunities for recreation, leisure and learning for people of all ages and ability;
 - landscapes and townscapes which chart human interaction over centuries, from Neolithic times to the present day. This is evident in archaeological remains, place and field names, oral and written history and present day land management practices. Snowdonia's architectural heritage is reflected in the density of Listed Buildings and the wider historic environment;
 - complex, varied and renowned geology, vital in influencing the disciplines of geology and geography internationally;
 - varied biodiversity reflecting Snowdonia's landscapes, geology, land management

practices and climate. Some species and habitats are of national and international significance, for example species which are remnants of the last Ice-Age, providing a glimpse of semi-Arctic habitats. Snowdonia is the most southerly point in the UK for many such species.

Link to ELDP policies

- 1.8 **Policy A: National Park Purposes and Sustainable Development** is an important underpinning policy which seeks to conserve and enhance the special qualities of the Snowdonia (see Appendix 1 for the policy in full). It gives the highest priority to the protection and enhancement of the natural beauty and the need to uphold the statutory purposes of the National Park. This policy also gives a strategic direction as to how development should be evaluated. In cases of conflict with other issues when dealing with development proposals, the highest regard will be given to protecting and safeguarding the environment and its component landscape qualities.
- 1.9 The main policy in the ELDP dealing with the landscape specifically is **Policy 2: Development and the Landscape** (see Appendix 2 for the policy in full). This policy states that the scale and design of new development should respect the landscape setting and character of the area and that unacceptable impacts will be resisted. Such impacts will be judged according to the nature, scale and design of a proposal. The definition of individual landscape character areas and their component attributes will assist in landscape impact evaluation. Unacceptable impacts on landscape character will be resisted and the thrust of the policy is to safeguard the existing landscape. Whilst to some extent landscape impacts are a subjective judgement, the identification of what is important in contributing to landscape quality will assist in measuring potential adverse impacts. This SPG provides a detailed evidence base to support this policy. Further work is also planned to assess the sensitivity of the landscape and its capacity to accommodate different types of development.
- 1.10 Policy 2 also refers to the protection of panoramas visible from significant viewpoints. Although it is not possible to identify all panoramic viewpoints in the National Park, some of the main panoramas and key views are included within the key characteristics of the LCA descriptions. To maintain the sense of tranquillity, remoteness and landscape quality, significant new visual impacts will be carefully evaluated to consider whether they will have a negative impact on panoramas.
- 1.11 Panoramas include views within the National Park itself as well as views out from the boundary. Just as important in many respects are views into the National Park., particularly when they are extensive and place the area within its geographic context and landscape setting. Proposals within the National Park will be determined by the Authority but there are an increasing number of more significant development proposals outside but relatively close to its boundaries. Potentially such proposals due to their proximity, scale or cumulative impact could have an adverse impact on the setting and landscape quality of the National Park. The SNPA will carefully evaluate any proposal which may impact on important views in and out of the protected landscape.

Link to National Park Management Plan objectives

- 1.12 The National Park Management Plan (NPMP 2010-15) provides the strategic policy framework for organisations to comply with their statutory responsibilities in carrying out their duties within the National Park. Although prepared by the SNPA, it is a document for all organisations and individuals with a role in shaping the future of Snowdonia.

- 1.13 The NPMP shares a common vision with the ELDP, and reinforces the special qualities of Snowdonia, as described previously. In addition it identifies 26 strategic objectives and a corresponding series of actions which all organisations and individuals working within the Park should strive to achieve. The Management Plan is a material consideration for all planning applications within the National Park.

Link to other policies and documents

- 1.14 Within this document it is not possible to identify all types of development which might have an adverse impact on the landscape. Individual proposals will need to be assessed against all the policies in the ELDP and their impact on individual LCAs described as part of this SPG. The ELDP should be read as a whole and normally more than one policy or Supplementary Planning Guidance document will apply to a single proposal.
- 1.15 Many parts of the National Park are also statutorily protected for their biodiversity and nature conservation interest. There is a link in safeguarding biodiversity and the landscape as a changing habitat is likely to result in visual landscape change. The SNPA planning guidance SPG on Nature Conservation and Biodiversity should therefore be read in parallel with this guidance to obtain a more complete understanding of the statutory protection afforded to certain sites.
- 1.16 SNPA has also jointly commissioned work to analyse the value and character of the seascapes of Snowdonia entitled '*Snowdonia and Anglesey Seascape Character Assessment*' (2013). This assessment of the seascapes in Snowdonia (15 in all) will also be part of the Guidance and will be taken into account when considering developments in coastal and marine areas, and those parts of the National Park with a strong relationship to their adjacent seascapes.

2 METHOD FOLLOWED TO PREPARE THE ERYRI LANDSCAPE CHARACTER ASSESSMENT

- 2.1 The Landscape Character Assessment which forms the basis of this SPG draws on LANDMAP as part of its evidence base, along with a wide range of other information available that describes the natural, cultural and aesthetic/perceptual qualities of the National Park. LANDMAP is an all Wales geographic information system based landscape resource where landscape characteristics, qualities and influences on the landscape are recorded and evaluated into a nationally consistent dataset. It is comprised of five 'Evaluated Aspects'; Geological Landscape, Landscape Habitats, Visual and Sensory, Historic Landscape and the Cultural Landscape.
- 2.2 Following the findings of a desk-based assessment – which included a review of the LANDMAP information and other spatial data – a field verification exercise was undertaken to confirm the boundaries and information provided for the 25 Landscape Character Areas (LCAs). The LCAs are designed to represent geographically discrete areas of the National Park's landscape that are recognised for their local distinctiveness and sense of place. They form a useful spatial framework to describe the landscape and to ultimately assist in making decisions on how it should be planned and managed to retain or enhance its special qualities.
- 2.3 In the future, the framework provided by the LCAs could also be used as the basis for monitoring landscape change in more detail. A methodology to assess the sensitivity of the landscape and its capacity to accommodate change will be developed in a further SPG. Eventually, in a review of the ELDP, planning policies can be refined to deal with changing circumstances arising from more detailed monitoring of landscape change and sensitivity.
- 2.4 A map of the National Park's LCAs is shown in Figure 2.1, with each LCA described separately using a common structure, as follows:
- Summary of LCA location and boundaries, including a map and representative photographs
 - Key characteristics
 - Forces for change affecting landscape character
 - A landscape strategy for the future
 - Guidelines for managing future landscape change (with cross-reference to Chapter 4 of this SPG).
- 2.5 As stated previously, the principal purpose of this guidance is to provide an evidence base to assist the National Park Authority in helping to guide the right types of development into appropriate locations; using the information to inform its siting and design in ways that protect and enhance the special qualities of the Park.
- 2.6 The remainder of this SPG includes a chapter outlining the generic forces for change impacting on the landscapes of Eryri, followed by high-level landscape guidance. Both of these chapters form an accompaniment to the detailed information that is provided for each of the 25 LCAs.

3 FORCES FOR CHANGE IMPACTING ON THE ERYRI LANDSCAPES

- 3.1 This section provides an overview of the main forces for change impacting on the landscapes of Eryri, organised under a number of different headings. It considers both past/current forces for change that have, and continue to, shape the landscapes seen today, as well as future forces for change that are likely to become increasingly prevalent in the National Park.
- 3.2 In addition, information on locally important forces for change is included in each LCA description.
- 3.3 Understanding the forces for change impacting on the National Park's landscapes is key to shaping management and planning responses. These are considered, through the production of high-level landscape guidelines, in the next chapter.

Past/current forces for change

Mineral workings and quarries

- Relict evidence of mineral workings, providing evidence of former industrial activity. Former metalliferous mines and slate quarries and associated tips can often be prominent but some have re-assimilated into the landscape, becoming refuges for unusual plant assemblages (metallophytes) and bats. Many are now valued aspects of the area's cultural heritage.

Large-scale afforestation

- Extensive areas of early 20th century coniferous plantation forestry across the National Park, often on moors and valley slopes that were previously covered in native woodland or poor quality grazing (ffridd). In more recent times some areas have been thinned or felled completely.
- Inappropriate planting, management and felling regimes of coniferous plantations, leading to a detrimental impact on the landscape, particularly on the boundaries of plantations.
- In some areas restoration projects to replace non-native conifer species with native woodland are underway to increase landscape and habitat quality.

Agricultural change

- Changing agricultural economics over the last few decades, impacting on the open character and diversity of the mountain vegetation – particularly the spread of gorse and bracken.
- Recent decline in the market value of livestock also resulting in lower numbers of stock on the uplands.
- Increased production costs together with an ageing population.
- Recent changes to agri-environment scheme support schemes in Wales (move to an ecosystem service-based approach through Glastir), with uncertainties in terms of its implementation, particularly the 'Advanced' element.
- Ongoing decline in traditional upland farming and commoning, further resulting in a long-term change in the nature and levels of livestock grazing on the uplands.
- Land drains present in bog habitats to improve agriculture, with some now being blocked to restore bog habitat and areas of peat for use as a carbon store.

- Invasion of non-native species such as rhododendron.

Development

- Visually intrusive power lines.
- Occasional development unsympathetic to local vernacular in coastal settlements.
- Ribbon development leading to the merging of adjacent settlements has also occurred in places along the Arduwy coastline.
- Utility and energy plants dominate some areas, reducing landscape quality. Examples include the Trawsfynydd nuclear plant, water treatment works at Llidiardau and the Ffridd Rasmus waste management site.
- Significant levels of hydro power energy production in the National Park.
- Evidence of past military activity and associated development and training grounds (e.g. Llanbedr military air field, Tonfannau and Bronaber training camps and artillery ranges on Arenig uplands).
- Road improvement schemes.
- Ever-increasing popularity of the areas for recreation and tourism, with linked demand for supporting development and infrastructure (see further in 'Future forces for change').

Future forces for change

Climate change impacts

- Potential drying out of wet heath, blanket bog and mires due to an increased frequency of drought conditions in the summer months. These conditions may also lead to more frequent and intensive moorland fires and erosion causing damage to archaeological sites.
- Increased autumn and winter precipitation levels could lead to saturated soils and higher water levels in upland streams, mires and tracts of blanket bog, resulting in more frequent downstream flooding.
- Longer growing season and enhanced growth rates of vegetation including bracken, gorse and secondary woodland resulting in a decrease in the area of open heather moorland/montane habitats and a 'scrubbing up' of upland stream valleys.
- Increase in the prevalence of pests and diseases which may affect species such as heather and bilberry and consequent impacts on biodiversity.
- Spread of non-native and alien species in response to a changing climate.
- Change in woodland / tree species composition as new pests/diseases spread (Such as *Chalara fraxinea* and *Phytophthora ramorum*).
- Sea level rise and increased stormy conditions leading to coastal erosion and coastal squeeze, leading to a need for long-term responses such as managed realignment.

Climate change responses

- Increased demand for wind turbines on the fringes of the National Park, including offshore (visible in views from the mountains).

- Potential for renewable energy generation from wood fuel biomass, leading to a change in how commercial forests are used and managed. The resulting increased value of commercial woodland may lead to forests being extended and more intensively managed as well as the introduction of short rotation coppice.
- Higher demand for UK food production potentially leading to an increase in stocking levels on the mountain commons and ffridd, resulting in overgrazing of upland habitats and a further spread of grassland.
- Further demand for domestic and community-scale renewable energy installations such as solar panels, small wind turbines and ground-source heat pumps.
- Restoration of wet heath, blanket bog and mires through drain blocking to create new areas of peat soils and sequester CO₂.
- Drive for increased woodland planting and regeneration, including at the heads of stream valleys to enhance flood storage capacity, water filtration and carbon sequestration functions to strengthen the landscape's resilience to climate change.
- Improving habitat connectivity and creating new linear landscape features to act as wildlife corridors to aid species migration and resilience.
- Accommodating new development as a result of coastal squeeze.

Uncertain future for upland farming

- Change in type of agricultural crops could occur to increase the economic viability of farming, on the more productive land.
- Decline and loss of traditional farming practices may lead to changes in habitat cover. A reduction in number of farmers leading to increased farm size and loss of field patterns.
- Catchment sensitive farming schemes to enhance ecosystem services. Improving carbon stores (such as woodland planting) to help with climate regulation and flood protection.

Development / tourism related

- Rise in UK-based tourism with an associated increase in recreational demand in honeypot sites and related facilities and infrastructure (e.g. car parks).
- Increased demand for holiday lettings, particularly in coastal areas, leading to a rise in planning applications for property conversions, caravan sites and new types of visitor accommodation.
- Increased provision and access for informal and managed sports and adventure tourism such as hiking, cycling, climbing/mountaineering and water sports.
- A rise in pressure for housing due to the National Park being a desirable area to live in, particularly for people of retirement age.
- Visually intrusive power supply lines may also result from new developments.
- Increased use of more popular footpaths resulting in erosion and scarring
- Impacts of new development and road improvements on tranquillity and sense of wilderness.

4 GUIDELINES FOR MANAGING LANDSCAPE CHANGE

4.1 The following table (Table 4.1) sets out high-level guidelines for managing and planning for landscape change in the National Park. It is structured under the following headings:

- Land Management and Farming (including cross-reference to LCAs of relevance)
- Forestry and Woodland Management
- Building Resilience to Climate Change
- Guiding Future Development (including cross-reference to LCAs of relevance)
- Access and Tourism

4.2 These guidelines should be read in conjunction with the LCA descriptions, particularly the end sections on '*Forces for Change Impacting on Landscape Character*' and '*A Landscape Strategy for the Future*'.

Table 4.1: High-level landscape guidelines for the National Park

GUIDELINES	RELEVANT LCAs
LAND MANAGEMENT AND FARMING	
<u>Relevant to all landscapes</u>	
Ensure sensitive farming practices which further enhance landscape character and biodiversity.	
Support farmers and land managers to continue to manage the landscape using traditional practices, particularly in more marginal areas. Continue to recognise the important role of agriculture to the local economy.	
Protect the integrity and traceability of the historic environment through sensitive management (including recreation management where relevant) and appropriate livestock grazing regimes. Include sensitive interpretation, where appropriate, on more publicly accessible sites.	
<u>Mountains/Uplands</u>	
Protect the geological and geomorphological features of the mountain landscapes, including classic glacial features, implementing appropriate management regimes (e.g. sustaining grazing on scree slopes to avoid scrub/secondary woodland encroachment).	1, 2, 3, 4, 5, 6, 9, 13, 15, 18, 19, 20, 21, 22, 24
Manage and enhance tracts of montane habitats and heather moorland through a continuation of extensive livestock grazing and controlled burning at appropriate levels to enhance biodiversity and sustain upland farming practices.	1, 2, 3, 4, 5, 6, 9, 13, 15, 18, 19, 20, 21, 22, 24
Manage and protect traditional stone wall boundaries demarcating areas of ffridd and the fringes of common land, using local stone and building styles to reflect those found in the Landscape Character Area. Encourage commoners and landowners to continue to use stone walls, rather than fencing, to reinforce landscape character.	1, 2, 3, 4, 5, 6, 9, 13, 15, 18, 19, 20, 21, 22, 24
Manage and repair traditional field barns, utilising local stone and building techniques wherever possible.	1, 2, 3, 4, 5, 6, 9, 13, 15, 18, 19, 20, 21, 22, 24
<u>Upland Fringe</u>	
Manage and enhance tracts of heather moorland and other upland habitats through a continuation of extensive livestock grazing and controlled burning at appropriate levels to enhance biodiversity, and sustain traditional upland farming practices and maintain visual and cultural links with the surrounding uplands.	1, 2, 3, 4, 5, 6, 7, 12, 20, 24

GUIDELINES	RELEVANT LCAs
Manage and enhance the wildlife interest of the farmed landscape, including through retaining patches of purple moor grass and rush pasture and semi-improved meadows.	1, 2, 3, 4, 5, 6, 7, 12, 20, 24
Manage and protect traditional field boundaries, undertaking sympathetic repairs to stone walls (reflecting the styles and materials of the Landscape Character Area) and utilising native tree species and traditional hedge laying techniques where hedgerows are characteristic.	1, 2, 3, 4, 5, 6, 7, 12, 20, 24
Encourage and support farmers to utilise traditional field boundaries, rather than post-and-wire fencing, when gapping up lost boundary sections or creating new lengths.	1, 2, 3, 4, 5, 6, 7, 12, 20, 24
Manage and protect the distinctive field patterns of upland fringe areas, sitting in contrast to adjacent areas of open uplands and commons.	1, 2, 3, 4, 5, 6, 7, 12, 20, 24
Manage and repair traditional field barns, utilising local stone and building techniques wherever possible.	1, 2, 3, 4, 5, 6, 7, 12, 20, 24
<u>Valleys/Estuaries</u>	
Manage and enhance the valleys' semi-natural woodlands through traditional techniques including coppicing. Control access by livestock to promote natural regeneration to enhance longevity whilst using extensive grazing to promote the species diversity of woodland ground flora. Explore opportunities for community utilisation of coppice residues as a low-carbon fuel source.	7, 8, 14, 16, 17, 21, 23, 25
Manage and enhance important wetland habitats, particularly wet pasture and riparian woodland, through preserving and managing water flows, controlling invasive vegetation and resisting agricultural improvement. These measures will enhance their roles in regulating stream and river flows.	7, 8, 14, 16, 17, 21, 23, 25
Manage and protect traditional field boundaries, undertaking sympathetic repairs to stone walls (reflecting the styles and materials of the Landscape Character Area) and utilising native tree species and traditional hedge laying techniques where hedgerows are characteristic.	7, 8, 14, 16, 17, 21, 23, 25
Encourage and support farmers to utilise traditional field boundaries, rather than post-and-wire fencing, when gapping up lost boundary sections or creating new lengths.	7, 8, 14, 16, 17, 21, 23, 25
<u>Coastal</u>	
Manage and protect traditional field boundaries, undertaking sympathetic repairs to stone walls (reflecting the styles and materials of the Landscape Character Area) and utilising native tree species and traditional hedge laying techniques where hedgerows are characteristic.	10, 11
Encourage and support farmers to utilise traditional field boundaries, rather than post-and-wire fencing, when gapping up	10, 11

GUIDELINES	RELEVANT LCAs
lost boundary sections or creating new lengths.	

FORESTRY AND WOODLAND MANAGEMENT

Manage conifer plantations to minimise any visual impacts associated with felling coupes.

Manage plantations long term to ensure boundaries follow landform and topography to provide for a better landscape fit. Where possible re-planting should introduce deciduous trees to soften the edges and introduce more variety and interest.

Plan for the gradual removal and restoration of plantations to open habitats, both within the mountains and uplands and along the coastal plain (e.g. LCA 10: Morfa Harlech). Where existing woodland provides a valued screening role to new or existing development, aim for a restructuring with native [climate-hardy] broadleaves rather than coniferous species.

Any felling operations should respect the presence of archaeological features and wildlife.

INCREASING RESILIENCE TO CLIMATE CHANGE

Manage and enhance important wetland habitats, particularly blanket bogs and valley mires, through preserving and managing water flows and controlling invasive vegetation. This will enhance their roles in storing and absorbing atmospheric carbon dioxide and regulating stream and river flows, including through encouraging and supporting initiatives such as the EU LIFE-funded Bog Restoration Project.

Allow the natural regeneration of semi-natural woodland and scrub along the upper courses of streams to enhance flood storage capacity to reduce downstream flooding and improve water quality. Do not allow natural regeneration to take place on the open moorland or mountain sides. Where appropriate, manage through sensitive coppicing techniques, with residues used as a community fuel source wherever possible.

Plan for the future impacts of climate change along the coast, particularly as a result of sea level rise, coastal erosion and allowing natural processes to take place wherever possible whilst ensuring that local communities are involved in making decisions about their future landscape. Plan for opportunities to expand coastal and estuarine habitats to build resilience to future climate change.

GUIDING FUTURE DEVELOPMENT

Relevant to all landscapes

Consider the 'Landscape Strategies' of each LCA when considering any development proposals.

Protect and enhance key views both to and from other landscapes within the National Park, and those outside of the protected landscape.

Evaluate and assess all development proposals to ensure they reinforce and, where possible enhance, local distinctiveness and local landscape character.

Plan for any new developments, or alterations/extensions/conversions to existing development, to remain consistent with the local vernacular scale, form and materials of the Landscape Character Area.

Manage new development so that it does not encroach into the green wedges designated in the ELDP.

Plan for any road improvements to be mitigated to reflect the local landscape pattern and to maintain key views to surrounding landscapes.

GUIDELINES	RELEVANT LCAs
<u>Mountains/Uplands</u>	
Protect all of these landscapes from unsympathetic development, even those in less publicly visible places.	1, 2, 3, 4, 5, 6, 9, 13, 15, 18, 19, 20, 21, 22, 24
Protect the undeveloped character of the open mountains and uplands, avoiding the development of vertical structures and planting of trees / woodland to maintain their open character and lack of intrusion.	1, 2, 3, 4, 5, 6, 9, 13, 15, 18, 19, 20, 21, 22, 24
<u>Upland Fringe</u>	
Protect the existing development patterns of the area, including the plan and form of historic villages and towns.	1, 2, 3, 4, 5, 6, 7, 12, 20, 24
Protect the undeveloped character of the higher hill summits, avoiding the development of vertical structures and planting of trees / woodland to maintain their open character and lack of intrusion.	1, 2, 3, 4, 5, 6, 7, 12, 20, 24
<u>Valleys/Estuaries</u>	
Protect the existing development patterns of the area, including the plan and form of historic villages and towns.	7, 8, 14, 16, 17, 21, 23, 25
Protect the open character of the estuaries (Mawddach, Dysynni and Dyfi) and their important views to and from the surrounding uplands.	17, 23, 25
<u>Coastal</u>	
Protect the open character of the coastal landscapes, protecting levels of intervisibility between the adjacent uplands, coastal settlements outside the National Park and the Llŷn Peninsula.	10, 11, 20, 25
Restrict new development to within existing settlement limits wherever possible, to protect important remaining areas of open coastline.	10, 11, 20, 25
Protect the character of the undeveloped coast.	20, 25
Minimise the use of visually intrusive coastal defences, conserving (and where relevant restoring) active natural coastal processes wherever possible.	10, 11, 20, 25

ACCESS AND TOURISM

Relevant to all landscapes

Plan for any improvements made to the footpath network and associated infrastructure to be sensitive to local landscape character whilst maximising opportunities for appropriate enjoyment.

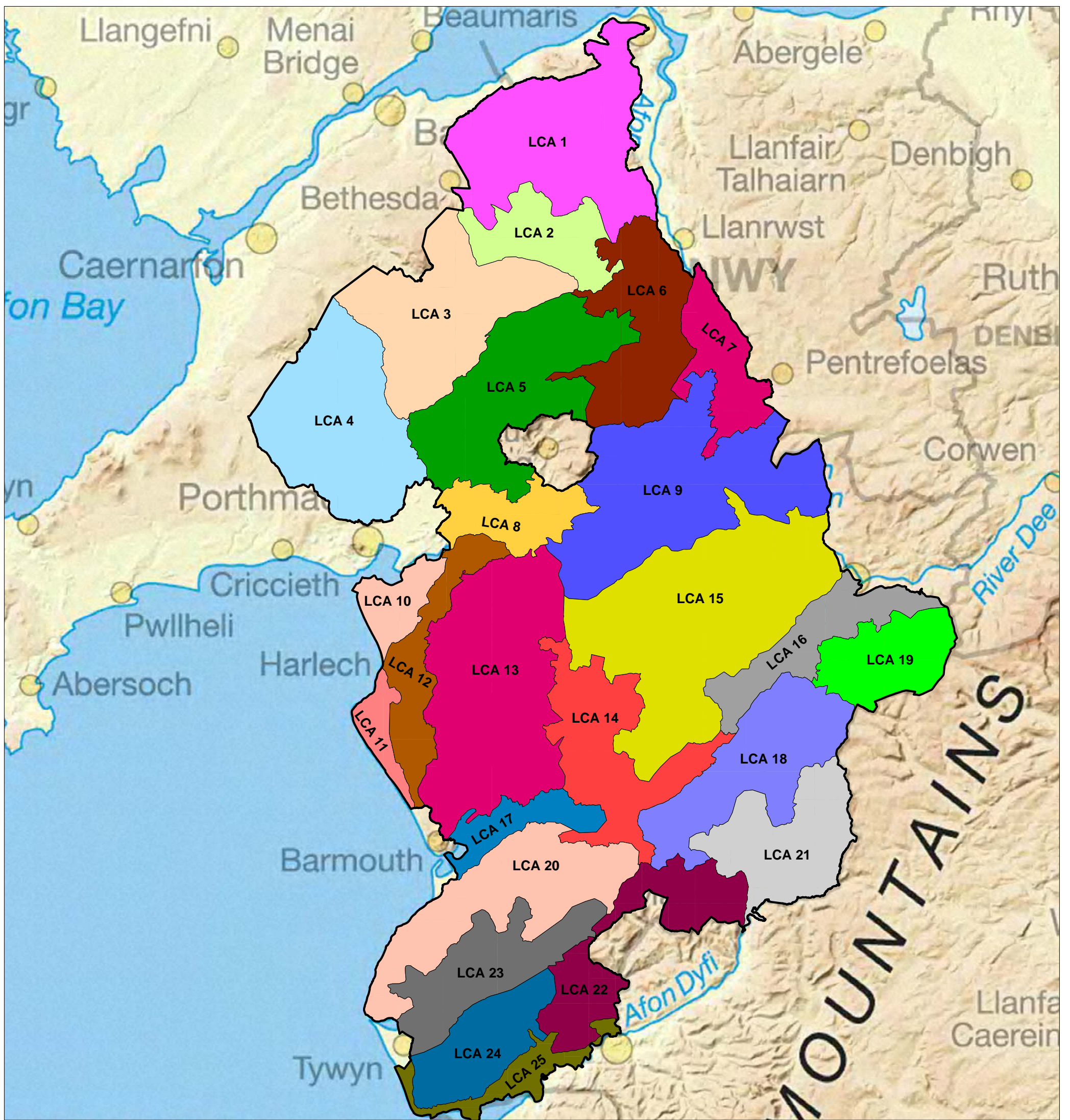
Protect the National Park's landscape integrity whilst maintaining its value and importance to the local economy through tourism.

Plan for any new tourism or recreation development to improve visitor facilities and management rather than increasing overall capacity. There will however be instances to increase capacity through new proposals.

Manage the visual impact of camping/caravanning sites through sensitive boundary treatment and enhanced landscaping, including woodland planting within them particularly where elevated views into the site are possible. Avoid new sites in open mountain or coastal areas where they would be particularly prominent.

Continue to support and encourage the use of the landscape's heavily forested areas (e.g. LCAs 6, 19 and 22) as recreational resources, thus diverting intense activity away from the more sensitive landscapes of the National Park.

Plan for any road improvements to be mitigated to reflect the local landscape pattern and to maintain key views to surrounding landscapes.




SNPA Boundary	LCA 13 - Y Rhinogau
LCA 1 - Ucheldir y Gogledd	LCA 14 - Dyffrynnoedd Mawddach a'r Wnion
LCA 2 - Y Carneddau	LCA 15 - Yr Arenig
LCA 3 - Yr Wyddfa a'r Glyderau	LCA 16 - Llyn Tegid a Dyffryn Dyfrdwy
LCA 4 - Moel Hebog	LCA 17 - Aber y Fawddach
LCA 5 - Y Moelwynion	LCA 18 - Mynyddoedd yr Aran
LCA 6 - Coedwig Gwydyr	LCA 19 - Coedwig Penllyn
LCA 7 - Dyffryn Corwy	LCA 20 - Cadair Idris
LCA 8 - Dyffryn y Ddwryd	LCA 21 - Pen Dyffryn Dyfi
LCA 9 - Y Migneint	LCA 22 - Coedwig Dyfi
LCA 10 - Morfa Harlech	LCA 23 - Dyffryn Dysynni
LCA 11 - Morfa Dyffryn	LCA 24 - Y Tarrenau
LCA 12 - Cefnwlad Arfordir Arduchwyr	LCA 25 - Aber y Ddyfi

Landscape Character Areas of Eryri

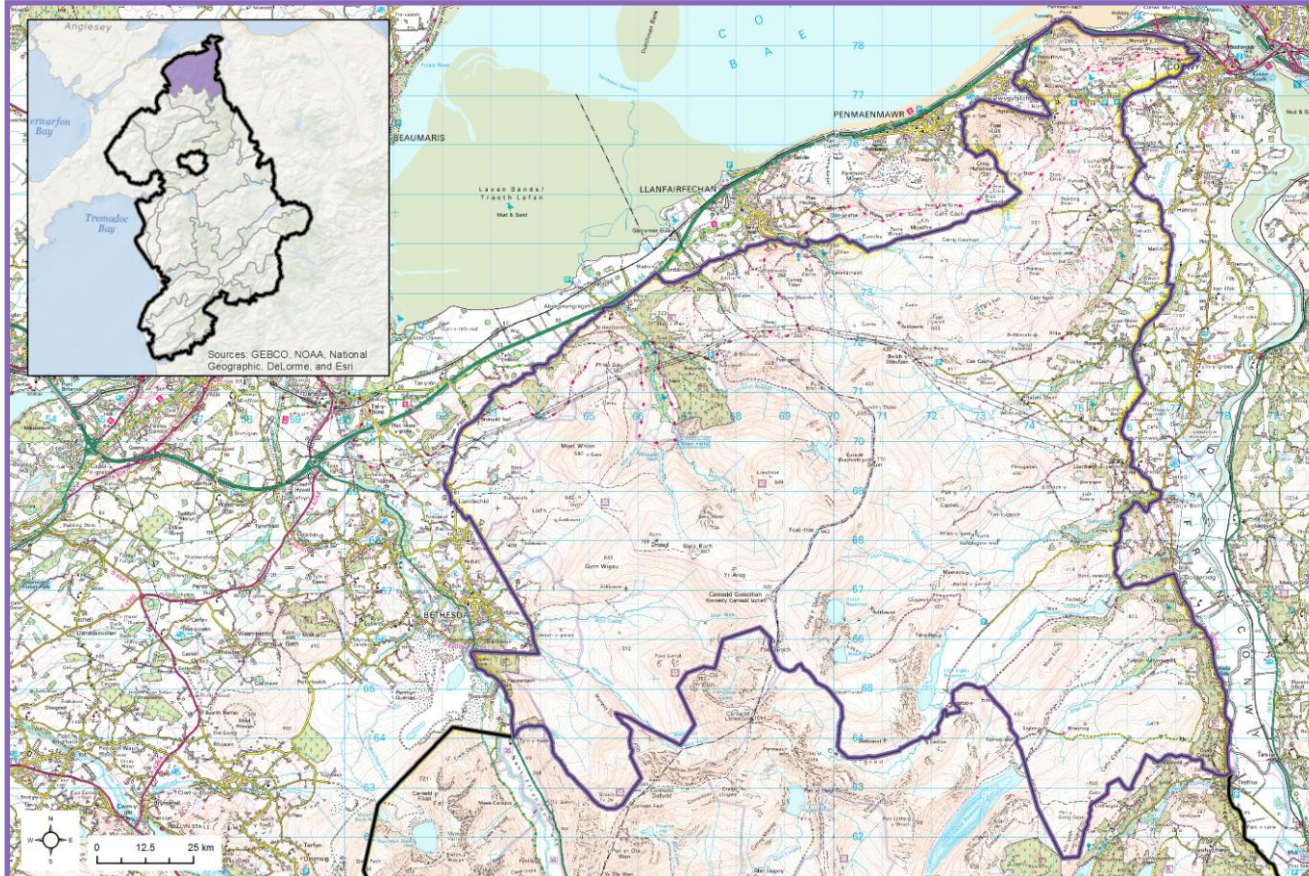
Figure 2.1
Landscape Character Areas in the National Park
Map Scale 1:300000

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Hawlfraint Awdurdod Parc Cenedlaethol Eryri /
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PART 1: DESCRIPTION



SUMMARY OF LOCATION AND BOUNDARIES

Ucheldir y Gogledd forms the first significant upland landscape in the northern part of the National Park. It includes a series of peaks - Moel Wnion, Drosogl, Foel Ganol, Pen y Castell, Drum, Carnedd Gwenllian, Tal y Fan and Conwy Mountain rising between 600 and 940m AOD. The area extends from Bethesda (which is located outside the National Park boundary) in the west to the western flanks of the Conwy valley in the east. It also encompasses the outskirts of Conwy to the north to form an immediate backdrop to the coast.

KEY CHARACTERISTICS OF THE LANDSCAPE CHARACTER AREA¹

- **Dramatic and varied topography**; rising up steeply from the Conwy coast at Penmaen-bach Point to form a series of mountains, peaking at Foel-Fras (942 metres). Foothills drop down from the mountains to form a more intricate landscape to the east and west.
- **Complex, internationally renowned geological and geomorphological landscape**, with a mixture of igneous and sedimentary rocks shaped by ancient earth movements and exposed and re-modelled by glaciation.
- **Multiple streams draining from the mountains**, in some places plunging down hanging valleys as waterfalls. U-shaped valleys carving through the mountains, often with extensive moraine and head deposits.
- Reservoirs at Llyn Anafon, Dulyon, Melynlyn and Llyn Eigiau.
- Small bands of woodland and spinneys associated with the lower-lying farmland and valley sides, including **nationally designated native woodlands** at Coedydd Aber, Coed Merchlyn, Coed Gorswen and Coed Dolgarrog. Prominent forestry blocks on the lower slopes of Llwytmor Bach and at Parc Mawr.
- **Large-scale, unenclosed mountains contrasting with small historic field patterns on the foothills**. The intermediate area defined by large **regular enclosures of ffridd**, providing valuable cultural and natural links between the uplands and their surrounding lowlands.
- Enclosed pasture fields divided by **stone walls or hedgerows**, often with frequent hedgerow trees. **Rough common land grazing by sheep** on the mountains.
- **Internationally important montane habitats and species** within the Eryri SAC/SSSI, including rare arctic-alpine plants, montane heaths, cliff ledges and wetlands. Wet and sessile oak woodlands found within the Coedydd Aber SAC/SSSI/NNR, linking the mountains to the north coast.
- **Sychnant Pass SSSI**, in the north-east of the LCA, comprising dry heath, acid grassland, bracken, marshland, ponds and streams – providing a naturalistic backdrop to the nearby Conwy Estuary.
- **Wealth of nationally important archaeological features** including Bronze Age funerary and ritual monuments (e.g. standing stones at Bwlch y Ddeufaen), prominent Iron Age hillforts (e.g. Maes y Gaer and Dinas) and evidence of early settlement, field systems and transport routes (e.g. the Roman road passing through Bwlch y Ddeufaen and 11th century Aber Castle).
- **The remains of 19th and 20th century slate quarrying** found throughout, including disused quarries and tips.
- **Uninhabited mountains, with large areas of open access land** and a sparse network of rights of way (but no road access). Lower level enclosed farmland includes scattered stone and slate-built farmsteads and occasional clustered hamlets linked by winding rural roads.
- Historic settlement of Abergwyngregyn (a Conservation Area) occupying a sheltered location on the banks of the River Aber; a strategic starting point for travellers crossing the Menai Strait. The village of Llanllechid (also a Conservation Area) straddles the National Park boundary in the western foothills.
- **Mountains forming a dramatic backdrop to the nearby coast and seascape** (including the A55 coast road) frequently characterising views from Anglesey, the Menai Strait and the Conwy coastline.
- **Long views north across the coastline, out to sea and to the Isle of Anglesey**. The offshore windfarms in the Irish Sea are visible features on the distant horizon. Views south are contained by the mountains of the Carneddau Range.
- **A highly tranquil, remote landscape** with few modern intrusions and a pervading ‘wilderness’ quality associated with the mountains.

¹ Bold indicates those key characteristics considered to be the ‘valued attributes’ of the Landscape Character Area; aspects of character that contribute greatly to local distinctiveness.

FORCES FOR CHANGE AFFECTING LANDSCAPE CHARACTER

Please refer to the 'Forces for Change' section of the SPG document. Of particular relevance to this LCA are the following forces for change:

- Conifer plantations detracting from the overall visual quality in the Aber Valley above Abergwyngregyn.
- Offshore wind turbines visible from the LCA impacting on the tranquillity and remoteness of the landscape.
- An intensification of agriculture at lower elevations leading to a dominance of improved pasture in places. Secondary woodland encroachment on mountain fringes indicating a decline in grazing levels in these marginal areas.
- Stone walls falling into a state of disrepair in some locations, frequently gapped up by post-and-wire fencing.
- Pressures from tourism related developments related to the tourist hotspots of Aber Falls, the Synchant Pass and the nearby town of Conwy.
- Linked to the above: pressures for car parking and the conversion of properties to holiday letting purposes.
- Pressure for new infrastructure such as water pipelines and wind turbines outside the National Park boundary.
- Urban expansion in Conwy town (outside Park boundary but visible from within the LCA), and 20th century development on the fringes of historic settlement cores detracting from the traditional local vernacular (e.g. Rowen).

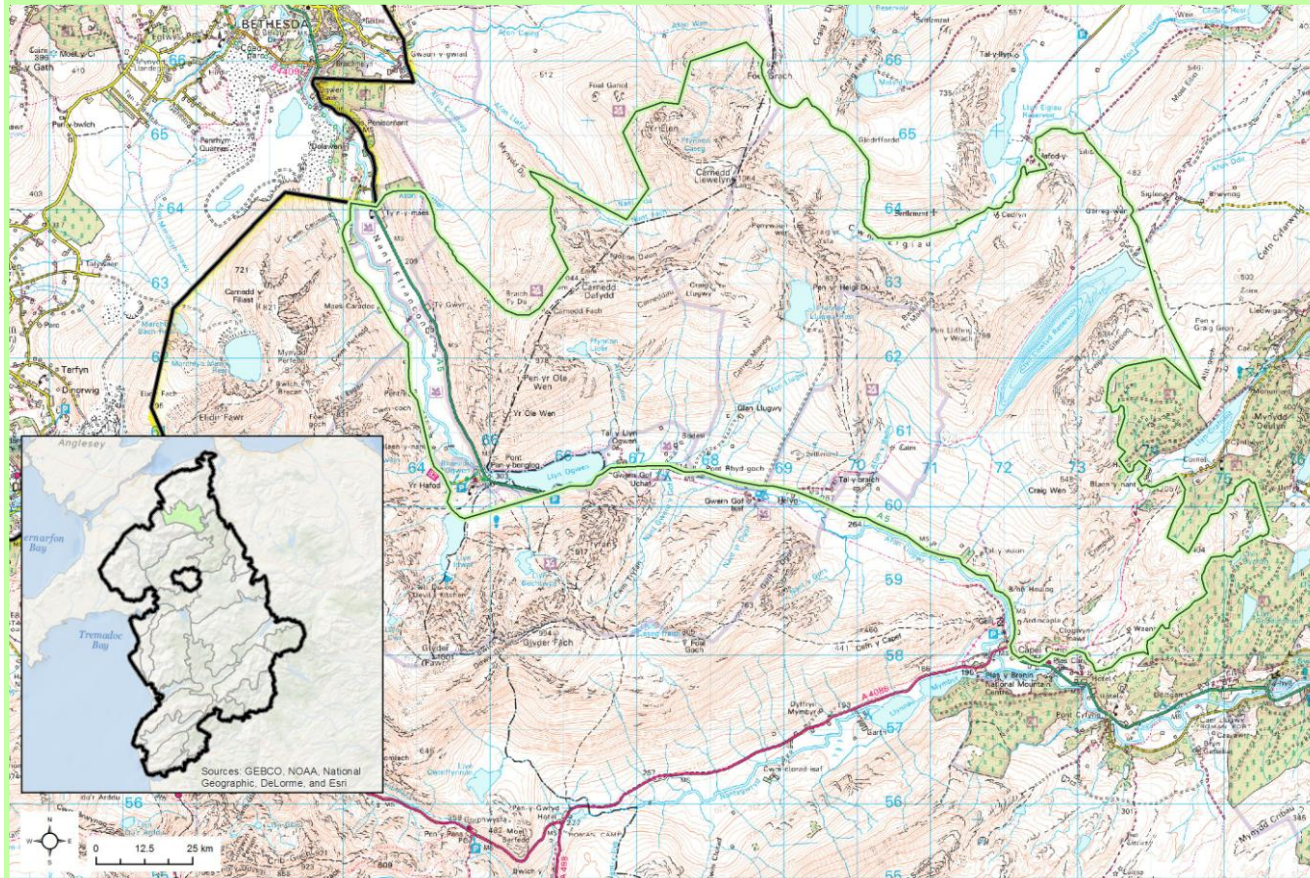
A LANDSCAPE STRATEGY FOR THE FUTURE

This LCA is considered to be one of the 'focal' landscapes of Snowdonia, much of which is defined as '*natural beauty*' as shown on the Eryri Local Development Plan (ELDP) proposals map. This natural beauty, and those elements that contribute towards it – especially the qualities of tranquillity and remoteness – will be protected and enhanced.

GUIDELINES FOR MANAGING FUTURE LANDSCAPE CHANGE

Please refer to the 'Guidelines' section of the main SPG document, particularly for those guidelines under the 'Mountains' and 'Upland Fringe' headings.

PART 1: DESCRIPTION



SUMMARY OF LOCATION AND BOUNDARIES

This is an upland landscape situated between the A5 road and the Northern Uplands (LCA 1). It is bounded to the west by the distinctive U-shaped valley of Nant Ffrancon, and to the south by the Afon Llugwy and A5. The landscape is dominated by the Carneddau mountain range, in particular Carnedd Llywelyn, the second highest peak in Snowdonia at 1,064 metres AOD.

KEY CHARACTERISTICS OF THE LANDSCAPE CHARACTER AREA¹

- **High and prominent ridgeline of the Carneddau mountain range**, rising to the summit of Carnedd Llywelyn at 1,064 metres AOD.
- **Complex, internationally renowned geological and geomorphological landscape**, underlain by volcanic deposits with a series of fault trended valleys.
- **Significant evidence of glaciation**, including corries (cymoedd), hanging valleys, deposits of boulder clay within valley floors, scree and moraine. Cwm Glas Crafnant NNR and Cors Geuallt SSSI are designated for their glacial features.
- **U-shaped valley of Nant Ffrancon** forming a prominent landform feature. Multiple streams draining from the mountains into the Afon Llugwy and Nant Ffrancon below.
- **Lakes scattered throughout**, including Llyn Ogwen (at the head of Nant Ffrancon), the cwm lakes of Ffynnon Lloer, Ffynnon Caseg and Ffynnon Llyffant and the reservoirs of Llyn Cowlyd and Ffynnon Llugwy.
- **A largely treeless and open landscape**, with woodland cover limited to scatterings of ash trees on the slopes of Craig Wen.
- **Open mountain summits** and upper slopes surrounded by large, regular **enclosures of ffridd**. Smaller scale fields define the broad valley floor of Nant Ffrancon.
- **Rough common land grazing by sheep** on the mountains, with semi-improved pastures and rough grassland fields on lower slopes.
- **Internationally important montane habitats and species** within the Eryri SAC/SSSI (covering the whole LCA), including rare arctic-alpine plants, montane heaths, cliff ledges and wetlands. These are interspersed with areas of bracken and acid/marshy grassland.
- **Includes land within the Ogwen Valley Landscape of Outstanding Historic Interest**, displaying evidence of prehistoric land use (funerary and ritual sites) and the industrial exploitation of slate in 19th and 20th century.
- **Primarily unsettled landscape**, with buildings limited to small clusters of slate-built cottages and hamlets along the A5.
- A5 road corridor following an historic, scenic route through this northern gateway into the wider National Park. **No road access into the mountains, but much is open access land** with a small number of defined footpaths.
- **Remote and wild mountains**. Overall strong perceptions of tranquillity eroded locally by the A5, as well as tourist-related developments in the Llugwy valley and around Llyn Ogwen and Rhaeadr Ogwen waterfall.
- **Panoramic views from the mountains**, including north to the coast and seascapes of Conwy and Anglesey, where off-shore wind turbines are visible, and south towards the Snowdon massif.

¹ Bold indicates those key characteristics considered to be the 'valued attributes' of the Landscape Character Area; aspects of character that contribute greatly to local distinctiveness.

FORCES FOR CHANGE AFFECTING LANDSCAPE CHARACTER

Please refer to the 'Forces for Change' section of the SPG document. Of particular relevance to this LCA are the following forces for change:

- Tourist-related developments in the Llugwy valley and around Llyn Ogwen and Rhaeadr Ogwen waterfall (including outdoor pursuits centre, car parks and camping sites along the Llugwy valley).
- Wind turbine proposals outside the National Park (including distant offshore schemes) impacting on open, panoramic views from this LCA.
- Pressure from tourism related proposals, particularly demand for car parking along the A5.
- Stone walls defining the fringes of mountain commons and historic areas of ffridd often replaced by fencing.
- Overhead cables / power lines linking residential properties on lower slopes.
- Geometric blocks of coniferous plantation standing out prominently in the open landscape.

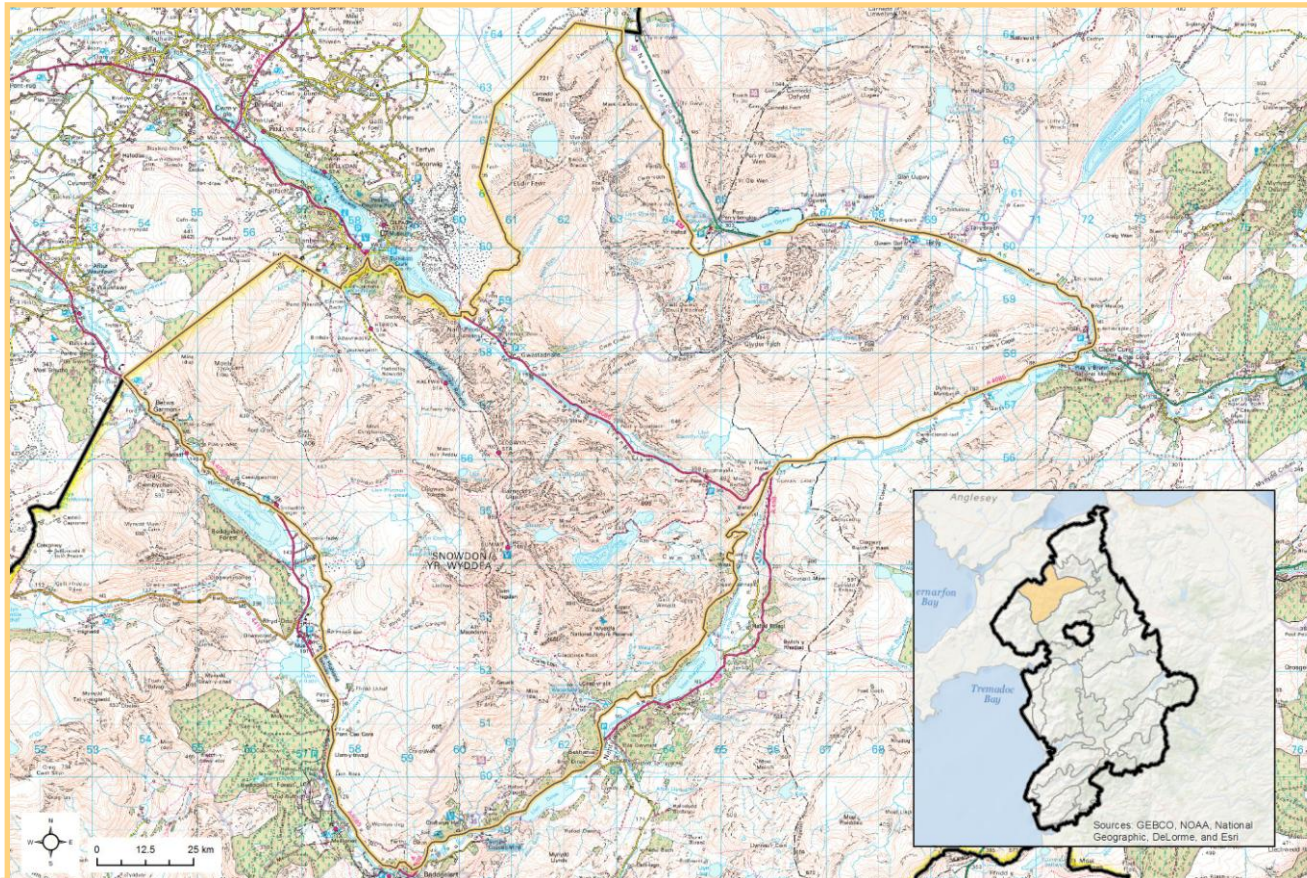
A LANDSCAPE STRATEGY FOR THE FUTURE

This LCA is considered to be one of the 'focal' landscapes of Snowdonia, much of which is defined as '*natural beauty*' as shown on the Eryri Local Development Plan (ELDP) proposals map. This natural beauty, and those elements that contribute towards it – especially the qualities of tranquillity and remoteness – will be protected and enhanced.

GUIDELINES FOR MANAGING FUTURE LANDSCAPE CHANGE

Please refer to the 'Guidelines' section of the main SPG document, particularly for those guidelines under the 'Mountains' and 'Upland Fringe' headings.

PART 1: DESCRIPTION



SUMMARY OF LOCATION AND BOUNDARIES

The LCA forms both the visual and historic core of the National Park. It is roughly encircled by the A4085 (west), A4086 (south and east) and A5 (north) with pass along valley floors which carve through the surrounding mountains. The main feature of the landscape is Mount Snowdon itself, which rises to 1,086 metres AOD and is flanked by a number of other iconic peaks such as Crib Goch and Y Lliwedd. The area is cut roughly in two by the Pass of Llanberis (A4086); north of which is the Glyderau mountain range (Snowdon falls to the south).

KEY CHARACTERISTICS OF THE LANDSCAPE CHARACTER AREA¹

- Rugged mountainous terrain, with rocky ridges, summits strewn with rock and numerous corries (cymoedd) encircling mountain tops. **Yr Wyddfa (Snowdon) rises to 1,086 metres AOD as the highest mountain in Wales.**
- **Complex geology:** a mixture of igneous and sedimentary rocks, subject to the actions of tectonic plates, volcanism and glaciation with a number of corries separated by prominent arêtes and rocky cliffs. Nationally important area for the study of glacial and post-glacial features, including at Cwm Idwal NNR² and Cwm Dwythwch SSSI.
- **Fast-flowing streams and waterfalls draining from the mountains** to meet the valleys below, including the steep V-shaped valley of the Afon Nant Peris, which roughly splits the LCA in half.
- **Mountains dotted by a number of cwm lakes**, including Llyn Dwythwch and Glaslyn, as well as reservoirs at Llyn Ffynnon-y-gwas and Llyn Llydaw.
- Tree/woodland cover limited to the lower-lying valley slopes, particularly above the Afon Glaslyn and around Betws Garmon.
- **Open mountain summits and upper slopes** surrounded by large, regular enclosures of **ffridd divided by stone walls**. Lower valley slopes and floors defined by a smaller scale pattern of irregular fields.
- **Rough common land grazing by sheep on the mountains**, with semi-improved pastures and rough grassland fields on lower slopes. Valleys include some fields of improved pasture.
- **Internationally important montane habitats and species** within the Eryri SAC/SSSI, including rare arctic-alpine plants, montane heaths, cliff ledges and wetlands. Llyn Idwal valued internationally for rich wetland vegetation associated with the hanging valley and nutrient-poor glacial lake.
- **Large area within the Dinorwic Landscape of Outstanding Historic Interest**, including evidence for prehistoric land use and settlement (e.g. huts and enclosures overlooking Llyn Ogwen) and 19th and 20th century slate mining relics such as quarries and tips.
- **Settlement limited to the fringes of the mountains**, including the edges of the tourist centre of Llanberis, occasional valley-side hamlets, and the historic village of Nant Peris (a Conservation Area).
- **The majority of the mountains are open access land**, with occasional rights of way. The LCA includes the Snowdonia mountain railway (a popular tourist attraction) and is encircled by main roads (including the Llanberis Pass) serving the National Park.
- **An inspirational and iconic landscape** popular with artists and writers, closely associated with Wales, Welsh identity and folklore.
- **Overriding sense of remoteness, tranquillity and wildness**, heightened by the landscape's close relationship with the mountains of the surrounding LCAs.

¹ Bold indicates those key characteristics considered to be the 'valued attributes' of the Landscape Character Area; aspects of character that contribute greatly to local distinctiveness.

² Wales's first National Nature Reserve, designated in 1954

FORCES FOR CHANGE AFFECTING LANDSCAPE CHARACTER

Please refer to the 'Forces for Change' section of the SPG document. Of particular relevance to this LCA are the following forces for change:

- Secondary woodland encroachment on mountain fringes indicating a decline in grazing levels in these marginal areas.
- Stone walls falling into a state of disrepair in some locations, frequently gapped up by post-and-wire fencing.
- Additional car parking facilities for tourists at Pen y Gwryd.
- Increased tourist pressure following completion of the Welsh Highland Railway through Beddgelert.
- New building at the Snowdon summit, Hafod Eryri.
- Some consider the Snowdon Summit Building and railway to be detractors to the remote qualities of the landscape.

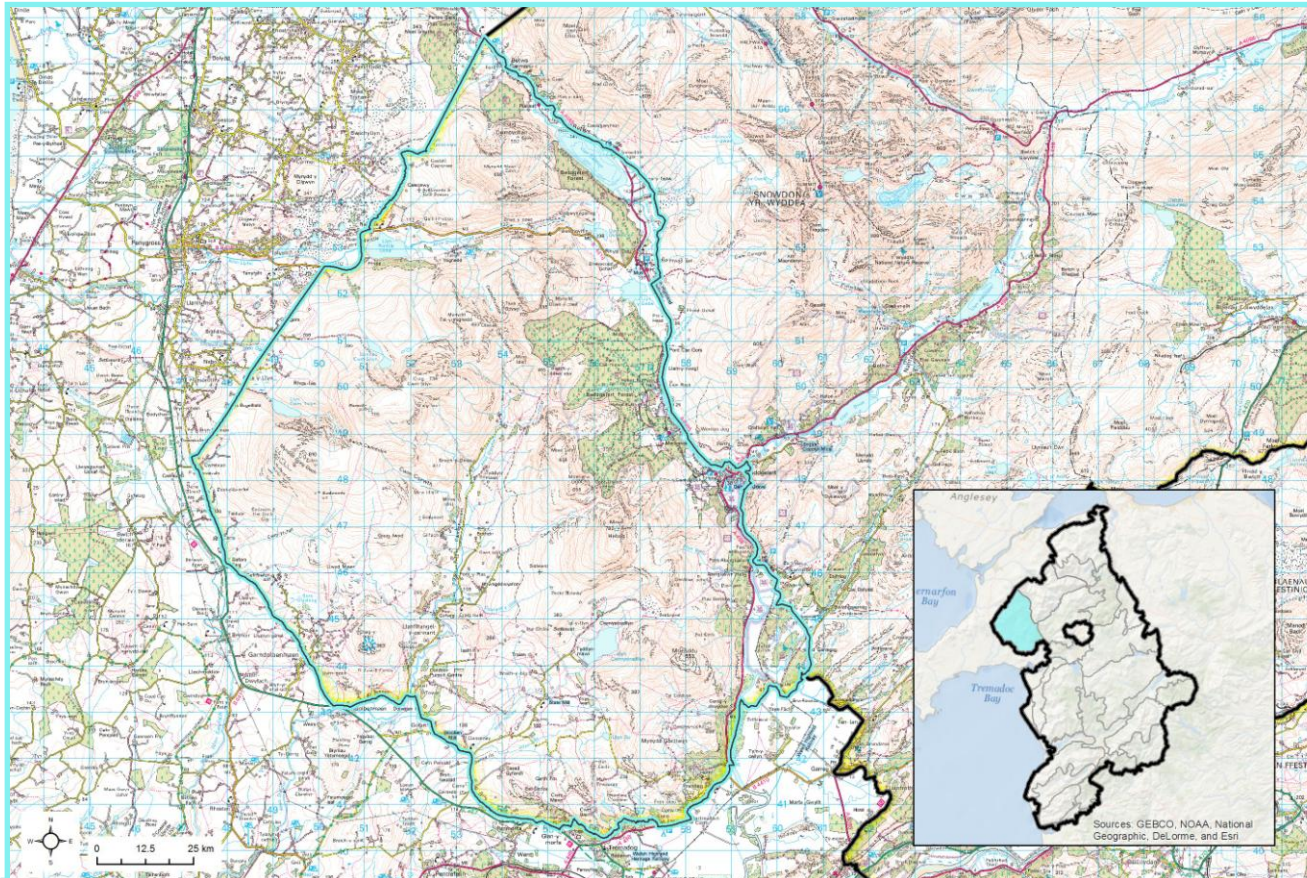
A LANDSCAPE STRATEGY FOR THE FUTURE

This LCA is considered to be one of the 'focal' landscapes of Snowdonia, much of which is defined as '*natural beauty*' as shown on the Eryri Local Development Plan (ELDP) proposals map. This natural beauty, and those elements that contribute towards it – especially the qualities of tranquillity and remoteness – will be protected and enhanced.

GUIDELINES FOR MANAGING FUTURE LANDSCAPE CHANGE

Please refer to the 'Guidelines' section of the main SPG document, particularly for those guidelines under the 'Mountains' and 'Upland Fringe' headings.

PART 1: DESCRIPTION



SUMMARY OF LOCATION AND BOUNDARIES

This LCA forms the western upland flank of north Snowdonia and includes the peaks of Mynydd Mawr (698m), Mynydd Graig Goch (609m), Craig Cwm Silyn (734m), Moel yr Ogof (655m) and Moel Hebog (782m). These run down to a prominent scarp above Tremadog, overlooking the lower reaches of the Afon Glaslyn. The LCA is bounded to the east by the A4085 as it passes through valleys encircling the mountains. The landscape offers spectacular views of the coast and the core of Snowdonia.

KEY CHARACTERISTICS OF THE LANDSCAPE CHARACTER AREA¹

- **Classic Snowdonian landscape** of glaciated valleys carved between craggy mountain peaks, Moel Hebog (782 metres AOD) being the highest summit.
- **Complex geology** comprising a mixture of volcanic (igneous) and sedimentary rocks shaped by earth movements and extensively remodelled by the actions of glaciation. Craig-y-Garn SSSI includes internationally important volcanic rocks from the Ordovician Period.
- Classic U-shaped valleys carving through the mountains, including the Afon Glaslyn, Afon Dwyfor and Dyffryn Nantlle. Moraine, head and boulder clay deposits feature within these valleys.
- **Glacial lakes found at the valley heads**, such as Llyn Cwm Dulyn, Llyn Nantlle Uchaf and Llyn Cwmystradllyn. Cwm lakes also scattered throughout the mountains, with the Llyn Cwmystradllyn reservoir also within the LCA.
- Beddgelert Forest comprising extensive coniferous forestry in a prominent hillside location. Small plantations and significant bands of semi-natural broadleaved woodland found on valley sides.
- **Unenclosed mountain summits** surrounded by large-scale regular enclosures of ffridd, divided by stone walls or fences. **Valleys defined by a small-scale historic field pattern**, with stone walls providing unity with the rocky uplands.
- **Rough common land grazing by sheep** on the mountains, with semi-improved pastures and rough grassland fields on lower slopes. Valleys include some fields of improved pasture.
- **Varied semi-natural habitats including heather moorland, acid grassland, bogs and flushes** (e.g. Moel Hebog and Cors Graianog SSSIs), and **species-rich grasslands interspersed with oak/birch semi-natural woodlands** within valleys (e.g. the internationally important Meirionnydd Oakwoods SAC)
- **Rich historic landscape reflecting the dual mining and farming economy** of the area. Nationally important evidence of prehistoric land use (e.g. ancient hut circles and field systems near Nantlle) as well as frequent industrial relicts (e.g. Ynys y Pandy slate slab mill and the deserted quarry settlement at Treforys).
- **Significant parts recognised as Landscapes of Outstanding Historic Interest** – the northern part of the LCA falling within the Nantlle Valley LOHI, and Glaslyn valley within the Aberglaslyn LOHI. Parts of Beddgelert and Nantmor Conservation Areas fall within the LCA.
- **Unsettled mountains surrounded by an historic pattern of scattered stone/slate farmsteads and occasional clustered hamlets** linked by rural lanes or tracks crossing stone hump-backed bridges. The A498 and A4085 roads border the south and eastern edges of the LCA respectively.
- **Majority of the mountains inaccessible to vehicles, but large parts defined as open access/common land** with rights of way linking to the surrounding valleys. Visitor attractions such as the Welsh Highland Railway and the historic village of Beddgelert make this a popular tourism destination.
- **A landscape with strong cultural and linguistic associations**, including Owain Glyndwr's cave on the western flanks of Moel yr Ogof.
- **Extensive views east toward the Llyn Peninsula and north towards Caernarfon** – with the mountains themselves forming a valued backdrop to the nearby seascapes.

¹ Bold indicates those key characteristics considered to be the 'valued attributes' of the Landscape Character Area; aspects of character that contribute greatly to local distinctiveness.

FORCES FOR CHANGE AFFECTING LANDSCAPE CHARACTER

Please refer to the 'Forces for Change' section of the SPG document. Of particular relevance to this LCA are the following forces for change:

- Secondary woodland encroachment on mountain fringes indicating a decline in grazing levels in these marginal areas.
- Traditional stone barns also falling into dereliction due to a lack of use / maintenance
- Stone walls falling into a state of disrepair in some locations, frequently gapped up by post-and-wire fencing.
- Pressure for tourism-related development in the area.
- Geometric blocks of coniferous plantation standing out prominently in the open landscape, including Beddgelert Forest.

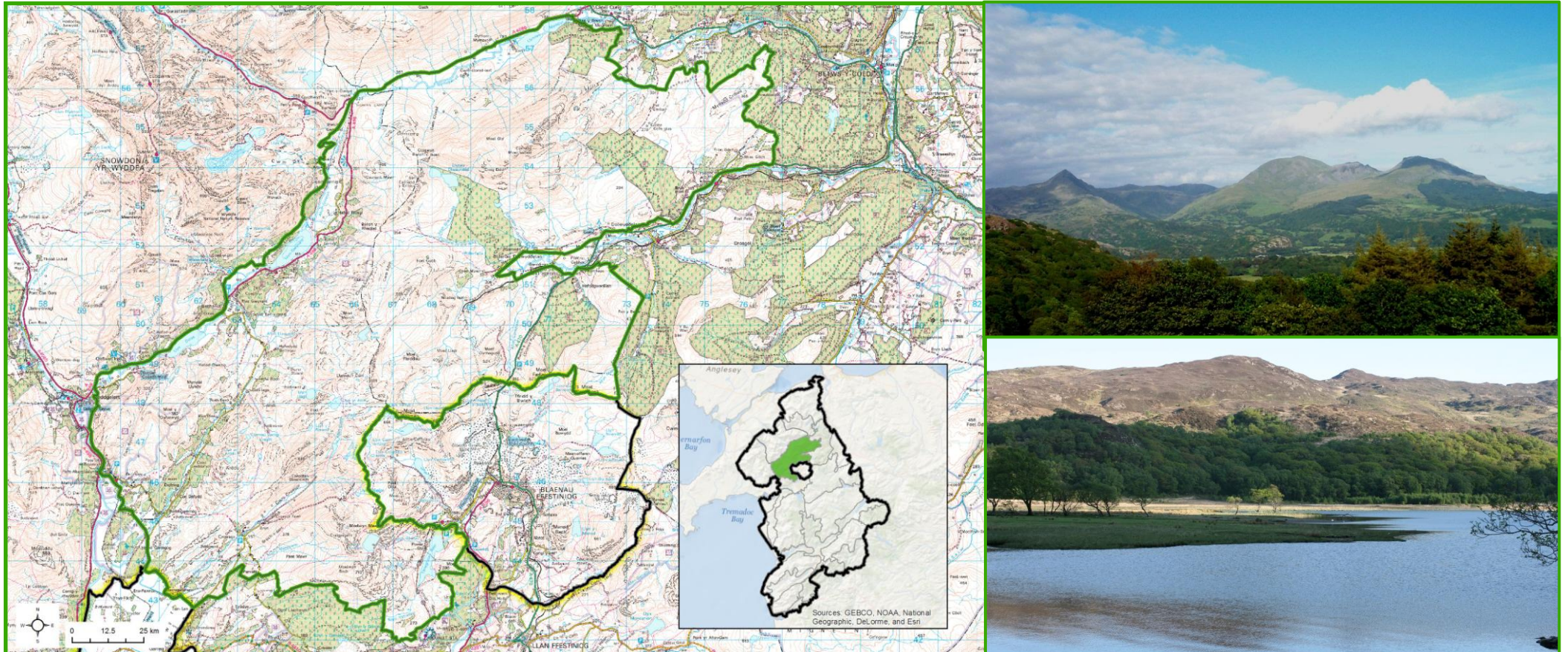
A LANDSCAPE STRATEGY FOR THE FUTURE

This LCA is considered to be one of the 'focal' landscapes of Snowdonia, much of which is defined as '*natural beauty*' as shown on the Eryri Local Development Plan (ELDP) proposals map. This natural beauty, and those elements that contribute towards it – especially the qualities of tranquillity and remoteness – will be protected and enhanced.

GUIDELINES FOR MANAGING FUTURE LANDSCAPE CHANGE

Please refer to the 'Guidelines' section of the main SPG document, particularly for those guidelines under the 'Mountains' and 'Upland Fringe' headings.

PART 1: DESCRIPTION



SUMMARY OF LOCATION AND BOUNDARIES

This LCA includes the upper reaches of Afon Glaslyn from Beddgelert inland, including its associated valley sides and upland peaks (rising to 872 metres AOD at Carnedd Moel Siabod). The valley floor is relatively narrow and includes the large water bodies of Llyn Dinas and Llyn Gwynant, which dominate the valley floor. Much of the side slopes are covered with plantations, primarily coniferous, interspersed with smaller areas of broadleaved woodland. The LCA wraps around the town and industry of Blaenau Ffestiniog, which falls outside the National Park

KEY CHARACTERISTICS OF THE LANDSCAPE CHARACTER AREA¹

- **Landscape defined by the deep Nant Gwynant valley, backed by an imposing, scenic mountain backdrop** of successive peaks and ridgelines (including Ysgafell Wen). The highest summit is Carnedd Moel Siabod (872 metres AOD).
- **Nant Gwynant and Nanmor valleys shaped by glacial action**, with extensive moraines, head deposits, scree and boulder clay.
- **Surrounding mountains include nationally important outcrops of volcanic rock** (e.g. Yr Arddu SSSI) and geomorphological features left as a legacy of glaciation (e.g. Moelwyn Mawr SSSI).
- **Llyn Dinas and Llyn Gwynant forming large bodies of water on the valley floor**. Cwm lakes in the mountains (e.g. Llyn Llagi, Llyn y Adar and Llynnau Diffwys), along with a number of reservoirs.
- **Marshy areas, bogs, waterfalls and fast-flowing streams** draining from the mountains into the valleys below.
- Medium-scale, geometric conifer plantations on prominent slopes, with valued bands of semi-natural broadleaved woodlands on valley sides.
- **Open mountain tops surrounded by large regular enclosures of ffridd. Valley slopes and bottoms defined by a small-scale irregular field pattern**. Boundaries are stone walls, providing unity with underlying geology.
- Valley floors and slopes largely defined by pastoral fields, while mountain sides and summits are characterised by rough common land grazing by sheep.
- **Upland areas typified by heath and montane grasslands**, with Creigiau'r Garth falling within the Eryri SAC/SSSI (also valued for rare arctic-alpine plants, cliff ledges and wetlands). **Nationally valued 'Atlantic' wet woodland at Coedydd Nantgwynant.**
- **Grade II listed parklands, with ornamental woodlands and formal gardens**, on the slopes of the Glaslyn Valley (Bryn Gwynant, Plas Gwynant and Craflyn). Grade II* 17th century terraced gardens overlooking the Afon Maesgwm.
- **Industrial relicts, including numerous disused tips, quarries, levels and mines** (partially within the Blaenau Ffestiniog Landscape of Outstanding Historic Importance). **Evidence for ancient settlement** in the form of nationally important hut circles and settlement sites, as well as the medieval Welsh castle of Dolwyddelan.
- Historic settlements of Beddgelert (a long-standing visitor resort) and Nantmor – both Conservation Areas – at the entrance of the two valleys.
- Elsewhere, **occasional stone-built farmsteads and hamlets dispersed along the sheltered valleys** – supplemented by camping sites, car parks and other tourism-related development.
- Main roads snaking through the valleys, including the scenic Nant Gwynant Pass (A498). The Crimea Pass (A470) cuts through the southern part of the LCA. **Much of the mountain landscape is open access/common land** supplemented by occasional rights of way. Nant Gwynant is a starting point for the Watkin path to the Snowdon summit.
- **Panoramic and inspiring village of Beddgelert, with its strong association with the folklore of Gelert the Hound.**
- **LCA includes the Tanygrisiau pump storage hydro-electric power station, the first in Britain (1963)**. The upper reservoir dam at 500 metres AOD is one of the most prominent man-made landmarks in the wider area.
- **A peaceful and highly scenic landscape overlooked by Mount Snowdon**, with these qualities affected locally by the noise/sight of traffic passing along the main A roads.

¹ Bold indicates those key characteristics considered to be the 'valued attributes' of the Landscape Character Area; aspects of character that contribute greatly to local distinctiveness.

FORCES FOR CHANGE AFFECTING LANDSCAPE CHARACTER

Please refer to the 'Forces for Change' section of the SPG document. Of particular relevance to this LCA are the following forces for change:

- Secondary woodland encroachment on mountain fringes indicating a decline in grazing levels in these marginal areas.
- Stone walls falling into a state of disrepair in some locations, frequently gapped up or replaced completely by post-and-wire fencing.
- Pressure for transport routes and car parking within the landscape, including on the fringes of historic villages.
- Geometric blocks of coniferous plantation standing out prominently on open mountain slopes.
- Development proposals in Blaenau Ffestiniog which may have adverse visual impacts on the surrounding landscape.

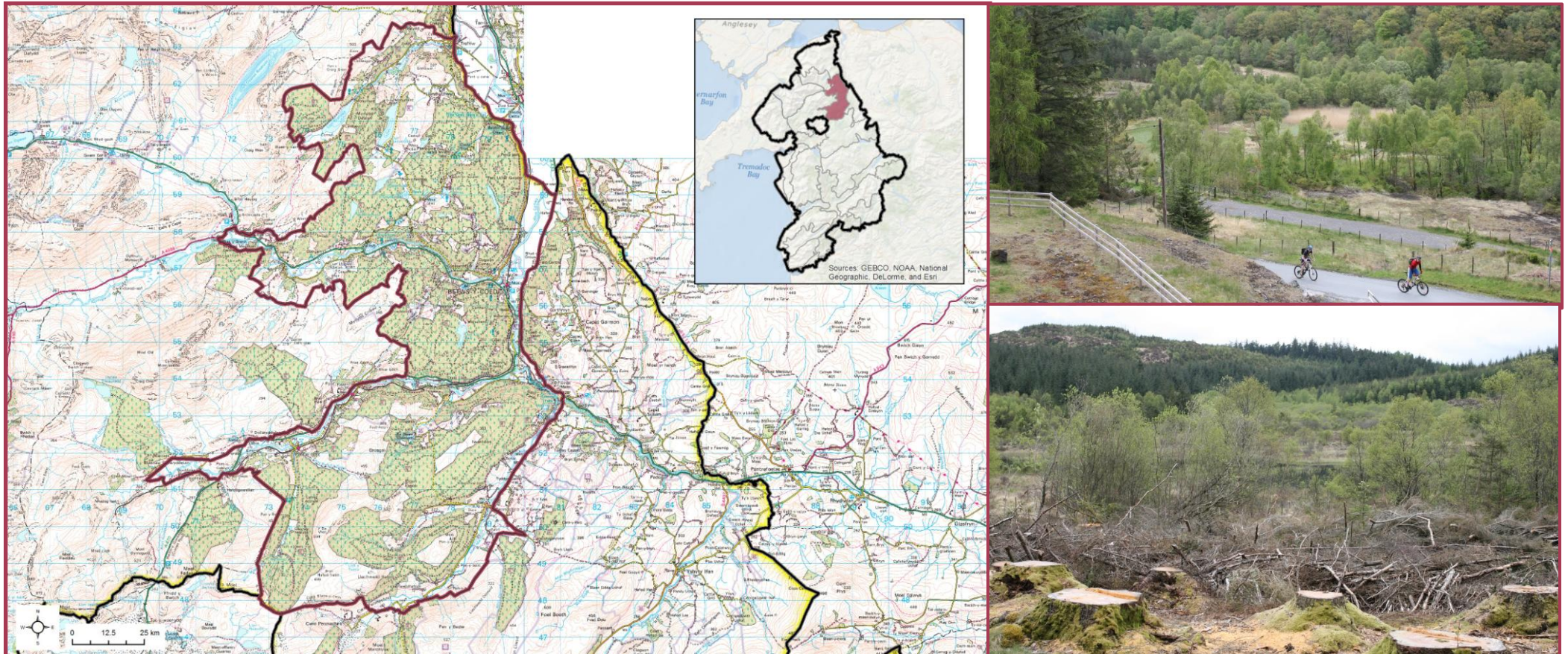
A LANDSCAPE STRATEGY FOR THE FUTURE

Beddegelert is a popular visitor destination and the area includes the scenic Aberglaslyn and Nant Gwynant Passes. There are strong heritage and cultural associations throughout the LCA with evidence of copper mining in Cwm Bychan and elsewhere. Sustainable tourism and recreation activities will be encouraged whilst protection will be given from inappropriate developments.

GUIDELINES FOR MANAGING FUTURE LANDSCAPE CHANGE

Please refer to the 'Guidelines' section of the main SPG document, particularly for those guidelines under the 'Mountains' and 'Upland Fringe' headings.

PART 1: DESCRIPTION



SUMMARY OF LOCATION AND BOUNDARIES

This LCA is dominated by the extensive conifer plantations which are found to the north, south and west of Betws-y-Coed on the eastern flank of the National Park. The Conwy Valley marks the eastern boundary of the LCA (falling within LCA 7), and it is also skirted by the Afon Lledr and Afon Machno – both tributaries of the Conwy.

KEY CHARACTERISTICS OF THE LANDSCAPE CHARACTER AREA¹

- Strongly undulating landscape of rounded hill summits dissected by a series of valleys. Higher land in the south with a series of upland peaks, the highest being Y Ro Wen (590 metres AOD).
- **Classic U-shaped glacial valleys** and lower hill slopes with extensive boulder clay deposits together with drumlins, peat and head deposits creating the complex topography.
- **Fast-flowing streams and waterfalls** draining from the hills to the main valleys below, plunging through gorges in some locations. Landscape cut by the main Afon Conwy, Machno, Llugwy and Lledr.
- **Glacial lakes** and reservoirs nestling in the hillsides (e.g. Llyn Crafnant and Llyn Geirionydd).
- Extensive conifer plantations on hill slopes and summits; strongly influencing landscape character. **Valued semi-natural broadleaved woodlands found along valley/gorge slopes.**
- Open hill summits and plantations contrasting with **lower-lying pockets of historic irregular small-scale fields**. The valley floor of the Conwy includes a matrix of regular fields.
- **Rough grazing on hill summits, with pastoral-dominated farming on lower slopes**, and wet pasture/meadows within valleys.
- **Significant areas of remnant flower-rich meadows, marshy grassland and flushes** along valley floors, many areas designated as SSSIs.
- **Gwydyr Forest Mines SAC** internationally valued for workings and waste heaps from the past lead, iron and zinc industry – supporting rare plant communities.
- **Strong cultural heritage associated with past industry**, including former mines, waste heaps, shafts and levels (e.g. Hafna and Coed Mawr Lead Mines – both Scheduled Monuments). Bryn-y-Gefeiliau Roman fort occupies a strategic position alongside the Afon Llugwy.
- **Area served by Betws-y-Coed, a nucleated town with picturesque 19th century architecture**. Associations with artists and the growing visitor economy during that period (reflected in Conservation Area status).
- Other settlement focused along valley floors linked by main roads (e.g. A470 and A5 trunk roads), with **scattered stone/slate-built farmsteads and hamlets** along their length.
- Tourist-related developments such as car parks, camping sites and The Towers outdoor pursuits centre – particularly concentrated around Betws-y-Coed. Much of the forested area and surrounding uplands is open access land, supplemented by rights of way and mountain biking tracks.
- Noise and movements from the main roads, along with tourism related development, disrupting the otherwise **peaceful, rural and scenic qualities** of the landscape (an important gateway into the mountains of the National Park).
- **Panoramic views and valued viewpoints** from the higher ground allowing scenic views of the nearby mountains.

¹ Bold indicates those key characteristics considered to be the ‘valued attributes’ of the Landscape Character Area; aspects of character that contribute greatly to local distinctiveness.

FORCES FOR CHANGE AFFECTING LANDSCAPE CHARACTER

Please refer to the 'Forces for Change' section of the SPG document. Of particular relevance to this LCA are the following forces for change:

- Secondary woodland encroachment due to a decline in grazing levels, reducing areas of open landscape and vistas to the surrounding mountains.
- Increasing popularity of the area for recreation, particularly mountain biking on tracks through Gwydyr Forest Park.
- Stone walls falling into a state of disrepair in some locations, frequently gapped up or replaced by post-and-wire fencing.
- Geometric blocks of coniferous plantation introduced since the 20th century.
- Roadside tourism-related development between Betws-y-Coed and Capel Curig, including prominent signage.
- Increasing levels of flood risk in Betws-y-Coed.

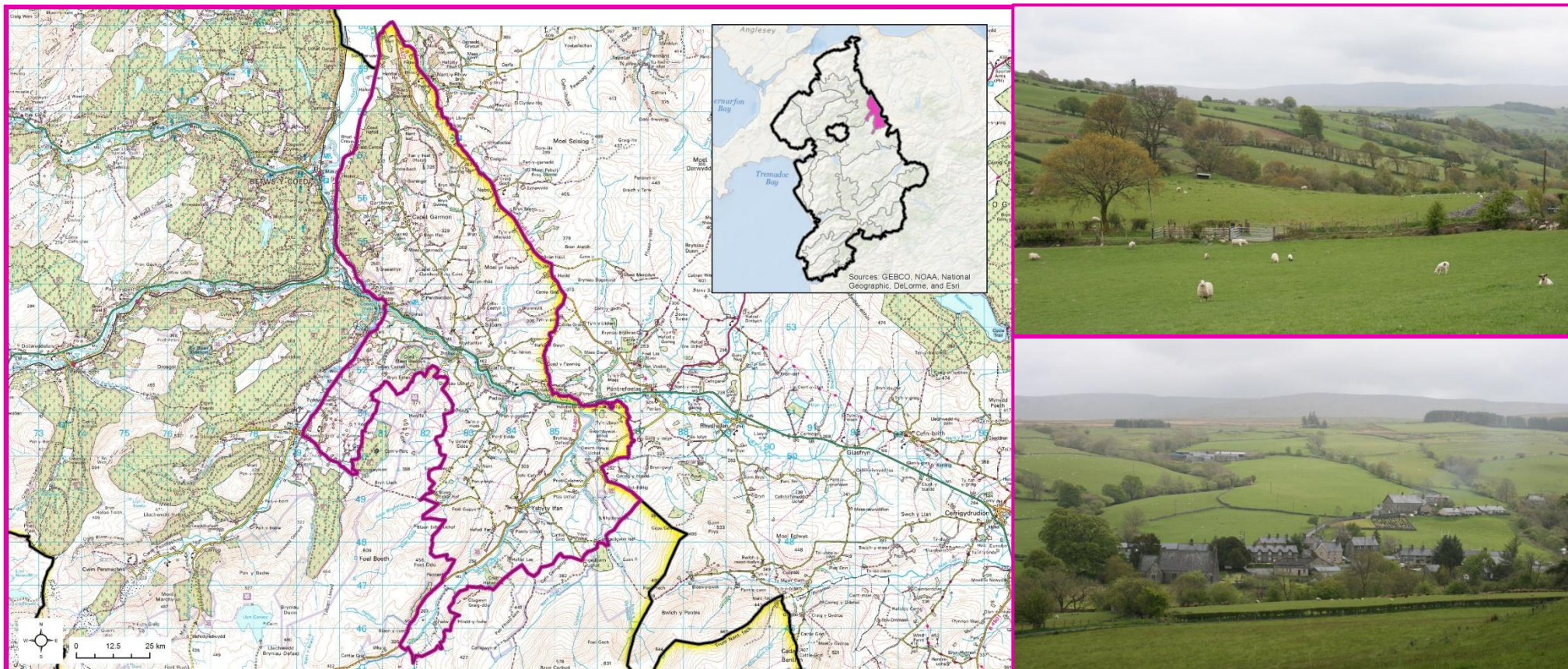
A LANDSCAPE STRATEGY FOR THE FUTURE

Recreation is an important feature of this area and much of the LCA is covered by the Gwydyr Forest Park. Sustainable tourism and recreation activities will be encouraged. The area is rich in industrial archaeological remains associated with lead and zinc mining and many sites have been preserved and interpreted. Biodiversity enhancement will be sought through improved forestry and woodland management.

GUIDELINES FOR MANAGING FUTURE LANDSCAPE CHANGE

Please refer to the 'Guidelines' section of the main SPG document, particularly for those guidelines under the 'Mountains' and 'Upland Fringe' headings.

PART 1: DESCRIPTION



SUMMARY OF LOCATION AND BOUNDARIES

This LCA is centred on the Afon Conwy as it flows through the eastern part of the National Park on its course to Conwy Bay (from its source at Cerrig Llwynogod in LCA 9). The peaceful, rural landscape provides an eastern gateway into Snowdonia via the A5.

KEY CHARACTERISTICS OF THE LANDSCAPE CHARACTER AREA¹

- Undulating vale landscape with occasional rounded hill summits, including Moel Trefriw (325 metres AOD), Capel Garmon (329m) and Dinas Mawr (254m).
- Underlying geology of Silurian rocks within the Llandovery Group, comprising mudstones, siltstones and sandstones, with occasional bands of **igneous tuff forming rocky outcrops**.
- **Landscape defined by the River Conwy and its tributaries**, including the Afon Eidda, Afon Gwrysgog and a number of streams and springs draining from the higher ground.
- **Valleys and streamsides often clothed in bands of broadleaved woodland**. Blocks of mixed and coniferous plantation associated with the steep valley slopes in the north of the LCA.
- **Strong historic pattern of small-medium irregular fields divided by stone walls or hedgerows (often with flower and fern-rich banks)**. Pockets of open rough grazing on hill summits.
- **Predominantly pastoral character**, with a mixture of improved and semi-improved fields and some areas of more intensive arable production. **Patches of rough grassland, rush pasture, gorse and heath contributing to a varied mosaic**.
- **Wet species-rich grassland and areas of purple moor grass providing nature conservation interest** (e.g. Pont Bancog and Eidda Pastures SSSIs), along with the **semi-natural woodland, fern and lichen communities** of the Conwy Gorge (Fairy Glen Woods SSSI).
- **Small areas within the Gwydyr Forest Mines SAC**, with workings and waste heaps from the past lead, iron and zinc industry supporting rare plant communities.
- **Evidence for prehistoric settlement and ritual practices**, including Capel Garmon chambered long cairn and round cairns at Y Foel. River Conwy overlooked by two parkland estates, Hendre House (Grade II) and Voelas (Grade II*) – the latter particularly valued for its picturesque riverside setting.
- **Scattered pattern of hamlets and farmsteads linked by winding rural lanes and tracks**. Area served by the clustered historic villages of Capel Garmon, Ysbyty Ifan and the nearby tourist centre of Betws-y-Coed (LCA 6).
- The A5 trunk road and B4406 providing the main routes through the landscape. A network of rights of way and areas of open access land above the Conwy Valley providing recreational opportunities.
- **A peaceful and rural landscape providing a scenic, gentle gateway into Snowdonia**. These qualities eroded only locally by traffic on the A5 and 20th century linear development spreading along the B4406 from Penmachno.
- **Valued viewpoints from the higher ground** allowing scenic views of the nearby mountains forming the core of the National Park.

¹ Bold indicates those key characteristics considered to be the 'valued attributes' of the Landscape Character Area; aspects of character that contribute greatly to local distinctiveness.

FORCES FOR CHANGE AFFECTING LANDSCAPE CHARACTER

Please refer to the 'Forces for Change' section of the SPG document. Of particular relevance to this LCA are the following forces for change:

- Secondary woodland encroachment due to a decline in grazing levels, reducing areas of open habitat and disrupting vistas to the surrounding mountains.
- Decline in species-rich hedgerow management in some locations, with lengths replaced by post-and-wire fencing or stone walls.
- Telecommunication lines passing through the landscape, eroding its unspoilt, rural qualities in parts.

A LANDSCAPE STRATEGY FOR THE FUTURE

This LCA forms the eastern boundary of the northern part of the National Park, rising from the floodplain of Afon Conwy to an elevated plateau affording views to the Conwy and Denbighshire moors. Slopes are predominantly covered in coniferous forest and there is a legacy of lead and zinc mining in the area. Biodiversity enhancement will be sought through improved forestry management and management of metallophytes on mine spoils.

GUIDELINES FOR MANAGING FUTURE LANDSCAPE CHANGE

Please refer to the 'Guidelines' section of the main SPG document, particularly for those guidelines under the 'Upland Fringe' and 'Valleys/Estuaries' headings.

PART 1: DESCRIPTION



SUMMARY OF LOCATION AND BOUNDARIES

The area extends from the National Park boundary to the north of Llan Ffestiniog down to Penrhyndeudraeth, and is centred upon the settlement of Maentwrog. It forms a relatively broad, open flat valley dominated by the tidal extent of the Afon Dwyryd and its tributaries.

KEY CHARACTERISTICS OF THE LANDSCAPE CHARACTER AREA¹

- **Complex topography defined by the broad tidal form of the Afon Dwyryd and its tributaries**, surrounded by varied, gently rolling vale landscape and immediately backed by a steep gorge.
- **Western tidal reaches of the river overlooked by forested hills** to the north, rising to 234 metres AOD at Y Gysgfa.
- Geology dominated by sedimentary Cambrian rocks, including sandstones, siltstones and mudstones. Sand, mudflats and alluvial deposits fringing Afon Dwyryd.
- **Streams, small lakes and waterfalls** (e.g. Rhaeadr Cynfal) draining into the Dwyryd and its tributaries.
- **Steep valley sides cloaked in woodland**, primarily coniferous with some significant areas of nationally important oak-dominated ancient woodlands.
- Regular matrix of reclaimed marshes on the valley floor and parts of the surrounding vale, interspersed with smaller-scale irregular pastures. Pockets of unenclosed hill summits grazed by sheep.
- **Fields generally enclosed by slate walls**, providing unity with the local vernacular. Some lengths of post-and-wire fencing.
- **Nationally important extensive tracts of oak and ash-dominated woodland** on hill and gorge slopes, supporting scarce lichens, mosses, breeding birds and bats. The Grade II* gardens and ornamental woodlands of Plas Tan-y-Bwlch overlook the Dwyryd.
- **Southern part of the LCA within the Trawsfynydd Basin & Cwm Prysor Landscape of Outstanding Historic Interest**, reflecting a long history of human occupation. Features include ancient hut groups on Nurse Cae Due, Sarn Helen Roman Road and a disused Ffestiniog railway line (and viaduct).
- **Clustered settlements of Gellilŷdan, Llan Ffestiniog and the estate village of Maentwrog** (a Conservation Area). Llan Ffestiniog experienced rapid 19th century growth associated with the slate industry.
- **Sparsely settled elsewhere**, with scattered farmsteads and hamlets linked by winding rural roads. The A470 trunk road, A487 and A496 dissect the landscape.
- **The Dwyryd River is a popular destination for fishing and watersports** such as canoeing and kayaking.
- **A strongly rural landscape framed by scenic views of the surrounding mountains.**

¹ Bold indicates those key characteristics considered to be the 'valued attributes' of the Landscape Character Area; aspects of character that contribute greatly to local distinctiveness.

FORCES FOR CHANGE AFFECTING LANDSCAPE CHARACTER

Please refer to the 'Forces for Change' section of the SPG document. Of particular relevance to this LCA are the following forces for change:

- National Grid pylons forming prominent man-made features at the mouth of the Dwyryd.
- Valley dominated by roads, A470 (northern edge) and A496 (southern edge) – disruptive visually and aurally.
- Removal and thinning of plantation forestry at Coed Llyn y Garnedd.
- Neglect of slate stone walls and traditional stone agricultural buildings within the farmed vale landscape.

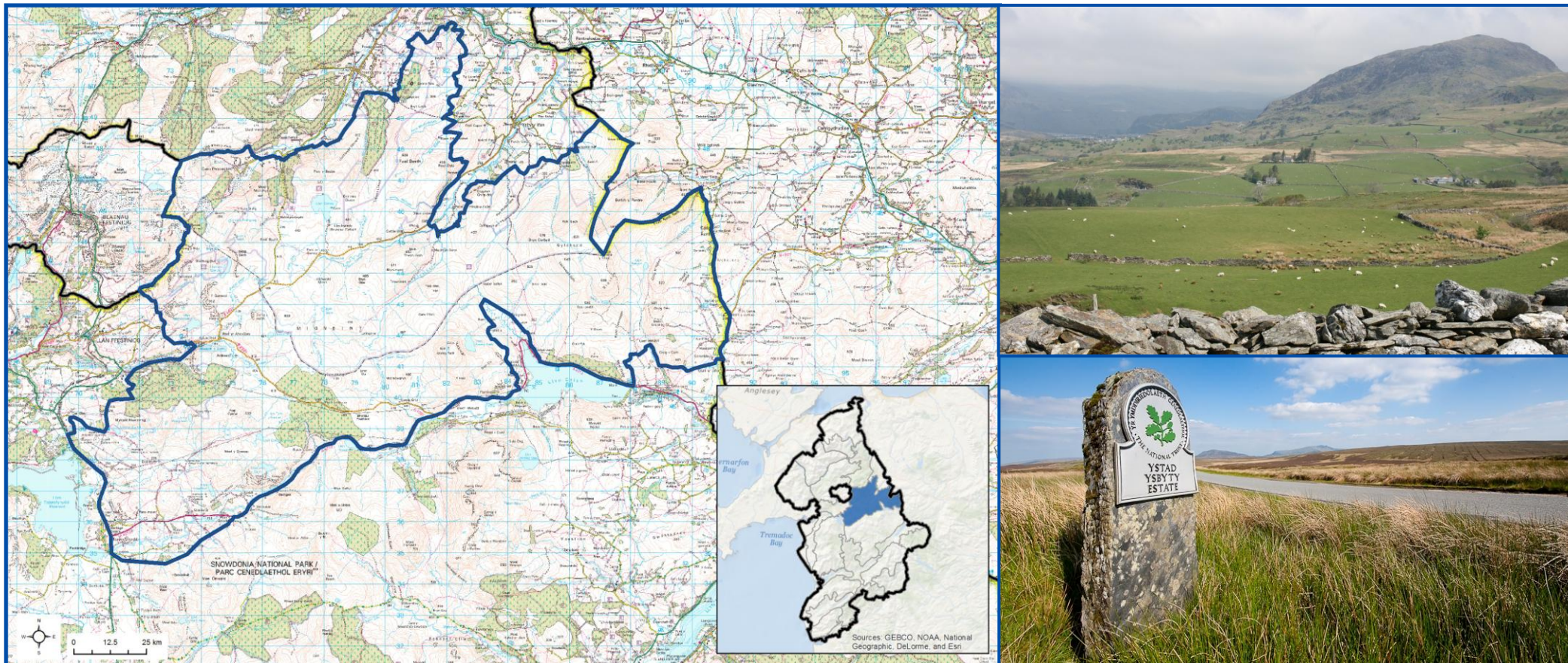
A LANDSCAPE STRATEGY FOR THE FUTURE

Centred on Afon Dwyryd, this LCA contains extensive areas of native oak woodland on the valley slopes interspersed with conifer plantations. There is a distinct local vernacular based on the Tan y Bwlch Estate, exemplified by the village of Maentwrog. Sustainable tourism and recreation activities will be encouraged whilst protection will be given from inappropriate developments. Biodiversity enhancement will be sought through improved forestry and woodland management.

GUIDELINES FOR MANAGING FUTURE LANDSCAPE CHANGE

Please refer to the 'Guidelines' section of the main SPG document, particularly for those guidelines under the 'Valleys/Estuaries' heading.

PART 1: DESCRIPTION



SUMMARY OF LOCATION AND BOUNDARIES

This upland LCA is bounded to the south by the Prysor and Tryweryn valleys and to the west by the A470. It covers the uplands of the Migneint, including the summits of Carnedd y Filiast (669 metres) and Arenig Fach (689 metres). The Machno valley and National Park boundary complete the northern and eastern extent of the area.

KEY CHARACTERISTICS OF THE LANDSCAPE CHARACTER AREA¹

- | | |
|---|---|
| <ul style="list-style-type: none"> • An open, undulating upland block centred upon the Migneint. Landscape punctuated by the isolated summits of Carnedd y Filiast (669m) and Arenig Fach (689m). • Diverse sedimentary and igneous rocks superimposed by thick glacial and glacio-fluvial sedimentary sequences. Dramatic landform features, including U-shaped valleys and corries (cymoedd). • Land sloping away gently to the west, comprising undulating enclosed farmland dissected by streams (e.g. Afon Prysor). • Wetlands including blanket bog, raised bog and upland cwm and oligotrophic lakes. Numerous fast-flowing streams and waterfalls draing from the uplands, including the head waters of the Afon Conwy. • Predominantly treeless uplands, with geometric plantation blocks on the fringes (e.g. Ffridd Nant-Crethyll, Hafod Fawr, and on the slopes above the Afon Machno). Small bands of broadleaved woodland on farmed slopes. • Lower valley sides and floors with a pattern of small, irregular fields bounded by hedgerows, contrasting with areas of ffridd and the open, unenclosed uplands. | <ul style="list-style-type: none"> • Uplands under rough grazing (predominantly by sheep); with pastoral farmland on lower valley sides and slopes. • Tracts of internationally important upland heath, blanket bog, flushes and woodland supporting valued upland bird populations (Migneint-Arenig-Dduallt SSSI/SAC/SPA). Off the moorland are areas of species-rich upland pasture supporting rare plants and flowers (Castell Prysor SSSI). • Nationally important archaeological remains including a Roman fort complex, amphitheatre, (Tomen y Mur) and associated practice camps (Dol-ddinas), along with post-medieval deserted settlements and prehistoric cairns scattered throughout. • Strong cultural association with the poet Ellis Evans (Hedd Wyn) who posthumously won the Chair at the National Eisteddfod in 1917 following his death at Passchendaele. The family home, Yr Ysgwrn near Trawsfynydd, is being developed as a cultural centre by the SNPA. • Slate quarries, tips and manganese mines found throughout the area, along with a dismantled railway. • Much of the area is within the Ysbyty Estate, managed by the National Trust. The majority of the upland landscape is open access or common land. • Unsettled uplands, with occasional slate-built farmsteads on lower farmed slopes. Uplands traversed by a number of roads, including the B4407, B4431 and A4212. • Landscape with a greater sense of tranquillity and solitude than the more popular areas of Snowdonia. |
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¹ Bold indicates those key characteristics considered to be the 'valued attributes' of the Landscape Character Area; aspects of character that contribute greatly to local distinctiveness.

FORCES FOR CHANGE AFFECTING LANDSCAPE CHARACTER

Please refer to the 'Forces for Change' section of the SPG document. Of particular relevance to this LCA are the following forces for change:

- Intrusive noise from the A4212
- National Grid overhead power lines found along the A4212.
- Large conifer plantations with distinctive straight, uniform boundaries.
- Large windfarm developments in the neighbouring areas of Conwy and Denbighshire, with the potential to impact on the panoramic views from the area.
- Barn conversions to provide visitor accommodation/bunk houses.
- Proposals for improving the A and B class roads that traverse the LCA.

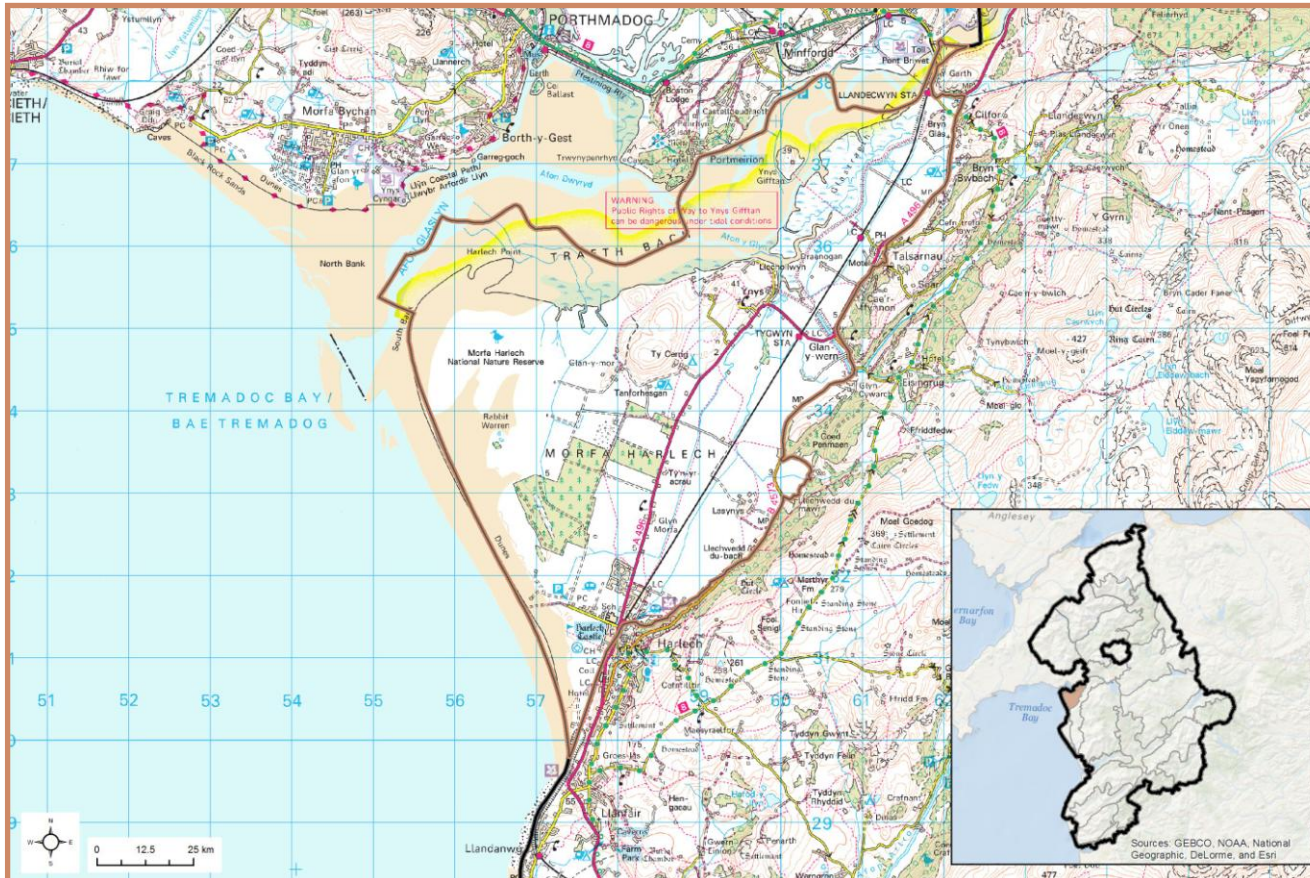
A LANDSCAPE STRATEGY FOR THE FUTURE

This LCA is considered to be one of the 'focal' landscapes of Snowdonia, much of which is defined as '*natural beauty*' as shown on the Eryri Local Development Plan (ELDP) proposals map. This natural beauty, and those elements that contribute towards it – especially the qualities of tranquillity and remoteness – will be protected and enhanced.

GUIDELINES FOR MANAGING FUTURE LANDSCAPE CHANGE

Please refer to the 'Guidelines' section of the main SPG document, particularly for those guidelines under the 'Mountains' heading.

PART 1: DESCRIPTION



SUMMARY OF LOCATION AND BOUNDARIES

A distinct, low lying coastal landscape set below and abutting the historic town of Harlech. Most of the landscape is reclaimed land, with the coastal edge defined by the hummocky sand dunes and wide sandy beach of Morfa Harlech – a popular tourism destination.

KEY CHARACTERISTICS OF THE LANDSCAPE CHARACTER AREA¹

- **Low-lying coastal landscape largely below 10 metres AOD**, underlain by some of the youngest rocks in Snowdonia. These are juxtaposed with some of the oldest at the Egryn Fault, overlain by extensive superficial estuarine deposits.
- Submerged peat and forest deposits periodically exposed by tides along the coastal foreshore. **Its geomorphological interest contributes to the landscape's SSSI designation.**
- **Small rounded hill summits near Ynys overlooking the estuary**, comprised of more resistant rocks and reaching up to 69 metres AOD.
- **Landscape dominated by the expanse of the Dwryd Estuary**, with tidal channels branching into the surrounding flats.
- **Reclaimed marshes/farmland crossed by a network of drainage channels and streams** draining into the estuary.
- Geometric coniferous plantations in the south forming inconspicuous features in the flat landscape. Very occasional small bands of woodland elsewhere, but largely **an open, exposed landscape.**
- **Matrix of rectangular 19th century reclaimed marshes** divided by ditches and post-and-wire fencing, with slate walls along roadsides. Immediate fringes of the estuary and coast are wetlands.
- **Rich coastal habitats including internationally important sand dunes, saltmarsh, grassland, swamp and the extensive beach at Morfa Harlech.** All of the LCA is within the Morfa Harlech SSSI/NNR, and much is also SAC designated.
- **All of the LCA within the wider Arduwy Landscape of Outstanding Historic Interest**, representing extensive evidence of recurrent settlement and land use since the prehistoric period.
- The 19th century nucleated village of Ynys sits on the banks of estuary, comprising stone buildings of various designs. The LCA also includes Lower Harlech, comprising 20th century housing and caravan/camping sites **overlooked by Harlech Castle (LCA 12) and the historic town.** Sparsely scattered farmsteads found along roadsides.
- The main arterial route of the A496, along with the Cambrian Line railway, cuts through the landscape eroding its strong sense of naturalness. .
- Occasional rights of way and the Wales Coastal Path crossing through the coastal landscape. Royal St David's golf course fronts Harlech, integrated into its sand dune setting.
- **Extensive views across the broad open dunes and estuary** of the Afon Glaslyn, backed by the mountains of the Snowdonia core and the distinctive outline of the Llŷn Peninsula.

¹ Bold indicates those key characteristics considered to be the 'valued attributes' of the Landscape Character Area; aspects of character that contribute greatly to local distinctiveness.

FORCES FOR CHANGE AFFECTING LANDSCAPE CHARACTER

Please refer to the 'Forces for Change' section of the SPG document. Of particular relevance to this LCA are the following forces for change:

- Housing and tourism development within and surrounding Lower Harlech – diluting the historic integrity of the nearby Old Harlech town core and setting of Harlech Castle (LCA 12 – a World Heritage Site).
- Visual impact of camping/caravanning sites within the open coastal landscape along with the Ffridd Rasmus landfill and waste management site.
- 20th century geometric conifer blocks standing out prominently within the coastal plain, at odds with its open and naturalistic character.
- Stone walls along the A496 falling into a state of disrepair in places.
- The impact of future road improvements required on the A496.
- Vulnerability of the internationally important coastal and estuarine habitats to the impacts of climate change – particularly sea level rise and coastal squeeze.

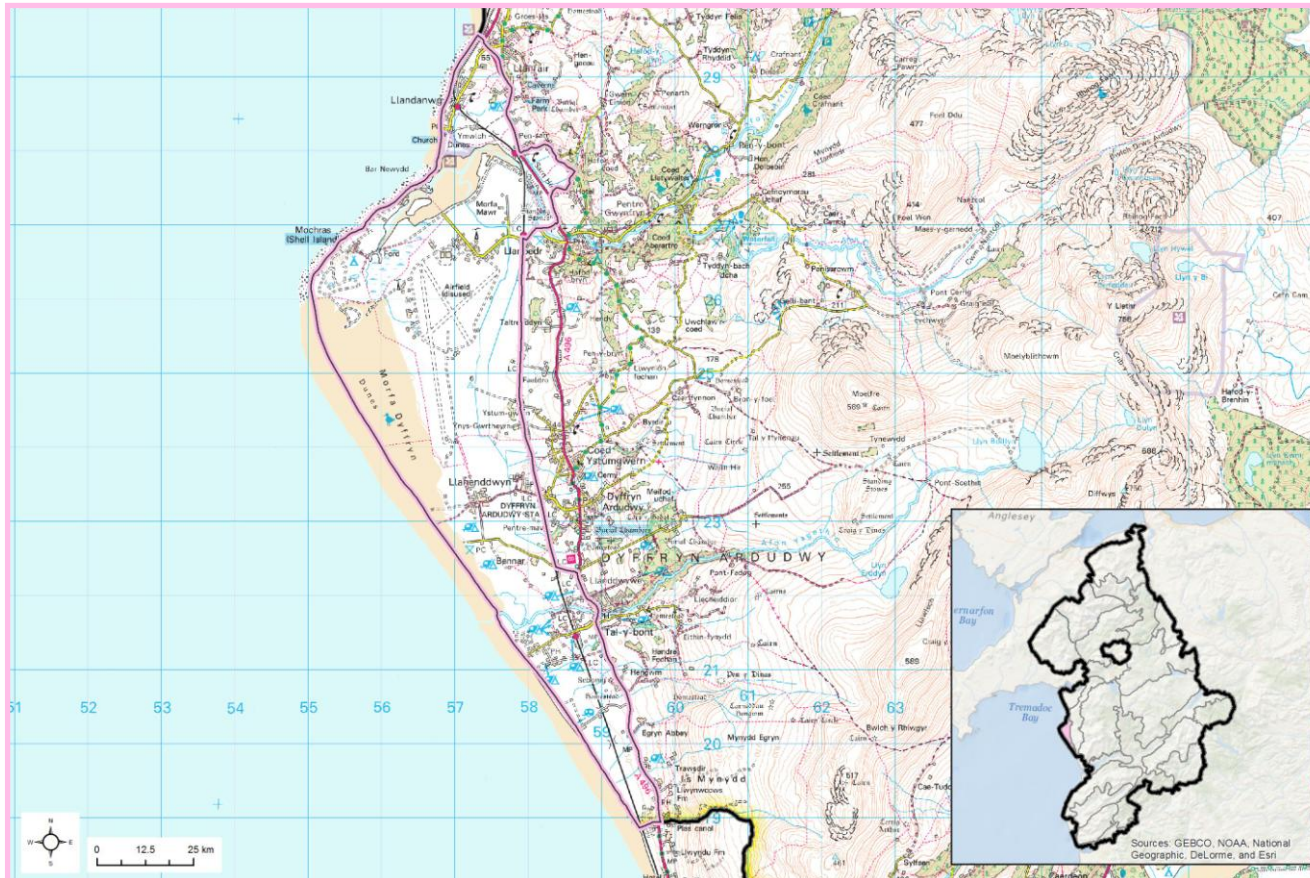
A LANDSCAPE STRATEGY FOR THE FUTURE

The rich coastal habitats, including internationally important sand dune systems, will be protected and enhanced. Extensive open views from the surrounding hills over this coastal plain and towards the sea will also be protected, as will views out from the LCA to the mountains and Llŷn Peninsula. Opportunities for improving biodiversity and supporting natural estuarine processes will be explored, particularly to strengthen the coastal landscape's resilience to rising sea levels and coastal squeeze.

GUIDELINES FOR MANAGING FUTURE LANDSCAPE CHANGE

Please refer to the 'Guidelines' section of the main SPG document, particularly for those guidelines under the 'Coastal' heading.

PART 1: DESCRIPTION



SUMMARY OF LOCATION AND BOUNDARIES

A small character area lying to the west of the A496, lying just above sea level, almost entirely dominated by the former Royal Aircraft Establishment complex and associated airfield. The land edge is defined by a dune system. The A496 passes through a number of small settlements, Tal y Bont, Coed Ystumgwern and Llanbedr, and provides a visual and noise detractor. Likewise the Cambrian Coast railway runs through the area.

KEY CHARACTERISTICS OF THE LANDSCAPE CHARACTER AREA¹

- **Flat coastal landscape providing a western frontage to the National Park**, with sand dunes at Morfa Dyffryn and a wide intertidal zone.
- Majority of the landscape below 10 metres AOD, comprised of superficial deposits of shingle and sand. The wide beach fronting the LCA is dominated by cobbles and boulders.
- Underlying geology of relatively young (in the Snowdonia context) Tertiary and Mesozoic rocks, faulted against the ancient Cambrian rocks forming the adjacent uplands.
- **Estuary of the Afon Artro defining the northern part of the LCA, with the smaller Afon Ysgethin meeting the sea further south.** Landscape criss-crossed by drainage channels, streams and springs.
- **Small patches of wind-pruned woodland and scrub**, with hedgerow trees providing more tree cover further inland.
- **Matrix of rectangular 19th century reclaimed grazing marshes divided by ditches. These surround large expanses of sand dunes and unenclosed coastal grassland.**
- Pastoral fields further inland forming a **small-scale irregular pattern, divided by distinctive cobble stone walls or hedgerows.**
- **Morfa Dyffryn of international importance for its mobile sand dune system (SAC designated), surrounded by species-rich saltmarsh, swamp, vegetated shingle and dune slacks.** This area is also SSSI and NNR designated.
- **All of the LCA within the wider Arduwy Landscape of Outstanding Historic Interest**, representing extensive evidence of recurrent settlement and land use since the prehistoric period. This includes an enclosed prehistoric hut circle north of Tyddyn-Mawr (a Scheduled Monument).
- **Shell Island (Mochras) created by historic land uses** –after the River Artro was diverted by the Earl of Winchelsea in 1819 from its previous course. It is not accessible by vehicle at high tide.
- **A sparsely settled landscape**, with the main settlement being Llandanwg, including some 20th century housing developments. Elsewhere, a scattered pattern of dispersed farmsteads associated with the farmland fringes.
- Northern half of the landscape dominated by the disused Llanbedr airfield. Tourism-related developments scattered throughout, including camping and caravan sites and car parks (including on Shell Island, a popular tourism destination).
- **Long scenic views along the Cambrian coast**, with inland views dominated by the mountains of the National Park's core.

¹ Bold indicates those key characteristics considered to be the 'valued attributes' of the Landscape Character Area; aspects of character that contribute greatly to local distinctiveness.

FORCES FOR CHANGE AFFECTING LANDSCAPE CHARACTER

Please refer to the 'Forces for Change' section of the SPG document. Of particular relevance to this LCA are the following forces for change:

- Visual impact of camping/caravanning sites within the open coastal landscape.
- Popularity of the area for tourism, with traffic on rural roads impacting on levels of tranquillity, particularly at peak times.
- Llanbedr Airfield has been designated an Enterprise Zone and promoted as a centre for Unmanned Aerial Vehicle (UAV) research along with aircraft maintenance and decommissioning.

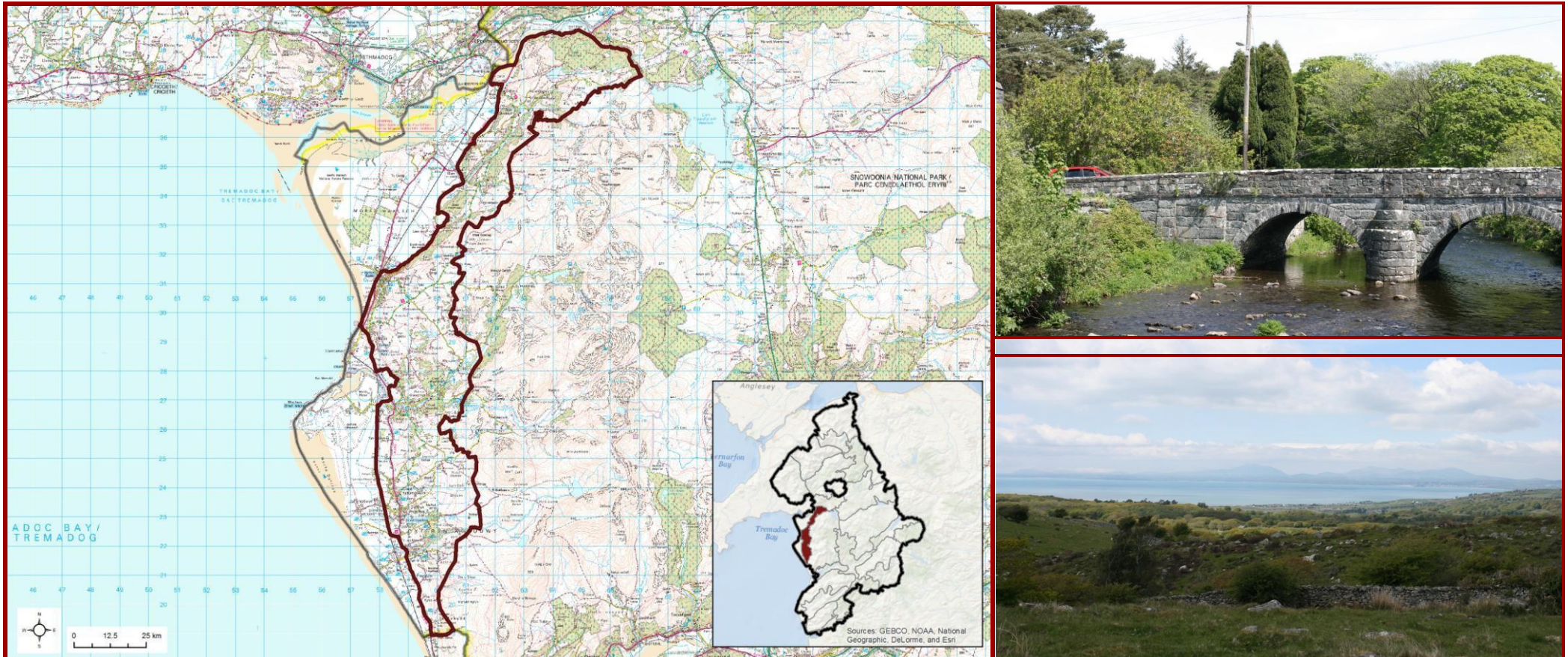
A LANDSCAPE STRATEGY FOR THE FUTURE

The rich coastal habitats, including internationally important sand dune systems, will be protected and enhanced. Extensive open views from the surrounding hills over this coastal plain and towards the sea will also be protected, as will views out along the Cambrian coast and open sea. Opportunities for improving biodiversity and supporting natural estuarine processes will be explored, particularly to strengthen the coastal landscape's resilience to rising sea levels and coastal squeeze. Future opportunities to sensitively re-develop or restore the airfield site will be pursued, taking into account its strong visibility within the open landscape.

GUIDELINES FOR MANAGING FUTURE LANDSCAPE CHANGE

Please refer to the 'Guidelines' section of the main SPG document, particularly for those guidelines under the 'Coastal' heading.

PART 1: DESCRIPTION



SUMMARY OF LOCATION AND BOUNDARIES

This LCA is the area to the west of the Rhinog mountains, sloping down dramatically towards the coastal edge. It extends from the mouth of the Afon Dwyrhyd and the edge of Coed Felinrhyd in the north to the National Park boundary north of Barmouth in the south.

KEY CHARACTERISTICS OF THE LANDSCAPE CHARACTER AREA¹

- **A rolling landscape of seaward facing hills dropping down from the adjacent Rhinog mountains**, which contain the landscape to the east.
- Altitude ranges from up to 300 metres on the fringes of the mountains, to 20 metres along the coastal edge.
- Bedrock geology of silty mudstones and thin coarse-grained sandstones of Cambrian age, frequently overlain by glacial till deposits resulting in a complex topography.
- **Dissected by the valleys of the Afon Artro, Cwmnantcol, YGlyn and Ysgethin along with multiple streams** draining westwards towards the coast. Small lakes are dotted throughout the landscape.
- Extensive broadleaved woodland cover clothing valley sides, with some mixed and coniferous plantations – including the extensive forestry at Coed Felinrhyd.
- **An historic irregular field pattern marked by stone walls, punctuated by pockets of open hill summits.** Mature trees along field boundaries contributing to a well-wooded character on valley slopes.
- Predominantly pastoral land use, with patches of rough grazing land on higher ground.
- **Nationally and internationally important ancient semi-natural oak sessile oak woodlands with a rich ground flora** (including areas within the Meirionnydd Oakwoods and Bat Sites SAC), interspersed with areas of **species-rich grassland, flushes and wet pasture.**
- **Within the wider Arudwy Landscape of Outstanding Historic Interest**, representing extensive evidence of recurrent settlement and land use since the prehistoric period – e.g. the Neolithic burial chambers at Dyffryn Arudwy, prehistoric settlement/field system remains, medieval deserted settlements and defensive sites (e.g. Clogwyn Arllef hillfort).
- **The 13th century Harlech Castle, a World Heritage Site**, occupying a prominent spur overlooking the sea and the flat expanse of Morfa Harlech (LCA 10). The **historic Edwardian settlement of Harlech (a Conservation Area)** occupies an elevated cliff-ledge previously open to the sea.
- **Estate plantings, ornamental woodland and parkland** associated with the 18th century Cors-y-Gedol (Grade II) and the 17th century Grade II* listed Glyn Cywarch manor house.
- Other settlement mainly concentrated along the A496 coastal road, including caravan parks and camp sites. This includes the villages of Coed Ystumgwyn, Dyffryn Arudwy, Talsarnau and Tal y Bont, with some ribbon development.
- Elsewhere, **scattered stone/slate-built farmsteads and hamlets** linked by winding rural roads along valleys and over hillsides.
- **Strong historic integrity** retained due to topography limiting both access and settlement in the area. The A496 road and tourism-related developments erode these perceptions along the coastal fringe.
- **Combined views of the coast and the Rhinog mountain range** (LCA 13).

¹ Bold indicates those key characteristics considered to be the ‘valued attributes’ of the Landscape Character Area; aspects of character that contribute greatly to local distinctiveness.

FORCES FOR CHANGE AFFECTING LANDSCAPE CHARACTER

Please refer to the 'Forces for Change' section of the SPG document. Of particular relevance to this LCA are the following forces for change:

- 'Ribbon development' between settlements due to topography restraints, impacting on the open character of the landscape.
- Some lengths of stone wall falling into disrepair, or replaced by post-and-wire fencing.

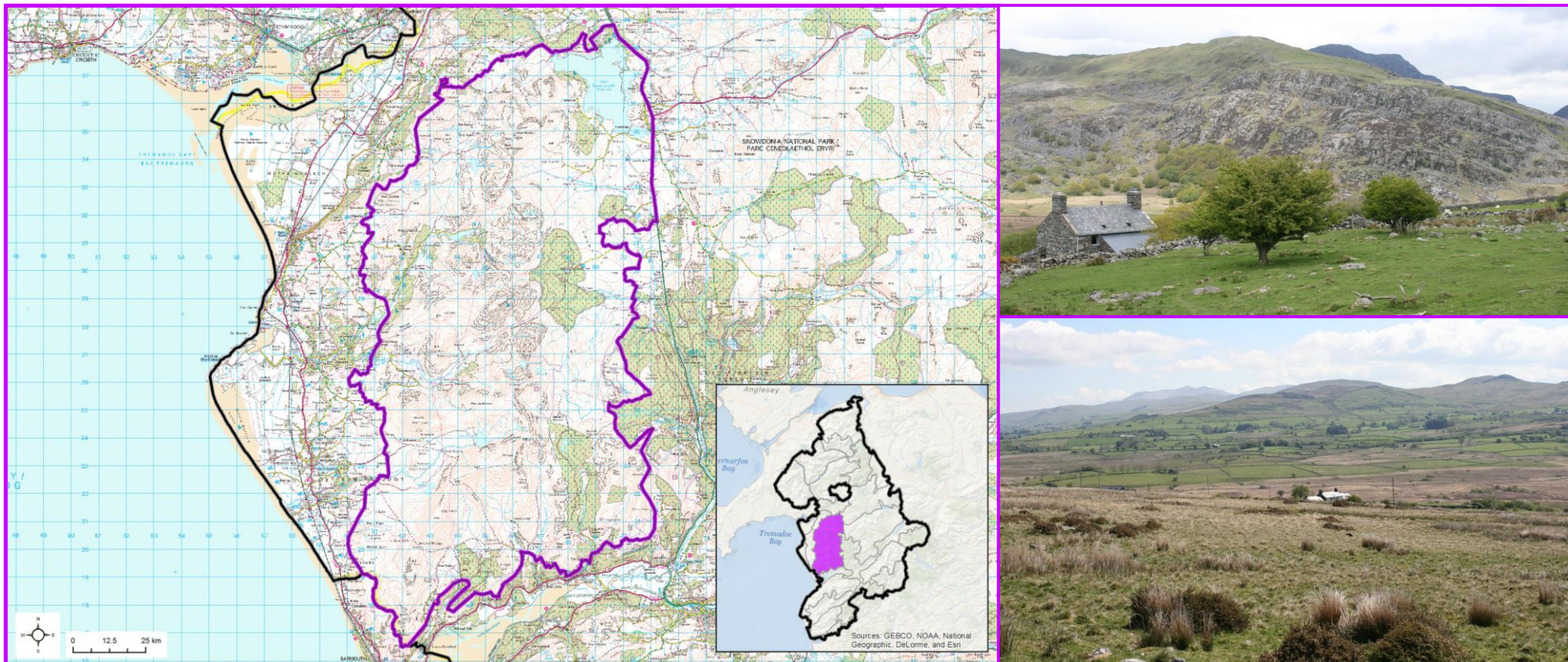
A LANDSCAPE STRATEGY FOR THE FUTURE

Land rises from the coastal plain to the Rhinogau, resulting in a landscape with strong visual and cultural links between the mountains and coast. This is an area rich in archaeological remains, with monuments from the Neolithic onwards, which will be protected from inappropriate development or land uses and sensitively managed. Maintain the "green wedge" policy in the Eryri Local Development Plan (2011) to prevent further coalescence between settlements within this LCA, particularly along the A496.

GUIDELINES FOR MANAGING FUTURE LANDSCAPE CHANGE

Please refer to the 'Guidelines' section of the main SPG document, particularly for those guidelines under the 'Upland Fringe' heading.

PART 1: DESCRIPTION



SUMMARY OF LOCATION AND BOUNDARIES

The Rhinog Mountains (the 'Rhinogydd' or 'Rhinogau') form a rugged mountain chain to the south of the Snowdon Massif extending from the slopes above the estuaries of the Dwyryd and Glaslyn in the north to the Mawddach estuary in the south. The area takes its name from its most famous peaks, Rhinog Fawr and Rhinog Fach (720 and 712 metres).

KEY CHARACTERISTICS OF THE LANDSCAPE CHARACTER AREA¹

- Open mountainous area with the highest summit, Y Llethr, reaching a height of 756 metres AOD. **Numerous cliffs and rock outcrops forming a rugged topography. Includes nationally important geomorphological features.**
- Underlain primarily by Cambrian grits of the Harlech Dome, with a number of intrusive dykes of volcanic deposits. Thick deposits of boulder clay, deposits of scree, head material and alluvium as a legacy of glacial action.
- **Valley mires and frequent glacial oligotrophic lakes feeding numerous fast-flowing streams draining from the uplands,** sometimes forming waterfalls. Includes the Afon Gamlan, Cwm-mynach, Cwm-Ilechen, Ysgethin and Cwm Nantcol.
- Landscape dominated in the north by the Llyn Trawsfynydd reservoir and former nuclear power station.
- A number of prominent conifer plantations and extensive areas of both broadleaved and coniferous woodland on valley sides.
- **Open mountains surrounded by large-scale regular enclosures of ffridd, with a small-scale irregular field pattern on lower valley sides.**
- **Stone walls forming boundary features, providing unity with buildings and rock exposures.** Mature trees following boundary lines at lower levels, contributing to a wooded character.
- **Rough grazing (predominantly by sheep)** on the uplands and ffridd, with improved pasture fields found along valley sides.
- **Extensive heathland habitats of European importance; the largest expanse of mature heath outside Scotland.** Vegetation dominated by heather and bilberry, as well as gorse, wetlands and large expanses of blanket bog (the Rhinog SAC, NNR, SSSI and Biogenetic Reserve).
- **Semi-natural oak-dominated woodlands, bogs, wet flushes, neutral and acid grasslands associated with valleys** (Merionnydd Oakwoods & Bat Sites SAC and Coed Graig Uchaf SSSI).
- **Significant proportion within the Ardudwy and Trawsfynydd Basin & Cwm Prysor Landscapes of Outstanding Historic Interest,** with ancient settlement sites and tracks (e.g. Roman Steps) and Iron Age hillforts. **Remains of mining and mineral extraction in the valleys** including gold, copper, zinc and lead.
- **Unsettled, remote uplands, a large proportion being open access or common land.**
- **Stone-built farmsteads and hamlets nestled in sheltered valleys connected by a sparse rural road network.** A number of car parks at the heads of the valleys provide recreational access onto the mountains.
- **Strong feeling of wildness and remoteness** associated with the mountains – less crowded than other parts of the National Park.
- **Mountains afford long, unspoilt views of the coast and south across the Mawddach Estuary to Cadair Idris.** Views north beyond the Dwryd Estuary towards Snowdon. The Trawsfynydd nuclear power station forms a prominent man-made landmark in the north.

¹ Bold indicates those key characteristics considered to be the 'valued attributes' of the Landscape Character Area; aspects of character that contribute greatly to local distinctiveness.

FORCES FOR CHANGE AFFECTING LANDSCAPE CHARACTER

Please refer to the 'Forces for Change' section of the SPG document. Of particular relevance to this LCA are the following forces for change:

- Some areas of overgrazing on lower slopes, including around Llyn Trawsfynydd
- Neglect of slate stone walls and replacement/gapping up of sections with uncharacteristic post-and-wire fencing.

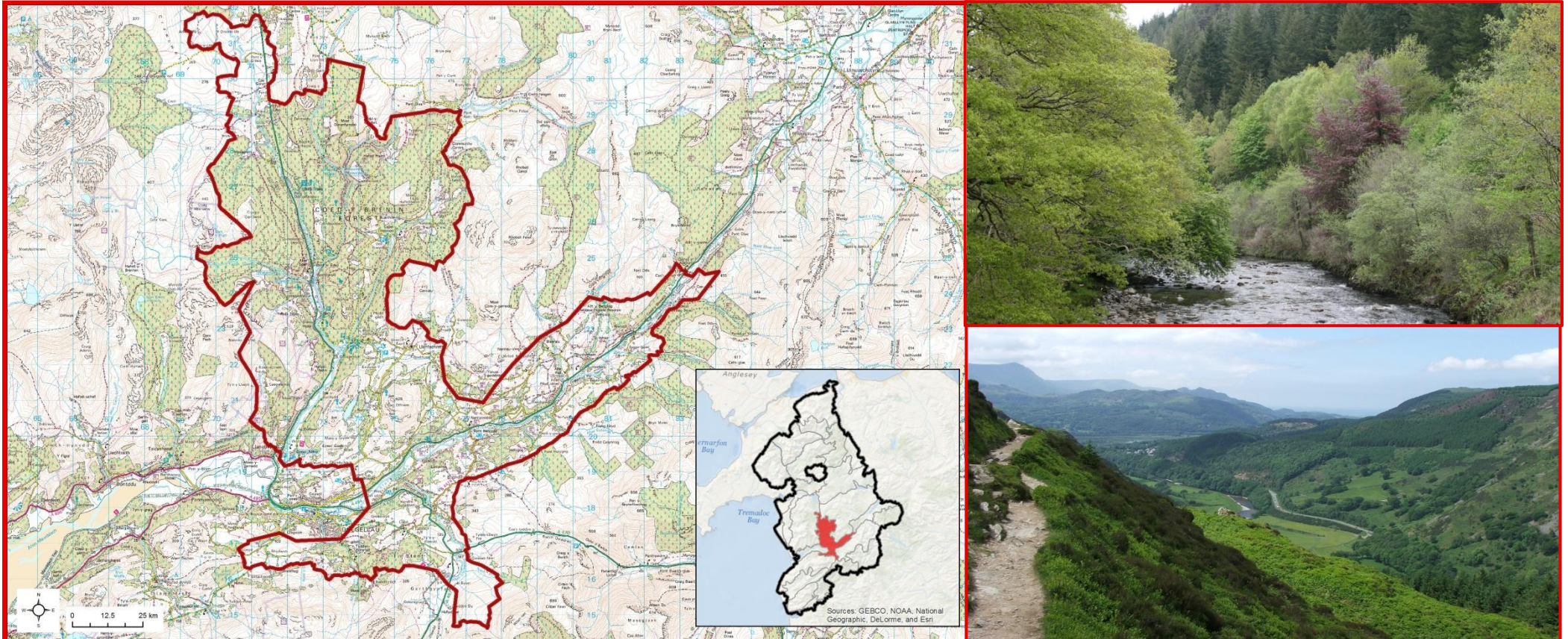
A LANDSCAPE STRATEGY FOR THE FUTURE

This LCA is considered to be one of the 'focal' landscapes of Snowdonia, much of which is defined as '*natural beauty*' as shown on the Eryri Local Development Plan (ELDP) proposals map. This natural beauty, and those elements that contribute towards it – especially the qualities of tranquillity and remoteness – will be protected and enhanced.

GUIDELINES FOR MANAGING FUTURE LANDSCAPE CHANGE

Please refer to the 'Guidelines' section of the main SPG document, particularly for those guidelines under the 'Mountains' heading.

PART 1: DESCRIPTION



SUMMARY OF LOCATION AND BOUNDARIES

This LCA comprises the Mawddach and Eden Valleys flowing from the uplands to the north of Dolgellau, and extends eastwards along the course of the Wnion. The rivers are enclosed by a varied landscape of wooded hills, plantations and farmland.

KEY CHARACTERISTICS OF THE LANDSCAPE CHARACTER AREA¹

- **Complex topography defined by the three main valleys, surrounded by steep slopes and upland blocks**, peaking to over 400 metres AOD above the Afon Mawddach.
- Bedrock geology of Cambrian mudstones, siltstones and sandstones, with some volcanic intrusions and deposits (e.g. Foel Offrwm). **Mineral veins, particularly gold, influencing the area's heritage.**
- Glacial and alluvial deposits contributing to the landscape's varied topography.
- **Main U-shaped valleys joined by fast-flowing tributaries draining from the uplands, with spectacular waterfalls** at Pistyll Cain (on the Afon Gain). and Rhaeadr Mawddach.
- Extensive conifer plantations on the slopes above the Mawddach and Eden, with frequent bands of broadleaved woodland found elsewhere.
- **Patchwork of small to medium sized, pastoral fields along the more open Wnion Valley, with areas of open rough grazing located on higher ground** in between forestry blocks.
- **Pockets of nationally and internationally important habitats, including wetlands associated with the Eden and its tributaries (an SAC) and sessile oak woodlands** supporting a rich variety of ferns, lichens, mosses and liverworts.
- **Remains of mining and the Meirionnydd 'Gold Rush' associated with the 19th century** gold and copper mining, such as Gwynfynydd and the Scheduled Berth-Llwyd & Cefn Coch Gold Mining Complex.
- **Nationally important remains of the Cistercian Cymer Abbey on the banks of the Mawddach (a Conservation Area), ancient settlements, Iron Age hillforts on summits (e.g. Moel Offrwm) and historic parklands at Nanau (Grade II*) and Dolmelynlyn.**
- **Ornate buildings in Ganllwyd** sheltered within the valley, influenced by the nearby Dolmelynlyn estate. **Remainder of the landscape surrounding the Mawddach/Eden valleys largely unsettled.**
- Nucleated villages and hamlets at road crossing points, along with scattered farmsteads found throughout the gentle slopes of the Wnion Valley.
- A470 and A494 roads running along the valleys, with a network of minor roads linking settlements. **Much of the higher ground and forestry is open access land.**
- A major destination for walkers and cyclists, including the Coed y Brenin mountain biking centre. Other visitor facilities include car parks and camping/caravan sites.
- **Views afforded up the Mawddach Valley to the slopes of Rhobell Fawr and Rhobell Ganol. Hill summits allow long views to the adjacent Rhinog and Arenig Mountains** (e.g. from Mynydd Pen-rhos).

¹ Bold indicates those key characteristics considered to be the 'valued attributes' of the Landscape Character Area; aspects of character that contribute greatly to local distinctiveness.

FORCES FOR CHANGE AFFECTING LANDSCAPE CHARACTER

Please refer to the 'Forces for Change' section of the SPG document. Of particular relevance to this LCA are the following forces for change:

- Stone walls replaced or supplemented by post-and-wire fencing.
- Noise and visual intrusion from the A470 and A494 road corridors, impacting locally on levels of tranquillity.
- Road improvement schemes have also threatened the integrity of designated sites along the valleys.
- Popularity of the area for tourism and recreation, including the Coed y Brenin mountain biking centre. The landscape's high woodland cover generally means that tourism facilities are well screened within the landscape.

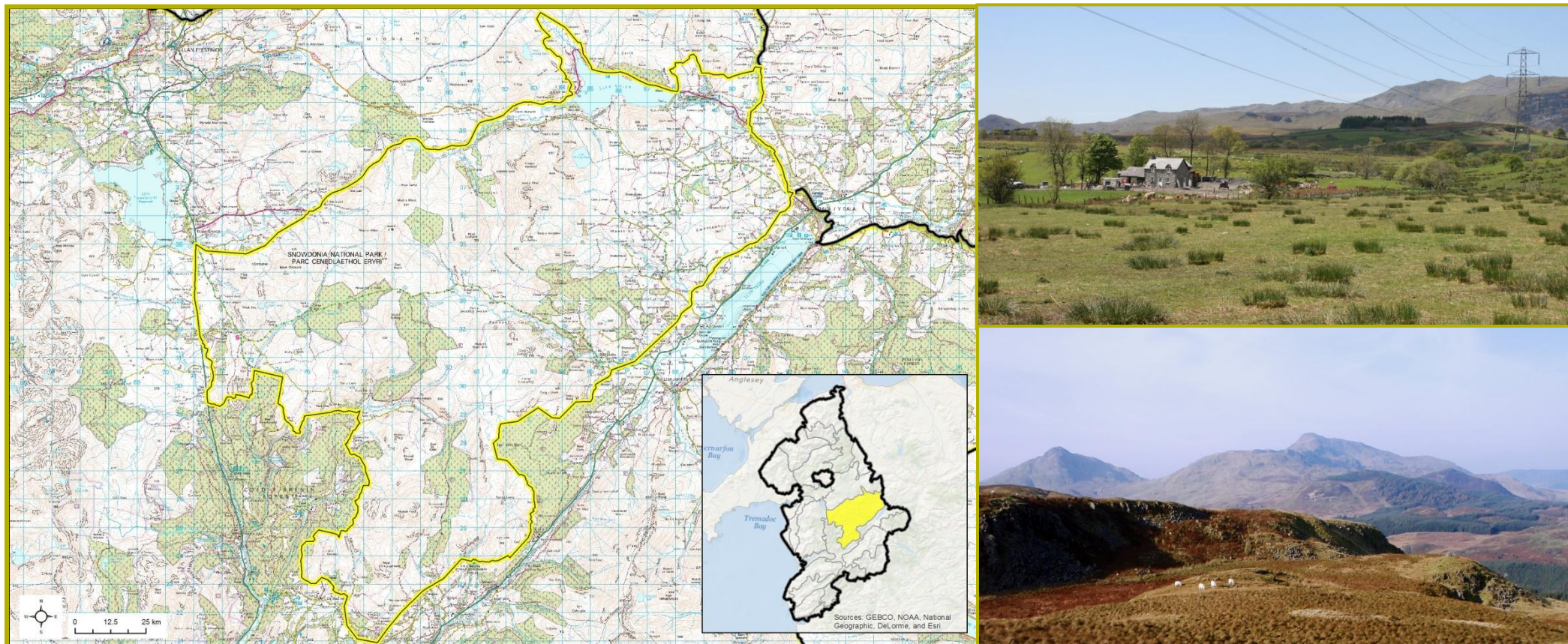
A LANDSCAPE STRATEGY FOR THE FUTURE

Important communications routes, the Mawddach and Wnion valleys meet just to the west of Dolgellau, formerly the county town of Meirionnydd. Dolgellau has many important cultural links and its buildings have a distinctive local vernacular, which will be protected and respected in any new development.

GUIDELINES FOR MANAGING FUTURE LANDSCAPE CHANGE

Please refer to the 'Guidelines' section of the main SPG document, particularly for those guidelines under the 'Valleys/Estuaries' heading.

PART 1: DESCRIPTION



SUMMARY OF LOCATION AND BOUNDARIES

An expansive LCA centred on Arenig Fawr (854m), lying between the Tryweryn valley in the east (on the National Park boundary) and Coed y Brenin to the west. To the north are the Mignient Uplands, whilst the Upper Dee valley is located to the south. The majority of the area is formed by open uplands, and includes Llyn Celyn reservoir.

KEY CHARACTERISTICS OF THE LANDSCAPE CHARACTER AREA¹

- **High, open upland landscape** rising to a maximum of 854 metres AOD at Arenig Fawr. It also includes the summits of Moel Llyfnant (751m) and Rhobell Fawr (734m).
- **Internationally renowned geology** of ancient Cambrian and Ordovician sedimentary and igneous rocks, including a rich fossil record recognised by SSSI designations.
- **Landscape shaped by several phases of glaciation**, producing distinctive features including U-shaped and hanging valleys, corries (cymoedd) and small cwm lakes.
- **Upland massif dissected by a number of watercourses** including the Afon Lliw, Afon Llafar, Afon Cain and Afon Tryweryn. The north-eastern part of the LCA is dominated by Llyn Celyn reservoir.
- A number of prominent forestry plantations within the uplands, with small bands of broadleaved woodland fringing valley sides in their lower courses.
- **Open mountain summits and upper slopes surrounded by extensive areas of ffridd marked by stone walls.** Rough sheep grazing predominates.
- Valleys and lower slopes characterised by a pattern of small-medium scale fields of improved and semi-improved pastures, **divided by cloddiau (stone-faced banks) often topped by spirera-dominated hedgerows with frequent trees.**
- **Large proportion within the Migneint-Arenig-Dduallt SPA/SAC/SSSI**, with upland heath, blanket bog, flushes and woodland supporting important upland bird populations.
- **Roman road from Caer Gai to Tomen y Mur can be seen in the Lliw Valley. Nationally important remains of prehistoric settlements and field systems** found in a number of upland locations. Disused tips, quarries and a dismantled railway providing evidence of the area's industrial past.
- **Dispersed pattern of small villages and hamlets** concentrated in the valleys and on lower slopes. These are linked by a network of rural roads and tracks. The A4212 skirts the northern LCA boundary.
- **Most of the uplands are inaccessible by road**, but much is open access land and crossed by occasional rights of way. The National White Water Centre is based in Canolfan Tryweryn – providing opportunities for rafting and canoeing on the local rapids.
- **High sense of relative solitude and tranquillity** in comparison with the busier, more popular mountains of central Snowdonia.
- Overhead powerlines in the Tryweryn valley and nearby uplands, the water treatment works at Llidiardau and quarries with associated tips eroding levels of tranquillity and remoteness locally.
- **Summit of Arenig providing uninterrupted views of all significant North Wales mountain ranges.**

¹ Bold indicates those key characteristics considered to be the 'valued attributes' of the Landscape Character Area; aspects of character that contribute greatly to local distinctiveness.

FORCES FOR CHANGE AFFECTING LANDSCAPE CHARACTER

Please refer to the 'Forces for Change' section of the SPG document. Of particular relevance to this LCA are the following forces for change:

- Heavily afforested in the past, much now removed and broadleaved species being encouraged.
- Visible quarries and associated tips, including Arenig Quarry.
- Scenic quality diminished by overhead power lines in the upper Tryweryn valley from Trawsfynydd to Rhostyllen.
- Water treatment works at Llidiardau, which have recently been significantly enlarged with prominent signage – impacting on the landscape's sense of remoteness.
- Pressure for conversion of barns for visitor accommodation/bunk barns.
- Stone walls falling into disrepair in some locations, supplemented or replaced by post-and-wire fencing.

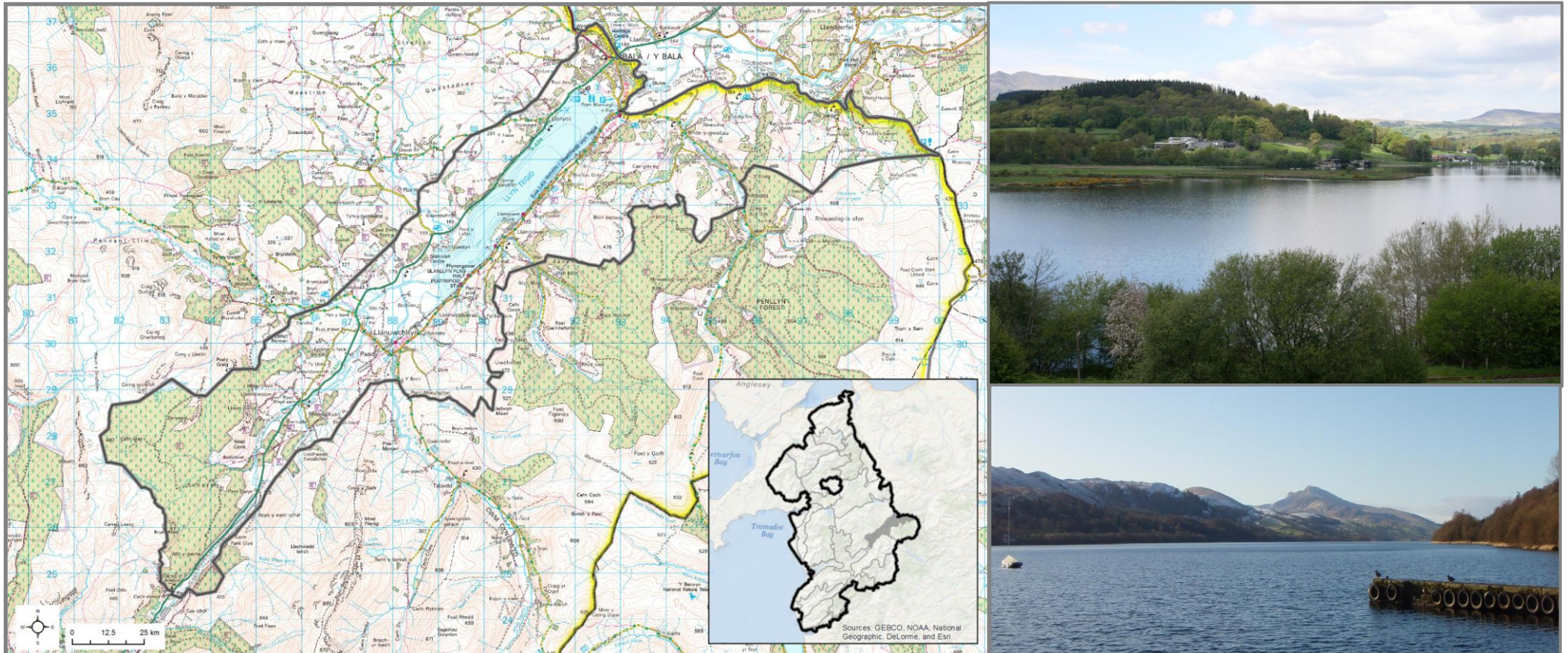
A LANDSCAPE STRATEGY FOR THE FUTURE

This LCA is considered to be one of the 'focal' landscapes of Snowdonia, much of which is defined as '*natural beauty*' as shown on the Eryri Local Development Plan (ELDP) proposals map. This natural beauty, and those elements that contribute towards it – especially the qualities of tranquillity and remoteness – will be protected and enhanced.

GUIDELINES FOR MANAGING FUTURE LANDSCAPE CHANGE

Please refer to the 'Guidelines' section of the main SPG document, particularly for those guidelines under the 'Mountains' heading.

PART 1: DESCRIPTION



SUMMARY OF LOCATION AND BOUNDARIES

This LCA comprises the upper Dee valley from the eastern boundary of the National Park at Bala, to the watershed of the Dee and Wnion rivers in the south-west. Much of the landscape is dominated by Llyn Tegid (Bala Lake) – the largest natural lake in Wales.

KEY CHARACTERISTICS OF THE LANDSCAPE CHARACTER AREA¹

- | | |
|---|---|
| <ul style="list-style-type: none"> • Landscape defined by the deep glacial basin of Llyn Tegid, sitting on a geological fault line (the Bala fault). • Land rising up either side to create a classic U-shaped valley, peaking at Craig yr Allor (478 metres AOD). • Bedrock geology of Ordovician volcanic rocks, mudstones, siltstones and sandstones, with a nationally important fossil record at Chwareli Gelli-Grin SSSI. • River Dee (Afon Dyfrdwy) and its tributaries flowing through the landscape, creating an undulating, hilly landform around the lake. • Significant blocks and bands of coniferous and mixed plantations on valley sides, as well as scattered mature trees and small broadleaved woodlands within farmland. • Historic pattern of small, irregular fields divided by stone walls or hedgerows with frequent hedgerow trees. • Strongly pastoral landscape interspersed with pockets of unenclosed rough grassland and heathland on hill summits and upper slopes. • Llyn Tegid recognised as an internationally important mesotrophic lake supporting valued swamp and wetland habitats along its shoreline. It also falls within the wider River Dee and Bala Lake SAC and Ramsar site. | <ul style="list-style-type: none"> • Much of the area within the Bala landscape of Special Historic Interest – with a succession of defensive sites and settlements from Roman to Medieval times (e.g. Caer Gai Roman Fort on the banks of the Dee). Disused quarries and tips evidence of the area’s industrial past. • Eastern lake shore dominated by the planned medieval borough of Bala, its core designated as a Conservation Area and arranged in a grid iron pattern. The village of Llanuwchllyn is centred on the Afon Twrch at the other side of the lake. • Elsewhere, a sparse settlement of farmsteads and small hamlets nestled in valleys, linked by winding lanes and tracks. The Bala Lake Railway follows the southern shoreline and along the Dee Valley. • Tracts of open access and common land on higher ground supplemented by a strong network of rights of way. • Tourist-related developments, including camping and caravan sites, as well as industrial units and modern development spreading out from Bala’s historic core. • A landscape with a strong sense of place, surrounded by spectacular scenery with views afforded to Meirionnydd hills and mountains. |
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¹ Bold indicates those key characteristics considered to be the ‘valued attributes’ of the Landscape Character Area; aspects of character that contribute greatly to local distinctiveness.

FORCES FOR CHANGE AFFECTING LANDSCAPE CHARACTER

Please refer to the 'Forces for Change' section of the SPG document. Of particular relevance to this LCA are the following forces for change:

- Modern development spreading out from Bala's historic core, including industrial units around the former railway goods yard.
- Episodic algal blooms in Llyn Tegid in recent years.
- Potential impact of large windfarm developments outside the National Park boundary to adversely impact on the setting of the landscape.

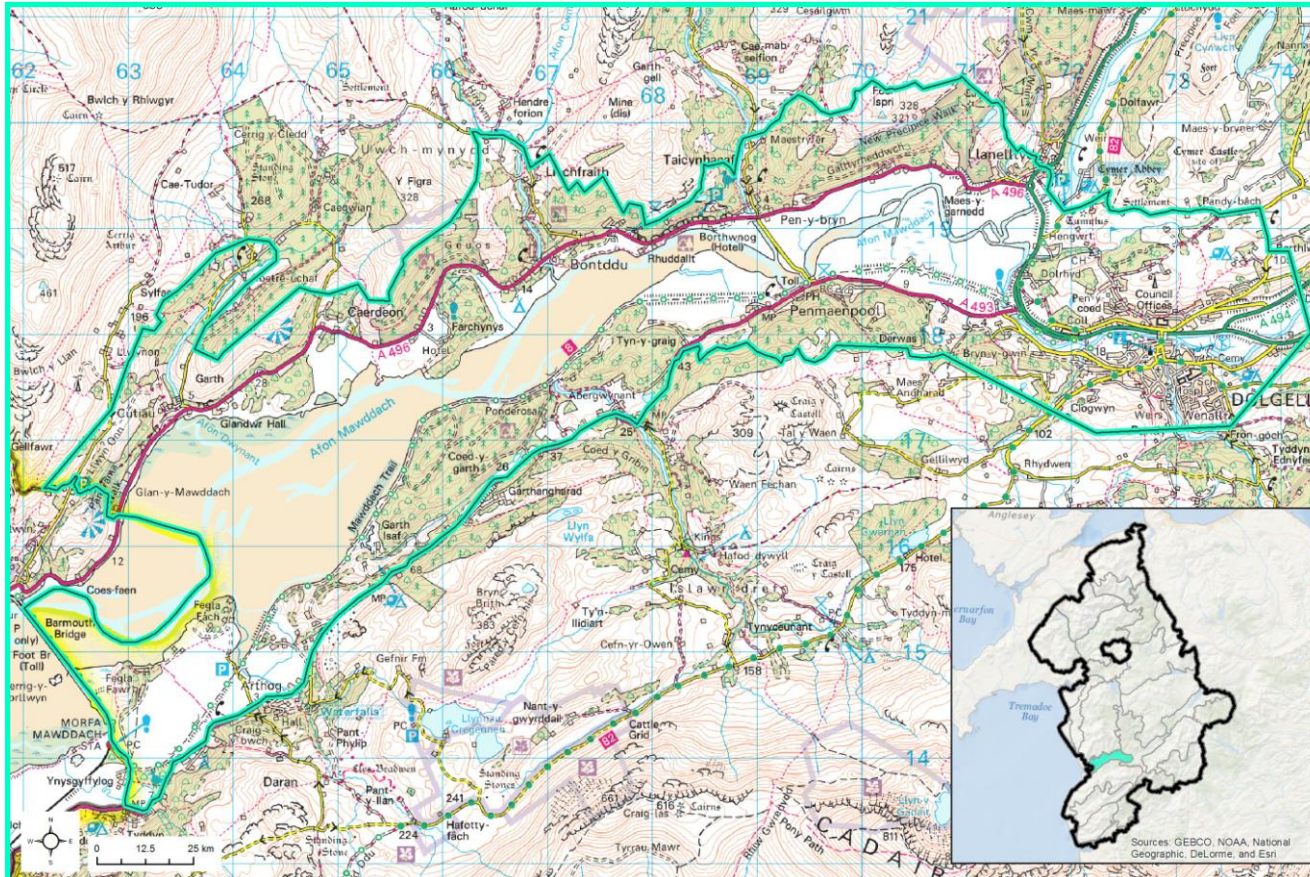
A LANDSCAPE STRATEGY FOR THE FUTURE

An important communications route, the Upper Dee valley lies in the trough of the Bala Fault. Llyn Tegid is a key focal point and valued not only for its nature conservation importance but also recreational opportunities. Bala has many important cultural links. Iconic views of the lake and surrounding hills and mountains will be protected from inappropriate developments.

GUIDELINES FOR MANAGING FUTURE LANDSCAPE CHANGE

Please refer to the 'Guidelines' section of the main SPG document, particularly for those guidelines under the 'Valleys/Estuaries' heading.

PART 1: DESCRIPTION



SUMMARY OF LOCATION AND BOUNDARIES

This Landscape Character Area is focused on the Mawddach Estuary, extending from Dolgellau westwards to the fringes of the estuary mouth (at the National Park boundary close to Barmouth). The A470, A496 and A493 roads run through the area.

KEY CHARACTERISTICS OF THE LANDSCAPE CHARACTER AREA¹

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| <ul style="list-style-type: none"> • Landscape dominated by the broad, open form of the Mawddach Estuary, contained by steeply rising landforms either side. • Estuary floor underlain by a thick sequence of unconsolidated glaciofluvial sediments, flanked by Lower Palaeozoic sedimentary and volcanic rocks of Cambrian and Ordovician age. • Estuary draining in a south-westerly direction into Cardigan Bay, joined by a number of tributaries flowing from the surrounding uplands. The Afon Wnion joins the Mawddach from the east. • Valley sides cloaked in tree cover, including coniferous plantations (e.g. Coed Y Garth) and broadleaved woodlands. • Areas of grazing marsh on the estuary fringes, divided by drainage channels. Pockets of small-scale regular and irregular pastoral fields divided by thick hedgerows with frequent hedgerow trees. • Estuary designated as SSSI/SAC, with muddy gullies, saltmarsh, coastal fen, reed swamp and wet woodland – home to important breeding bird populations, otters and rare plants. It includes the only example of estuarine raised mire in North Wales (Arthog Bog). | <ul style="list-style-type: none"> • Steep slopes abutting the estuary including internationally and nationally important oak woodlands with rich ground flora and bryophytes, home to breeding bat colonies (within the Meirionnydd Oakwoods & Bat Sites SAC). • Lies within two Landscapes of Outstanding Historic Interest, Vale of Dolgellau and Mawddach. Extensive evidence of diverse land use including slate quarrying, gold mining and the wool industry. The Grade II* listed Barmouth railway viaduct forms a local landmark feature in the west. • Historic ornamental woodlands and formal gardens overlooking the estuary at Glan-y-Mawddach (Grade II*), Abergwynant and Penmaenuchaf (Grade II). • Main settlement the market town of Dolgellau, with its historic core and nearby Pandy'r Odyn both designated as Conservation Areas. Occasional farmsteads and hamlets dispersed along valley sides. • Landscape crossed by the A470, A496 and A493 main roads, eroding local levels of tranquillity. • A scenic landscape with a strong sense of place, with borrowed views of Cadair Idris. |
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¹ Bold indicates those key characteristics considered to be the 'valued attributes' of the Landscape Character Area; aspects of character that contribute greatly to local distinctiveness.

FORCES FOR CHANGE AFFECTING LANDSCAPE CHARACTER

Please refer to the 'Forces for Change' section of the SPG document. Of particular relevance to this LCA are the following forces for change:

- Decline in woodland management, with rhododendron invasion an issue in some valley-side woodlands.
- Sensory distraction caused by the main roads crossing through the landscape (the A470, A496 and A493).
- Some modern housing developments extending along the roads outside Dolgellau. The town is defined as a 'Local Service Centre' in the Eryri Local Development Plan (2011); therefore future rates of development might be higher than in other locations.
- The holiday resorts of Fairbourne and Barmouth (outside National Park) in close proximity to the landscape.
- Camping/caravan sites and car parks dotting across the landscape, serving the area's popularity as a tourism destination.

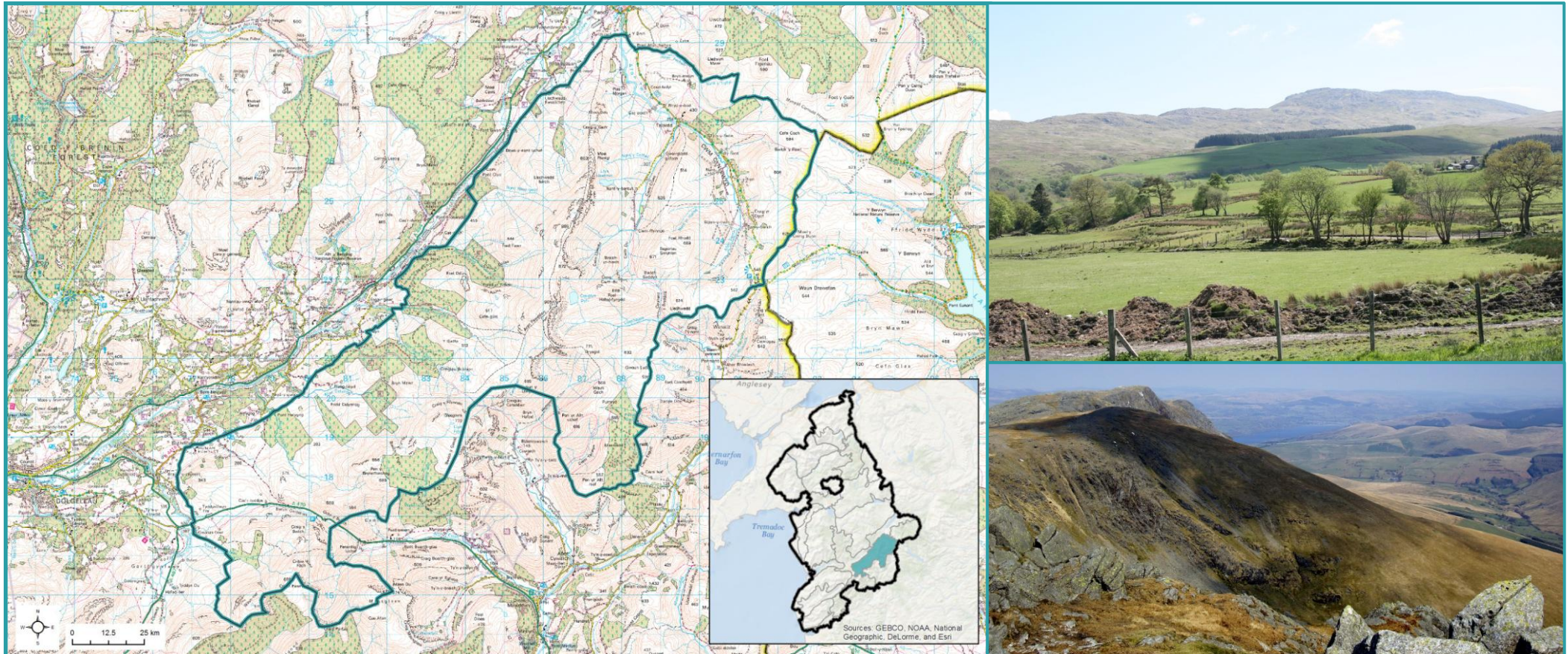
A LANDSCAPE STRATEGY FOR THE FUTURE

One of the jewels of the Snowdonia National Park, the Mawddach Estuary provides iconic views both inland towards the hills and also towards the coast. These views will be protected from inappropriate development. Opportunities for improving biodiversity and supporting and restoring natural estuarine processes will be explored, particularly to strengthen the landscape's resilience to climate change.

GUIDELINES FOR MANAGING FUTURE LANDSCAPE CHANGE

Please refer to the 'Guidelines' section of the main SPG document, particularly for those guidelines under the 'Valleys/Estuaries' heading.

PART 1: DESCRIPTION



SUMMARY OF LOCATION AND BOUNDARIES

The northern edge of the LCA is focused upon Afon Twrch and Cwm Cynllwyd; an attractive valley with scattered farmsteads dispersed amongst a network of small fields and clumps of woodland. To the south and west the land rises to the main Aran ridgeline before dropping towards the Wnion valley which demarcates the area's western edge. To the south the LCA boundary skirts Cwm Cywarch and Hengwm rising to a high point at Bwlch y Groes.

KEY CHARACTERISTICS OF THE LANDSCAPE CHARACTER AREA¹

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| <ul style="list-style-type: none"> • High mountainous area defined by the prominent Aran ridge, peaking at Aran Fawddwy (905m) and Aran Benllyn (885m). • Area defined by a ‘whaleback’ ridge of volcanic deposits of Ordovician age running from northeast to southwest. Lower slopes are underlain by Ordovician mudstones and sandstones. Tyllau Mŵn SSSI designated for rare and distinctive geological formations of ironstone. • Cwms and corrie lakes as a result of past glacial action on the slopes, such as Crieglyn Dyfi and Llyn Pen Aran. • Peat bogs feeding streams draining from the mountains into valleys below, including tributaries of the Dee (Afon Dyfrdwy) and Afon Wnion. • Visually prominent conifer plantations on valley sides, particularly those cutting into the north-western slopes of the Aran ridge. Small broadleaved woodlands on the sides of the Afon Twrch valley. • Open sheep-grazed mountain summits surrounded by large-scale regular enclosures of ffridd, marked by stone walls. • Localised network of scattered farmsteads and irregular pasture fields on valley floors, bound by a mixture of post and wire fences and hedgerows with hedgerow trees. | <ul style="list-style-type: none"> • Heather-dominated upland heath interspersed with blanket mire, bracken and acid grasslands, of international importance for its breeding birds (as part of the wider Berwyn Mountains SAC/SPA/NNR/SSSI). • Landscape modified historically by people exploiting peat bogs for fuel and former magnetite mining operations at Tyllau Mŵn. Disused tips, quarries and levels evidence for this industrial past, with ring cairns at Nant Helygog relating to prehistoric settlement (Scheduled Monuments). • It is believed that the term “Aran” either alludes to landscape resembling ploughed land, “tir ar” in Welsh, or high ground in general. • Few roads, with the A470 forming the only major route through the landscape. The minor road at Bwlch y Groes is a popular route for those touring north Wales; used as a hill testing ground for motor vehicles in the 20th century. • A quiet and remote landscape due to large parts being unsettled and devoid of roads. Large tracts defined as open access land, with occasional rights of way concentrated in the valleys. • Extensive panoramic views towards the main Snowdonia peaks of Rhinogydd and Cader Idris, and eastwards across the wider Berwyn Mountains, including the nearby Lake Vyrnwy. |
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¹ Bold indicates those key characteristics considered to be the ‘valued attributes’ of the Landscape Character Area; aspects of character that contribute greatly to local distinctiveness.

FORCES FOR CHANGE AFFECTING LANDSCAPE CHARACTER

Please refer to the 'Forces for Change' section of the SPG document. Of particular relevance to this LCA are the following forces for change:

- Pressure from tourism-related proposals.
- Proposed windfarm developments in northern Powys with the potential to impact on the panoramic views from the Aran ridge and Bwlch y Groes.
- Stone walls defining the fringes of mountain commons and historic areas of ffridd often replaced by fencing.
- Geometric blocks of coniferous plantation standing out prominently on the open mountain slopes.

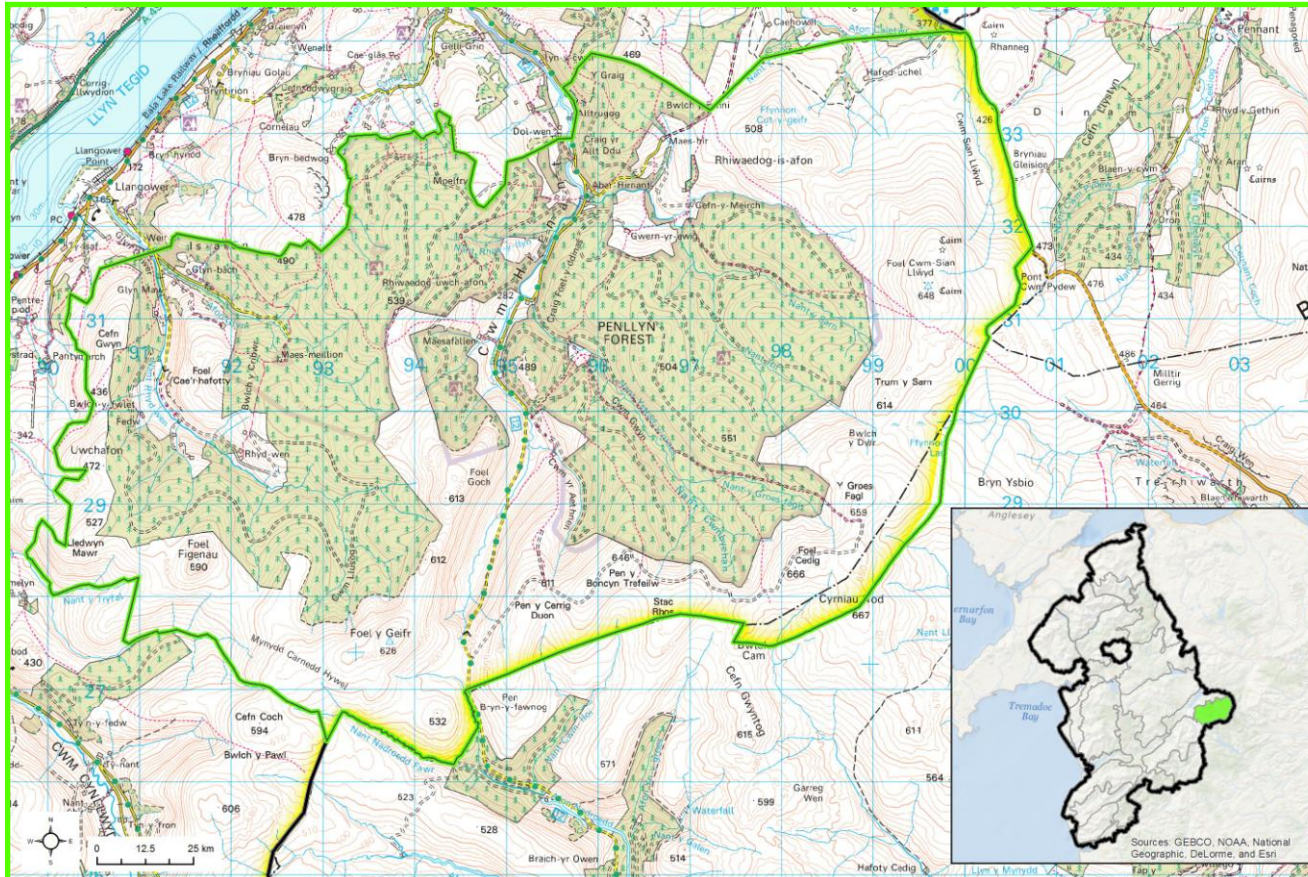
A LANDSCAPE STRATEGY FOR THE FUTURE

This LCA is considered to be one of the 'focal' landscapes of Snowdonia, much of which is defined as '*natural beauty*' as shown on the Eryri Local Development Plan (ELDP) proposals map. This natural beauty, and those elements that contribute towards it – especially the qualities of tranquillity and remoteness – will be protected and enhanced.

GUIDELINES FOR MANAGING FUTURE LANDSCAPE CHANGE

Please refer to the 'Guidelines' section of the main SPG document, particularly for those guidelines under the 'Mountains' heading.

PART 1: DESCRIPTION



SUMMARY OF LOCATION AND BOUNDARIES

This Landscape Character Area is located in the south east corner of the National Park, centred on Penllyn Forest and other forestry blocks below the summits of Foel Cedig and Foel Cwn-Sian Llwyd. It forms a gateway into the National Park, and forms part of an upland spine which extends into the Berwyn Mountains.

KEY CHARACTERISTICS OF THE LANDSCAPE CHARACTER AREA¹

- Series of rounded hills lying between the Berwyn and Aran Ranges, including Foel Cwm Sian Llwyd (649m), Foel Cedig (666m) and Foel y Geifr (626m).
- Underlying bedrock of Ordovician and Silurian sedimentary slates, mudstones, siltstones and sandstones, with some volcanic intrusions (e.g. at Cwm Llusog).
- **A number of fast-flowing streams and waterfalls draining from the hills to form the headwaters of rivers below**, including the Dee (Dyfrdwy) to the north and the Afon Nadroedd to the south. Small lakes also occasionally found below hill summits.
- **Extensive conifer plantations** greatly influencing landscape character. Small bands of broadleaved woodland along valley sides.
- **Pockets of small-scale, irregular fields within valleys, but the majority is open and unenclosed hill summits**, surrounded by large-scale regular enclosures of ffridd.
- **Pastoral fields in valley bottoms and lower slopes enclosed by thick hedgerows with frequent hedgerow trees. Heather moorland managed for grouse and grazed extensively by sheep.**
- **Heather-dominated upland heath interspersed with blanket mire, bracken and acid grasslands, of international importance for its breeding birds** (as part of the wider Berwyn Mountains SAC/SPA/NNR/SSSI).
- **Cefn Gwyn falls within the Bala Landscape of Special Historic Interest. Prehistoric round cairns** crown the summits of Foel y Geifr and Foel Cwm-Sian Llwyd (Scheduled Monuments).
- **Sparse, scattered settlement limited to the valleys, linked by a sparse network of rural lanes and tracks. Unsettled uplands and forestry**, a large proportion being open access or common land and crossed by occasional rights of way.
- The B4391 provides a popular route for visitors into the National Park, with this **landscape providing a scenic gateway into Snowdonia**.
- **More tranquil and a greater sense of solitude than the busier central peaks of Snowdonia**, though extensive forestry plantations introduce a strong human influence in large parts.
- **A diversity of landscapes** from farmed valley bottoms to forests on the slopes and rounded hills.
- **Strong intervisibility with the Berwyn Mountains and Lake Vyrnwy** outside the National Park boundary, with scenic views north and west framed by Snowdonia's mountain core.

¹ Bold indicates those key characteristics considered to be the 'valued attributes' of the Landscape Character Area; aspects of character that contribute greatly to local distinctiveness.

FORCES FOR CHANGE AFFECTING LANDSCAPE CHARACTER

Please refer to the 'Forces for Change' section of the SPG document. Of particular relevance to this LCA are the following forces for change:

- Extensive forestry plantations forming the predominant land use.
- Secondary woodland encroachment on areas of open habitat on valley sides and moorland fringes, particularly birch, indicating a decline in grazing levels.
- Pressure for conversion of traditional stone barns to visitor accommodation – tracks through the forestry are popular for mountain bikers.
- Windfarms are visible when looking north-east from Moel Cwm Sian Llwyd.

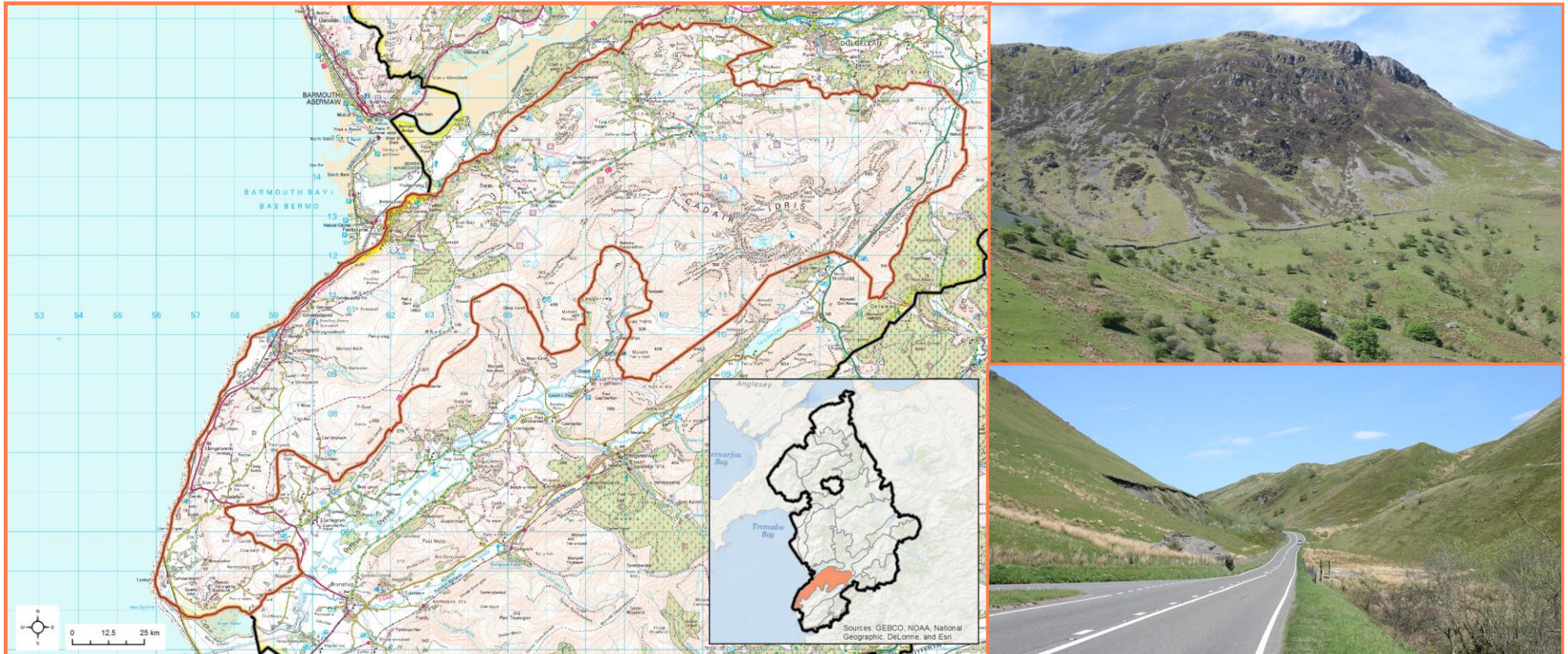
A LANDSCAPE STRATEGY FOR THE FUTURE

Significant conifer plantations located in the southern part of the National Park. More remote and inaccessible than Gwydyr and Coed y Brenin, and consequently this forested landscape offers a different visitor experience. There may be limited opportunities for low key recreation developments. Biodiversity enhancement will be sought through improved forestry and woodland management. The moorland fringes are important bird habitats, with appropriate management and enhancement encouraged to retain or extend this resource.

GUIDELINES FOR MANAGING FUTURE LANDSCAPE CHANGE

Please refer to the 'Guidelines' section of the main SPG document, particularly for those guidelines under the 'Mountains' and 'Forestry' headings.

PART 1: DESCRIPTION



SUMMARY OF LOCATION AND BOUNDARIES

The area includes the uplands along the southern side of the Mawddach Estuary, including the peaks of Cadair Idris (893 metres AOD) along with Braich Ddu (546 metres AOD) and Bryn Brith (383 metres AOD) which run down to the coast at Llwyngwriil and Gwastadgoed and form the northern flanks of the Dysynni Valley.

KEY CHARACTERISTICS OF THE LANDSCAPE CHARACTER AREA¹

- **A mountainous landscape dominated by the Cadair Idris massif**, rising to 863 metres AOD at Mynydd Moel. The upland terrain grades towards the western coastline, to as low as 10 metres AOD.
- **Bedrock geology dominated by Lower Palaeozoic sedimentary and igneous rocks (including pillow lavas and ash-flow deposits)** of Ordovician age. Cregennen a Pared y Cefn Hir SSSI valued for its mixed rock outcrops.
- **An outstanding assemblage of geomorphological landforms**, including well-preserved corries (cymoedd), moraine and scree slopes.
- **Cwm lakes nestling within the mountains, including Llyn Cau, Llyn y Gadair and Llyn Gafr. Multiple fast-flowing streams, including waterfalls**, draining into surrounding valleys and the Mawddach Estuary (including the Gwynant).
- **Open mountain summits and slopes contrasting with wooded valleys**, including coniferous plantations and broadleaved woodlands.
- **Small-scale irregular field patterns at lower elevations, with large-scale, 19th century regular enclosures of ffridd surrounding open mountain summits.**
- **Dry stone walls** forming the predominant boundary type, with some **thick hedgerows with frequent hedgerow trees** at lower elevations.
- Roughly grazed uplands surrounded by improved pastures.
- **Habitats of international importance** including blanket bog, wet and dry heath and upland acid and species-rich marshy grassland (Cadair Idris SAC, NNR, SSSI). **Oak, birch, rowan and hazel woodlands** clothing the valley sides of the Gwynant, supporting rare moths, mosses and liverworts (Coedydd Abergwnant SSSI).
- **Much designated as part of wider Landscapes of Outstanding Historic Interest.** Several nationally important archaeological features scattered throughout, including ring cairns, ancient settlements, enclosures and Iron Age hillforts (Tyddyn-y-Coed, Tal-y-Gareg and Llechrwyd).
- North-facing scarp includes oolitic ironstone, previously worked as a source of low-grade iron ore.
- Small linear coastal settlements (Llwyngwriol, Llangelninn and Rhoslefan), with occasional outlying camping/caravan sites served by the A493 and the Cambrian Coast Railway. The A487 travels through Cwm Rhwyddfôr in the east of the LCA.
- **Remote, uninhabited mountains**, with a sparse pattern of isolated stone/slate farmsteads and hamlets linked by minor roads on lower slopes.
- **Large proportion defined as open access or common land**, with occasional rights of way.
- **Borrowed views of the coast and areas beyond the National Park boundary.**

¹ Bold indicates those key characteristics considered to be the 'valued attributes' of the Landscape Character Area; aspects of character that contribute greatly to local distinctiveness.

FORCES FOR CHANGE AFFECTING LANDSCAPE CHARACTER

Please refer to the 'Forces for Change' section of the SPG document. Of particular relevance to this LCA are the following forces for change:

- Wind turbine developments outside the National Park impacting on views from this LCA.
- Stone walls defining the fringes of mountain commons and historic areas of ffridd often replaced by fencing.
- Geometric blocks of coniferous plantation standing out prominently in the open landscape.
- Secondary woodland on lower slopes (including characteristic scree slopes), indicating a decline in grazing levels in these marginal locations.
- Pressure for tourism related developments, such as camping and caravan sites, particularly along the LCA's western coastal edge which is served by the main A493.

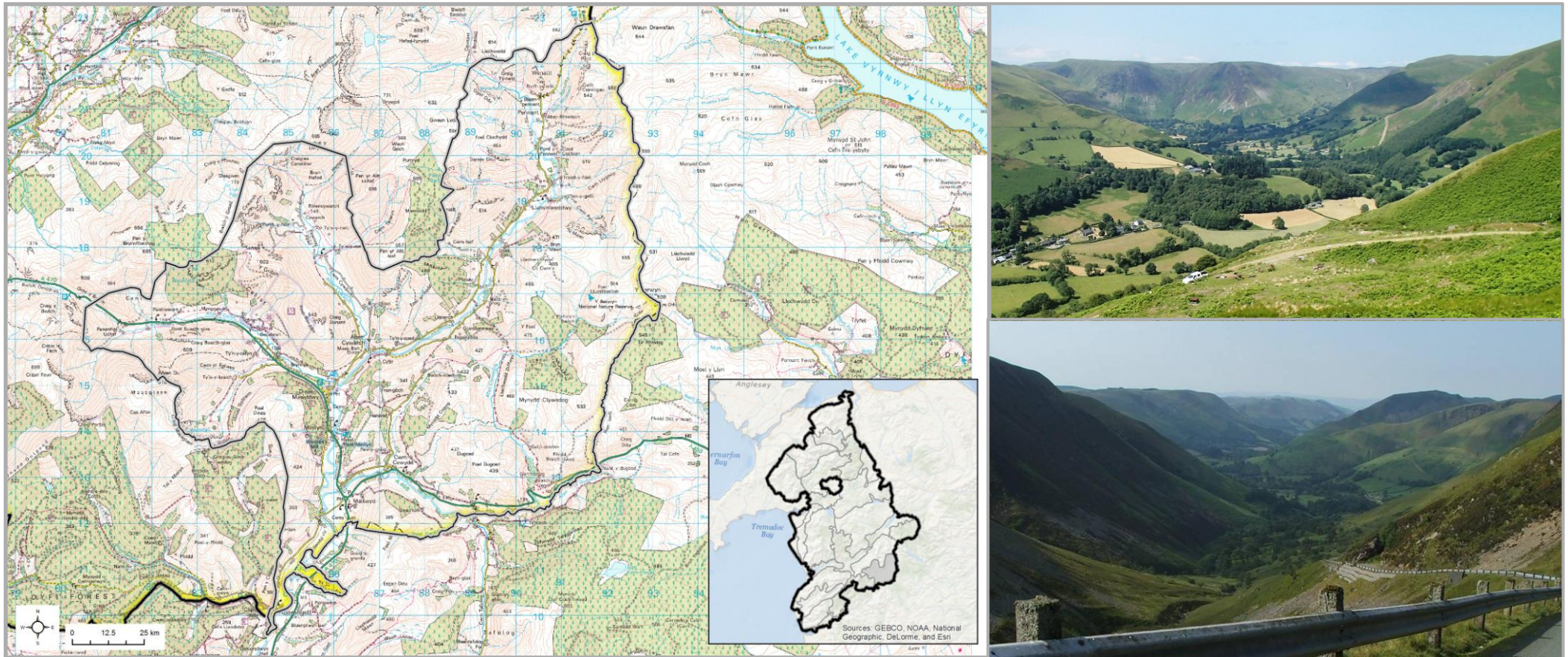
A LANDSCAPE STRATEGY FOR THE FUTURE

This LCA is considered to be one of the 'focal' landscapes of Snowdonia, much of which is defined as '*natural beauty*' as shown on the Eryri Local Development Plan (ELDP) proposals map. This natural beauty, and those elements that contribute towards it – especially the qualities of tranquillity and remoteness – will be protected and enhanced.

GUIDELINES FOR MANAGING FUTURE LANDSCAPE CHANGE

Please refer to the 'Guidelines' section of the main SPG document, particularly for those guidelines under the 'Mountains' and 'Upland Fringe' headings.

PART 1: DESCRIPTION



SUMMARY OF LOCATION AND BOUNDARIES

The LCA is centred on the Dyfi Valley and its tributaries – the Afon Cerist, Cywarch and Cleifion - carving through the surrounding uplands. The landscape falls on the eastern edge of the National Park.

KEY CHARACTERISTICS OF THE LANDSCAPE CHARACTER AREA¹

- A confluence point for a number of tributary valleys to the Afon Dyfi, including the Afon Cerist, Afon Cwyarch and Afon Tafolog, The surrounding uplands reach over 700m AOD on the slopes of Glasgwm.
- **Typical steep-sided U-shaped valleys reflecting the effects of glaciation**, with associated terraces and moraine mounds. Geological features at Afon Dyfi ger Mallwyd designated as SSSI due to exceptional preservation.
- **Fast-flowing streams and waterfalls plunging from the uplands** through ravines to the valleys below, including the 20 metre waterfall at Coed Afon Pumryd.
- Number of large conifer plantations on the steep valley sides. **Important broadleaved woodland in the gorge at Coed Afon Pumryd**, dominated by sessile oak.
- **Mixture of small-scale regular and rectilinear pastoral fields within valleys**, bounded by a mix of post and wire fences and thick hedgerows. **Mature hedgerow trees and clumps of woodland** contributing to a well-treed character.
- **Extensive open sheep grazing on the valley sides and hill summits, with large-scale enclosures of ffridd demarcated by stone walls.**
- **Eastern edge of the LCA within the wider Berwyn Mountains SPA/SAC/NNR/SSSI**, with heather-dominated upland heath interspersed with blanket mire, bracken and acid grasslands.
- **Rare arctic-alpine plants on the slopes of Ogof Ddu (SSSI) and rich ravine habitats** (including slime molds) at Coed Afon Pumryd SSSI.
- **Relicts from the area's industrial past**, including disused mining shafts.
- **Main medieval settlement of Dinas Mawddwy, with a rich cultural history** including tales of Gwyllaid Cochion Mawddwy, associations with King Arthur and relicts from the woollen and slate industries. The 17th century stone bridge, with twin arches, is Grade II Listed.
- **Dinas Mawddwy and the A470 providing a gateway into the National Park.** The A458 also provides entry into the protected landscape from the east.
- **Elsewhere, rough stone-built farmsteads and occasional hamlets** linked by minor roads and tracks wrapping around valley sides, crossing frequent fords.
- **Much of the uplands designed as open access or common land**, providing recreational access. Occasional rights of way wrapping around slopes.
- Tourism-related development extending in linear form along the A470 from Dinas Mawddwy, including caravan and camping sites.
- **A strongly rural landscape – with exposed, remote uplands affording panoramic views into the National Park and out across the Berwyn Mountains.**
- **Valleys providing a contrasting sense of enclosure and intimacy.**

¹ Bold indicates those key characteristics considered to be the 'valued attributes' of the Landscape Character Area; aspects of character that contribute greatly to local distinctiveness.

FORCES FOR CHANGE AFFECTING LANDSCAPE CHARACTER

Please refer to the 'Forces for Change' section of the SPG document. Of particular relevance to this LCA are the following forces for change:

- Large coniferous plantations on valley sides, including Dinas Mawddwy.
- Presence of the main A470 and A458 road corridors, with noise and visual intrusion impacting locally on the area's strongly rural character.
- Nearby windfarm developments (outside the National Park) and future proposals with the potential to impact on the special qualities and setting of the protected landscape (this LCA is sited on the boundary of the National Park).
- Popularity of the landscape for recreation and tourism, particularly around the cultural centre of Dinas Mawddwy, with linked demand for local facilities.

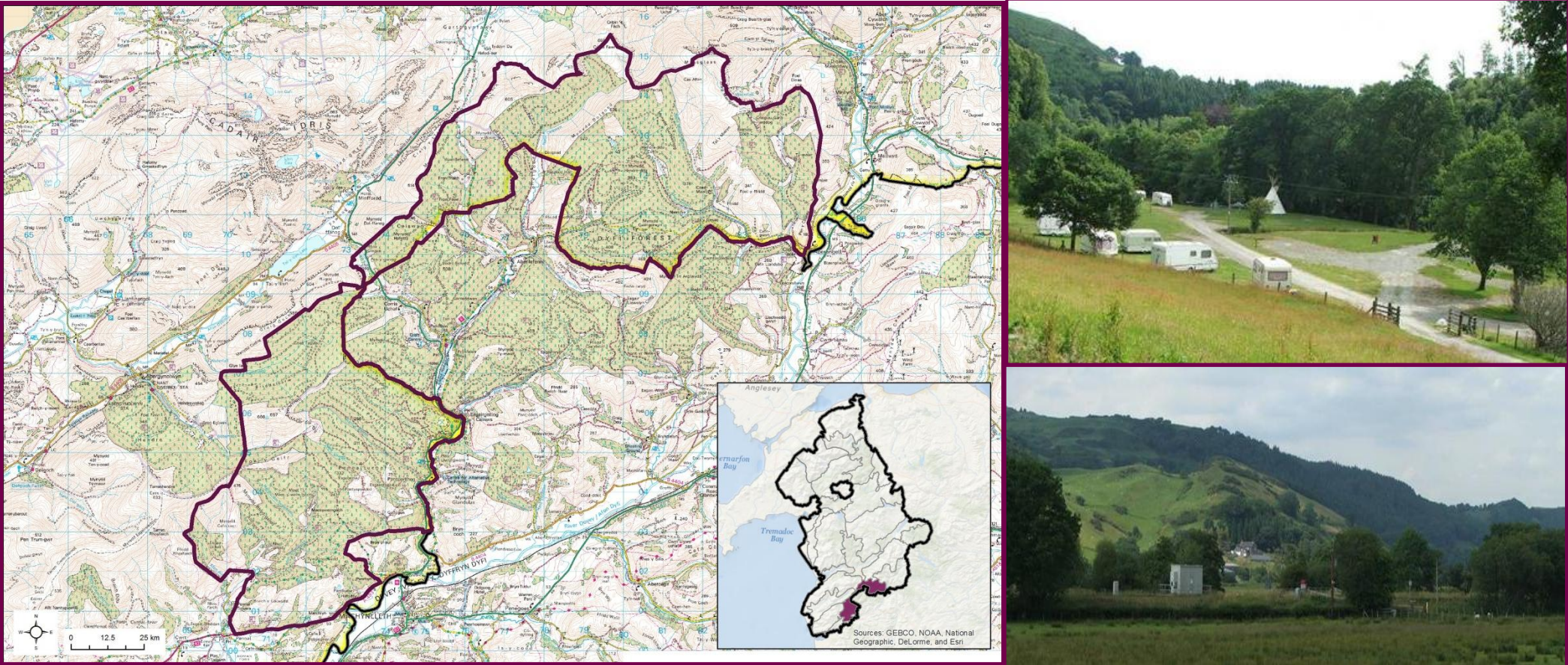
A LANDSCAPE STRATEGY FOR THE FUTURE

This LCA lies on the southern boundary of the National Park, and as such provides a valued function as a setting and gateway into the protected landscape. Its remote qualities and expansive panoramic views into Snowdonia and out across the Berwyn Mountains and beyond will be protected, whilst its rich natural and cultural heritage will be managed and enhanced, including through a continuation of traditional land and woodland management practices.

GUIDELINES FOR MANAGING FUTURE LANDSCAPE CHANGE

Please refer to the 'Guidelines' section of the main SPG document, particularly for those guidelines under the 'Mountains' and 'Valleys' headings.

PART 1: DESCRIPTION



SUMMARY OF LOCATION AND BOUNDARIES

This heavily forested Landscape Character Area includes the higher ground and upper valleys above Corris and Corris Uchaf (outside the National Park boundary in Gwynedd). The landscape forms the central-southern fringe of the protected landscape providing an important frontage to the mountains behind.

KEY CHARACTERISTICS OF THE LANDSCAPE CHARACTER AREA¹

- **Complex topography with extremely steep valleys** carving through the upland landform, with rounded hill summits reaching a maximum of 667 metres AOD above Briddellarw.
- Underlying bedrock of Silurian and Ordovician siltstones, sandstones and mudstones.
- **Multiple streams creating steep valley landforms twisting through the uplands**, including the Afon Angell, Nant y Darren, Nant Lliwdy and Nant Ceiswyn – tributaries of the Dyfi and Dulas to the south.
- Landscape almost entirely covered in coniferous forestry, masking the complex landform. **Narrow bands of broadleaved woodland along valley sides.**
- **Limited areas of rough grazing and common land interspersed amongst the forestry**, with small pockets of **irregular fields within valleys, divided by hedgerows with frequent hedgerow trees.**
- Aside from forestry and rough grazing are small areas of pastoral farming on the lower fringes.
- **Patches of rough grassland, heathland, scrub, bracken and broadleaved woodland** forming valued semi-natural habitats between the forestry.
- **Disused quarries and tips** providing evidence of the area's industrial past.
- The forested areas and tracks are popular with mountain bikers, and much is open access land.
- **Majority of the landscape is unsettled**, with very occasional farms and hamlets on lower valley slopes linked by a sparse rural road network.
- **An isolated landscape with a strong feeling of remoteness**, providing a valued undeveloped frontage to the National Park.
- Away from planted areas there are **views of the Dyfi Valley and the Cadair Idris and Aran Ranges.**

¹ Bold indicates those key characteristics considered to be the 'valued attributes' of the Landscape Character Area; aspects of character that contribute greatly to local distinctiveness.

FORCES FOR CHANGE AFFECTING LANDSCAPE CHARACTER

Please refer to the 'Forces for Change' section of the SPG document. Of particular relevance to this LCA are the following forces for change:

- Extensive forestry plantations forming the predominant land use and masking the underlying complex topography.
- Secondary woodland encroachment on areas of open habitat on valley sides and moorland fringes, particularly birch, indicating a decline in grazing levels.
- Popularity of the area for mountain biking and walking trails – any related development to support tourism would impact on the landscape's remote and undeveloped qualities.

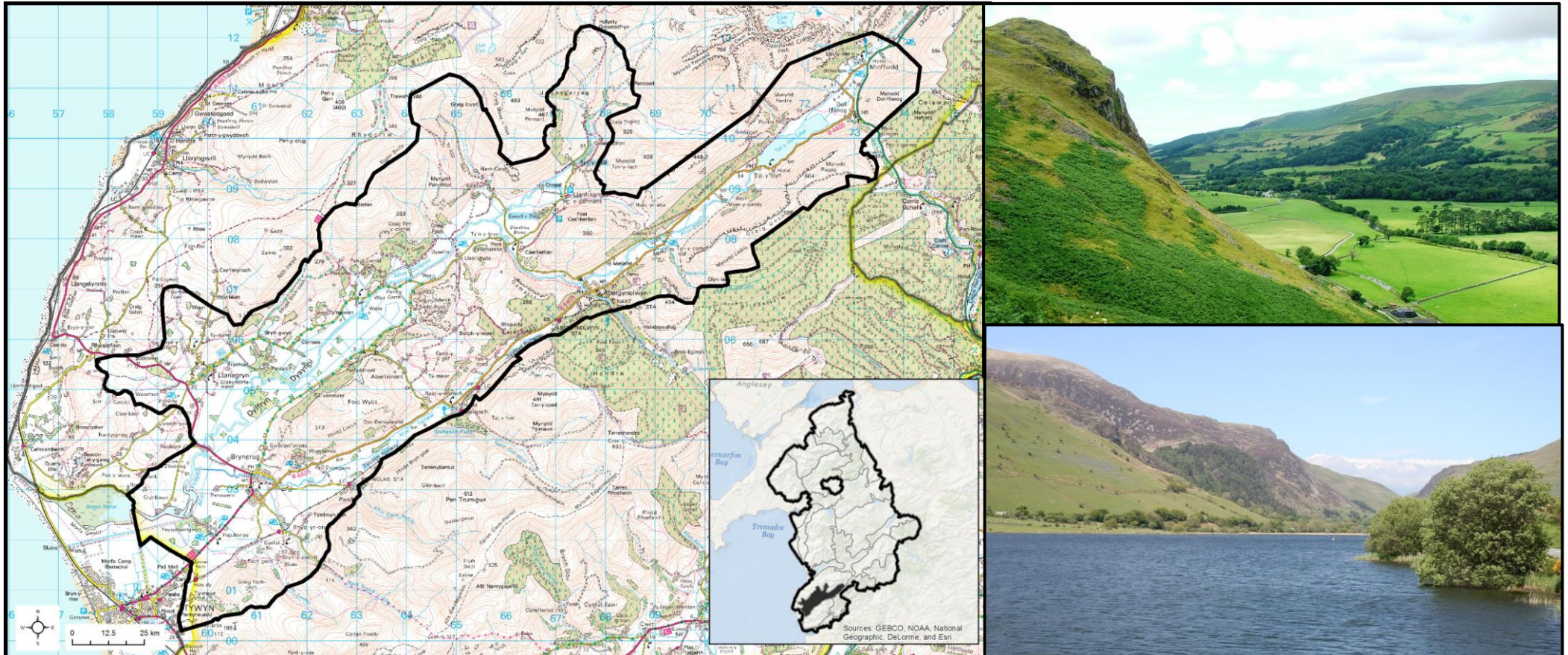
A LANDSCAPE STRATEGY FOR THE FUTURE

Significant conifer plantations located in the southern part of the National Park. More remote and inaccessible than Gwydyr and Coed y Brenin, and consequently this forested landscape offers a different visitor experience. There may be limited opportunities for low key recreation developments. Biodiversity enhancement will be sought through improved forestry and woodland management. The moorland fringes are important bird habitats, with appropriate management and enhancement encouraged to retain or extend this resource.

GUIDELINES FOR MANAGING FUTURE LANDSCAPE CHANGE

Please refer to the 'Guidelines' section of the main SPG document, particularly for those guidelines under the 'Mountains/Uplands' and 'Forestry' headings.

PART 1: DESCRIPTION



SUMMARY OF LOCATION AND BOUNDARIES

The LCA includes the main section of the Dysynni Valley on its course to Cardigan Bay, as well as its narrower upper courses from its source at Llyn Mwyngil. The landscape includes the tributary valleys of the Afon Cadair and Nant-caw, the fringes of the surrounding uplands and the broad floodplain of the Dysynni as it reaches the coast. It is bounded to the west by the National Park boundary at Tywyn.

KEY CHARACTERISTICS OF THE LANDSCAPE CHARACTER AREA¹

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| <ul style="list-style-type: none"> • Narrow valley of the Dysynni and its tributaries, taking the form of a classic U-shape with steep valley sides (peaking at 586 metres AOD at Graig Goch). Landscape dramatically opening into a broad floodplain in the west as the river flows towards the sea. • Bedrock of Ordovician mudstones, sandstones and siltstones intermixed with volcanic intrusions, including the high crag of Craig yr Aderyn (Bird's Rock) SSSI. Extensive evidence of glacial deposition and action. • Eastern edge of the LCA dominated by the glacial lake of Llyn Mwyngil, the source of the Dysynni. Fast-flowing streams, springs and waterfalls descending from the surrounding uplands. • Extensive areas of conifer and mixed plantations on valley sides, along with valued bands of broadleaved woodland. • Regular field patterns from 18th and 19th century coastal reclamation giving way to smaller-scale irregular field patterns in valleys. Steep open slopes including large parcels of sheep-grazed ffridd divided by stone walls. • Pastoral land divided by drainage ditches in the west and a mixture of fencing and thick hedgerows with frequent hedgerow trees within valleys. | <ul style="list-style-type: none"> • Steep slopes above Llyn Mwyngil including heathland and upland acid and species-rich marshy grassland (within the wider Cadair Idris SAC, NNR, SSSI). Unimproved acid grassland/bracken mosaic at Craig yr Aderyn supporting nationally important populations of chough and cormorants. • Important coastal habitats at the mouth of the valley including saltmarsh, lagoons, shingle spit, mudflats, reedbeds and ditches (Broadwater SSSI). • Valley designated as a Landscape of Special Historic Importance, with nationally important features including Craig yr Aderyn Iron Age hillfort, Castell y Bere medieval castle, and ancient hut circles at Craig Tyn-y-Cornel. • Peniarth Grade II* listed parkland with wooded riverside pleasure grounds and a viewing mount. Remnants of slate quarries (e.g. Alltwyllt slate quarry incline – a Scheduled Monument), zinc and lead mines as reminders of the area's industrial past. • Villages of Abergynolwyn, Llanegryn and Brynchrug supplemented by dispersed stone/slate farmsteads and hamlets connected by rural roads. The Talyllyn Railway runs through the valley. • Static caravan and camping sites within the landscape, particularly in the west (where closer to the coast and the tourist centre of Tywyn). • Rich in cultural heritage owing to its association with several Welsh stories e.g. Mari Jones from Llanfihangel-y-Pennant, and Castell y Bere - the Welsh castle probably begun by Llywelyn the Great in around 1221. |
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¹ Bold indicates those key characteristics considered to be the 'valued attributes' of the Landscape Character Area; aspects of character that contribute greatly to local distinctiveness.

FORCES FOR CHANGE AFFECTING LANDSCAPE CHARACTER

Please refer to the 'Forces for Change' section of the SPG document. Of particular relevance to this LCA are the following forces for change:

- Extensive conifer plantations on higher ground and valley sides, particularly at Abergynolwyn, contrasting with the open character of the surrounding uplands (and the floodplain below).
- Proximity to the tourist centre of Tywyn (outside the National Park), with the main A493 crossing through the landscape to serve the town. Visual and noise intrusion from traffic on this road affects levels of tranquillity in the western part of the LCA.
- Caravan and camping sites found scattered across the landscape to serve its popularity for tourism, including due to its proximity to Tywyn and the presence of the Talyllyn heritage railway line.

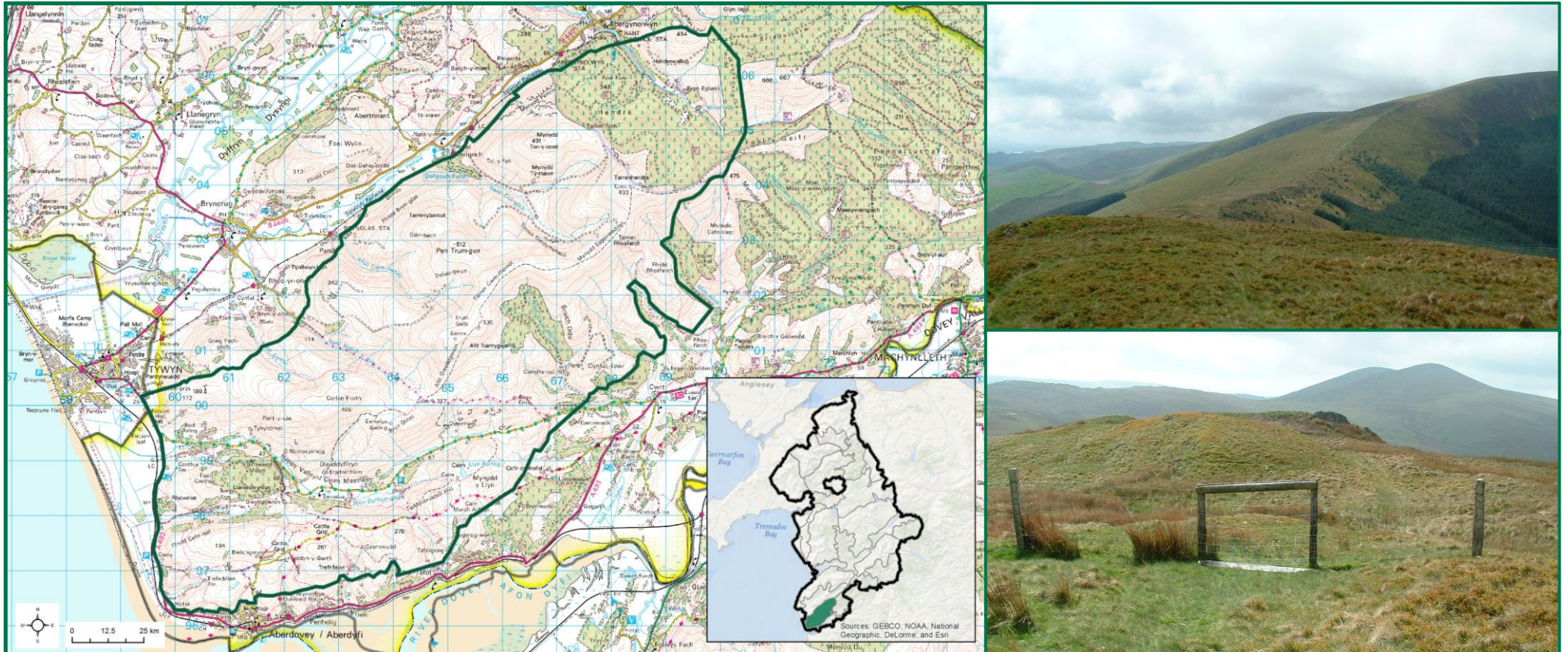
A LANDSCAPE STRATEGY FOR THE FUTURE

Llyn Mwyngil, which lies in the Talyllyn Valley, and Craig yr Aderyn, an impressive inland crag, are iconic features of this LCA. There are also borrowed views towards Cader Idris which are important to protect from inappropriate development. The landscape's strong cultural associations and peaceful, rural character – along with its function as a gateway into the central mountain core – should be protected and enhanced.

GUIDELINES FOR MANAGING FUTURE LANDSCAPE CHANGE

Please refer to the 'Guidelines' section of the main SPG document, particularly for those guidelines under the 'Valleys/Estuaries' heading.

PART 1: DESCRIPTION



SUMMARY OF LOCATION AND BOUNDARIES

Land rising up from the coast in the west and the Dyfi Estuary in the south to form a series of uplands, dissected by the valley of the Cwm Maethlon (known locally as Happy Valley). The highest hill summit is Tarrenhendre (634 metres AOD).

KEY CHARACTERISTICS OF THE LANDSCAPE CHARACTER AREA¹

- Upland area between the Dysynni and Dyfi valleys, with a ridge of peaks reaching a maximum of 634 metres AOD at Tarrenhendre.
- Bedrock geology of Ordovician mudstones, siltstones and sandstones shaped by glacial action.
- **Streams and waterfalls (e.g. the popular Dolgoch Falls) flowing from the uplands** to the Cwm Maethlon (also known as ‘Happy Valley’) and the nearby Dysynni and Dyfi Valleys/estuary.
- Extensive forestry plantations on the northern and eastern slopes of Tarrenhendre, in the Cwm Ffernol valley and at Llechwedd Melyn. Bands of broadleaved woodland found along lower valley sides.
- **Large walled enclosures of ffridd on the uplands, rough grazed predominantly by sheep.**
- Lower levels defined by a mixture of medium scale regular fields and **smaller, irregular enclosures of an historic origin.**
- Improved pastoral fields at lower levels bounded by a mixture of post and wire fences, **dry stone walls and hedgerows (often with frequent hedgerow trees).**
- **Large expanses of upland heath, moorland and scrub.** Small mire at Cors Barfog designated as SSSI due to its raised bog habitats of cotton grass, cross-leaved heath and bog mosses, as well as all three British species of sundew (carnivorous plants).
- **Northern part of the area within the Dysynni Valley Landscape of Special Historic Interest.** Remains of Bryn Eglwys slate quarry including disused tips and shafts, and the water-powered chain incline (a Scheduled Monument). Industrial remains also found in the valley at Nantycynnog.
- **Limited prehistoric remnants** including cairns and tumuli on hill summits and Foel Caethle Iron Age hillfort, commanding westward views of the coast.
- **Remote landscape with isolated stone-built farmsteads** linked by rural lanes/tracks within the lower-lying land in the west.
- Main route through the area is a single track unclassified road (also a Sustrans cycle route). **Much of the uplands are open access land or commons.**
- Compared to other more popular mountain ranges, **the Tarren Mountains remain relatively tranquil and unspoilt**, and their intact nature gives a **strong sense of place.**
- **The high points within the landscape enjoy extensive views of southern Snowdonia** including the Rhinogydd and Cadair Idris **and south towards the Cambrian Mountains.**

¹ Bold indicates those key characteristics considered to be the ‘valued attributes’ of the Landscape Character Area; aspects of character that contribute greatly to local distinctiveness.

FORCES FOR CHANGE AFFECTING LANDSCAPE CHARACTER

Please refer to the 'Forces for Change' section of the SPG document. Of particular relevance to this LCA are the following forces for change:

- Stone walls defining the fringes of mountain commons and historic areas of ffridd often replaced by fencing.
- Geometric blocks of coniferous plantation standing out prominently in the open landscape.

A LANDSCAPE STRATEGY FOR THE FUTURE

This LCA is considered to be one of the 'focal' landscapes of Snowdonia, much of which is defined as '*natural beauty*' as shown on the Eryri Local Development Plan (ELDP) proposals map. This natural beauty, and those elements that contribute towards it – especially the qualities of tranquillity and remoteness – will be protected and enhanced.

GUIDELINES FOR MANAGING FUTURE LANDSCAPE CHANGE

Please refer to the 'Guidelines' section of the main SPG document, particularly for those guidelines under the 'Mountains/Uplands' and 'Upland Fringe' headings.

PART 1: DESCRIPTION



SUMMARY OF LOCATION AND BOUNDARIES

This LCA comprises the northern banks of the Dyfi Estuary, with the National Park/Local Authority boundary with Ceredigion running down the centre of the estuary and river for the most part. It includes the resort of Aberdyfi, and follows the course of the river (and its tributaries) inland to the edge of the National Park above Machynlleth. The LCA also extends around the coastline to the National Park boundary on the southern fringes of Tywyn.

KEY CHARACTERISTICS OF THE LANDSCAPE CHARACTER AREA¹

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| <ul style="list-style-type: none"> • Landscape focused on the open form of the Dyfi and its floodplain, backed by an undulating topography of steep valley slopes and hills. • Bedrock geology of Silurian (Llandovery) rocks – mudstones, siltstones and sandstones. • Internationally important landscape for coastal geomorphology and as a record of environmental changes through the Holocene epoch. Extensive sand banks, mudflats and sand dunes fringing the estuary. • Floodplain criss-crossed by a network of drainage channels and tributary streams draining from the uplands to the north (including the Afon Pennal, Afon Cwrt and Nant Cwm-Sylwi). • Blocks of broadleaved woodland on valley slopes mixed with coniferous species in places. Further inland are more scattered broadleaved trees and some plantations. • Floodplain and coastal edge including a regular pattern of reclaimed grazing marshes divided by drainage ditches. • Rough grazing land and pasture further inland forming a more irregular pattern of small-medium fields divided by hedgerows or post-and-wire fencing. | <ul style="list-style-type: none"> • Internationally important estuarine habitats within the Dyfi SAC/Ramsar/NNR/SSSI, including river channels and creeks, sandbanks, sand dunes, mudflats and expanses of saltmarsh – of considerable value for wetland birds. It falls within the wider Dyfi UNESCO World Biosphere site. • Nationally important areas of sessile oak woodland on the steep river banks with a rich ground flora (Coed y Gofer SSSI). • Landscape with strong links to maritime industry, with the Conservation Area at Aberdyfi reflecting its function as a former fishing and ship building port. Remains of a Roman Fort in a strategic position overlooking the Dyfi at Cefn-Caer (a Scheduled Monument). • The northern coastal edge is within the Dysyni Valley Landscape of Special Historic Importance, including evidence of 18th and 19th century land reclamation. • Main settlement is the holiday resort of Aberdyfi, overlooking the Dyfi and extending along lower valley slopes. The village of Pennal sits on the banks of the Afon Pennal. • Elsewhere, clustered hamlets, individual properties (including hotels) and caravan/camping sites linked by the A493 and minor roads/tracks. The Cambrian Coast Railway runs along the edges of the estuary. • The estuary is distinctive, picturesque and largely unspoilt, and is a popular walking and recreational destination (including sailing, rowing and kite surfing). |
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¹ Bold indicates those key characteristics considered to be the 'valued attributes' of the Landscape Character Area; aspects of character that contribute greatly to local distinctiveness.

FORCES FOR CHANGE AFFECTING LANDSCAPE CHARACTER

Please refer to the 'Forces for Change' section of the SPG document. Of particular relevance to this LCA are the following forces for change:

- Extensive forestry plantations forming the predominant land use.
- Secondary woodland encroachment on areas of open habitat on valley sides and moorland fringes, particularly birch, indicating a decline in grazing levels.
- Pressure for conversion of traditional stone barns to visitor accommodation – tracks through the forestry are popular for mountain bikers.
- Windfarm visible when looking south across the estuary.

A LANDSCAPE STRATEGY FOR THE FUTURE

To protect the high quality estuarine landscape from developmental pressure, and improve and manage tourism to protect the local economy. This should be pursued whilst ensuring that visitors and associated activities are not detrimental to landscape quality. Opportunities for improving biodiversity and supporting natural estuarine processes will be explored, particularly to strengthen the landscape's resilience to the future impacts of climate change.

GUIDELINES FOR MANAGING FUTURE LANDSCAPE CHANGE

Please refer to the 'Guidelines' section of the main SPG document, particularly for those guidelines under the 'Valleys/Estuaries' and 'Coastal' heading.

SNOWDONIA NATIONAL PARK SEASCAPE ASSESSMENT

1.0 Introduction

The following Seascapes Character Areas and Forces for Change have been identified and defined following a joint project between Snowdonia National Park Authority, Anglesey County Council and Natural resource Wales. Much of the authoring and assessment work was undertaken by Fiona Fyfe Associates, with Countryside and Bangor University (SEACAMS), between January and July 2013.

The methodology (comprising desk studies, fieldwork on land and by boat, and writing-up) follows the current best practice guidelines for landscape and seascape character assessment. It reflects the holistic approach to landscape (and by extension seascape) of the European Landscape Convention, considering natural, cultural and perceptual qualities of seascape. The project was undertaken by a multi-disciplinary team with expertise in terrestrial, intertidal and marine environments.

The study area for the project includes coastal land, the intertidal zone, and extends out to the territorial limit (12 nautical miles offshore). Where land outside the study area boundary contributes to seascapes this has been recorded. Within the study area there is a great diversity of terrestrial, intertidal and marine environments. These stem from the varied geology, geomorphology and coastal processes within the area, and also from thousands of years of human activity on land and sea. Combinations of natural and cultural processes continue to shape the evolution of the area's seascapes.

Seascape character assessment is a development of the well-established process of landscape character assessment. It divides the study area into Seascape Character Areas (SCAs) (geographically-distinct areas with a unique sense of place, and comprised of different combinations of SCTs). The full publication also identifies Seascape Character Types which define types of environment through uniform or predominant character as opposed to geographical coverage; full descriptions of the SCTs these are available from the National Park Authority on request; below

Profiles are provided for each of the SCAs (which are named by their geographical position) describing their location and context; summary description; constituent SCTs; key characteristics; cultural benefits and services; natural influences and sites; cultural influences and sites; perceptual qualities; forces for change and inherent sensitivity.

List of Seascape Character Types (SCTs)

SCTs were grouped into three groups: Terrestrial (tSCTs); Intertidal (iSCTs) and Marine (mSCTs).
The full list of SCTs is as follows:

Terrestrial SCTs:

Name	SCT Code	Summary description
Beach [above high water mark]	t1	A shoreline landform composed of loose sand, shingle or pebble particles deposited by wave or current action.
Dunes or Dune slack [above high water mark]	t2	A landform where constructive waves have encouraged the accumulation of sand, and where prevailing onshore winds have over time blown this sand inland.
Reedbed	t3	Coastal reed beds: natural habitats found in floodplains, waterlogged depressions and estuaries.
Cliffs and cliff tops	t4	Coastal erosion landforms which occur where the continuous wave action erodes rocks to create cliffs of varying heights.
Coastal Heath/ Grassland	t5	An important and rare mosaic of heathland communities, much of which is dominated by mixtures of western gorse, heathers and grasses.
Rocky Islets	t6	Small rocky islets which are the surviving remnants of former headlands, cut off from the mainland through processes of coastal erosion.
Farmland (predominantly reclaimed grazing marsh)	t7a	Generally associated with 19 th century land reclamation, resulting in landscape change from tidal estuaries and marshes to enclosed flat areas with embankments and networks of drainage ditches controlling water levels.
Farmland (predominantly irregular enclosures/ rhos pasture)	t7b	A patchwork of small and irregularly shaped fields, mainly used for sheep pasture. Generally unimproved, often rocky farmland, with thin, damp soils supporting tussocky deciduous grasses.
Farmland (predominantly regular enclosures)	t7c	Larger and more regular-shaped shaped fields, mainly given over to pasture (improved and semi-improved grassland) with occasional arable/cereal production.
Woodland (deciduous)	t8a	Mature broadleaved natural or semi-natural deciduous woodland.
Woodland (coniferous)	t8b	Stands of coniferous plantation, usually planted in monocultures.
Historic parkland/ gardens	t9	Historic designed landscapes, usually associated with a large estate.
Golf course/ amenity land	t10	Golf courses (predominantly links courses) and other areas of formal recreation/sports grounds.
Tourist Infrastructure (caravan park/ campsite)	t11a	Formal (permanent) static caravan parks and seasonal campsites, with associated infrastructure.
Tourist Infrastructure (other)	t11b	Promenades and their associated tourist infrastructure.
Airfield/ race track	t12	Airfields and the Anglesey motor racing circuit, and their associated infrastructure.
Settlement	t13	Settlements, ranging from the large towns of Bangor

		and Holyhead, to smaller towns and villages.
Settlement (Conservation Area)	(t13b)	Parts of settlements designated for their historic or architectural importance.
Industrial/ business park	t14	Industrial sites, power stations (Wylfa), business parks and industrial parks.
Quarry/ former quarry	t15	Existing and former quarries/ mineral workings.
Coastal Lagoon	t16	Waterbodies separated from the shoreline by drained/reclaimed land or sand dunes, or (at Cemlyn Bay Lagoon) by a natural shingle ridge.
Raised bog	t17	Peatland ecosystems which develop where drainage is impeded, creating anaerobic, waterlogged conditions which slow down the decomposition of plant material and lead to an accumulation of peat.

Seascape Features:

Castle/ fort/ defensive works	O symbol
Lighthouse	Star symbol
Harbour	H symbol

Intertidal SCTs:

Name	SCT Code	
Intertidal Shingle	i1	Relatively exposed shores characterised by pebble, cobble, shingle, gravel and coarse sand beaches.
Intertidal Sand	i2	Beaches comprising clean coarse, medium or fine-grained sands or muddy sands, with shells and stones occasionally found on the surface.
Intertidal Mud	i3	The sheltered location allows fine silt or clay to settle, typically forming mudflats.
Intertidal Rock	i4	A habitat of bedrock, boulders and cobbles which can experience enormous variation in exposure, salinity and temperature.
Reefs and Mussel Beds	i5	A habitat of rock, cobbles and pebbles on underlying sand or muddy sediments. Two reef habitats dominate: mussels and honeycomb worm.
Saltmarsh	i6	This habitat can develop on a variety of sandy or muddy sediment types and is periodically covered by spring high tides. Vegetation is dominated by salt-tolerant species.
Seagrass Beds	i7	Seagrass beds on muddy fine sand or sandy mud dominated by an abundance of narrow-leafed eel grass, where the muddy sediment on the shores retains water and stops the roots drying out.

Marine SCTs:

Name	SCT code	
Carboniferous tidal strait	m1a	A narrow channel experiencing strong tidal currents and little wave action. Deposited sediment is a carried away, leaving a bare carboniferous rock substrate.
Precambrian tidal strait	m1b	A narrow tidal channel with rocky islets and inlets, creating a rugged and complex coastline with a rich diversity of habitats.
Tidal delta	m1c	Found at the entrances to the Menai Strait, where tidal processes cause deposition of sand.

Shelf sea rock – shallow water, high energy	m2a	Well lit, shallow habitats less than 20m deep where high levels of wave and tidal current energy prevent significant deposition of finer grained sediment.
Shelf sea rock – shallow water, moderate energy	m2b	Bedrock and stable boulders in shallow, well lit waters with moderate levels of exposure to current and wave energy, limiting the amount of fine sediment deposition.
Shelf sea rock – deep water, high energy	m2c	Seabed comprising hard substrate, high energy and poor light levels. Patches of coarse and mixed sediment may be present sporadically but the high energy environment prevents fine sediment being deposited.
Shelf sea rock – deep water, moderate energy	m2d	Areas of bedrock and boulders in deep water with poor light levels and moderate exposure to wave and current energy. Patches of coarse sediment are likely to be present but the high energy environment prevents fine sediment being deposited.
Shelf sea coarse sediment – shallow water, high energy	m3a	Coarse sand, gravel, shingle and shell in well-lit shallow water with exposure to high current and wave energy.
Shelf sea coarse sediment – shallow water, moderate energy	m3b	Coarse sand, gravel, shingle and shell in well-lit shallow water with exposure to moderate current and wave energy.
Shelf sea coarse sediment – deep water, high energy	m3c	Tide-swept coarse sand, gravel, shingle and shell in poorly lit water, generally deeper than 20m. Wave energy at the seabed may exceed 1.2 Nm^{-2} and peak spring current speeds may reach 1.5 ms^{-1} .
Shelf sea coarse sediment – deep water, moderate energy	m3d	Tide-swept coarse sand, gravel, shingle and shell in poorly lit water, generally deeper than 20m. Wave energy at the seabed does not generally exceed 1.2 Nm^{-2} and peak spring current speeds are less than 1.5 ms^{-1} .
Shelf sea sand – shallow water	m4a	Well-lit sand that may be clean or contain up to approximately 20% silt or clay, generally in water less than 20m deep. This seascape character type is often found in areas of net sediment deposition.
Shelf sea sand – deep water	m4b	Relatively stable clean or muddy sand with up to 20% silt or clay content. Water depth is generally more than 20-30m and light attenuation is poor.
Shelf sea mud	m5	Fine, cohesive sediment containing at least 20% silt or clay. This habitat is characteristic of a low energy environment.
Shelf sea mixed sediment	m6	Sediment of heterogeneous grain size that may include mud, sand, gravel, cobble and shell. The sediment may be well mixed or poorly sorted.
Sarnau	m7	Shallow (and in some places intertidal) rocky reefs which extend westwards out to sea from the Welsh mainland. They are composed of boulders, cobbles and coarse sediment, and are thought to be glacial in origin.
Biogenic reef	m8	Hard marine structures formed by dense beds of animals.
Macrophyte bed	m9	Dense kelp park on silted rock or sediment, or seagrass meadow on sheltered sediment.

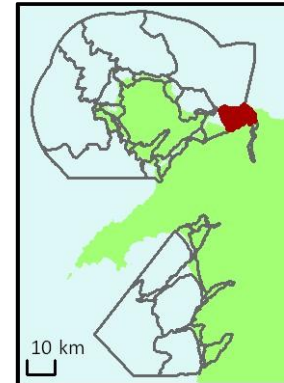
Estuarine channels	m10	A sinuous network of channels that shift due to erosion and deposition of sediment. A mixture of shallow, wide channel with slow moving water and high rates of sedimentation and deeper channels with strong tidal currents.
Harbour (NOTE: also symbolised as point features)	m11	Naturally sheltered areas such as estuaries providing boat access, with added protection from man-made structures. The marine habitat of a harbour is generally characteristic of a very sheltered muddy environment.
Inland Sea	m12	A body of water formed between the main island of Anglesey and Holy Island by the building of road embankments. Tidal flow of water between the Inland Sea and the open sea is restricted by the bridges at each end.

SEASCAPE CHARACTER AREA 2: CONWY BAY

Component LCAs (Snowdonia): Northern Uplands

Location and Context

This SCA lies in the north-east of the study area, to the north of Snowdonia National Park. It includes the eastern part of Conwy Bay (including an extensive intertidal area), the mouth of the Conwy estuary and the surrounding coast. The town of Llandudno is in the east of the SCA, Conwy is in the south and Penmaenmawr is in the west. The Great Orme headland frames the SCA to the east and north-east. To the west is SCA3 Traeth Lafan, Western Conwy Bay, to the south SCA 1 Conwy Estuary and to the north SCA 28 North-east of Anglesey.



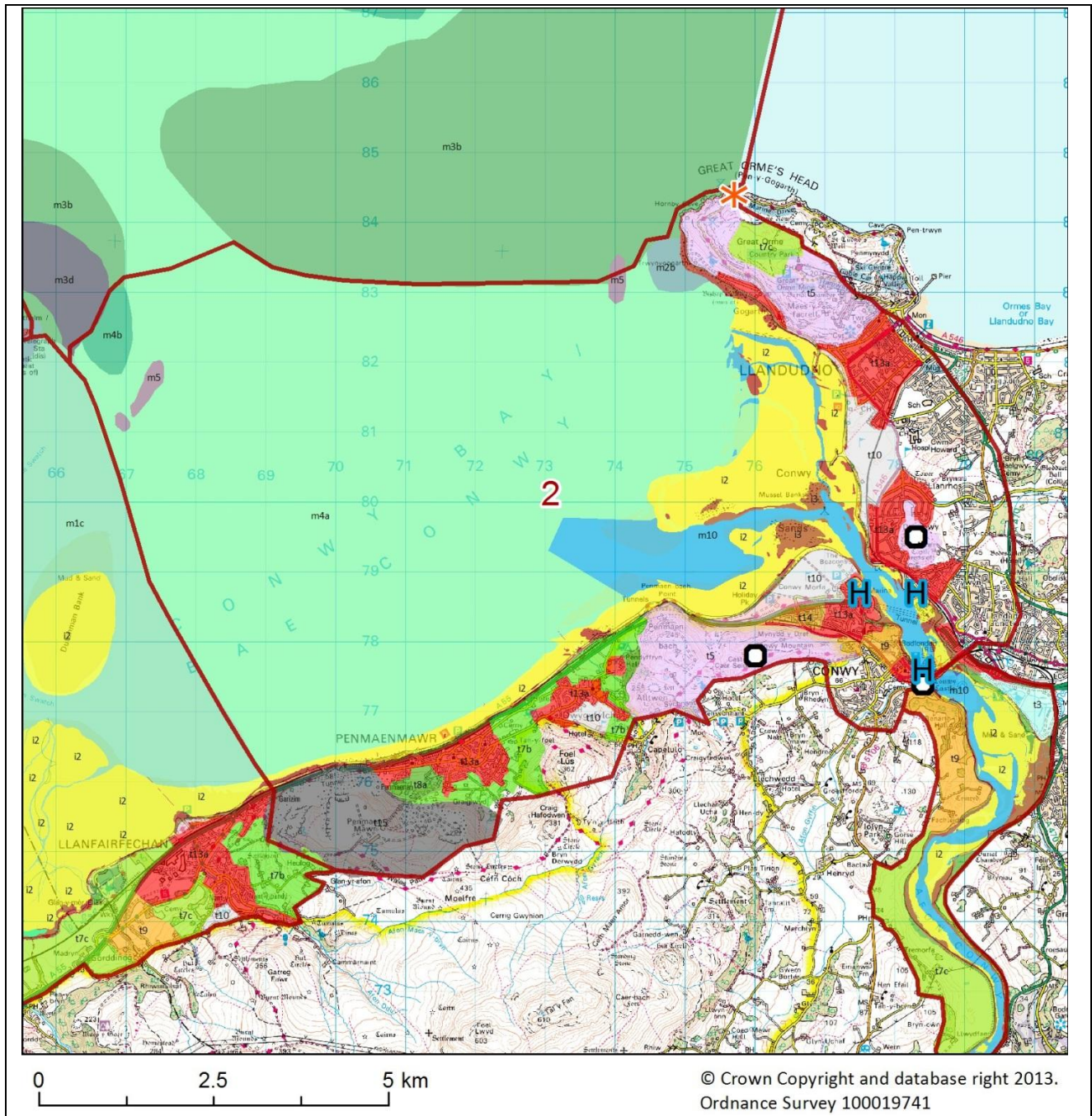
Conwy Bay, Llandudno and Great Orme as seen from Conwy Mountain. Image ©Fiona Fyfe

Summary Description

This is a busy and varied area with a long history of settlement and tourism, and magnificent views both inland and over Conwy Bay with its wide sands and intertidal habitats. The high land surrounding the SCA (including Great Orme headland and Conwy mountain) creates a dramatic and distinctive backdrop and a strong sense of place. Views of the seascape are framed by Great Orme to the east and (more distantly) Puffin Island to the west. A variety of settlements are set against the high ground of the Great Orme and Conwy Mountain. These include the medieval walled town of Conwy with its castle and bridge, the industrial village of Penmaenmawr with its terraces of houses, and modern marina development at Deganwy. This is a popular tourist area, and contains fine examples of Victorian seaside tourism development, including the resort of Llandudno West Shore with its esplanade, and the development of the Great Orme with various attractions including a tramway to the summit cafe. More recent tourism developments have included golf courses, caravan parks and recreational boating facilities; the latter give a busy feel to the lower part of the Conwy Estuary.

Constituent Seascape Character Types

Please refer to Appendix I for a list of constituent Seascape Character Types.



Seascape Character Types in the Eastern Conwy Bay SCA. Refer to the key on pages 96 - 99 for full descriptions.

H symbol	i3	m3d	m10	t7c	t13a
O symbol	m1c	m4a	t3	t8a	t14
Star symbol	m2b	m4b	t5	t9	t15
i2	m3b	m5	t7b	t10	

Key Characteristics

- Varied underlying geology, including Carboniferous limestone (Great Orme), Ordovician igneous rocks (Conwy Mountain) and softer Ordovician sedimentary rocks forming lower-lying areas.
- Shallow bay ringed by high hills, including Conwy Mountain to the south, and limestone headland of Great Orme to the east. Lower land around Llandudno emphasises height and profile of Great Orme.
- Where the high mountainous topography of Snowdonia meets the sea, tumbling dramatically down to sea level and requiring tunnels through the headlands for coastal transport routes.
- Extensive intertidal area around estuary mouth, with dynamic sediment processes. Great Orme headland exposed to full force of sea, especially in northerly wind conditions.
- Land/ sea uses include transport (road, rail and boat), tourism, settlement, coastal heath/ grassland, farmland, quarrying, and recreational boating.
- Very extensive intertidal and shallow marine habitats. Also elevated coastal heath (Conwy Mountain) and coastal grassland (Great Orme).
- Many onshore historic and cultural features reflecting the area's long history of settlement, defence (including Conwy Castle) and 19th Century tourism.
- Offshore historic and cultural features include historic harbours/ quaysides (e.g. Conwy) and more modern marinas (e.g. Deganwy) and channel beacons.
- A very long history of settlement, including Iron Age and Roman occupation, the Medieval fortified town of Conwy, Victorian seaside development at Llandudno West Shore, and more recent development.
- Visually varied, with contrasting textures and colours of water, intertidal areas, coastal heath/ grassland and towns. Area has a busy feel, especially in summer.
- Distinctive hills forming landscape setting provide dramatic backdrop and strong sense of place, as well as sense of enclosure.
- Seascape setting framed by Great Orme to east and Puffin Island in distance to west.



*Great Orme and Esplanade at Llandudno West Shore.
Image © Fiona Fyfe*



View across the lower part of Conwy Estuary from Conwy to Deganwy. Image © Fiona Fyfe



*Conwy Castle and bridges.
Image © Fiona Fyfe*

Cultural Benefits and Services

Key: Bold shading = widespread; medium shading = localised; no shading = occasional

Leisure, recreation & tourism	Health	Heritage	Education	Religious & spiritual
Watersports	Relaxation	Cultural	Informal	Spiritual
Exploring	Exercise	Natural	Formal	Religious
Active				
Ecotourism				
Beach				

Natural Influences and sites

- Meeting point between Snowdonia Mountains and the Irish sea. Carneddau range tumbles dramatically into the sea making coastal land travel very difficult but spectacular, with road and rail tunnels and bridges.
- Varied geology enabling diverse habitats within a relatively small area. E.g. Great Orme Coastal Grassland (SSSI and SAC grazed by herd of distinctive Kashmir goats) and Conwy Mountain coastal heathland with land cover of heather and bilberry. Sychnant Pass, Bwlch Mine, Chwareli a Glaswellt Deganwy and Cadnant designated SSSI.
- Limestone cliffs of the Great Orme host a variety of birds including Guillemot, Razorbill, Kittiwake, Fulmar and Peregrine. Grey Seals haul out on the rocky beaches. Great Orme is the largest headland on the North Wales mainland coast. RIGS sites at Great Orme and Great Orme head.
- Extensive intertidal habitats at mouth of Conwy Estuary designated SSSI (Aber Afon Conwy). Conwy river channel also designated SAC; wider Conwy Bay designated SAC and SPA. Flat sands run up to bases of steep headlands.
- Sheltered bay with low energy from waves. Residual currents flow into the bay from the north west, and turn both west into the Menai Strait via the Penmaen Swatch between the Lavan Sands and Dutchman Bank, and east towards the Great Orme before leaving the bay to the north east.
- Shallow mobile sand habitat covers most of the seabed and features active bedforms such as sand waves and megaripples. Muddier sediment is found in the eastern reaches of the SCA. Subtidal limestone reef along the west of the Great Orme colonised by anemones, hydroids and sponges.
- Estuary mouth features shifting sand banks and has a freshwater influence from the river Conwy. . Accretion of sand at Conwy Morfa, and at Llandudno west shore (where intervention actively encourages the build-up of sediment). Protection of soft coast by rock groynes/ armour e.g. Penmaenmawr.
- Migratory salmon and trout pass through these waters on their way to and from the river Conwy.

Cultural Influences and sites

- Defensive Sites include Caer Seion Iron-Age Hillfort at the summit of Conwy Mountain, Deganwy Castle, and the magnificent castle and town walls at Conwy (both Scheduled Monuments and UNESCO World Heritage Sites) built by Edward I. The SCA (together with SCA 1) provides the setting for these World Heritage Sites).
- Conwy contains many historic buildings, including Plas Mawr Elizabethan house (Scheduled Monument) and its historic harbour and quay at the mouth of the River Conwy. The town centre is a Conservation Area, as is Penmaenmawr. Gogarth Grange on south side of Great Orme was 13th century Bishop's Palace.
- Popular beaches, and an outstanding example of Victorian seaside development at Llandudno West Shore including hotels, guesthouses, esplanade and paddling pool (within Conservation Area). Immediately to the north of Llandudno, Great Orme was developed for recreation, including a tramway to the summit cafe, and construction of the 'Marine Drive' around the headland. Great Orme Headland designated Heritage Coast.
- Historic charts show three approaches to Conwy Harbour, with a traditional anchorage off the South Deep where vessels waited for the right tidal conditions to move into the river.
- Remains of Bronze-Age and post-Medieval copper mining on Great Orme. More recent quarry works at

Penmaenmawr (still operational) visible as levels and inclines on mountainside.

- Historic intertidal fishing industry, with a Medieval stone fishtrap associated with Gogarth Abbey on the eastern side of the bay, a mussel fishery on the south side near Conwy Marsh, and traces of wooden stake fishtraps in the intertidal zone.
- Important transport-related sites, including Stephenson's crenellated tubular railway bridge and Telford's suspension bridge over the River Conwy, A55 road tunnels, and harbours/ marinas.
- Documentary records of shipwrecks, with losses either foundering in the bay or running aground. Wreck of the *Flying Foam* visible in the intertidal area on the eastern side of the bay.
- Partially within Snowdonia National Park

Perceptual Qualities

- From elevated viewpoints, area appears as expansive and large scale with panoramic views. From within towns and the bay itself, landform creates a more enclosed feel
- Varied uses, and a busy feel in much of the area, but this is balanced by the strong landscape and seascape setting.
- Curved sweep of bay contrasts with more angular form of surrounding hills. Varied textures and patterns from water, sand, towns, heathland, grassland, caravan parks, etc. Seasonal colour from coastal heath and summer tourist development.
- A generally busy and developed area, and a popular holiday destination. However, most places have views to natural features such as the sea and surrounding mountains, which influence perceptions of the area.
- Rugged higher land has a sense of relative wildness, remoteness and detachment from the urban areas below, but this is reduced by traffic noise, movement and lighting.
- High land close to the coast (within and outside the Study Area) is very important to the setting of the SCA and adds to its strong sense of place.

Forces for Change

Summary	Key forces for change							
	Special Qualities	Natural processes/ climate change	Visitor pressure	Marine use- commercial and fishing	Offshore energy or minerals	Development pressure/ transport routes	Land management changes	MOD use
Development pressure around main settlements and transport routes. Noise and lighting from A55 detracts from many sections as it runs close to the sea. Together with the railway, it cuts off Penmaenmawr and Dywgyfylchi from the sea front, except for limited crossing points.	Welsh Language							
Visitor pressure around popular tourist sites, including Llandudno west shore, Great Orme, Conwy, and waterside development at Deganwy. Variety of recreation demands including golf courses and facilities for water-based recreation.	Diversity of landscapes, including coastal landscape features & expansive views.							
	Rural agricultural communities and their associated features							
	Richness of habitats and biodiversity							
	Cultural heritage							
	Remoteness, tranquillity and wildness							
	Access to land and water and recreation/ enjoyment							
	Geology and geomorphological features							
	Islands							
	Archaeology and history including historic parks and gardens							
	Soil, air and water quality							
Operational offshore wind farm in Colwyn Bay visible from high land.	Key		Change occurring in the area affecting the selected special quality					
Natural coastal processes, including sediment drift towards the mouth of the Conwy estuary, and build-up of sediment at Conwy Morfa and Llandudno west shore.								
Risk of flooding of low-lying land at Conwy Morfa, Llandudno and Llandudno Junction exacerbated by sea level rise.								

Inherent Sensitivity

Theme	Factors making the area more sensitive	Factors making the area less sensitive
Coastal geometry and landform	<p>Views out to sea framed by headlands (Great Orme and Puffin Island).</p> <p>High land close to the coast forms a distinctive coastal backdrop and skyline.</p> <p>Steeply sloping cliffs form natural rocky shoreline and associated habitats around Great Orme.</p> <p>Sensitive coastal habitats in extensive inter-tidal areas.</p>	
Existing development	Historic character of existing settlements (Medieval, Victorian and industrial).	Presence of existing development within the SCA, including towns and caravan parks.
The visual experience	<p>High land to south and headland/ cliffs to east are very prominent in coastal views, contributing to the character and visual qualities of the SCA.</p> <p>Users of Wales Coast Path are sensitive receptors.</p> <p>Highly visible in views from surrounding hills.</p>	<p>Seafront development, golf courses etc. create recreational character in some parts of SCA.</p> <p>Built development and night lighting (including lighting associated with transport routes) along coast.</p>
Tranquillity	Relatively high levels of tranquillity on elevated land in south of SCA.	<p>Busy holiday destination, with seasonal reductions in tranquillity due to numbers of visitors.</p> <p>Impacts of existing development, main roads (including A55) and occasional trains.</p>

SEASCAPE CHARACTER AREA 3:

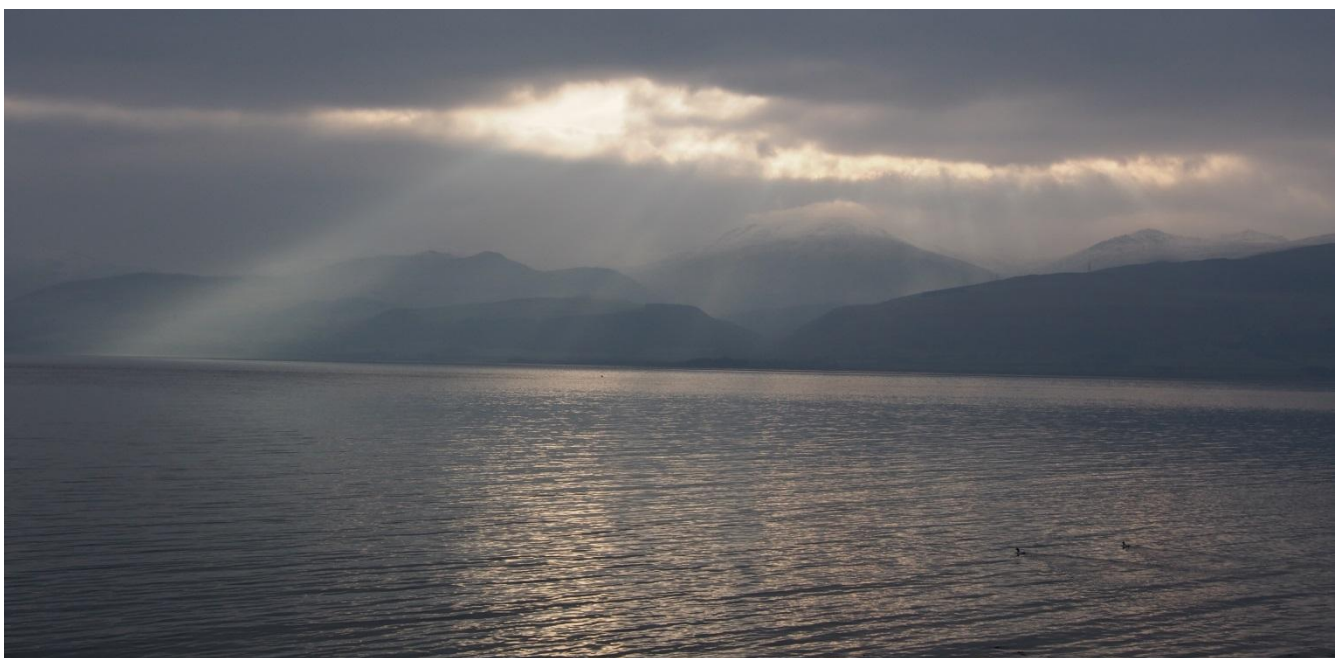
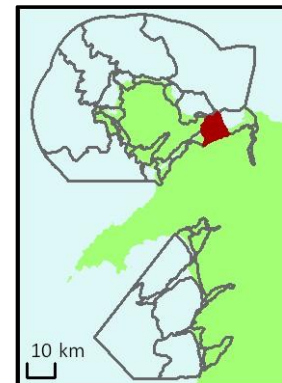
TRAETH LAFAN

Component LCAs (Gwynedd): Bangor Coastal Plain

Component LCAs (Anglesey): Eastern Menai Strait; Penmon and Puffin Island

Location and Context

This SCA encompasses the western part of Conwy Bay, including the area where the Menai Strait opens into Conwy Bay, parts of the eastern coast of Anglesey (including the town of Beaumaris) the northern coast of the Mainland between Llanfairfechan and Penrhyn, and the extensive intertidal sand and mud flats of Traeth Lafan. SCA 2: Conwy Bay lies to the east, and SCA 4: Menai Strait lies to the south-west. To the north-west is SCA 5: Penmon (which includes Puffin Island). SCA 28: North-east of Anglesey lies to seaward.



The Mountains of Snowdonia as seen across Traeth Lafan from Beaumaris.

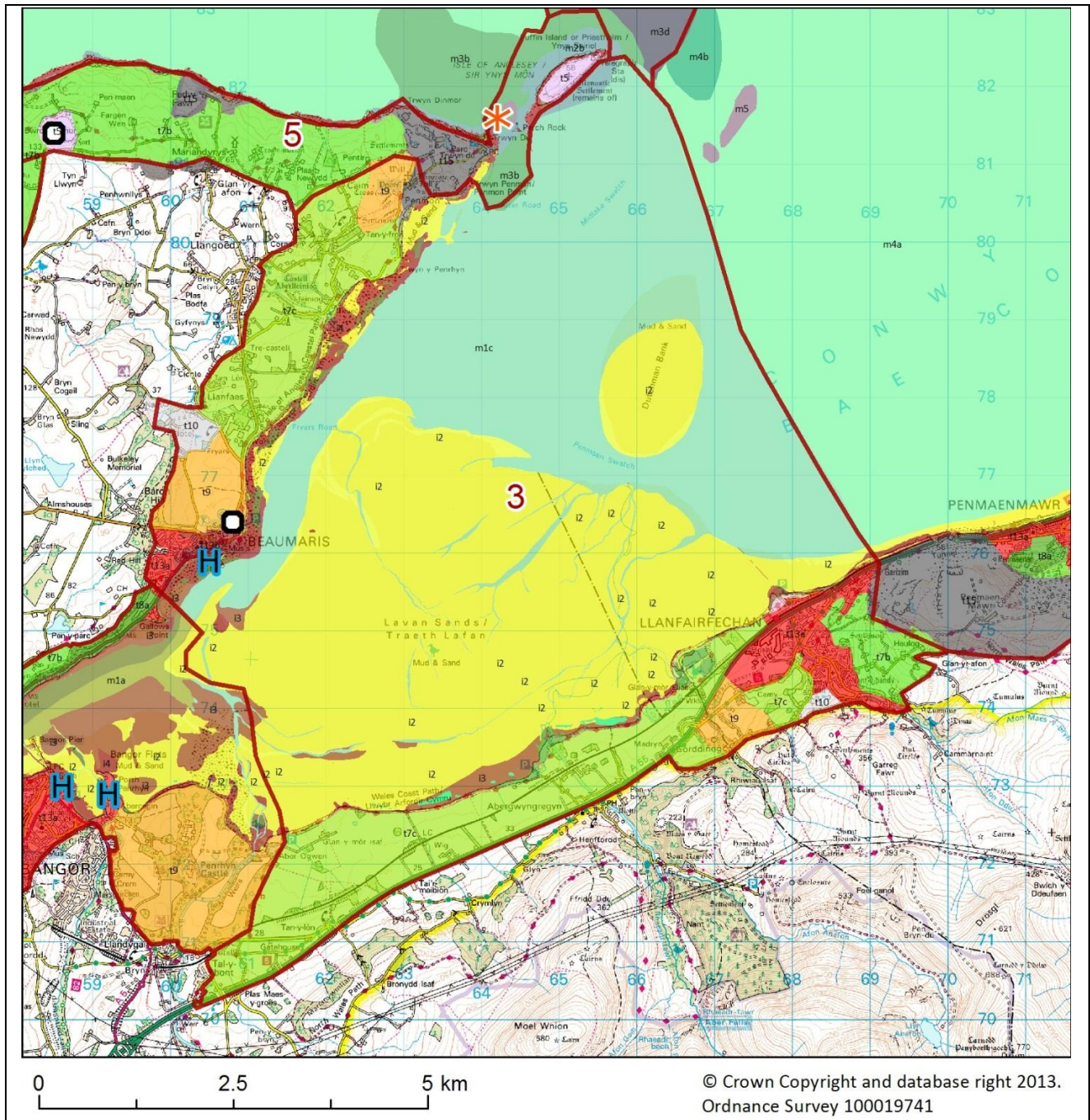
Image © Fiona Fyfe

Summary Description

Spectacular landscapes and seascapes create magnificent views within this SCA. Foreground views are dominated by the expanse of Traeth Lafan, with its constantly changing patterns and colours depending on tides and light conditions. The Snowdonia mountains form a grand backdrop to views across the Bay when seen from Anglesey. Views seawards are framed by Puffin Island to the west, and (more distantly) the headland of Great Orme to the east. Coastal settlements including Beaumaris and Llanfairfechan reflect the area's long importance for defence, religion, settlement and transport. Prior to the construction of Telford's suspension bridge across the Menai Strait in 1826, one means of reaching Anglesey was via a tidal causeway across Lafan sands to the Beaumaris ferry.

Constituent Seascape Character Types

Please refer to Appendix I for a list of constituent Seascape Character Types.



Seascape Character Types in the Traeth Lafan SCA. Refer to the key on pages 96-99 for full descriptions.

H symbol	i3	m2b	m4b	t7c	t13a
O symbol	i4	m3b	m5	t8a	t15
Star symbol	m1a	m3d	t5	t9	
i2	m1c	m4a	t7b	t10	

Key Characteristics

- Geology primarily of Ordovician mudstone and siltstone, with an outcrop of harder igneous rock at the eastern edge of the SCA.
- Relatively low-lying coastal landform (except in the extreme east of the SCA). Shallow bathymetry within Bay, with extensive tidal mud and sand flats (Traeth Lafan).
- Land uses very varied, including several settlements, harbours, farmland, woodland and parkland. Sea uses include recreation and commercial mussel fishing.
- Extensive intertidal sand and mudflats, with a shoreline of cobbles, boulders and muddy gravels. Woodland and parkland habitats onshore.
- Numerous onshore historic and cultural features reflecting the SCA's long history of settlement, defence, transport and religion, including Beaumaris Castle and Penmon Priory.
- Offshore historic and cultural features the harbour and pier at Beaumaris and the site of the former causeway across Traeth Lafan.
- A settled area, including towns of Beaumaris, and Llanfairfechan, as well as scattered farms and hamlets.
- Views dominated by the open expanse of Conwy Bay, its colours and textures continually changing in response to weather and tidal conditions, and numerous boats.
- Land rises very steeply behind the Study Area in the eastern part of the SCA. Mountains of Snowdonia form a magnificent landscape setting, particularly when seen across Conwy Bay. Precipitous hill at Penmaenmawr drops steeply into the sea and visually separates this SCA from SCA 2 to the east.
- Puffin island a key feature of the seascape setting in views north, with Great Orme a more distant feature to the east.



Intertidal sand at Traeth Lafan as seen from the coastal railway line. Image © Fiona Fyfe



Beaumaris town and pier. Image © John Briggs



Traeth Lafan from Crymlyn, northern Snowdonia. Image ©John Briggs

Cultural Benefits and Services

Key: Bold shading = widespread; medium shading = localised; no shading = occasional

Leisure, recreation & tourism	Health	Heritage	Education	Religious & spiritual
Active	Relaxation	Cultural	Informal	Spiritual
Exploring	Exercise	Natural	Formal	Religious
Watersports				
Beach				

Natural Influences and sites

- Extensive intertidal habitats in Conwy Bay. Traeth Lafan (designated Nature Reserve) is a wide expanse of sediment, muddy at the back of the shore and becoming increasingly sandy towards the low-tide mark.
- Importance of habitats shown in level of designations: Extensive SSSI (Glannau Penmon-Biwmares) and SAC on Anglesey coast; Traeth Lafan designated SSSI, SPA and SAC. Outer Conwy Bay designated SPA. SSSI at Baron Hill Park.
- Nature Reserve at Morfa Madryn on salt marshes to the west of Llanfairfechan. Provides habitats for cormorants, shags and the little egret.
- RIGS sites at Beaumaris cliff and drumlin, Beaumaris (Salop), Trwyn Penrhyn and Aberlleiniog.
- Marine environment comprises a tidal strait and associated ebb tidal delta. The navigable tidal channel flows close to the Anglesey coastline. Sand banks of Traeth Lafan and Dutchman Bank represent a navigational hazard.
- The south western reaches of the SCA experience the strongest tidal currents where the channel is narrowest. Towards the northeast more gravel and sand can be found, with the finer sediment occurring to the south away from the main channel.
- Current direction in eastern reaches of SCA generally rotates clockwise through the tidal cycle.
- A variety of important habitats, including sheltered muddy gravel habitat in Glannau Penmon-Biwmaris SSSI supporting a variety of bivalves, carpet shells, cockles and worms. Lower shore cobbles and boulders support sponges, anemones and sea squirts due to the tidal currents.
- Mobile bedforms include ripples and sand waves, visible on the lower shore edge of Traeth Lafan.

Cultural Influences and sites

- Beaumaris Castle (Scheduled Monument and UNESCO World Heritage Site) Built by Edward I and an outstanding example of medieval Welsh castle building, surrounded by an attractive planned town (designated Conservation Area). Its name comes from the French for “beautiful marshes”. Also the earthworks of a motte and bailey castle at Castell Aberlleiniog.
- Religious sites include Penmon Priory and Cross (Scheduled Monument). Also the site of a former Franciscan friary in Llanfaes north of Beaumaris (recorded in placename of Fryars) parts of which were still recorded as in existence in 1855.
- Included in Register of Welsh Historic Landscapes (Area 33: Penmon; Area 30: North Arllechwedd).
- Estates of Henllys and Baron Hill north of Beaumaris, and their associated extensive parkland.
- 19th Century coastal tourist development at Llanfairfechan seafront (Conservation Area).
- Tradition of Shipbuilding at Gallows Point, Beaumaris. Beaumaris is also the registration port of all vessels from North-west Wales, and the home of the Royal Anglesey Yacht Club.
- Former causeway crossing of Traeth Lafan between Abergwyngregyn and the Beaumaris ferry. Llanfaes was a royal township (maerdref) which controlled the northernmost ferry landing. In 1254 Llanfaes church was the richest in Anglesey. Flying boats built and repaired on site of old friary by Saunders-Roe during WW11.
- Evidence of historical fishing activity in the form of fish traps (goradau) at Trecastell Bay.
- Traditional anchorages off Beaumaris, the Outer Road off Penmon, and the entrance to the Penmaen Swatch Channel (south of Dutchman Bank). Beaumaris Pier was the landing stage for steamer services, and the old customs house stands prominently on the Green.
- Wrecks include the *Rothsay Castle* on the Dutchman Bank, and ships carrying 550 troops to Ireland in 1625.
- The UK’s biggest mussel fishery is located within this SCA, producing 7-10,000 tonnes of mussels per year (up to 75% of the UK’s production).
- Periodic periwinkle collection along the coast from Beaumaris, and cockle harvesting on Traeth Lafan.
- Partially within Anglesey Coast AONB.

Perceptual Qualities

- Visually dominated by Conwy Bay, with open views across the bay contrasting with the sense of dramatic enclosure created by surrounding mountains.
- Textures, patterns and colours affected by tides, weather conditions and intertidal environments.
- Quiet, open and extensive flats at Traeth Lfan Bird Reserve have sense of tranquillity. Patterns of sand and mud banks have a wild quality.
- Sense of movement (people, boats and traffic) throughout much of the area). Settlements and main roads influence parts of the SCA, and the associated noise, movement and lighting locally reduces the perception of remoteness and tranquillity. However the large-scale mountain backdrop balances this and introduces a wilder element into views.
- The profiles and seaward slopes of the mountains of Snowdonia to the south of Conwy Bay (outside the Study Area) are an integral part of the setting of this SCA, contributing to its sense of scale and grandeur, and to its sense of place.

Forces for Change

Summary	Key forces for change							
Development pressure in coastal settlements, and ongoing improvements to transport routes.	Special Qualities	Natural processes/ climate change	Visitor pressure	Marine use- commercial and fishing	Offshore energy or minerals	Development pressure/ transport routes	Land management changes	MOD use
Visitor pressure in popular tourist locations including Beaumaris castle and Llanfairfechan seafront.		Welsh Language						
Potential changes to land and agricultural management affecting coastal landscape features & expansive views								
Rural agricultural communities and their associated features								
Richness of habitats and biodiversity								
Increased commercial and recreational use of water (e.g. mussel fishing).								
Cultural heritage								
Remoteness, tranquillity and wildness								
Potential development outside the SCA (particularly ridgeline developments) affecting the skyline and setting of the SCA.								
Access to land and water and recreation/ enjoyment								
Geology and geomorphological features								
Islands								
Natural coastal processes, including a tidally-dominated north-eastern wave pattern, and movement of sediment by waves and tides towards the Menai Strait.								
Archaeology and history including historic parks and gardens								
Soil, air and water quality								
Key		Change occurring in the area affecting the selected special quality						
Flood risk to low-lying coastal settlements (e.g. Beaumaris and Llanfairfechan) and transport corridors (A55 and railway line) exacerbated by sea level rise.								

Inherent Sensitivity

Theme	Factors making the area more sensitive	Factors making the area less sensitive
Coastal geometry and landform	<p>Views out to sea framed by headlands (Puffin Island and Great Orme)</p> <p>High hills inland form a magnificent backdrop and skyline to views.</p> <p>Sensitive coastal habitats in extensive inter-tidal areas.</p>	
Existing development	Historic character of settlements, including Beaumaris with its associated Medieval castle.	Presence of existing settlements and roads, including the A55 to the south of Lafan sands.
The visual experience	<p>Setting and associated hills and skylines contribute to character and high scenic quality of SCA.</p> <p>Highly visible in views from surrounding hills.</p> <p>Users of Wales Coast Path and Traeth Lafan Nature Reserve are sensitive receptors.</p> <p>A soft coastal fringe for much of the SCA, comprising farmland, parkland, woodland etc.</p>	Recreational uses on land and water influence the character of parts of the SCA.
Tranquillity	Quiet, open and extensive sand flats at Traeth Lavan. Bird reserve at eastern end.	<p>Busy holiday destination, with seasonal reductions in tranquillity due to numbers of visitors.</p> <p>Impacts of existing development, roads (including A55) and occasional trains.</p>

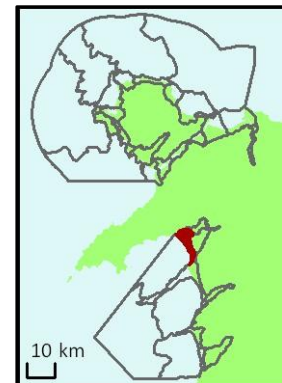
SEASCAPE CHARACTER AREA 19: CRICCIETH TO MOCHRAS

Component LCAs (Snowdonia): Morfa Harlech

Component LCAs (Gwynedd): Porthmadog

Location and Context

Criccieth to Mochras SCA is the most northerly of the SCAs on the western coast of Snowdonia. It forms a narrow crescent shape from Criccieth in the north to Mochras in the south, and includes the beaches, intertidal area and the peak of Moel-y-Gest as well as the settlements of Criccieth and Morfa Bychan. It is bordered to seaward by SCA 33 Tremadog Bay, to the north-east by SCA 20 Porthmadog and Glaslyn Estuary, and to the east by SCA 21 Dwyryd Estuary and Morfa Harlech.



Looking north across Tremadog Bay towards Criccieth and the Llyn Peninsula. Moel-y-gest is on the far right.

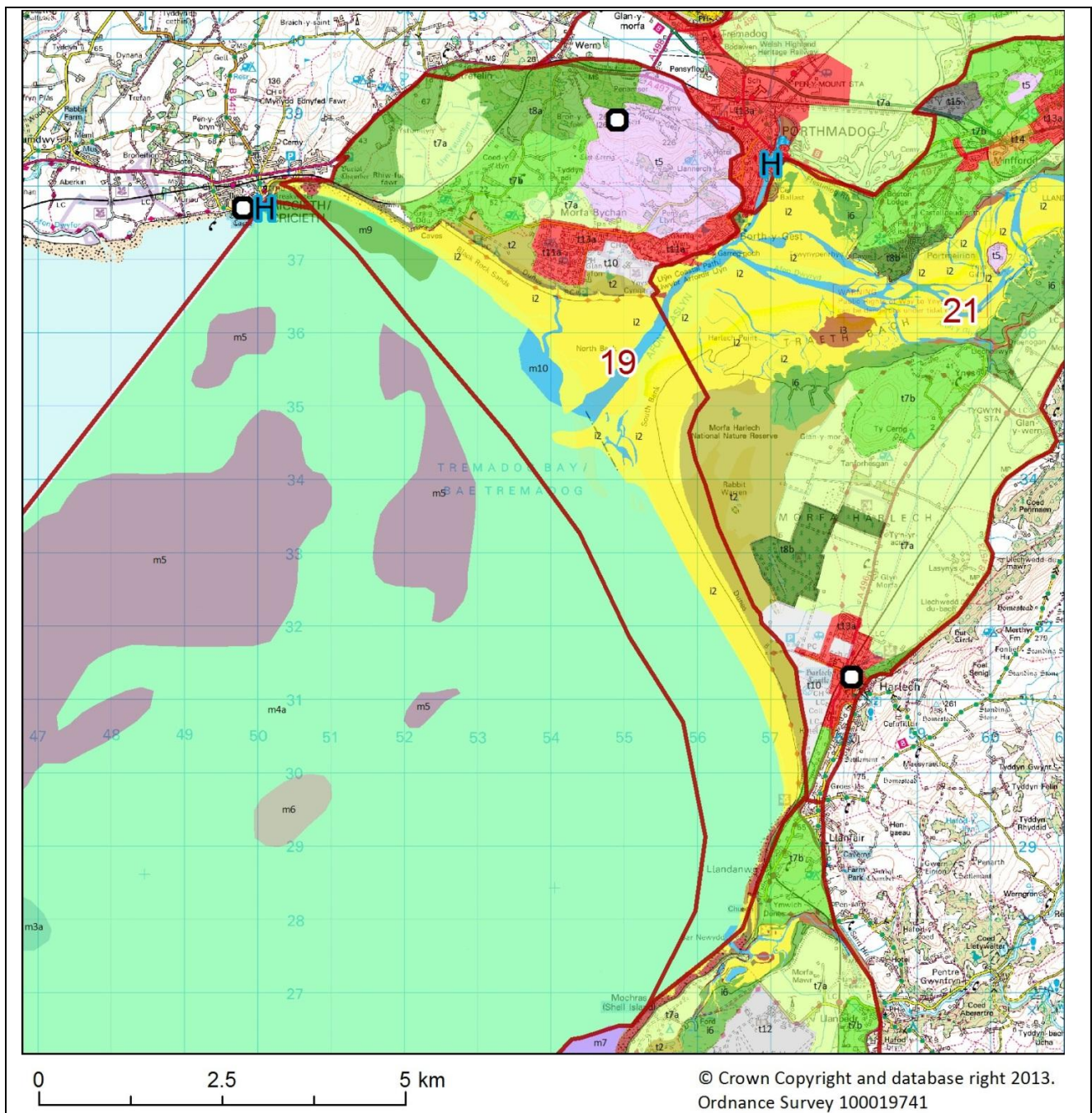
Image © Fiona Fyfe

Summary Description

This SCA is characterised by its long, narrow sandy beach which forms a crescent shape around the eastern shore of Tremadog Bay, and includes the swash-aligned landform at Morfa Harlech. It is a popular holiday destination, and there are numerous caravan sites, campsites and holiday developments. At the northern end of the SCA is the town of Criccieth with its elevated castle. From here there are views across Tremadog Bay to the low ridge of Mochras on the opposite side. The rocky outline of Moel-y-gest is a distinctive landmark in views from the sea, and in views from inland. From the coast the eye is naturally drawn towards Harlech Castle and inland to the hills of Snowdonia which rise up behind the Glaslyn and Dwyryd estuaries, forming a horseshoe-shaped backdrop. Views seaward are dominated by the pointed hills of the Llyn Peninsula.

Constituent Seascape Character Types

Please refer to Appendix I for a list of constituent Seascape Character Types.



Seascape Character Types in the Crickieth to Mochras SCA. Refer to the key on pages 96-99 for full descriptions.

H symbol	i6	m6	t2	t8a	t13a
O symbol	m3a	m7	t5	t8b	t14
i2	m4a	m9	t7a	t11a	t15
i3	m5	m10	t7b	t12	

Key Characteristics

- Northern part of SCA underlain by Cambrian and Ordovician sedimentary rocks with igneous intrusions. Southern part underlain by much younger Palaeogene deposits. Surface evidence of various geological and geomorphological processes.
- A sweeping, shallow bay with wide sandy beaches, and a distinctive swash-aligned coastal landform at Morfa Harlech. To the north, the rugged coastal peak of Moel-y-Gest is a prominent landmark.
- Glaslyn and Dwyryd estuaries flow into the sea in the centre of the SCA. Marine environment strongly influenced by the relatively high water temperatures and turbidity associated with Tremadog Bay.
- Tourism and recreation are important land and sea uses, with recreational boating, sea angling, caravan parks, beaches and tourist infrastructure.
- North of SCA extends inland to include farmland, woodland and coastal heath at Moel-y-Gest.
- Unique sea conditions of Tremadog Bay support a variety of habitats and species. Onshore habitats include coastal heath, rhos pasture, woodland, wetland & dune systems.
- Onshore historic and cultural features include defensive sites of Criccieth Castle and Iron-Age hillfort on summit of Moel-y-Gest. Also features related to development of tourism.
- Offshore historic and cultural features include harbour at Criccieth.
- Historic town of Criccieth, and 20th Century tourist development of Morfa Bychan, plus occasional farms in the north of the SCA.
- Long views across the length of the sweeping bay create an open quality and large scale to the SCA. Weather and season have strong influences on the perceptual qualities of the area.
- Landscape setting dominated by the hills of Snowdonia National Park.
- Seascape setting includes the dunes of Mochras on the southern horizon, and the hills of the Llyn Peninsula to the north.



*Elevated summer view showing watersports offshore.
Image © John Briggs*



*Black Rock Sands and Criccieth Castle in summer.
Image © John Briggs*



*Black Rock Sands in winter.
Image © Fiona Fyfe*

Cultural Benefits and Services

Key: Bold shading = widespread; medium shading = localised; no shading = occasional

Leisure, recreation & tourism	Health	Heritage	Education	Religious & spiritual
Beach	Relaxation	Natural	Informal	Spiritual
Active	Exercise	Cultural	Formal	Religious
Ecotourism				
Watersports				
Exploring				

Natural Influences and sites

- Dynamic environment, particularly at estuary mouth with changing patterns of channels and swash-aligned landform at Morfa Harlech. Tremadog Bay designated offshore SAC for its conservation value.
- Criccieth Castle located on headland of harder igneous rock, with surrounding softer glacial sediments eroded into bays on either side. Quaternary exposures in cliffs at Morannedd provide insight into the glacial history of north-west Wales. Boundary between Cambrian and Ordovician rocks exposed at Rhiw-for-fawr. Wern Road Section SSSI designated for its geological interest.
- Sediment deposition and dune formation/movement, with natural process of intertidal sediment drift towards the centre of the bay. Distinctive boulder-strewn beach at Morannedd.
- Unique marine conditions (water temperature, turbidity and muddy sediment) of Tremadog Bay support variety of relatively rare species, including intertidal seagrass.
- Beaches (famous for quantities and varieties of shells) and dunes designated SAC and SSSI (Tiroedd a Glannau Rhwng; Criccieth ac Afon Glaslyn; Morfa Harlech and Morfa Dyffryn).
- Natural habitats associated with Moel-y-Gest managed through grazing and woodland management.
- Wetland at Llyn Ystumlleyn designated SSSI (Rhiw-for-fawr).

Cultural Influences and sites

- Defensive sites of Iron-Age Hillfort on summit of Moel-y-Gest, and Criccieth Castle (Scheduled Monument) built on a headland of resistant igneous rhyolite rock. Also Prehistoric hut circles near Garth Morthin.
- Medieval township of Ystwmllyn associated with church of St Cynhaiarn on its island on the western side of Llyn Ystumllyn (now reclaimed grazing land). Remains of early Medieval long huts visible on small islands south-west of the church. In Medieval times there is likely to have been a landing place in the vicinity.
- Coastal village of Criccieth historically associated with herring fishing, but from Mid-19th Century developed as a tourist resort following arrival of railway (Criccieth designated Conservation Area).
- Morfa Bychan an example of 20th Century tourist development, with its grid plan of bungalows, and extensive carparks, caravan parks and campsites located behind the wide sandy beach of Black Rock Sands.
- Beach car parks etc. likely to have obscured small landing places serving local communities/ farmsteads.
- Partially included in Register of Welsh Historic Landscapes (Area 20: Arduwy).
- Criccieth church contains an 18th Century sundial, showing distances to various ports.
- Navigation dominated by Porthmadog Bar, North Bank and South Bank (Harlech spit) and the system of buoys marking the shallow navigable channel (which has moved markedly to the south in the last 150 years). Boats heading for Porthmadog anchored in St Tudwall's Roads offshore before proceeding into the river at high tide. Pilot boats were stationed on Fechan Point.
- Shipwrecks on the bar include many losses from the slate trade.
- Powder magazine on Ynys Cyngar (used by ships for defensive armament & signal guns) now private house.
- Wrecks of two WW2 aircraft on sands to the south, which crashed following take-off from Llanbedr airfield.
- Very popular holiday destination, with watersports and recreational boating in the summer.

- Partially within Snowdonia National Park.

Perceptual Qualities

- Open and large scale views of wide beaches and Tremadog bay.
- Relatively simple landform and coast within the SCA, but containing a variety of land uses including prominent caravan parks. A popular tourist area, very busy in summer months.
- Views dominated by the pattern of sweeping sands, and the prominent peak of Moel-y-Gest. Sea, dunes and coastal heath add a variety of natural colour and texture, and caravan parks add more formal patterns.
- A busy, popular and settled area. Nevertheless, the sea adds a wild element to the SCA, particularly in westerly weather conditions.
- The setting of the SCA (comprising the surrounding hills of Snowdonia and the Lleyn Peninsula) contributes greatly to its character and sense of place. This landscape setting creates a dramatic and relatively wild backdrop to views from the coast and from the sea.

Forces for Change

Summary	Key forces for change							
	Natural processes/ climate change	Visitor pressure	Marine use- commercial and fishing	Offshore energy or minerals	Development pressure/ transport routes	Land management changes	MOD use	
<p>Appearance and historic character of Criccieth vulnerable to future development altering the settlement pattern (including potential development on the east and west flanks of the town) or affecting notable landmarks on Criccieth seafront. This could potentially include the introduction of visually intrusive sea defenses.</p> <p>Development along ridgeline westwards outside Pen Lleyn AONB.</p> <p>A popular holiday destination, with potential for further tourism-related development in Morfa Bychan area (e.g. new/ extended caravan and camp sites). High season pressure on seashore and near shore environments (e.g. dunes at Black Rock) due to high visitor numbers, and issues with noise pollution and traffic pressures, including water craft.</p> <p>Potential threats to inland setting and skylines from onshore wind turbine developments.</p> <p>Natural processes of intertidal sediment drift towards the centre of the bay.</p>	Special Qualities							
	Welsh Language							
	Diversity of landscapes, including coastal landscape features & expansive views							
	Rural agricultural communities and their associated features							
	Richness of habitats and biodiversity							
	Cultural heritage							
	Remoteness, tranquillity and wildness							
	Access to land and water and recreation/ enjoyment							
	Geology and geomorphological features							
	Islands							
	Archaeology and history including historic parks and gardens							
	Soil, air and water quality							
	Key		Change occurring in the area affecting the selected special quality					

Inherent Sensitivity

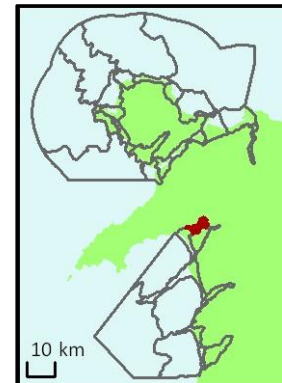
Theme	Factors making the area more sensitive	Factors making the area less sensitive
Coastal geometry and landform	<p>Open coast with long views seawards over Tremadog Bay: development potentially visible from both land and sea.</p> <p>Sensitive coastal habitats in dune systems and wetland areas.</p> <p>High land of Moel-y-Gest forms a distinctive coastal landmark.</p> <p>Prominent ridgelines highly sensitive to development (including areas outside the Pen Lleyn AONB).</p>	
Existing development	<p>Historic settlement pattern and character of Criccieth village, castle and harbour.</p> <p>Black Rock Sands Beach itself has an undeveloped quality, as dunes block views of development inland.</p>	Villages of Criccieth and Morfa Bychan, and surrounding caravan parks.
The visual experience	<p>Users of Wales Coast Path are sensitive receptors.</p> <p>High land of Moel-y-Gest prominent in coastal views.</p> <p>Sweeping bay focuses views along it, making development highly noticeable.</p>	Recreational/ tourism uses on land and water influence the character of coastal parts of the SCA.
Tranquillity	Higher levels of tranquillity in northern part of SCA, around Moel-y-Gest	Popular holiday destination, with seasonal increases in visitor numbers.

SEASCAPE CHARACTER AREA 20: PORTHMADOG AND GLASLYN ESTUARY

Component LCAs (Gwynedd): Porthmadog

Location and Context

This SCA is located in the northern part of the west coast of Snowdonia. It includes the town of Porthmadog and the reclaimed marshes in the Glaslyn valley to the east of the town. It is inland (east) of SCA 19: Criccieth to Mochras, and north of SCA 21: Dwyrdd Estuary and Morfa Harlech.



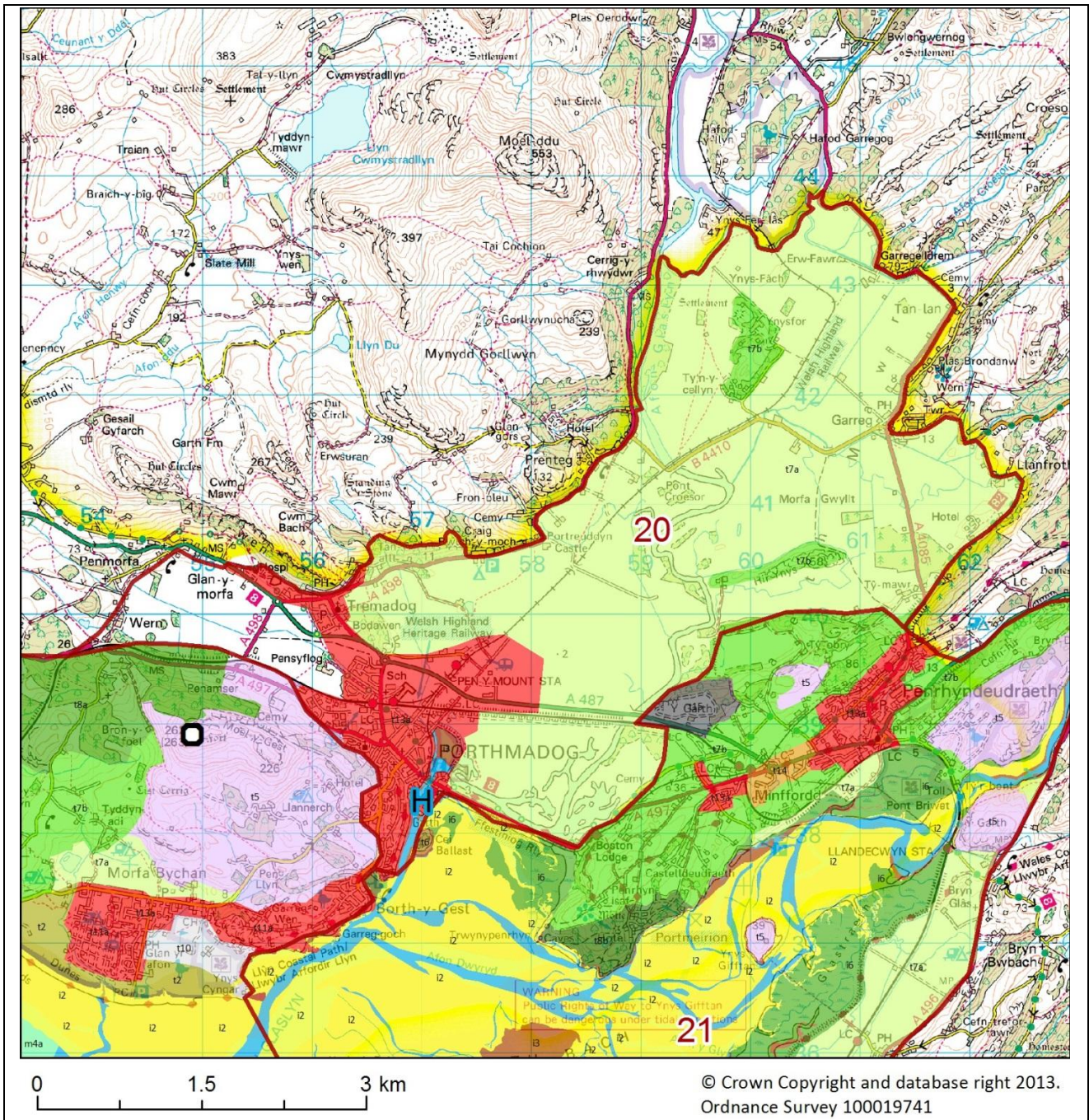
View east from the Glaslyn Estuary looking across flooded seasonal grazing marshes towards the mountains of western Snowdonia. Image © Fiona Fyfe

Summary Description

This SCA is almost entirely comprised of land which has been reclaimed from the sea. Many of the features within the landscape, including the embankment (‘cob’) across the mouth of the estuary, the settlements of Porthmadog and Tremadog, the river course and the grazing marshes are all part of the reclamation scheme devised by William Madocks in the early 19th Century. The result is a flat, fertile landscape with few buildings, prone to seasonal flooding and visually dominated by the mountains of Snowdonia which surround it. It is crossed by railway lines, including narrow-gauge lines which originally transported slate from the Snowdonia quarries to the port at Porthmadog.

Constituent Seascape Character Types

Please refer to Appendix I for a list of constituent Seascape Character Types.



Seascape Character Types in the Porthmadog and Glaslyn Estuary SCA. Refer to the key on pages 96-99 for full descriptions.

H symbol	i3	t2	t7a	t8b	t13a
O Symbol	i6	t5	t7b	t10	t14
i2	m4a	t6	t8a	t11a	t15

Key Characteristics

- Underlain by latest Cambrian and Lower Ordovician sedimentary rocks (including those of the Tremadoc epoch) locally with dolerite intrusions.
- A broad, flat valley floor landform which was formerly an estuary. Occasional small hills of more resistant rock (former islands) occur within the valley floor.
- River Glaslyn meanders through the valley, although its course was altered to enable the surrounding marshes to be reclaimed in the early 19th century.
- Land use almost entirely grazing marsh, with some settlement on higher ground at the periphery of the SCA.
- Valuable and extensive wetland pasture and marsh habitats cover most of the SCA. Some woodland, particularly on higher land.
- Numerous historic and cultural features associated with the draining of the estuary by William Madocks in the early C19, including Porthmadog Cob and Tremadog village.
- Offshore historic and cultural features include canal from Tremadog to the sea at Porthmadog, and associations with shipbuilding and the sea transport of slate from the Ffestiniog quarries.
- Georgian planned town of Tremadog and later coastal port of Porthmadog (both on western side of SCA) plus occasional farms around the periphery.
- Iconic views from Porthmadog and the cob over this SCA to the encircling majestic mountains of Snowdonia, including Snowdon itself. The openness and flatness of the valley floor are emphasised by the surrounding hills.
- Intervisibility between this SCA and the sea is very limited, as views are blocked by the Cob. However, in views from surrounding hills, the visual and physical relationship between this SCA and the sea can be appreciated.



Looking along the cob towards Porthmadog.

Image © Fiona Fyfe



Elevated view from above Portmeirion, showing different drainage patterns either side of the cob. Image © John Briggs



Typical view of grazing marshes in the Glaslyn estuary. Moel-y-gest is visible on the horizon.

Image © Fiona Fyfe

Cultural Benefits and Services

Key: Bold shading = widespread; medium shading = localised; no shading = occasional

Leisure, recreation & tourism	Health	Heritage	Education	Religious & spiritual
Exploring	Relaxation	Natural	Informal	Spiritual
Ecotourism	Exercise	Cultural	Formal	Religious
Active				

Natural Influences and sites

- SCA is an example of the deliberate and systematic modification of the natural environment. Draining of the estuary for farmland required the altering of the course of the river, and the construction of an embankment (the Cob) across the mouth of the estuary to prevent inundation at high tide. Diversion of the river in turn caused scouring of the channel downstream.
- A very low-lying landscape, prone to seasonal flooding but with a high value for wildlife. Glaslyn SSSI includes the river channel and parts of the valley floor; the river channel is also designated SAC.
- National Nature Reserve at Garregog, and Bird hides constructed near Pont Croesor.
- Designated RIGs site at Tremadog Ironstone Mine.
- Mountains of Snowdonia form a dramatic landscape setting and magnificent backdrop to the SCA. In the 1960s, proposed pylon lines across the estuary were placed underground in order to protect views.

Cultural Influences and sites

- SCA is one of the best examples of a reclaimed landscape in Wales, displaying William Madocks' vision of fertile farmland, settlement and trade on what had previously been tidal marshes.
- Porthmadog Cob (embankment) is a distinctive linear feature across the mouth of the estuary. It carries a road and the narrow-gauge Ffestiniog railway line (now a tourist line, but formerly used for exporting slate from the Ffestiniog quarries). Other railway lines cross reclaimed land in the SCA: the public service to Pwllheli and the Welsh Highland Railway (a former quarry line).
- Village of Tremadog designed by Madocks in a Georgian style (designated Conservation Area). Later town of Porthmadog (also a Conservation Area) developed as industrial centre, harbour and port.
- Main exports from Porthmadog were slate, and copper and lead ores. Imports included coal, limestone, American timber and general supplies. 1868 records record over 1300 inward and outward voyages.
- Small Iron Age hillfort/ defended settlement on Ynysfor in the centre of the marsh. Present farmhouse dates from Eighteenth Century.
- Partially included in Register of Welsh Historic Landscapes (Area 25: Aberglaslyn).
- History of shipbuilding, notably 'Western Ocean Yachts' (schooners) built specifically for the Newfoundland salt cod industry. Ships built here were usually 150-00 tons and used for coastal and deep ocean voyages.

Perceptual Qualities

- A large scale landscape, with views framed by surrounding hills, creating a sense of enclosure.
- Away from settlements and roads, the landscape has a simple, balanced composition. Tremadog has the symmetrical appearance of a designed town, but Porthmadog has developed less formally and has a bustling quality.
- Straight drains and field boundaries create a regular pattern in the landscape. Landscape texture dominated by water (especially during winter floods), rushy pasture and riparian vegetation. Pockets of woodland on higher ground provide contrasts in texture and colour.
- Away from the settlements and roads which follow the periphery of the SCA, this is a relatively inaccessible landscape with a sense of remoteness and tranquillity. The tranquillity of the SCA is further enhanced by the presence of water and birdlife. The landscape is perceived as being natural, despite the fact that it has been reclaimed through engineering.
- Landscape setting of surrounding hills creates a rugged and impressive backdrop, as well as a sense of

containment and scale. The presence of these hills in views adds to the SCA's sense of remoteness and tranquillity.

- The SCA is also an important component of views from the surrounding hills. In these views the SCA can be seen in its coastal context.

Forces for Change

Summary	Key forces for change						
	Special Qualities						
	Natural processes/ climate change	Visitor pressure	Marine use- commercial and fishing	Offshore energy or minerals	Development pressure/ transport routes	Land management changes	MOD use
Potential expansion of existing settlements within the SCA, resulting in encroachment into currently undeveloped areas, and/or impacts on the strongly horizontal landform of the SCA.							
Development beyond the SCA boundary may create visual detractors, most notably ridgeline developments.							
Changes to agricultural practices and/ or intensity which may alter established field patterns and habitats.							
Flooding of low-lying land, exacerbated by sea level rise.							
Welsh Language							
Diversity of landscapes, including coastal landscape features & expansive views							
Rural agricultural communities and their associated features							
Richness of habitats and biodiversity							
Cultural heritage							
Remoteness, tranquillity and wildness							
Access to land and water and recreation/ enjoyment							
Geology and geomorphological features							
Islands							
Archaeology and history including historic parks and gardens							
Soil, air and water quality							
Key	Change occurring in the area affecting the selected special quality						

Inherent Sensitivity

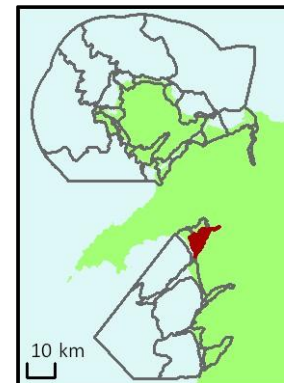
Theme	Factors making the area more sensitive	Factors making the area less sensitive
Coastal geometry and landform	<p>Horizontal landform sensitive to the introduction of vertical features.</p> <p>Low-lying landform with sensitive wetland habitats.</p>	Estuary floor has little intervisibility with the sea, due to intervening embankment known as the cob.
Existing development	Existing development limited to western edge of SCA; elsewhere, SCA has an empty, undeveloped quality.	Presence of existing development at Porthmadog and Tremadog.
The visual experience	<p>Setting and associated hills and skylines contribute strongly to character and visual qualities of SCA.</p> <p>Highly visible in views from surrounding hills.</p>	
Tranquillity	Existing high levels of tranquillity away from main roads and towns.	Impacts of existing development, roads (at periphery) and occasional trains.

SEASCAPE CHARACTER AREA 21: DWYRYD ESTUARY AND MORFA HARLECH

Component LCAs (Snowdonia): Morfa Harlech; Vale of Ffestiniog; Morfa Dyffryn
Component LCAs (Gwynedd): Porthmadog

Location and Context

This SCA is located in the northern part of the west Snowdonia coast. It includes the Dwyrdd estuary from its mouth near Porthmadog to its inland tidal limit at Tan-y-bwlch. It also includes Morfa Harlech on the southern shore of the estuary, and the towns of Harlech and Penrhyndeudraeth. To the north is SCA 20: Porthmadog and Glaslyn Estuary, to the west is SCA 19: Criccieth to Mochras, and to the south is SCA 22: Mochras to Fairbourne and Sarn Badrig.



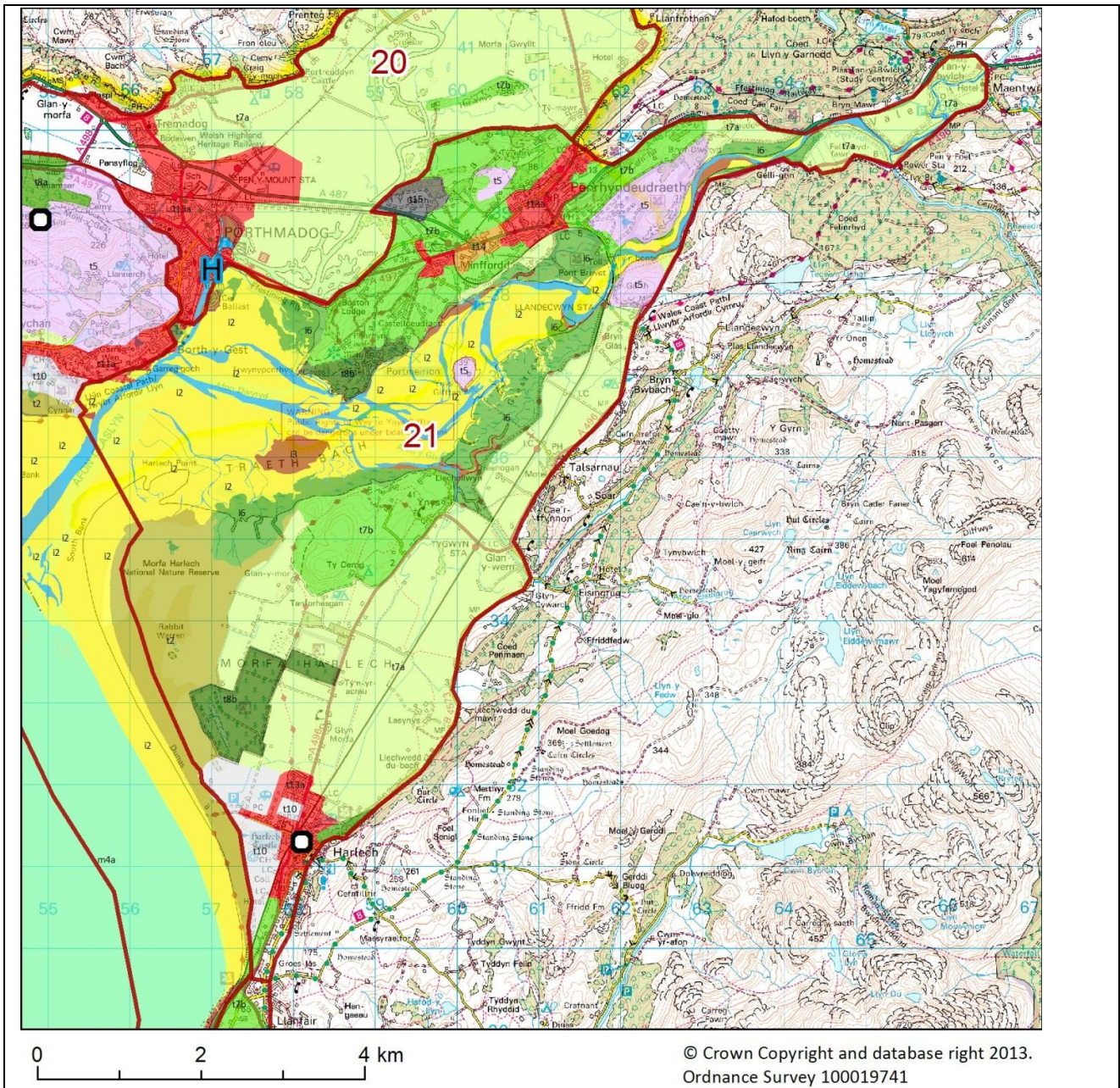
View across the Dwyrdd Estuary from Ynys, showing intertidal habitats, the village of Portmeirion and the mountains of Snowdonia forming the backdrop. Image © Fiona Fyfe

Summary Description

Views of this SCA are dominated by the broad landform of the Dwyrdd estuary, with its extensive salt marshes, sand, mud and dune system (Morfa Harlech). The estuary also contains distinctive 'islands' and ridges of higher ground on either side. Overlooking the estuary are the contrasting villages of Harlech (with its Medieval castle on the valley side), Portmeirion with its Italianate architecture, and the industrial village of Penrhyndeudraeth. Surrounding the estuary are the wooded hills of Snowdonia, which form a majestic backdrop to picturesque views from lower land. In the eastern part of SCA, the valley narrows as the river flows inland. Here, the Afon Dwyrdd has been heavily modified flows between areas of improved grazing, with main roads on both sides of the valley floor. It is surrounded by steep, wooded slopes which give it a much more enclosed and intimate feel.

Constituent Seascape Character Types

Please refer to Appendix I for a list of constituent Seascape Character Types.



Seascape Character Types in the Dwyryd Estuary and Morfa Harlech SCA. Refer to the key on pages 96-99 for full descriptions.

H symbol	i3	t2	t7b	t10	t14
O symbol	i6	t5	t8a	t11a	t15
i2	m4a	t7a	t8b	t13a	

Key Characteristics

- Underlying geology of Cambrian sedimentary rocks, with younger Palaeogene rocks to the west of the Mochras fault.
- Predominantly low-lying landform, comprising the broad estuary and its associated marshes and dunes, with the Dwryd Valley narrowing as it flows inland. Rounded island of Ynys Gifftan a prominent feature within the estuary channel. Ridge of land to the north of the channel also included in this SCA.
- Close relationship with distinctive swash-aligned coastal landform at Morfa Harlech.
- Extensive intertidal area at the mouth of the estuary, with a meandering channel running through it, and continuing inland. River flows through a notable rocky gorge near Penrhyn-deudraeth before the valley widens again.
- Land use predominantly grazing marsh, with areas of sand dunes, forest, golf course and caravan parks at Morfa Harlech. Also some farmland, heath, woodland, quarrying and settlement on higher land.
- Habitats include extensive intertidal mud, sand and salt marsh. Also wet pastures, coastal heath and sand dunes.
- Onshore historic and cultural features include Portmeirion, Harlech Castle, and former explosive works at Gwaith Powdwr.
- Historic and cultural features associated with the estuary include former coastal warehouse with river access at Ynys, and trestle bridge and toll house near Llandecwyn Station.
- Settlements include Penrhyn-deudraeth on north side of estuary, and Harlech on south side. Smaller villages/ hamlets on higher land.
- Strong textures and patterns from river channels, dunes and intertidal habitats. A dynamic environment changing with tides, seasons and weather.
- Surrounding wooded hills of Snowdonia National Park rise steeply from valley floor and are integral to views within the SCA.
- Views of seascape limited by sand dunes at Morfa Harlech, although Moel-y-Gest (SCA 19) is a prominent feature in views seawards. Tremadog Bay visible from Porthmadog Cob and Portmeirion Peninsula.
- Views inland are picturesque, with attractive compositions of valley floor and surrounding hills. Ynys Gifftan forms a feature in the middle estuary,



Dwryd Estuary from the air, showing the meandering channel, sandflats, saltmarshes and Ynys Gifftan. Image © Rohan Holt.



Afon Dwryd in the upper part of the Estuary. Image © Fiona Fyfe



Morfa Harlech, showing dunes, golf course, caravan parks (centre) and Harlech Castle (right). Image © Fiona Fyfe

Cultural Benefits and Services

Key: Bold shading = widespread; medium shading = localised; no shading = occasional

Leisure, recreation & tourism	Health	Heritage	Education	Religious & spiritual
Exploring	Relaxation	Natural	Informal	Spiritual
Ecotourism	Exercise	Cultural	Formal	Religious
Active				

Natural Influences and sites

- A dynamic environment with ongoing estuarine processes, including accretion of mudflats and saltings. Extensive intertidal habitats and river channels designated SAC and SSSI (Morfa Harlech and Glaslyn) provide important bird feeding and overwintering sites.
- Ynys Gifan, a rocky island within the estuary, now clothed in scrub, forms a feature in the middle part of the estuary.
- Morfa Harlech dune system (behind swash-aligned landform) still accreting through natural processes, and designated SSSI, SAC and National Nature Reserve for rare plants and insects.
- Heathland/ Woodland Nature Reserve at Gwaith Powdwr (former explosives works).
- Woodland SSSIs at Coedydd Dyffryn Festiniog (Gogleddol and Coed Llachwedd).

Cultural Influences and sites

- Harlech castle dominates valley side and views seawards. Built by Edward I, it could withstand siege due to a tunnel connecting it to the sea (and supplies) at the base of the cliffs. Prior to sediment deposition and formation of the Morfa Harlech dune system, Harlech was a coastal port, and at the time of building, Harlech was a coastal castle.
- Network of slate quays extends far up-river towards Maentwrog (e.g. Cemlyn, Felingrin, Gelligrin (with powder magazine) and Cei Newydd).
- Noddfa slate quarry (to south of Harlech) constructed a tramway across the dunes, possibly to facilitate beach loading of vessels. Line of tramway still visible on aerial photographs.
- Royal St David's Golf Course on Morfa Harlech dunes. Marshes behind the dune system drained for farmland in 19th Century.
- Outline of Nineteenth Century horse racing course on Morfa Harlech still visible in aerial photographs.
- Portmeirion constructed as a model village by Clough William Ellis in 20th Century. Subsequently used for filming of 1960s TV series 'The Prisoner'. Now a Conservation Area.
- Partially included in Register of Welsh Historic Landscapes (Area 20: Arudwy and 25: Aberglaslyn).
- Partially within Snowdonia National Park.

Perceptual Qualities

- An open landscape framed by surrounding hills (including the elevated site of Harlech Castle above the estuary). Above Pont Briwet the estuary narrows and turns between steeply sloping rocky hillsides covered in heath and woodland. The scene is exceptionally picturesque in places, with a Highland-like quality.
- A balanced landscape with composed views of the SCA and its surrounding hills. Near the coast views are expansive, with the valley floor forming a strong horizontal element in views.
- Varied and dynamic patterns, colours and textures associated with intertidal habitats, river channels, sand dunes, woodland and heath.
- The openness of the landscape, its perceived naturalness and the presence of rivers give parts of the SCA a sense of tranquillity. However, this is reduced by the presence of roads, railways, settlement and other development. These factors also limit the SCA's sense of remoteness and wildness.
- Close visual and physical connection between surrounding hills which form the landscape setting (outside the Study Area) and this SCA. Landscape setting contributes to the character of the SCA and enhances its sense of tranquillity. The SCA is also an important feature in views from the surrounding hills, where it appears in its coastal context.

Forces for Change

Summary	Key forces for change									
<p>Development pressure on the Harlech settlement boundary, especially on the Morfa and on higher slopes above the town. Quarrying activity at Penrhyndeudraeth.</p> <p>New bridge at Pont Briwet could result in higher traffic levels on coast road. Other road improvements within SCA must be mindful of the landscape context. Upgrading power lines & pylons will result in landscape impacts and medium-term disruption. Development beyond SCA may provide visual detractors, most notably ridgeline developments.</p> <p>Changes to agricultural practices and/ or intensity which may alter established field patterns and habitats.</p> <p>High season visitor pressures create localised issues relating to traffic and noise pollution, particularly when introduced to the nearshore area.</p> <p>Land management changes and visitor pressure, as well as natural coastal processes can have a negative impact on landforms. e.g. accretion of sand dunes at Morfa Harlech, and accretion of mudflats and saltings within the estuary. Flooding of low-lying land is also a force for change, exacerbated by sea level rise.</p>	<p>Special Qualities</p>	Natural processes/ climate change	Visitor pressure	Marine use- commercial and fishing	Offshore energy or minerals	Development pressure/ transport routes	Land management changes	MOD use		
		Welsh Language								
		Diversity of landscapes, including coastal landscape features & expansive views								
		Rural agricultural communities and their associated features								
		Richness of habitats and biodiversity								
		Cultural heritage								
		Remoteness, tranquillity and wildness								
		Access to land and water and recreation/ enjoyment								
		Geology and geomorphological features								
		Islands								
		Archaeology and history including historic parks and gardens								
		Soil, air and water quality								
		Key	Change occurring in the area affecting the selected special quality							

Inherent Sensitivity

Theme	Factors making the area more sensitive	Factors making the area less sensitive
Coastal geometry and landform	<p>Low-lying landform with highly sensitive coastal wetland habitats, dune systems etc.</p> <p>Visually prominent hills/ ridges within and at boundaries of estuary.</p>	Estuary floor has little intervisibility with the sea, due to intervening sand dunes.

	Horizontal landform sensitive to the introduction of vertical features.	
Existing development	Historic and cultural value of features, settlements and their settings e.g. Harlech (including castle) and Portmeirion.	Existing settlements and roads. Line of 400kv electricity pylon wires, and especially the pylon tower which sits within the inter-tidal estuary. To a lesser extent the other pylon towers and wires which are visible running up the hillsides.
The visual experience	Users of Wales Coast Path and Morfa Harlech Nature Reserve are sensitive receptors. Landscape appreciated from river, roads, railway and publicly accessible conservation sites. Very high scenic quality with spectacular scenic backdrop. Setting and associated hills and skylines contribute to character and visual qualities of SCA. SCA also appreciated in views from surrounding hills.	Recreational uses (e.g. golf course; caravan parks) influence the character of parts of the SCA around Morfa Harlech.
Tranquillity	Higher levels of tranquillity in central part of SCA, away from roads and settlements.	Impacts of existing development, roads and occasional trains. Popular holiday destination, with seasonal increases in visitor numbers

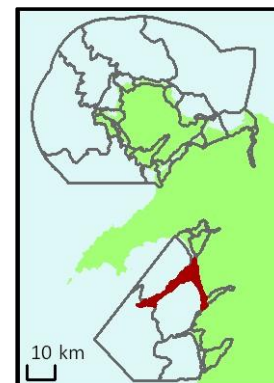
SEASCAPE CHARACTER AREA 22 MOCHRAS TO FAIRBOURNE AND SARN BADRIG

Component LCAs (Snowdonia): Morfa Dyffryn; Arduwy Coast

Component LCAs (Gwynedd): Barmouth

Location and Context

This linear SCA is located on the western coast of Snowdonia, and comprises the coastal land between Harlech in the north and Fairbourne in the south, including the town of Barmouth. It extends offshore following the line of the sarn between offshore SCAs 33: Tremadog Bay and SCA 34: Barmouth Bay with SCA 36: Cardigan Bay lying beyond. On the land to the north is SCA 19: Criccieth to Mochras, and to the south is SCA 24: Fairbourne to Tonfanau. SCA 23: Mawddach Estuary joins at the south-eastern boundary.



View looking south towards Barmouth from Morfa Bychan, showing sand dunes, sandy beach, and numerous caravan parks on the flat coastal plain. Inland, the hills rise relatively steeply to form the inland setting.

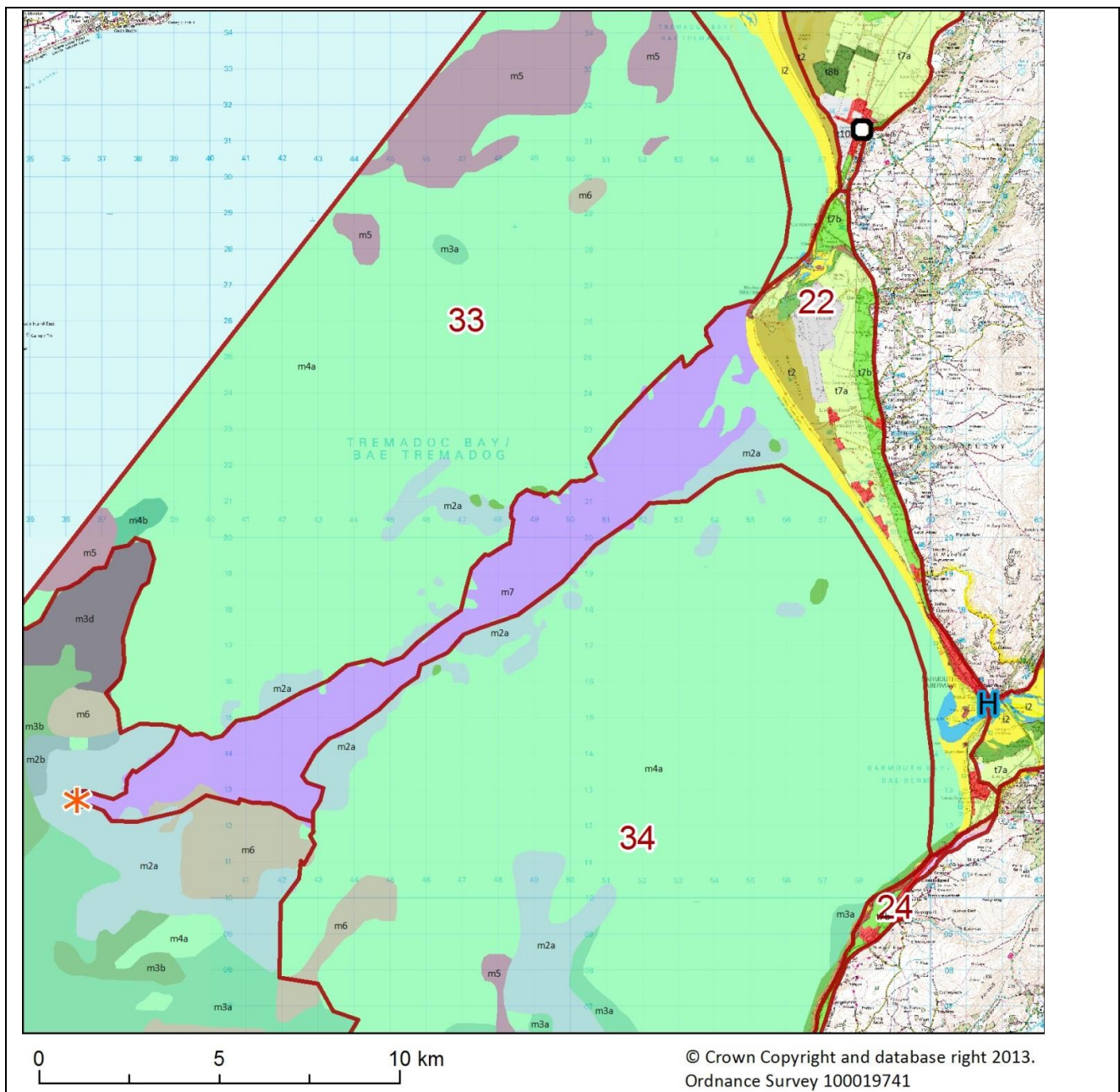
Image ©Fiona Fyfe

Summary Description

This SCA comprises a long, narrow, flat coastal plain. The landform has formed through coastal sedimentation, and includes sandy beaches (containing many shells) backed by extensive areas of sand dunes. This is a popular holiday destination, and the SCA contains numerous caravan parks and campsites, and their associated infrastructure. The southern part of the SCA contains the Victorian seaside resorts of Barmouth and Fairbourne. A railway line and road run parallel to the coast, emphasising the linear form of the landscape. Hills rise inland of the SCA to form its landward setting. Sarn Badrig (thought to be a glacial moraine feature) extends into the sea, and is visible at low tide as line on the surface of the sea.

Constituent Seascape Character Types

Please refer to Appendix I for a list of constituent Seascape Character Types.



Seascape Character Types in the Mochras to Fairbourne and Sarn Badrig SCA. Refer to the key on pages 96-99 for full descriptions.

H symbol	m2a	m4a	m7	t7c
O symbol	m3a	m4b	t2	t8b
Star symbol	m3b	m5	t7a	t10
i2	m3d	m6	t7b	t13a

Key Characteristics

- Underlying geology of the coastal plain includes the Mochras Fault, and a long stratigraphy overlain by a thin veneer of Pleistocene sediments. South of Llanaber, Precambrian rocks crop out at the surface, creating a steep hillside inland.
- Glacial features include boulder clay deposits below Morfa Dyffryn, and Sarn Badrig, thought to be a glacial medial moraine.
- Topography comprises a flat coastal plain formed by post-glacial sedimentation and sea-level rise. Inland, land rises into the western foothills of Snowdonia.
- Tidal and longshore drift processes result in the formation of a swash-aligned landform comprising a long sandy beach backed by dunes, and the deposition of significant numbers of shells. The Artro, Ysgethin and Mawddach flow into the sea in this SCA.
- Uses dominated by recreation and tourism (resort, caravan parks, campsites, recreational boating etc), plus farming, dunes and airfield.
- Habitats include extensive dune systems, grazing marsh, beaches and intertidal areas.
- Onshore historic and cultural features include Llandbedr airfield, Llandanwg Church, the Victorian seaside resort of Barmouth, and Cambrian Coast railway line to Pwllheli.
- Offshore historic and cultural features include Barmouth harbour and the associated historic shipbuilding and fishing industries. Summer ferry from Barmouth to Fairbourne.
- Several small villages located along the A496 coast road. Tourism a strong influence on development, including Barmouth, and numerous 20th Century caravan parks and campsites on flat coastal land.
- A linear landscape, with beach, road and railway forming clear north-south elements. Light colours and regular patterns of the numerous caravan parks contrast with surrounding dunes and farmland.
- Foothills of Snowdonia form landscape setting in views from land and sea.
- Tremadog Bay forms wide seascape setting, with hills of the Lleyn peninsula visible to the north. Lighthouses contribute to seascape at night.



Elevated view of the SCA from the south. Mochras extends into the sea on the left. Barmouth is on the right. Image ©John Briggs



Morfa Bychan dune system with inland hills beyond. Image © Fiona Fyfe



Sarn Badrig visible as a line of disturbance on the sea. Image © Rohan Holt

Cultural Benefits and Services

Key: Bold shading = widespread; medium shading = localised; no shading = occasional

Leisure, recreation & tourism	Health	Heritage	Education	Religious & spiritual
Beach	Relaxation	Natural	Informal	Spiritual
Watersports	Exercise	Cultural	Formal	Religious
Active				
Exploring				
Ecotourism				

Natural Influences and sites

- Tremadog Bay designated marine SAC for its marine environment and habitats.
- Geological survey borehole at Mochras Farm penetrates the sedimentary fill of the Cardigan Bay Basin. It has revealed the fault system (including the Mochras Fault) which downthrows the Cardigan Bay Basin against the Lower Palaeozoic Welsh Massif. It has also penetrated the stratigraphy, including Mesozoic and Tertiary deposits, and the thickest-known Liassic (Lower Jurassic) succession in the British Isles.
- Designated RIGS site at Friog Coastal Section, and part of Glannau Tonfanau I Friog SSSI at south end of SCA.
- Peat deposits on foreshore at Llanaber confirm and illustrate the story of sea level rise and coastal change.
- Active coastal processes including longshore drift (predominantly northwards, but also towards the Mawddach estuary) creating swash-aligned Morfa Dyffryn landform; dune and beach formation (at Barmouth beach and Ro wen) and shell deposition. Erosion occurs at Fairbourne and Mochras headland.
- Morfa Dyffryn dunes and grazing marsh designated SAC and SSSI. Morfa Dyffryn dune system also designated National Nature Reserve, and has the highest proportion of bare sand (10%) of any of the sand dune systems in Wales. Barmouth Bar and sandbanks part of Mawddach Estuary SSSI.
- Sarn Badrig is a 24km long reef of boulders, cobbles and coarse sediment thought to be a glacial medial moraine. Much of the reef is intertidal, and provides solid substrate habitat in an otherwise sediment-dominated marine area. The Sarn impacts on wave energy and dispersal and is therefore also likely to affect sediment patterns. It is within the Pen Llyn a`r Sarnau/ Llyn Peninsula and the Sarnau SPA.

Cultural Influences and sites

- Morfa Dyffryn of archaeological importance due to Mesolithic cultural material exposed by tides.
- Barmouth comprises a cramped old town on the lower mountain sides, with narrow streets of steps and houses almost above one another. Nineteenth Century and later development on lower, flatter land behind the beach and artificially-constructed promenade. Notable Nineteenth Century Sailors Institute with Reading Room and billiards hall.
- Barmouth Harbour historically used for fishing and ship building, and traditionally marked with buoys rather than lights. Vessels would anchor outside the bar to await pilot boats which were moored to the spit buoy. Exports from the harbour included timber, zinc, copper and slate; imports included coal, corn, limestone and general supplies.
- Medieval coastal church of St Tanwg south of Llandanwg.
- Small landing places served communities such as Talybont and Llanaber. Local reports of vessels being wrecked whilst beached due to sudden changes in weather.
- Line of 692 anti-tank bollards at Fairbourne (Scheduled Monument) is longest surviving continuous line of these WW2 defences in the UK. Pillboxes are set into the line of anti-tank blocks.
- Llanbedr airfield of strategic importance during Cold War because of the length of its runway (partially hidden under dunes to avoid detection by enemy aircraft or satellites).
- Partially included in Register of Welsh Historic Landscapes (Area 20: Arduwly and Area 32: Mawddach).
- Folklore surrounds the unusual feature of Sarn Badrig. It is said to be the remains of a dyke or dam that

once protected a kingdom that covered the area of Cardigan Bay known as Cantre'r Gwaelod, or "The Lowland Hundred" from the sea.

- Numerous wrecks associated with Sarn Badrig: shallow rocks, conflicting tidal streams, overfalls and heavy breaking seas create treacherous conditions. Traditional leading marks to assist mariners in avoiding the reef were St Tudwalls East, Bardsey Lighthouse, Penkillan Head, Carn Modryn, Harlech Castle and the Causeway Buoy. Today the end of the sarn is marked by a flashing Cardinal Mark.
- SCA contains several phases of tourism development: Victorian Barmouth and Fairbourne with hotels and other tourist infrastructure (esplanade, narrow-gauge railway etc) resulting from the construction of the Cambrian Coast railway. Later development of coastal caravan and campsites with associated shops, arcades etc. Shell Island campsite (summer only) is one of largest in Europe. Barmouth is designated a Conservation Area.
- Barmouth Harbour is popular for water-based recreation, including the start of the Three Peaks Yacht Race.
- Within Snowdonia National Park.

Perceptual Qualities

- Small scale of field patterns contrasts with the larger scale of the landform, beaches and its sense of openness to the sea. Views are dominated by the flat topography of the SCA.
- Diverse land uses, with land and sea busier in summer than winter due to popularity as tourist destination.
- Many different patterns and textures, e.g. straight cobblestone field walls, sand dunes, waves, shell beaches and grazing marshes. Regular patterns and bright colours of caravans and tents contrast with natural surroundings.
- On the beach itself, looking out to sea, there is a sense of wildness, especially in westerly weather conditions. Inland, there are strong influences of tourist development and numbers of people.
- Hills inland (outside the Study Area boundary) form setting and backdrop, and contain views inland. From the sea, these hills dominate views, with the coastal plain less visible.
- Flashing Cardinal Marks on the ends of the sarnau are part of the seascape at night.

Forces for Change

Summary	Key forces for change								
<p>Heavier localised recreation use in areas of high environmental sensitivity leading to degradation (e.g. Llandanwg dunes & lagoon).</p> <p>Development pressure, especially given the existing pattern of ribbon development (due to geographical constraints) in the SCA. Any new development would require careful siting, and should also avoid impacting on the horizontal appearance of the landform, and the undeveloped areas of the SCA.</p> <p>Future development of Llanbedr airfield potentially impacting on tranquillity and visual qualities.</p> <p>Development outside the SCA, notably on ridgelines, which may create visual detractors.</p> <p>Changes to agricultural practises/ intensity which may alter field patterns and habitats.</p> <p>Natural sedimentary processes, including drift northwards up coast and towards the Mawddach estuary, erosion at Fairbourne and Mochras headland, and accretion at Barmouth Beach and Ro wen. Flooding of low-lying land is likely to increase due to sea level rise.</p> <p>Coastal landform assemblage locally threatened by visitor pressure, development pressure and land management changes (e.g. Ysgethin Spit).</p>	Special Qualities	Natural processes/ climate change	Visitor pressure	Marine use- commercial and fishing	Offshore energy or minerals	Development pressure/ transport routes	Land management changes	MOD use	
		Welsh Language							
	Diversity of landscapes, including coastal landscape features & expansive views							?	
	Rural agricultural communities and their associated features								
	Richness of habitats and biodiversity								
	Cultural heritage								
	Remoteness, tranquillity and wildness							?	
	Access to land and water and recreation/ enjoyment								
	Geology and geomorphological features								
	Islands								
	Archaeology and history including historic parks and gardens								
	Soil, air and water quality								
	Key	Change occurring in the area affecting the selected special quality							

Inherent Sensitivity

Theme	Factors making the area more sensitive	Factors making the area less sensitive
Coastal geometry and landform	<p>Open coast with long views seawards over Barmouth Bay: development potentially visible from both land and sea.</p> <p>Low-lying and horizontal landform sensitive to the introduction of vertical features.</p> <p>Sensitive coastal habitats in beaches, dune systems and wetland areas.</p>	
Existing development		Existing development, particularly in the form of caravan sites, campsites and airfield structures.
The visual experience	<p>SCA seen against scenic backdrop of pastoral hills and coastal heath. Users of Wales Coast Path and Morfa Bychan Nature Reserve are sensitive receptors.</p> <p>Setting and associated hills and skylines contribute to character and visual qualities of SCA.</p>	Concentration of caravan parks and associated infrastructure create a recreational/ holiday character in parts of SCA.
Tranquillity	Higher levels of tranquillity associated with Morfa Bychan dunes.	<p>Impacts of main roads and occasional trains.</p> <p>Busy holiday destination, with seasonal increase in visitor numbers, presence of tents on campsites, cars etc.</p>

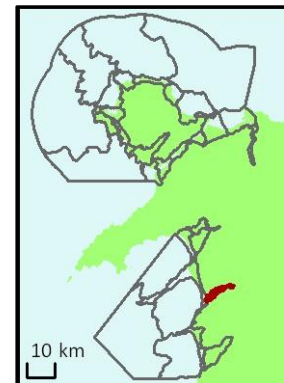
SEASCAPE CHARACTER AREA 23: MAWDDACH ESTUARY

Component LCAs (Snowdonia): Mawddach Estuary

Component LCAs (Gwynedd): Barmouth

Location and Context

This SCA is located in the central part of the western coast of Snowdonia, and comprises the estuary of Afon Mawddach from its mouth to its tidal limit near Dolgellau. It is located to the east (inland) of SCA 22: Mochras to Fairbourne and Sarn Badrig.



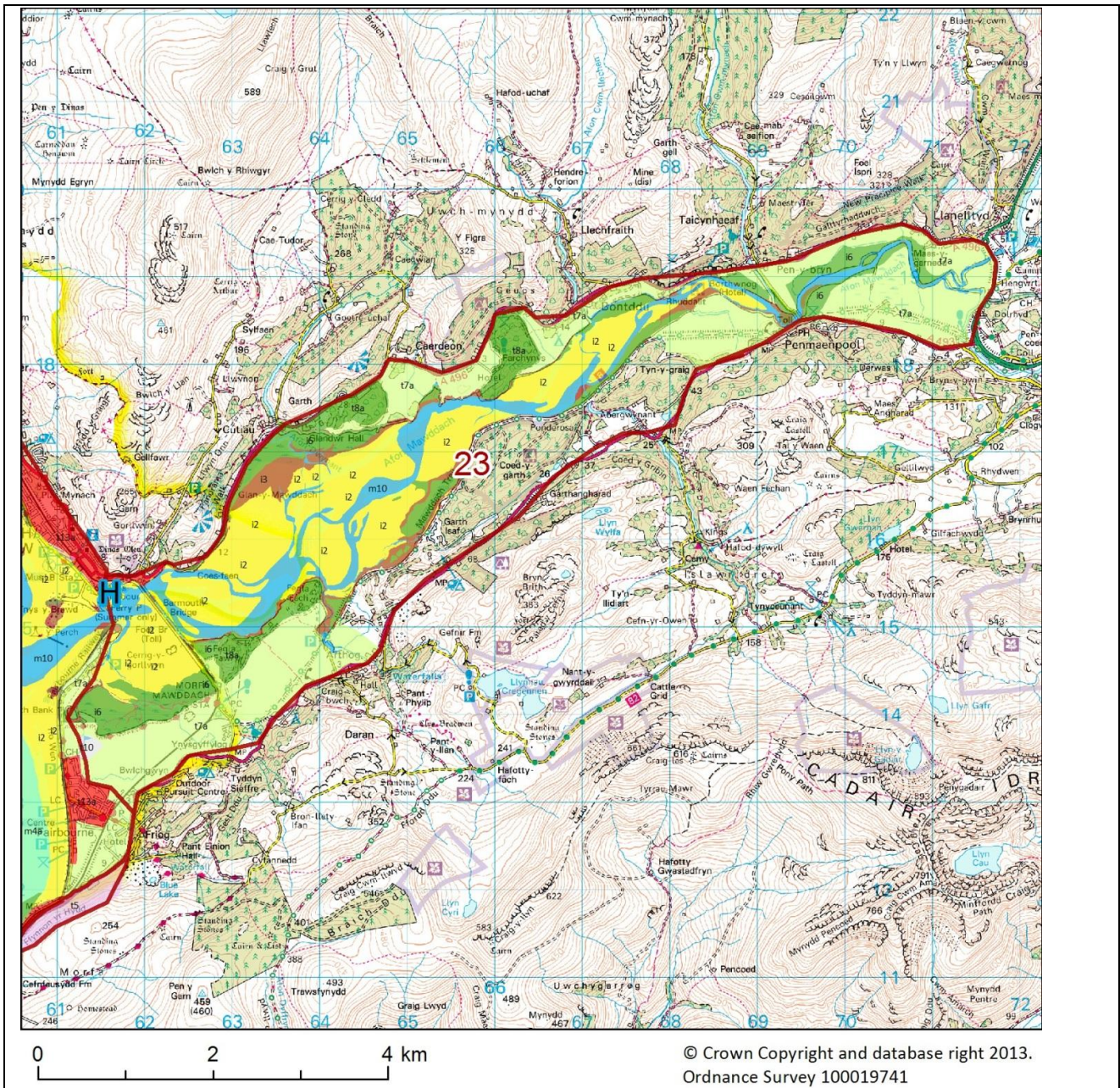
*Mawddach Estuary from Fairbourne at low tide, showing extensive intertidal areas, and surrounding hills.
Image ©Fiona Fyfe*

Summary Description

The valley floor of the Mawddach estuary is surrounded by high wooded hills, creating magnificent visual compositions which are enhanced by the constantly changing water, light, colours and textures on the valley floor as the tide ebbs and flows. The historic trestle railway bridge across the mouth of the estuary is a prominent landmark, and also an excellent location from which to appreciate the views. Above the toll bridge at Penmaenpool, the river meanders between areas of reclaimed grazing land.

Constituent Seascape Character Types

Please refer to Appendix I for a list of constituent Seascape Character Types.



Seascape Character Types in the Mawddach Estuary SCA. Refer to the key on pages 96-99 for full descriptions.

<i>H</i> symbol	<i>i6</i>	<i>t5</i>	<i>t10</i>
<i>i2</i>	<i>m4a</i>	<i>t7a</i>	<i>t13a</i>
<i>i3</i>	<i>m10</i>	<i>t8a</i>	

Key Characteristics

- Underlying geology of Middle-Upper Cambrian sedimentary rocks with localised dolerite intrusions.
- Landform consists of a wide, flat valley floor which narrows as it goes inland. Steep hills rise on either side.
- Channel of Mawddach river meanders across valley floor. Intertidal area extends across full width of valley at the mouth, but inland, the river channel is lined with areas of reclaimed grazing land.
- Land use almost entirely grazing marshes and intertidal habitats, with some woodland and parkland along the edges of the valley.
- Extensive intertidal habitats including salt marshes, mud and sand. Also wet pastures and woodland.
- Summer ferry across mouth of estuary from Barmouth to Fairbourne.
- Wooden trestle railway bridge across the mouth of the estuary is key landmark within the SCA.
- Popular with Romantic poets and artists, including Wordsworth and John Varley.
- Settlement within the SCA limited to occasional farms and small estates at periphery, although there are views of Barmouth and Fairbourne.
- Spectacular views framed and enclosed by surrounding hills including Cadair Idris. At low tide, estuary contains rich variety of colours and textures. At high tide, it can appear lake-like.
- Landscape setting an essential component of views, and always seen in conjunction with SCA itself.
- Views over the estuary and sea from surrounding hills appreciated from Victorian panorama walks.



*View inland from Barmouth Bridge at high tide. The estuary has a lake-like appearance.
Image © Fiona Fyfe*



*Trestle railway bridge over the Mawddach Estuary.
Image © Fiona Fyfe*



*Afon Mawddach further inland, showing parkland influences on its setting.
Image © Robin Lines*

Cultural Benefits and Services

Key: Bold shading = widespread; medium shading = localised; no shading = occasional

Leisure, recreation & tourism	Health	Heritage	Education	Religious & spiritual
Exploring	Relaxation	Natural	Informal	Spiritual
Ecotourism	Exercise	Cultural	Formal	Religious
Active				

Natural Influences and sites

- Active estuarine processes and extensive intertidal habitats. The Mawddach estuary has accreted significantly in recent years, with associated changes to the low waterbank system of the ebb delta.
- Most of SCA (including all intertidal areas) designated SSSI (Mawddach Estuary) and SAC for its conservation value.
- Mountains of Snowdonia (including Rhinogydd to the north and Cadair Idris to the south) create a dramatic inland setting.

Cultural Influences and sites

- Railway bridge of wooden trestle construction with iron swing section is one of the last surviving in Britain. It is a key landmark within the SCA.
- Coes-faen (Victorian Gothic house and clock tower) on northern shore near bridge is a landmark in views from the bridge. Other large Victorian houses are situated along both banks of the Estuary, with designed landscapes/ gardens leading down to the water, and with boathouses as elements in their design. These residences, gardens and boathouses are more visible from the water than from the road.
- Transport routes include roads along edges of valley floor, and railway line running north-south across estuary. Former railway along the valley to Dolgellau is now the Mawddach Trail, which links with existing rail station at Morfa Mawddach.
- Partially included in Register of Welsh Historic Landscapes (Area 32: Mawddach).
- Early Nineteenth Century shipbuilding industry at Penmaenpool.
- Historic gold mine site at Bontddu.
- Largely within Snowdonia National Park.

Perceptual Qualities

- Views are large in scale, but enclosed by surrounding hills. Landform channels views inland or seawards.
- Harmonious compositions of water, woodland and hills, popular with artists and Romantic poets for their picturesque qualities, and the spectacular drama of the views.
- Strong and varied patterns and textures of intertidal environments give the SCA a more coastal feel at low tide. At high tide, water extends from shore to shore, giving the appearance of a lake.
- A unified landscape, with a mountainous backdrop and a strong sense of perceived naturalness. Within the estuary there is a sense of remoteness and tranquillity, but this reduces near to the roads around the periphery of the SCA.
- Majestic setting of mountains of Snowdonia adds scale and grandeur to the SCA, and is integral to its character and sense of place. Unlike the floor of the estuary, these hills can be seen from the sea.
- In views from surrounding hills (including the Victorian 'Panorama Walk' near Barmouth), the SCA can be seen in its coastal context.

Forces for Change

Summary	Key forces for change							
<p>Development pressure, (particularly on ridgelines beyond the SCA boundary) which may detract from the views and special qualities of the SCA.</p> <p>Changes to forestry plantations further up the estuary towards Arthog. Changes in management of parkland around the estuary would also impact on views.</p> <p>Visitor numbers leading to increased pressures for infrastructure improvements. Any such improvements will need careful siting and consideration, particularly on approaches to Barmouth from the east (including from the footbridge).</p> <p>Seasonal use of powered craft can negatively impact upon tranquillity.</p> <p>Natural processes of accretion within the estuary, with associated changes to sand banks at its mouth. Silting may alter the appearance of the estuary floor at low tide.</p> <p>Potential risk of flooding (exacerbated by climate change) near the mouth of the estuary and also further upstream near Dolgellau.</p>	Special Qualities	Natural processes/ climate change	Visitor pressure	Marine use- commercial and fishing	Offshore energy or minerals	Development pressure/ transport routes	Land management changes	MOD use
		Welsh Language						
	Diversity of landscapes, including coastal landscape features & expansive views							
	Rural agricultural communities and their associated features							
	Richness of habitats and biodiversity							
	Cultural heritage							
	Remoteness, tranquillity and wildness							
	Access to land and water and recreation/ enjoyment							
	Geology and geomorphological features							
	Islands							
	Archaeology and history including historic parks and gardens							
	Soil, air and water quality							
	Key	Change occurring in the area affecting the selected special quality						

Inherent Sensitivity

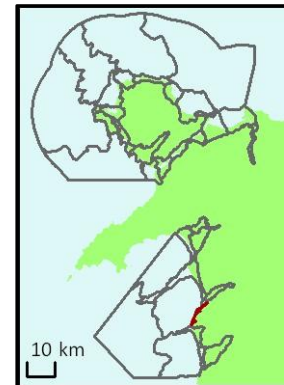
Theme	Factors making the area more sensitive	Factors making the area less sensitive
Coastal geometry and landform	<p>Horizontal landform of estuary floor sensitive to the introduction of vertical features.</p> <p>Low-lying landform with highly sensitive coastal wetland habitats.</p>	Estuary floor has little intervisibility with the sea, due to intervening sand dunes
Existing development	Very little existing built development within SCA, resulting in undeveloped character.	Views of existing development at Barmouth and Fairbourne (SCA 22) visible from west of SCA.
The visual experience	<p>Very high scenic quality with a mountainous character and spectacular scenery.</p> <p>Users of Wales coast path, Nature Reserve and Mawddach Trail are sensitive receptors.</p> <p>SCA is highly visible in views from surrounding hills (including Panorama Walk) as well as from river, roads and railways.</p> <p>Trestle bridge is key landmark.</p>	
Tranquillity	Existing high levels of tranquillity, particularly away from main roads.	<p>Road traffic on peripheral roads (though often screened) and occasional trains across estuary.</p> <p>High numbers of summer visitors impact on tranquillity.</p>

SEASCAPE CHARACTER AREA 24: FAIRBOURNE TO TONFANAU

Component LCAs (Snowdonia): Cadair Idris

Location and Context

This narrow SCA is located on the western coast of Snowdonia, and runs north-south between Fairbourne and Tonfanau. It comprises a beach and narrow coastal plain, and is backed by steep hills inland. SCA 34: Barmouth Bay lies to seaward, with SCA 22: Mochras to Fairbourne and Sarn Badrig to the north, and SCA 25: Tywyn and Sarn-y-bwch continuing along the coast to the south.



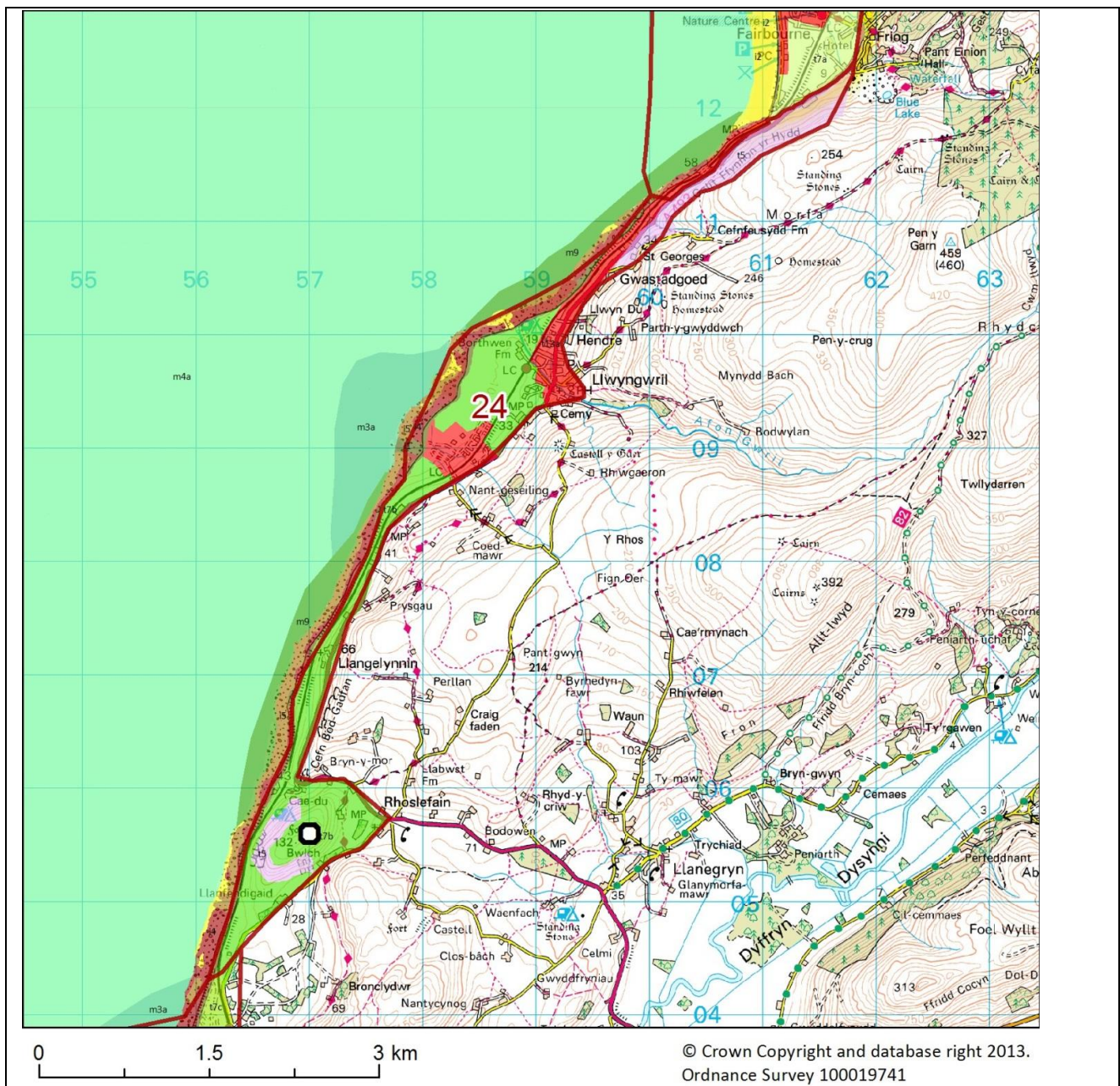
Sloping fields lined with drystone walls occupy the narrow strip of land between the sea and the steep hills inland. The A493 coast road is on the left of the picture, and the railway line is on the right. Foel Llanfendigaid Hillfort is in the distance. Image © Fiona Fyfe

Summary Description

This is an exceptionally narrow and rough-textured SCA comprising a rocky shoreline, pebble beach and the steeply sloping land which rises up almost immediately behind it. In places, the coastal strip is so narrow that the coast road and railway line have been cut into the hillside. Steep fields on the hillside above the coast are divided by a regular pattern of stone walls, and the coastal Iron-Age hillfort at Foel Llanfendigaid is a prominent feature.

Constituent Seascape Character Types

Please refer to Appendix I for a list of constituent Seascape Character Types.



Seascape Character Types in the Fairbourne to Tonfanau SCA. Refer to the key on pages 96-99 for full descriptions.

<i>O</i> symbol	<i>i5</i>	<i>m9</i>	<i>t7b</i>
<i>i2</i>	<i>m3a</i>	<i>t5</i>	<i>t7c</i>
<i>i4</i>	<i>m4a</i>	<i>t7a</i>	<i>t13a</i>

Key Characteristics

- Underlying geology of exceptionally hard sedimentary rocks of Middle and Upper Cambrian age.
- Steeply sloping cliffs drop to a narrow, pebbly beach. Around Llwyngwriil, alluvium deposited by the Afon Gwriil has created a wider coastal plain.
- Sea hits west-facing cliffs creating dramatic spray and crashing waves, and causing ridges to form on cobble (pebble) beaches.
- SCA is transport corridor (road and rail), with narrow band of sloping coastal farmland, and coastal heath on steeper slopes. Small area of flatter ground contains farmland and caravan park. However, coastal access is limited, with coast path diverting inland.
- Rocky beach and intertidal habitats along shoreline, and coastal heath habitats (bracken, gorse and grassland).
- Recently-identified prehistoric hillfort/hilltop enclosure at Foel Llanfendigaid.
- Coastal road and Cambrian Coast railway pass through this area.
- Settlement limited to village of Llwyngwriil and adjacent large caravan park in flat area in north of SCA.
- A strongly linear SCA, confined inland by steep hills, but with open views out to sea. Textures and colours from sea, beach, rocks, field walls and coastal heath.
- Steep hills on landward side (covered in a mixture of coastal heath and irregular farmland) form the inland setting and are prominent in views from sea.
- An open and exposed seascape. Hills of the Lley Peninsula visible to the north, across the open expanse of Barmouth Bay.



In the north of the SCA, the cliffs are so steep that the road and railway line have been cut into them. Image © Fiona Fyfe



Cobble beach, caravan park on narrow coastal plain, and farmed hills behind. Image © Fiona Fyfe



Coastal heath at Foel Llanfendigaid Hillfort. Image © Fiona Fyfe

Cultural Benefits and Services

Key: Bold shading = widespread; medium shading = localised; no shading = occasional

Leisure, recreation & tourism	Health	Heritage	Education	Religious & spiritual
Ecotourism	Relaxation	Natural	Informal	Spiritual
Exploring	Exercise	Cultural	Formal	Religious
Beach				

Natural Influences and sites

- Ongoing shoreline processes of cliff erosion and pebble beach formation. Rocky shoreline and beach designated SAC and SSSI (Glannau Tonfanau I Friog) for their structural geology, mineralogical features, and rich intertidal habitats).
- Tremadog/ Barmouth Bay also designated offshore SAC for its marine environments. Marine mammals include dolphins and seals.
- Notable population of Honeycomb worm on shoreline rocky reef habitats.
- Patches of coastal heath of conservation value and requiring appropriate management to avoid scrubbing-up.

Cultural Influences and sites

- Prehistoric Hillfort/ enclosure at Foel Llanfendigaid appears to be one of an unusual cluster of hillfort sites in this area.
- In the steepest areas, coast road and railway line run along ledges cut into cliffs. Railway line has avalanche shelter to protect trains from rocks falling from cliffs.
- Fields lined with dry-stone walls, sourced from local beach boulders and cobbles, rounded in shape due to erosion by water.
- Small churches (e.g. St Celynnin's, dating to Thirteenth Century) provide further evidence for a series of Medieval villages along the coast. Limited agricultural land would have made gathering from the foreshore an essential part of the local economy.
- Medieval/ Post-Medieval stone-built fish traps visible in aerial photographs between Borthwen Farm and Llangelynin.
- Traditional landing place at Hen Borth for Llwyngwriol, formerly associated with a limekiln.
- Association with the Barmouth-Consols copper/ gold mine (1861 onwards) at coastal hinterland south of Fairbourne.
- Within Snowdonia National Park.

Perceptual Qualities

- Narrowness of coastal strip creates sense of confinement, and a contrast between enclosed views landwards, and open views seawards.
- Linear form of SCA enhanced by straightness of coast, railway line, road and perpendicular field boundaries. Coastal hillfort of Foel Llanfendigaid on its steeply rounded hill is a landmark within the SCA.
- Contrasting textures and seasonally-changing colours of sea, cobble beaches, walled fields and coastal heath.
- Spectacular views from railway line near the avalanche shelter, where the track runs disconcertingly close to the edge, and train speeds are kept low.
- Exposed and isolated west-facing coast has wild quality, although this is less apparent in views from roads. Flashing Cardinal Marks on the ends of the sarnau are part of the seascape at night.
- Much of the shoreline has sense of inaccessibility, with few public rights of way or opportunities to access the sea- even the coast path diverts inland here. However, the closeness of the main road and the visibility of the caravan site reduce the SCA's sense of tranquillity.
- Steep hills to landward (including some outside the Study Area boundary) form the inland setting. The narrow width of the SCA emphasises the vertical scale of these hills, especially in views from the sea. From the sea, the inland hills appear to rise up out of the water.

Forces for Change

Summary	Key forces for change							
	Special Qualities	Natural processes/ climate change	Visitor pressure	Marine use- commercial and fishing	Offshore energy or minerals	Development pressure/ transport routes	Land management changes	MOD use
Introduction of new sea defences along coastline.								
Continuing use of stockpiles and associated traffic to and from quarry at Tonfanau. Also future upgrading of coastal road and rail routes may affect the character of the SCA.	Welsh Language							
Possible future uses of former Tonfanau military camp site (currently no LDP allocation).	Diversity of landscapes, including coastal landscape features & expansive views							
Changes to agricultural practices or intensity which may affect established field patterns and habitats. Bracken encroachment and loss of coastal heath/ grassland due to changing grazing practises is already apparent. Changes to vegetation (including increased bracken) may also damage archaeology.	Rural agricultural communities and their associated features							
	Richness of habitats and biodiversity							
	Cultural heritage							
	Remoteness, tranquillity and wildness							
	Access to land and water and recreation/ enjoyment							
	Geology and geomorphological features							
	Islands							
	Archaeology and history including historic parks and gardens							
Natural processes of cliff erosion and pebble beach processes.	Soil, air and water quality							
	Key	Change occurring in the area affecting the selected special quality						

Inherent Sensitivity

Theme	Factors making the area more sensitive	Factors making the area less sensitive
Coastal geometry and landform	<p>Steeply sloping cliffs form natural rocky shoreline and associated habitats.</p> <p>Narrowness of landform channels the eye along it.</p> <p>Open views seawards over Barmouth Bay: any development potentially visible from both land and sea.</p>	Steep hills rising steeply from the coast potentially reduce the risk of development appearing as a silhouette in views from the sea.
Existing development	Very little existing built development in southern part of SCA results in undeveloped character.	Existing village of Llwyngwryl and caravan parks in north of SCA.
The visual experience	Ridgeline inland and Foel Llanfendigaid hillfort form skyline in views from land and sea.	
Tranquillity	Very few people at coast, particularly in south of SCA.	Use as a narrow transport corridor for railway line and main road.

SEASCAPE CHARACTER AREA 25:

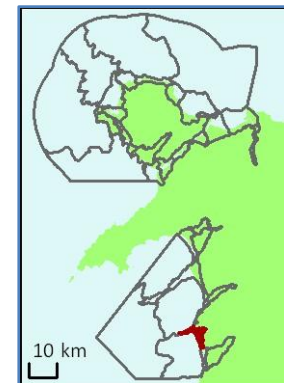
TYWYN AND SARN-Y-BWCH

Component LCAs (Snowdonia): Dysynni Valley; Cadair Idris; Tarrau Mountains; Dyfi Estuary

Component LCAs (Gwynedd): Tywyn

Location and Context

This SCA is located towards the south of the western Snowdonia coast, and includes the town of Tywyn, the surrounding coast, and the flat land which surrounds the town (including Broad Water). SCA 24: Fairbourne to Tonfanau is to the north, and SCA 26: Borth is to the south. The sarn separates offshore SCA 34 Barmouth Bay from offshore SCA 35 Aberdyfi Bay



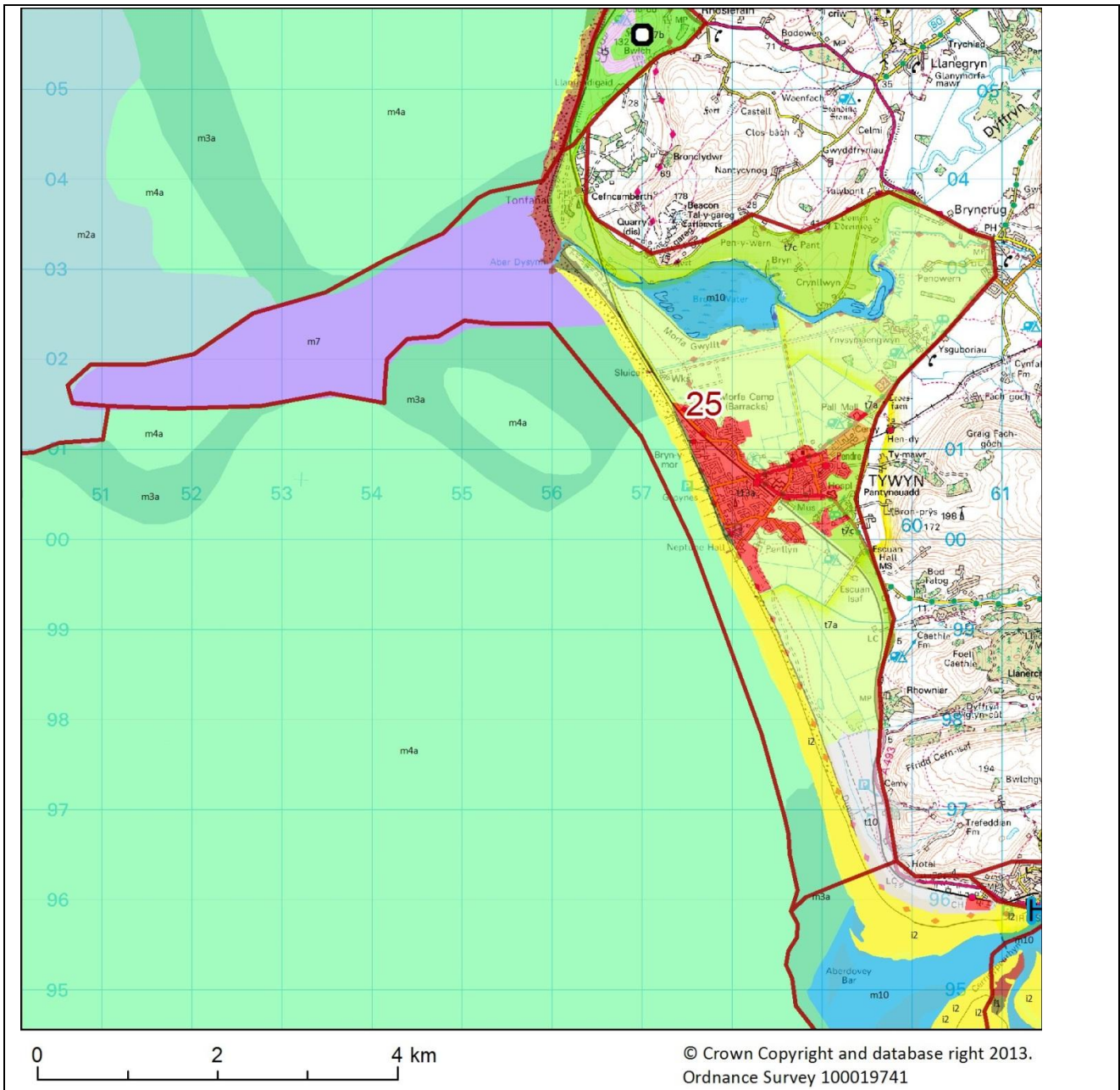
Tywyn seafront, looking north. The wide sandy beach is covered by the tide. The flat coastal plain at Tonfanau is visible on the horizon above the figures. At night the flashing Cardinal Mark at the end of Sarn-y-bwch can be seen out to sea. Image © Fiona Fyfe

Summary Description

This SCA comprises the long sandy beach at Tywyn, and the flat land which surrounds the town, including the former estuary of Broad Water. Broad Water is now a tidal lagoon, and supports a rich variety of bird life; its wetlands provide a contrasting texture to the surrounding pastoral fields. Behind the coastal marshes and extensive sand dunes are the high hills of Snowdonia which create a dramatic inland setting for the SCA. The town of Tywyn itself is ancient in origin, but saw considerable Victorian resort development. There are long views inland to Snowdonia, and out to sea, with the tops of the hills of the Llyn Peninsula appearing as 'islands' on the northern horizon.

Constituent Seascape Character Types

Please refer to Appendix I for a list of constituent Seascape Character Types.



Seascape Character Types in the Tywyn and Sarn-Y-Bwch SCA. Refer to the key on pages 96-99 for full descriptions.

H symbol	m2a	m7	t5	t7c
O symbol	m3a	m10	t7a	t10
i2	m4a	t1	t7b	t13a

Key Characteristics

- Underlying geology of Ordovician and Silurian mudstones, with some igneous intrusions, and Pleistocene glacial deposits around Tonfanau. The Tal-y-llyn fault (part of the 'Bala Lineament') trends NE-SW across the SCA, intersecting the coast at Tywyn.
- A predominantly flat area, separated from the sea and broad sandy beach by sand dunes. Glacially-deposited sarn extends as a linear feature out to sea.
- Afon Dysynni flows through the area and into the sea near Tonfanau. Former estuary has silted up, leaving a tidal lagoon (Broad Water). Tidal and sediment patterns cause dune formation, and longshore drift northwards along the coast.
- Varied land uses including farmland (fields and grazing marsh), settlement (Tywyn), and tourism/ recreation (caravan park, large golf course etc.)
- Habitats include wetlands and tidal lagoon of Broad Water, grazing marshes, sandy beaches and extensive sand dune systems.
- Long history of settlement from the Bronze Age onwards. Early medieval ecclesiastical centre at Tywyn. SCA also contains features from post-medieval estates and Victorian development.
- Town of Tywyn established since 13th Century, but expanded considerably as a resort in late 19th Century following construction of the Cambrian Coast railway.
- An open and relatively flat landform, with dunes, water, sea, beaches, farmland and buildings providing a variety of colours and textures.
- Landscape setting of inland hills, with farmland and stone walls adding backdrop and scale to the flat land of the valley floor.
- A clear seaward horizon, with views south across the Dyfi estuary mouth to Ynyslas and Borth Cliffs beyond.



*Broad water and surrounding pastoral farmland.
Image © Fiona Fyfe*



*Offshore sea defence off Tywyn beach.
Image © Fiona Fyfe*



Coastal grazing marshes, golf course and railway line, south of Tywyn. Image © Fiona Fyfe

Cultural Benefits and Services

Key: Bold shading = widespread; medium shading = localised; no shading = occasional

Leisure, recreation & tourism	Health	Heritage	Education	Religious & spiritual
Beach	Relaxation	Natural	Informal	Spiritual
Exploring	Exercise	Cultural	Formal	Religious
Watersports				
Ecotourism				
Active				

Natural Influences and sites

- Around Tonfanau the coastal cliffs are composed of boulder clay representing glacial deposits from both the Irish Sea ice-sheet, and locally-derived Welsh ice. Other glacial features include the drumlin on which part of Tywyn is built, and Sarn-y-bwch, which is thought to be a glacial medial moraine.
- Ongoing coastal processes of erosion, longshore drift and dune formation. Drift potential is predominantly northwards due to the presence of hard sea defences. Some drift also occurs southwards towards the Dyfi estuary.
- Tidal wetlands of Broad Water and Afon Dysynni designated SSSI. Also parts of Glannau Tonfanau I Friog SSSI in north of SCA, and part of Dyfi SSSI in south of SCA.
- Offshore area and mouth of Dysynni designated SAC.
- Southern part of SCA within Borth Bog UNESCO Biosphere Reserve.
- Submerged prehistoric forest and cut peat beds visible on the beach at very low tides.
- Sarn-y-bwch within the designated Pen Lleyn a`r Sarnau/ Lleyn Peninsula and the Sarnau SPA.

Cultural Influences and sites

- Archaeological finds of Bronze Age artefacts around Tywyn, indicating long settlement. Two Iron Age hillforts above Broad Water (outside Study Area).
- Early ecclesiastical origins, with a monastery established at Tywyn in 6th Century. Part of present church dates from 12th Century, and contains the earliest known example of written Welsh (8/9th Century) on a funerary stone.
- Medieval Motte at Domen Ddreiniog, and historic bridge over Dysynni adjacent to A493.
- Remains of post-medieval estate of Ynysmaengwyn, and associated drainage and farm improvement schemes.
- Development of Victorian seaside resort and tourist infrastructure (golf course, caravan parks etc.).
- WW2 camp at Tonfanau, now semi-derelict, with brick and concrete barrack blocks, concrete gun emplacements and tarmac roads. Originally part of a network of training camps/ firing ranges around Cardigan Bay.
- Another WW2 military airfield north of Tywyn. Many original buildings survive in use as an industrial estate. Subtle military character extends far offshore to limits of the firing range, and also includes gun emplacements near Dysynni Bridge and pillboxes along the coast to the mouth of the Dyfi.
- Outer end of Sarn-y-bwch traditionally marked with a can buoy. Mariners used bearings to pole beacon at Trevanna Farm, Aberystwyth Castle and Ffigle Fawr hill near Barmouth to try and avoid the sarn. Today its western end is marked with a flashing Cardinal Mark.
- Shipping losses on Sarn-y-bwch include the *Albert* and the *John Pritchard*.
- Partially included in Register of Welsh Historic Landscapes (Area 54: Dysynni Valley).
- Partially within Snowdonia National Park.

Perceptual Qualities

- A relatively open feel and medium scale, due to the wide beach, dunes and flat coastal marshes.
- Generally a simple and predominantly horizontal landform within the SCA, but hills inland provide a

contrasting backdrop.

- Subtle textures of dunes, water, intertidal areas, fields and buildings. Occasional pine trees (possible relics of estate planting) contribute distinctive silhouettes.
- Presence of towns and roads reduce the perceptions of remoteness and tranquillity, especially in summer.
- Surrounding undeveloped hills add to the setting of the SCA and give it a contained and less developed feel.
- Flashing Cardinal Marks at the ends of the sarnau are part of the night-time seascape.

Forces for Change

Summary	Key forces for change								
<p>Development on the valley floor around Tywyn will be highly visible from the inland hills. Recently-constructed tall buildings are visually prominent across the coastal plain. Any development on the surrounding ridgelines (e.g. wind turbines) will impact on views from the coast and sea.</p> <p>Natural process of coastal erosion and drift (northwards in the northern part of the SCA and southwards towards the Dyfi estuary in the southern part of the SCA). Further sea defence structures on the Tywyn seafront may affect the character of the SCA.</p> <p>Flood risk in Dysynni estuary increased by sea level rise.</p> <p>Increasing recreational use for surf and paddle boarding due to recent coastal engineering altering wave height.</p> <p>Changes in agricultural and land management practices may affect the character of surrounding land.</p>	Special Qualities	Natural processes/ climate change	Visitor pressure	Marine use- commercial and fishing	Offshore energy or minerals	Development pressure/ transport routes	Land management changes	MOD use	
	Welsh Language								
	Diversity of landscapes, including coastal landscape features & expansive views								
	Rural agricultural communities and their associated features								
	Richness of habitats and biodiversity								
	Cultural heritage								
	Remoteness, tranquillity and wildness								
	Access to land and water and recreation/ enjoyment								
	Geology and geomorphological features								
	Islands								
	Archaeology and history including historic parks and gardens								
	Soil, air and water quality								
	Key		Change occurring in the area affecting the selected special quality						

Inherent Sensitivity

Theme	Factors making the area more sensitive	Factors making the area less sensitive
Coastal geometry and landform	Open views from coast out to sea across Cardigan Bay. Development potentially visible from both land and sea.	

	<p>Low-lying and horizontal landform sensitive to the introduction of vertical features.</p> <p>Sensitive coastal habitats in dune systems and wetland areas.</p>	
Existing development		Town of Tywyn and surrounding caravan parks.
The visual experience	<p>SCA seen against scenic backdrop of pastoral hills.</p> <p>Users of Wales coast path are sensitive receptors.</p>	Seafront development and extensive golf course create recreational character in parts of SCA.
Tranquillity	Higher levels of tranquillity around River Dysynni and Broad Water.	<p>Impacts of main roads and occasional trains.</p> <p>Busy holiday destination, with seasonal reductions in tranquillity due to numbers of visitors.</p>

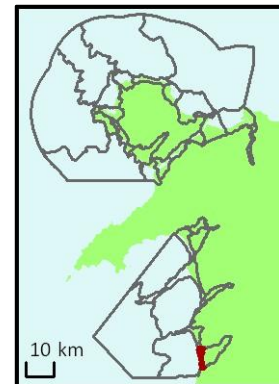
SEASCAPE CHARACTER AREA 26:

BORTH

Component LCAs (Snowdonia): Dyfi Estuary

Location and Context

This SCA is located at the southern end of the west coast of Snowdonia. It includes the mouth of the Dyfi Estuary and the villages of Borth, Upper Borth and Ynyslas. SCA 35: Aberdyfi Bay lies to seaward; SCA 25: Tywyn and Sarn-y-bwch is to the north, and SCA 27: Dyfi Estuary is inland to the east.



View northwards from Upper Borth, showing Borth beach and village, and the mouth of the Dyfi Estuary.

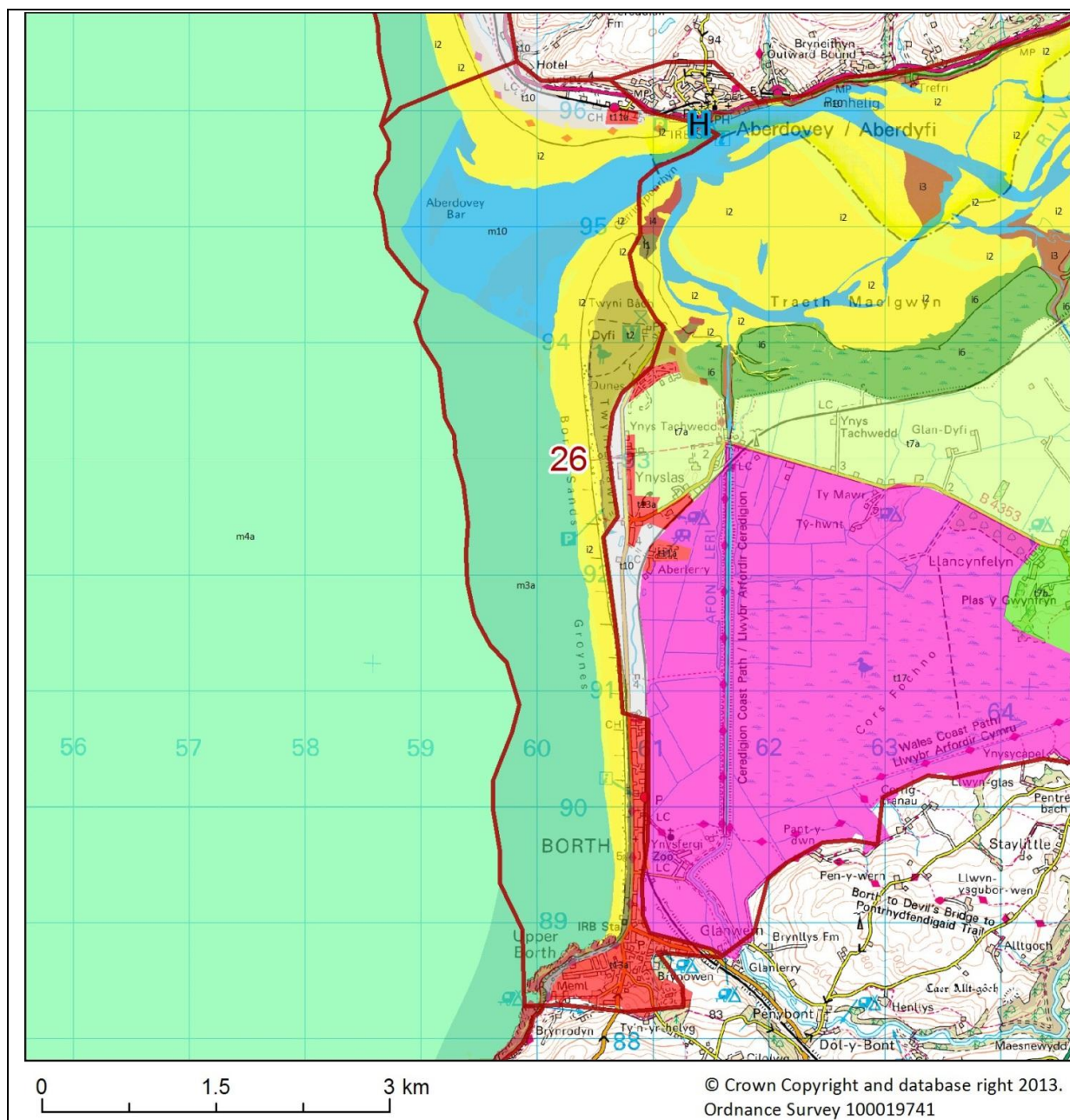
Image © Fiona Fyfe

Summary Description

This SCA is characterised by the strongly linear form of its landform, settlement, beach and roads. The village has developed along a narrow spit of land which separates the Dyfi Estuary from the sea. At the north end of the spit are the sand dunes of Ynyslas, and further sand dunes occur on the northern side of the mouth of the Dyfi estuary. The village of Borth has an open and exposed feel, with long views out to sea, and inland across the Dyfi estuary. From the cliffs at Upper Borth (the southern edge of the Study Area) there are panoramic views along the coast.

Constituent Seascape Character Types

Please refer to Appendix I for a list of constituent Seascape Character Types.



Seascape Character Types in the Borth SCA. Refer to the key on pages 96-99 for full descriptions.

<i>H symbol</i>	<i>i4</i>	<i>m4a</i>	<i>t2</i>	<i>t10</i>	<i>t17</i>
<i>i2</i>	<i>i6</i>	<i>m10</i>	<i>t7a</i>	<i>t11a</i>	
<i>i3</i>	<i>m3a</i>	<i>t1</i>	<i>t7b</i>	<i>t13a</i>	

Key characteristics

- Underlying geology of Silurian sedimentary rocks, but overlain by more recent deposits of windblown sand.
- Landform comprises a long linear beach and a sand spit which extends northwards into the Dyfi Estuary and separates Borth Bog (SCA 27) from the sea. Steep cliffs rise up at the southern edge of SCA. Shallow undersea bathymetry with rocky intertidal area.
- Sea has freshwater influence from estuary, and a northward pattern of longshore drift and dune creation due to the prevailing south-westerly waves. Northern part of SCA contains the mouth of the river Dyfi and associated dynamic sand banks.
- Uses include recreational and commercial fishing and boating, tourism/leisure (golf course and caravan parks), settlement and transport.
- Habitats include long sandy beach backed by pebble ridge, and extensive sand dune system at Ynyslas.
- Onshore historic and cultural features include cliff-top war memorial (a landmark from land and sea) and tourism development at Borth.
- Strong historic associations between Borth and the sea. Originally a fishing village but now much expanded for coastal tourism.
- Historic settlement of Upper Borth expanded in 19th Century in linear pattern along sandy spit. Scattered housing at Ynyslas.
- A large scale and open feel, with long views out to sea and also inland over Borth bog and the Dyfi estuary. The sea, groynes, dunes, pebbles and buildings all add colour and texture. Straight form of settlement reflects linearity of landform, roads and railway.
- Landscape setting formed by the hills surrounding the Dyfi Estuary.
- Seascape setting framed to south by cliffs, and to north by Tywyn sands. Open views over Cardigan Bay, with hills of the Llyn peninsula appearing like islands on northern horizon.



*Borth village and beach
Image© Fiona Fyfe*



The cliff at Upper Borth, with its war memorial, is a prominent landmark in views from the coast and sea. Image© Fiona Fyfe



Visitor centre at Ynyslas Nature Reserve. Image© Fiona Fyfe

Cultural Benefits and Services

Key: Bold shading = widespread; medium shading = localised; no shading = occasional

Leisure, recreation & tourism	Health	Heritage	Education	Religious & spiritual
Beach	Relaxation	Natural	Informal	Spiritual
Watersports	Exercise	Cultural	Formal	Religious
Active				
Ecotourism				
Exploring				

Natural Influences and sites

- Active coastal and estuarine processes of sediment movement and sand deposition, resulting in extensive active sand dune system at Ynyslas, designated SSSI (Dyfi), SAC, and Ramsar Site. Ynyslas Spit is the finest example of the few North-South drift-aligned spits on the west-facing coast of Wales.
- Patterns of sediment drift strongly influenced by changes in configuration of the banks at the mouth of the Dyfi estuary.
- Ynyslas also designated National Nature Reserve, with a popular visitor centre.
- Entire SCA is within the Borth Bog UNESCO Biosphere Reserve.
- Offshore area within Cardigan Bay SAC.
- Geological interest at southern end of SCA, with designated RIGS site (Upper Borth) and part of Borth-Clarach coastal SSSI.
- Prehistoric forest visible off coast at Ynyslas at very low tides.

Cultural Influences and sites

- Borth War Memorial, located on cliff top in Upper Borth is a prominent feature in views from sea and land. Many Borth men joined the Navy due to the village's very strong seafaring tradition.
- Heritage Coast from Upper Borth southwards, continuing beyond end of Study Area.
- Historic core of former fishing village at base of cliff. Borth fishing boats of unique design to enable them to be run straight onto the beach without needing a harbour.
- Villages of Borth and Ynyslas expanded following building of railway line, to include linear Victorian seafront and associated buildings, and several caravan parks.
- Plans for 'Ynyslas Health Resort' in 1889 included promenades, sea-bathing pools, shops, chapels, terraced and detached houses, and a market hall. 'Show Homes' from early stages of the development survive in the linear village.
- Experimental test-firing range 1945-6, developed to test Britain's earliest long-range rocket systems (in response to German Doodlebug and V2 bombs). Remains of rocket test firing tracks, camera observation points, radar stations etc. can be found amongst the sand dunes.
- Rocky outcrop at Moel Ynys used as a leading mark for Dyfi Estuary and also as a target for vessels in difficulty to beach safely.
- Shipwrecks associated with Aberdyfi Bar in the northern part of the SCA, including the Norwegian-registered *Moringen* which sank in 1877 with a deck cargo of timber. The crew were rescued by the Aberdyfi lifeboat, but a windlass periodically uncovered on the beach is thought to come from this wreck.
- Partially within Snowdonia National Park.

Perceptual Qualities

- Open views over the sea and estuary create a large scale and spacious feel.

- Within the SCA a diversity of land uses, but sea and inland setting increase the sense of unity. A busy feel to the SCA with lots of movement, especially in summer.
- Views channelled by the linear landform and settlement pattern. The regular pattern of groynes contrasts with the more organic patterns and textures of the beach and dunes
- An exposed feel, open to the sea and inland. Weather has strong influence on the SCA. Flashing Cardinal Marks at the ends of the Sarnau are part of the seascape at night.
- SCA itself has a settled and managed feel, although away from the groynes and boardwalks, the beaches and dunes have a sense of wildness, especially in westerly conditions.
- Open seascape and magnificent landscape setting provides a dramatic backdrop and draws the eye out of the SCA towards the sea and hills beyond.

Forces for Change

Summary	Key forces for change								
<p>Further sea and flood defence structures, particularly given the low-lying locations of Borth and Ynyslas.</p> <p>Increasing recreational use of the water (following recent coastal engineering altering wave heights) and visitor numbers at Ynyslas nature reserve. Also development pressure for housing and holiday accommodation.</p> <p>Natural coastal processes of sediment erosion, drift and deposition, including sediment movement towards the mouth of the Dyfi estuary, and continued formation of sand dunes at Ynyslas.</p> <p>Development of further wind turbines on ridges to the east of Borth would add to the visual intrusion of existing structures.</p> <p>Seasonal visitor pressures including increased traffic and numbers of people and boats impacting on tranquillity.</p> <p>Visitor pressure, development pressure and land management change could all adversely impact on the local geomorphology.</p>	Special Qualities	Natural processes/ climate change	Visitor pressure	Marine use- commercial and fishing	Offshore energy or minerals	Development pressure/ transport routes	Land management changes	MOD use	
	Welsh Language								
	Diversity of landscapes, including coastal landscape features & expansive views								
	Rural agricultural communities and their associated features								
	Richness of habitats and biodiversity								
	Cultural heritage								
	Remoteness, tranquillity and wildness								
	Access to land and water and recreation/ enjoyment								
	Geology and geomorphological features								
	Islands								
	Archaeology and history including historic parks and gardens								
	Soil, air and water quality								
	Key	Change occurring in the area affecting the selected special quality							

Inherent Sensitivity

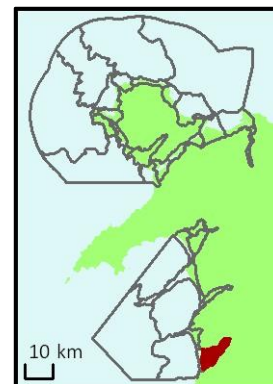
Theme	Factors making the area more sensitive	Factors making the area less sensitive
Coastal geometry and landform	<p>Open coast with long views out to sea; development potentially visible from both land and sea.</p> <p>High land to south of Borth has panoramic views over Cardigan Bay and Dyfi Estuary.</p> <p>Sensitive coastal habitats at Ynyslas dune system.</p>	Presence of sea defences and groynes on beaches.
Existing development		Presence of existing village, scattered housing at Ynyslas, and caravan parks.
The visual experience	<p>Users of Wales Coast Path and Ynyslas Nature Reserve are sensitive receptors.</p> <p>Cliffs and high land to south of Borth very prominent in coastal views.</p>	Seafront development and golf course create recreational character in parts of SCA.
Tranquillity	Higher levels of tranquillity in northern part of SCA, with views of dunes and up Dyfi estuary.	<p>Impacts of existing development, roads and occasional trains.</p> <p>Busy holiday destination, with seasonal reductions in tranquillity due to numbers of visitors.</p>

SEASCAPE CHARACTER AREA 27: DYFI ESTUARY

Component LCAs (Snowdonia): Dyfi Estuary

Location and Context

This SCA is located in the south of the west coast of Snowdonia, and includes the village of Aberdyfi and the floor of the Dyfi Estuary as far as its tidal limit at Derwenlas. It is inland of SCA 26: Borth.



The Dyfi Estuary, looking inland from Ynyslas. The fishing village of Aberdyfi is on the left of the picture.

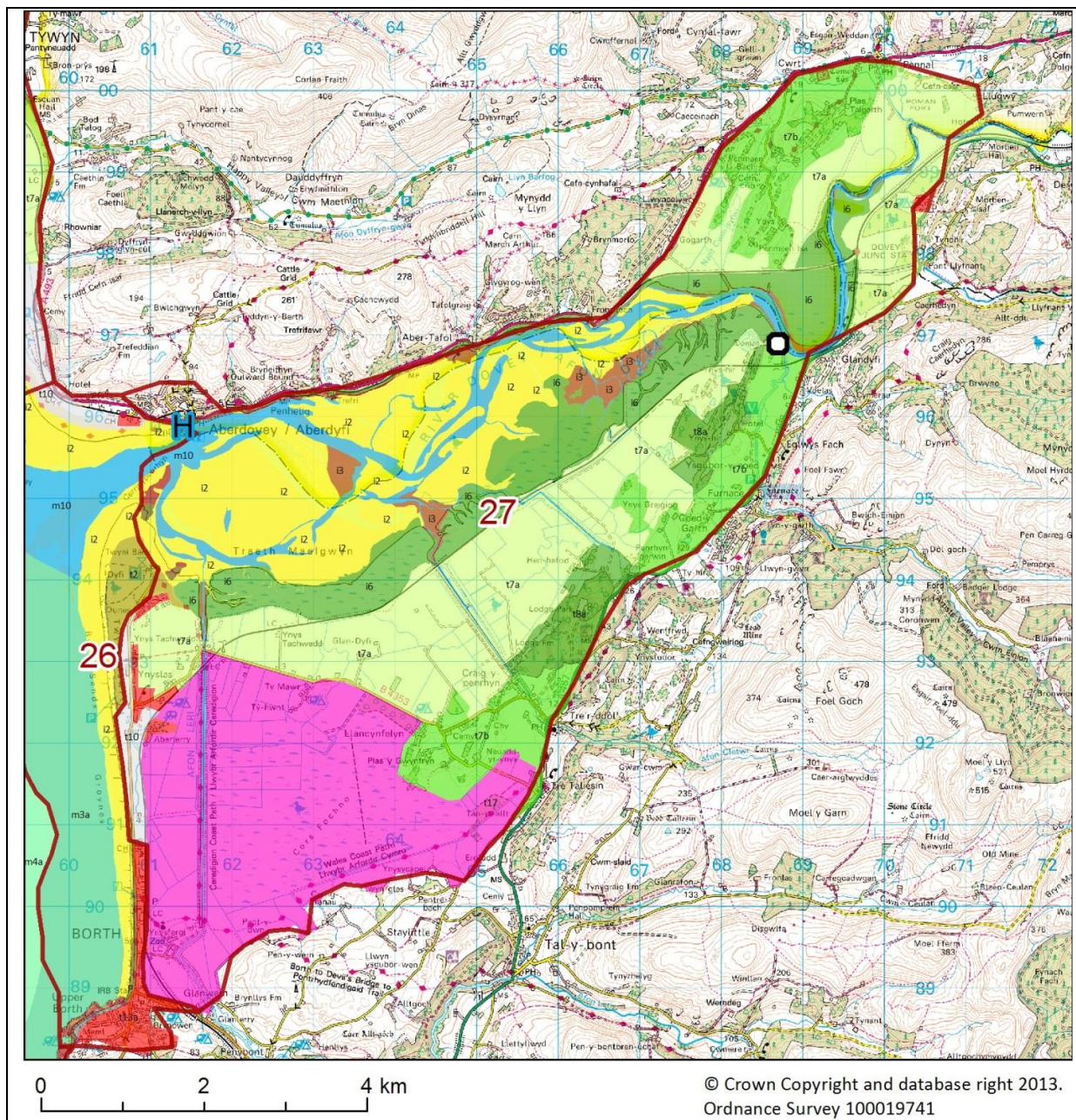
Image © Fiona Fyfe

Summary Description

The hills of southern Snowdonia and Ceredigion form a magnificent backdrop to expansive views across the estuary and create a strong sense of place. The tidal channel is lined with mudflats, salt marsh and reed beds, through which sinuous tidal creeks wind their way. This is a rich natural environment with a variety of marine, intertidal and terrestrial habitats including the raised peat mire of Borth Bog, and the brackish saltmarshes of Ynyshir. This variety, combined with dynamic coastal and estuarine processes, and fluctuating tides, results in a constantly-changing environment with a rich diversity of colours, patterns and textures. It can be appreciated from the water, on foot, and from the railway lines which follow the northern and southern edges of the estuary.

Constituent Seascape Character Types

Please refer to Appendix I for a list of constituent Seascape Character Types.



Seascape Character Types in the Dyfi Estuary SCA. Refer to the key on pages 96-99 for full descriptions.

H symbol	i3	m4a	t7a	t10
O symbol	i6	m10	t7b	t13a
i2	m3a	t2	t8a	t17

Key Characteristics

- Underlying bedrock geology of Silurian mudstone, siltstone and greywacke, overlain by glacial, alluvial and coastal deposits.
- A broad estuary with a wide valley floor, surrounded by suddenly steepening landform.
- Meandering channel of River Dyfi surrounded by expansive flats. Rivers Einion, Cletwr and Leri (latter two canalised) flow into the Dyfi within the SCA.
- Marine areas popular for sailing and fishing, with a small harbour and slipway at Aberdyfi. Terrestrial areas include extensive mud flats, salt marshes and grazing marsh.
- Diverse coastal and estuarine habitats (including raised peat bog, saltmarsh, mud, sand and reedbeds) and woodland supporting a wide variety of plant, insect and bird species.
- Famously scenic railway lines and one of the most remote railway stations in Britain at Dyfi Junction. Roman and Norman defensive sites at Domen Las, and historic drainage of flats to create grazing marsh.
- Historic harbour and former fishing village at Aberdyfi.
- Settlement within the SCA limited to the village of Aberdyfi, scattered farms and hamlets. However, other settlements (including Borth and Machynlleth) are close to the SCA and visible from it.
- Surrounding high hills of Snowdonia and Ceredigion create spectacular views and a strong sense of place.
- Varied and dynamic landscape patterns, textures and colours.



*Fishing pots at Aberdyfi quay.
Image © Fiona Fyfe*



*Reed bed and railway bridge near Dovey Junction station.
Image © Fiona Fyfe*



Salt marshes on the southern side of the estuary, as seen from the train. Image © Fiona Fyfe

Cultural Benefits and Services

Key: Bold shading = widespread; medium shading = localised; no shading = occasional

Leisure, recreation & tourism	Health	Heritage	Education	Religious & spiritual
Exploring	Relaxation	Natural	Informal	Spiritual
Watersports	Exercise	Cultural	Formal	Religious
Ecotourism				

Natural Influences and sites

- Dynamic coastal and estuarine environment resulting in a rich environment in terms of food and habitats for a variety of plant and bird species. Habitats include salt marshes, grazing marshes, mud flats, sand, woodland and the most intact raised peat bog in Europe.
- Internationally-important sites within the SCA, with designations including: Dyfi SSSI, SAC, SPA, UNESCO Biosphere Reserve, Ramsar Site and National Nature Reserve.
- Ynys hir and Dyfi oak woodlands renowned for bluebells and birdsong in spring.
- Birds include ospreys and red kites, and there is a notable starling roost at Aber.
- Climate change and changes in water levels threatening rare habitats.

Cultural Influences and sites

- Long history of defence, including Roman fort at Domen Las, which was later the site of a Norman castle.
- Early 19th Century land reclamation schemes (including canalisation of river Leri) resulted in drainage of marshes for agricultural use. Further reclamation following construction of Cambrian Coast railway line and embankment in Mid-19th Century.
- Industrial history shaped edges of the estuary and generated maritime trade. e.g. slate quarries and associated quays and anchorage on northern bank of estuary (e.g. Fron Goch); lead mines around Taliesin.
- St Michael's church (19th Century) constructed on small 'island' of higher land.
- Historic fishing harbour and village at Aberdyfi. Village also associated with shipbuilding in early-mid Nineteenth Century, centred on Penhelig.
- Former shipbuilding yard, timber mill and railway company's wharves (used during construction of Cambrian Coast railway line) at mouth of Afon Leri. Also at mouth of Afon Leri are remains of three schooners (Scheduled Monuments) abandoned after the coming of the railways and the end of the slate trade from quays at Derwenlas.
- Designed landscapes surrounding country houses of Ynyshir and Lodge Park on south side of the estuary.
- Visitor and beach access to Ynyslas, including a tradition of parking on the beach on the estuary side of the sand bar near the mouth of the estuary.
- WW2 military elements, including remains of Ynyslas firing range and pillboxes.
- Partially within Snowdonia National Park.

Perceptual Qualities

- Expansive views across the estuary are enclosed by the surrounding hills, which create an impressive and distinctive backdrop and harmonious compositions of landscape elements.
- This is generally a calm SCA, despite the dynamic processes within it. Occasional trains are moving elements through the SCA, as well as cars on peripheral roads.
- Intricate, sinuous patterns of salt marshes, and the delicate textures of reedbeds and oak woodlands form a rich foreground with contrasting colours to the surrounding hills.
- Sense of wildness and remoteness in parts due to the extensive areas of inaccessible mud and saltmarsh. Sense of tranquillity away from settlements, roads and railway lines which is enhanced by the sounds of birds.
- Surrounding hills have strong intervisibility with the estuary. They create an impressive backdrop and add to the SCA's sense of place and tranquillity. The SCA is also an important component of views from the surrounding hills, from where it can be appreciated in its coastal context.

Forces for Change

Summary	Key forces for change								
<p>Flooding (exacerbated by sea level rise) threatening the rare and internationally designated lowland raised bog at Borth Bog (Cors Fochno).</p> <p>Development pressures include proposed development on both sides of the estuary, including the expansion of Aberdyfi up the hillside. New and proposed wind turbines will impact on views and detract further from the sense of tranquillity.</p> <p>Potential upgrades to the railway line and a new Dyfi crossing will affect the character of the valley floor.</p> <p>Changes in agricultural practises and land management (including forestry plantations) will affect the visual appearance of the SCA and its setting.</p> <p>Natural estuarine processes, including silting may change the appearance of the estuary, especially at low tide.</p>	Special Qualities	Natural processes/ climate change	Visitor pressure	Marine use- commercial and fishing	Offshore energy or minerals	Development pressure/ transport routes	Land management changes	MOD use	
	Welsh Language								
	Diversity of landscapes, including coastal landscape features & expansive views								
	Rural agricultural communities and their associated features								
	Richness of habitats and biodiversity								
	Cultural heritage								
	Remoteness, tranquillity and wildness								
	Access to land and water and recreation/ enjoyment								
	Geology and geomorphological features								
	Islands								
	Archaeology and history including historic parks and gardens								
	Soil, air and water quality								
	Key	Change occurring in the area affecting the selected special quality							

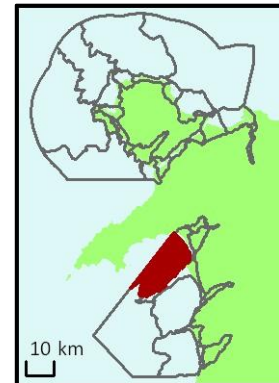
Inherent Sensitivity

Theme	Factors making the area more sensitive	Factors making the area less sensitive
Coastal geometry and landform	Low-lying landform with highly sensitive coastal wetland habitats.	Intervisibility with the sea restricted by dunes/ sandbanks.
Existing development	<p>Existing development limited to western edge of SCA; elsewhere, SCA has an undeveloped quality.</p> <p>Historic character of Aberdyfi village and harbour.</p>	Presence of existing development at Aberdyfi. Linear development at Borth and Ynyslas also visible.
The visual experience	<p>Landscape appreciated from river, roads, railway and publicly accessible conservation sites.</p> <p>Very high scenic quality with a strongly rural character and spectacular scenery.</p> <p>Setting and associated skylines contribute to character and visual qualities of SCA.</p> <p>Highly visible in views from surrounding hills.</p>	Windfarm on ridge to south of SCA impacts on views and locally reduces sensitivity in the immediate vicinity of the existing windfarm.
Tranquillity	Existing high levels of tranquillity, particularly away from main roads.	Road traffic at periphery and occasional trains.

SEASCAPE CHARACTER AREA 33 TREMADOG BAY

Location and Context

This SCA is located off the northern part of the west coast of Snowdonia, to the south of the Llyn peninsula. To the north-east is SCA 19: Criccieth to Mochras, and to the south is SCA 22: Mochras to Fairbourne, which includes Sarn Badrig extending into the sea.



Open view across Tremadog Bay as seen from Pwllheli. Image © Fiona Fyfe

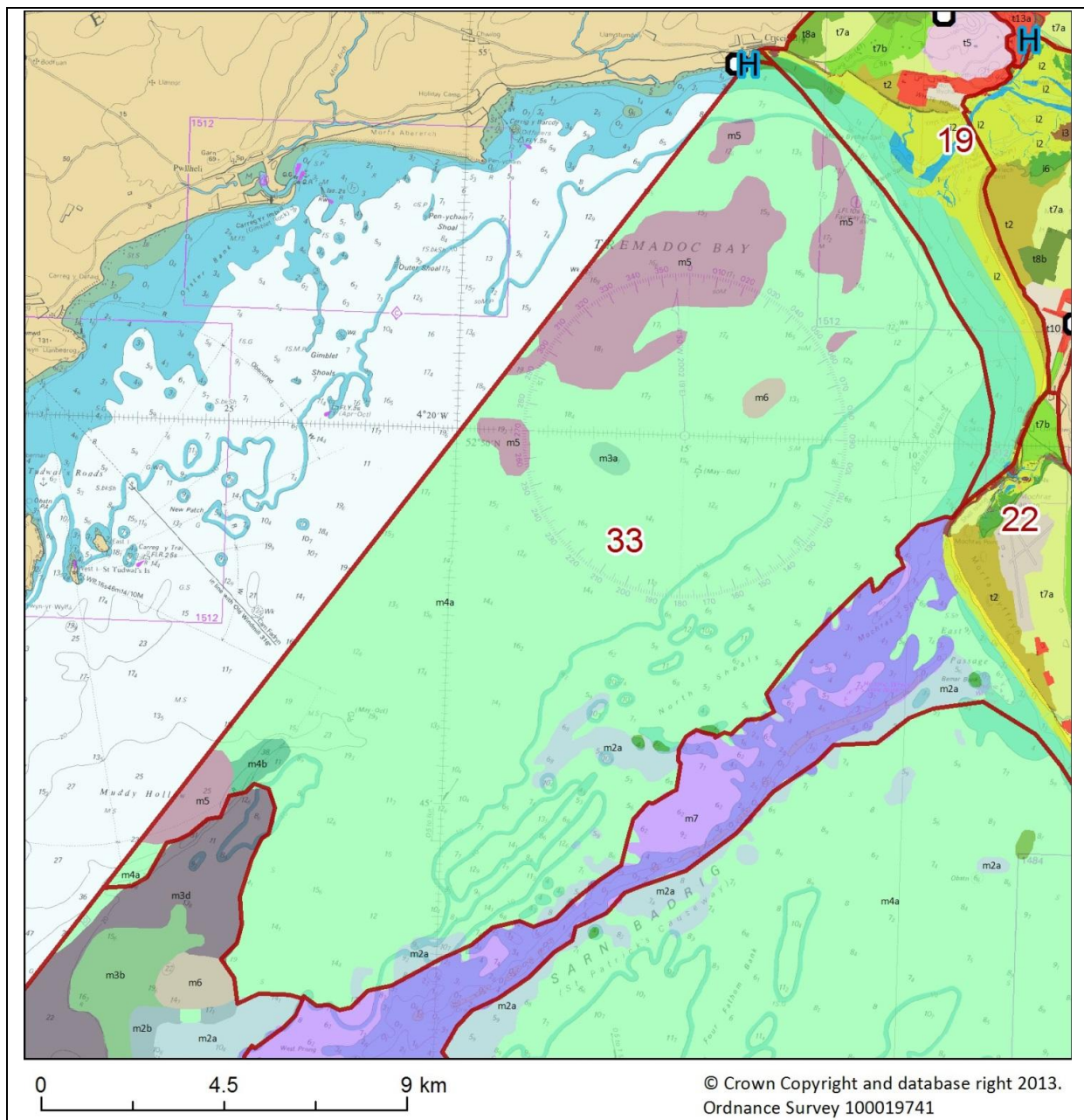
Summary Description

This Offshore SCA is characterised by its distinctive muddy seabed, and high levels of water turbidity. The water is much browner in colour than elsewhere in the Study Area; it is also warmer in temperature and supports species which often prefer warmer climates. Historically, mariners used the sediment traces picked up on sounding leads to assist with navigation and avoid Sarn Badrig. Other parts of the seabed within this SCA are of sand or mixed sediment.

The SCA is enclosed by land to the north and east, with the hills of the Llyn Peninsula and Snowdonia visible from the sea. The distinctive coastal hill of Moel-y-Gest is also a prominent landmark. Views are more open to the south and west; the direction of the prevailing wave pattern.

Constituent Seascape Character Types

Please refer to Appendix I for a list of constituent Seascape Character Types.



Seascape Character Types in Tremadog Bay SCA. Refer to the key on pages 96-99 for full descriptions.

H symbol	i6	m3b	m5	t5	t8b
O symbol	m2a	m3d	m6	t7a	t10
i2	m2b	m4a	m7	t7b	t13a
i3	m3a	m4b	t2	t8a	

Key Characteristics

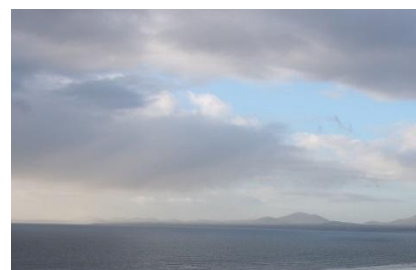
- A fairly sheltered SCA with weak to moderate tidal currents. Wave action generates little disturbance in central, muddy areas of the SCA.
- Shallow mud and sand substrate with a diverse infaunal community, historically used as a navigational aid.
- High primary productivity (phytoplankton).
- Nursery grounds for commercially important demersal fish.
- The rocky reef of Sarn Badrig forms the southern boundary to this SCA and supports a diverse reef community.
- Limited fishing activity of light otter trawling and potting.
- Recreational and fishing boats seen accessing Porthmadog harbour and Pwllheli.
- Wrecks are found along the southern SCA boundary of Sarn Badrig.
- A relatively enclosed offshore SCA with views of the Lleyn peninsula to the north and the Gwynedd coastline to the east throughout the SCA.



Photograph of seabed with rare muddy sediment conditions, as found in Tremadog Bay. Image © Bangor University



Photograph of seabed with rare muddy sediment conditions, as found in Tremadog Bay. Image © Bangor University



Tremadog Bay and the Lleyn Peninsula as seen from Harlech. Image © Fiona Fyfe

Cultural Benefits and Services

Key: Bold shading = widespread; medium shading = localised; no shading = occasional

Leisure, recreation & tourism	Health	Heritage	Education	Religious & spiritual
Watersports		Natural	Formal	Spiritual
		Cultural		

Natural Influences

- Predominantly mud and sandy sediments overlying Oligocene and Permo-Triassic sedimentary rock.
- Shallow water ranging from less than 10m in the north east to a maximum of approximately 20m.
- Weak to moderate tidal currents with peak velocities less than 1ms^{-1} . Maximum tidal range of 3.5 to 4.5m. Mean tidal range of 3.25m (mean spring range of 4.3m).
- Wave action disturbs the seabed in the shallower regions of the bay, with little disturbance in the central muddy area.
- Freshwater input from the Afon Glaslyn and Afon Dwyryd combined estuary, and smaller rivers.
- Water in the bay becomes stratified in the summer and a front forms that separates it from SCA 36: Cardigan Bay.
- Low to moderate energy at the sea bed produces mostly shallow mud and sand habitats. Stable fine sediments harbour a diverse community of burrowing infauna including polychaetes, echinoderms, anemones and bivalves.
- This SCA borders the rocky, glacially-created ridge of Sarn Badrig to the south, and the habitat along this border is a mixture of algal dominated rock and coarse sediment supporting epifauna and reef fish.
- Bottlenose dolphins are commonly sighted in this SCA.
- Nursery grounds for commercially important fish including sole and plaice.
- Area of high primary productivity (increased chlorophyll-a concentration).
- Part of the designated Pen Lleyn a'r Sarnau/ Lleyn Peninsula and the Sarnau SPA.

Cultural Influences

- Fishing activity is limited to light otter trawling and potting.
- Recreational boats are seen in the SCA, particularly close to the shore.
- Sarn Badrig lies to the south of this SCA and represents a navigational hazard. A number of wrecks associated with it including the schooner *Viligant* (1858) and the *Pride of the Sea*. The shoals were also the scene of recoveries, which were towed into local ports for repair.
- Historically, mariners used sounding leads on entering the bay, both for measuring water depth and observing changes in sediment. Historic patterns of shipping activity reflect the Admiralty advice to *use a sounding lead to follow a 'muddy hollow' to within a mile of Porthmadoc fairway buoy, and not to stray into water less than 7 fathoms in depth*. The vessel would then be guaranteed to be at least 2-3 miles from Sarn Badrig.

Perceptual Qualities

- Views of the Lleyn peninsula to the north and the Gwynedd coastline to the east give a sense of enclosure to much of the SCA.
- Waves breaking on Sarn Badrig identify the southern edge of the SCA. The flashing Cardinal Mark at the westerly end of Sarn Badrig provides orientation at night, and contributes to the night-time seascape.
- Bays of the Lleyn Peninsula to the north and northeast. Wide stretches of sandy beaches to the east backed by the mountains of Snowdonia.
- Boat activity limited to recreational boats and small fishing vessels.

Forces for Change

Summary	Key forces for change							
<p>Natural variability in marine habitats and their communities.</p> <p>Climate change may impact marine ecosystem processes and prevailing conditions.</p> <p>EU fisheries policy reform is likely to alter fishing practices which in turn impacts marine habitats.</p> <p>Fishing activity currently restricted by bylaws.</p> <p>Seasonal variation in tourism and recreational boats accessing Porthmadog and Pwllheli.</p> <p>Natural processes impact on marine archaeology such as wrecks through corrosion or covering by sediment.</p>	Special Qualities	Natural processes/ climate change	Visitor pressure	Marine use- commercial and fishing	Offshore energy or minerals	Development pressure/ transport routes	Land management changes	MOD use
	Welsh Language							
	Diversity of landscapes, including coastal landscape features & expansive views							
	Rural agricultural communities and their associated features							
	Richness of habitats and biodiversity							
	Cultural heritage							
	Remoteness, tranquillity and wildness							
	Access to land and water and recreation/ enjoyment							
	Geology and geomorphological features							
	Islands							
	Archaeology and history including historic parks and gardens							
	Soil, air and water quality							
	Key		Change occurring in the area affecting the selected special quality					

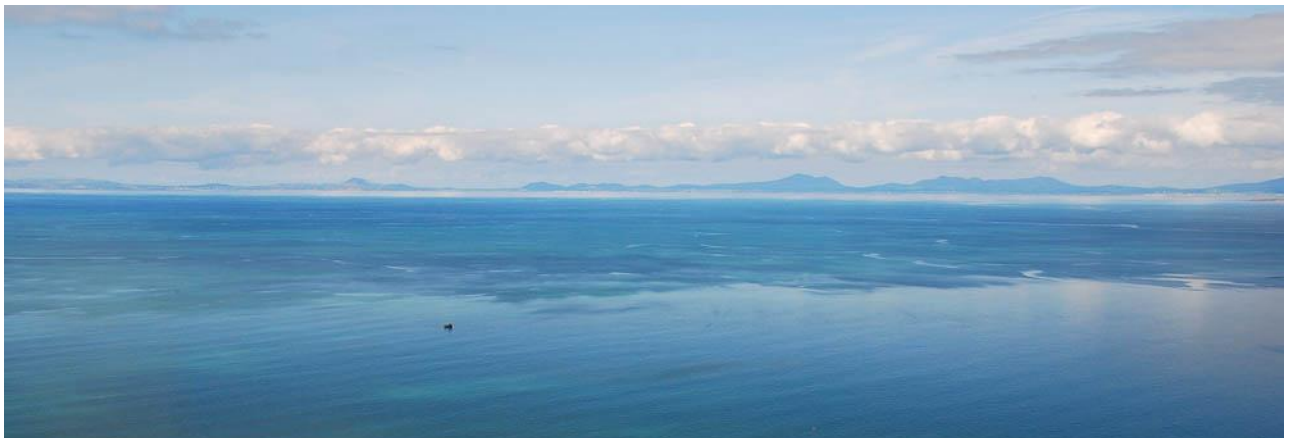
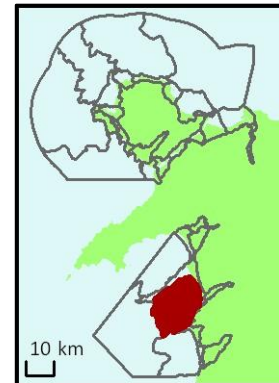
Inherent Sensitivity

Theme	Factors making the area more sensitive	Factors making the area less sensitive
Coastal geometry and landform	An embayment, with views to/ from the Lley Peninsula and Snowdonia. Warm, turbid waters support unusual marine flora and fauna.	
Existing development		
The visual experience	Hills of Lley Peninsula landmarks to north. SCA visible from popular coastal locations.	
Tranquillity	Few large boats due to shallowness of water and proximity to land.	

SEASCAPE CHARACTER AREA 34: BARMOUTH BAY

Location and Context

This Offshore SCA is located towards the south of the Study Area, between Sarn Badrig to the north and Sarn-y-bwch to the south. To the north and east is SCA 22: Mochras to Fairbourne, and to the south-east is SCA 24: Fairbourne to Tonfanau. To the west is SCA 36: Cardigan Bay.



*Looking across Barmouth Bay from above Llwyngwrl. The Lley Peninsula is visible on the horizon.
Image © John Briggs*

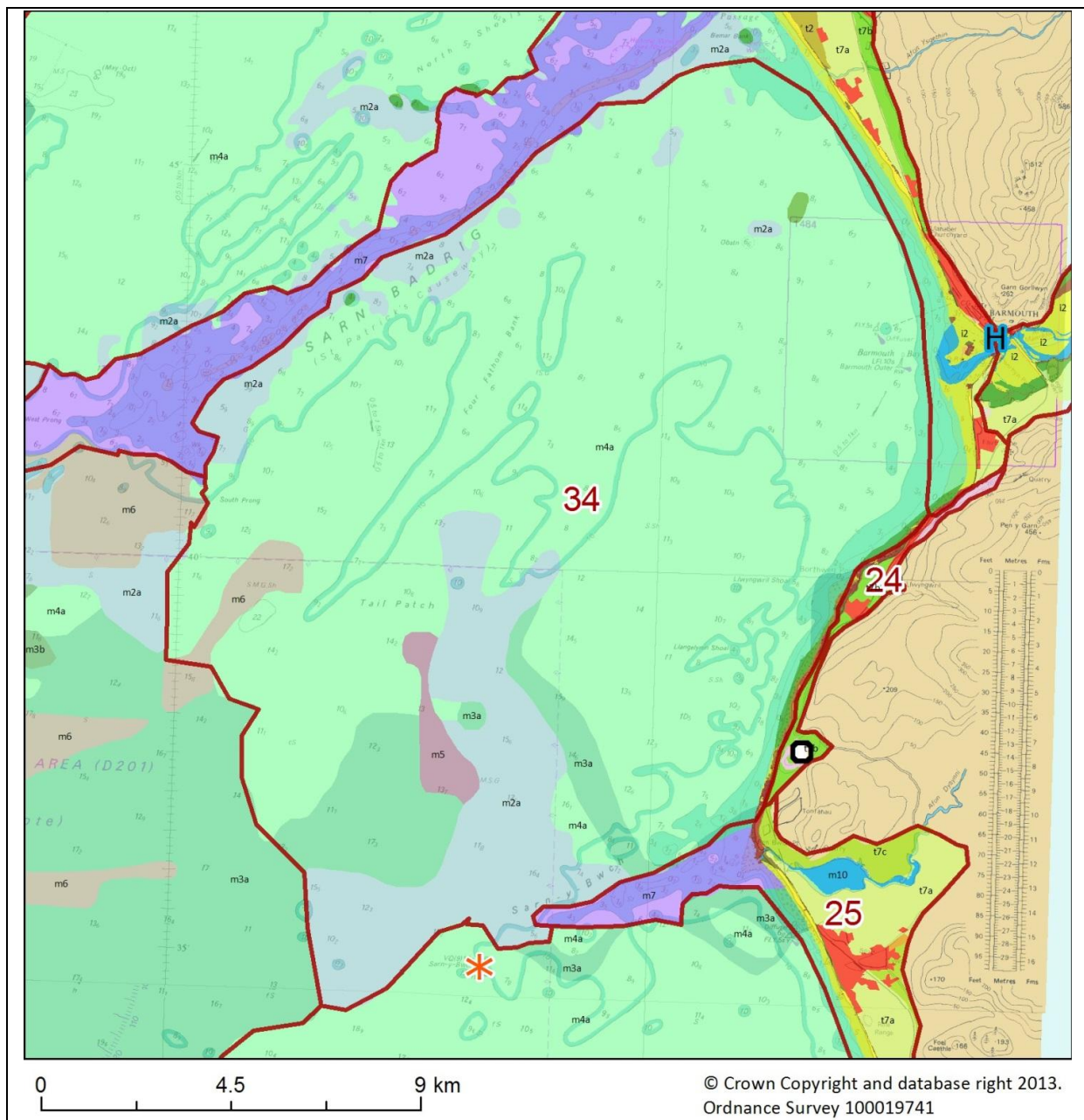
Summary Description

The seabed of this SCA comprises shallow sand. Towards the west the seabed sediment becomes courser, but remains shallow. It is a popular area for recreational sailing, particularly from Barmouth Harbour, so in summer the SCA can have a fairly busy, active feel.

The low-lying coastal plain quickly disappears from view away from shore. However, the high hills of Snowdonia and the Lley peninsula remain visible. The SCA is between the two 'ship traps' of Sarn Badrig and Sarn-y-bwch and contains numerous wrecks. Flashing Cardinal Marks (buoys) on the ends of the sarnau are important features visible from within this SCA and give it a strong sense of place, particularly at night.

Constituent Seascape Character Types

Please refer to Appendix I for a list of constituent Seascape Character Types.

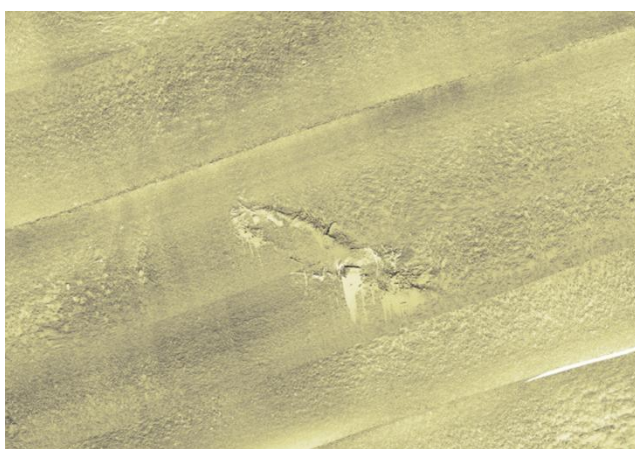


Seascape Character Types in Barmouth Bay SCA. Refer to the key on pages 96-99 for full descriptions.

H symbol	i2	m3b	m6	t2	t7c
O symbol	m2a	m4a	m7	t7a	t13a
Star symbol	m3a	m5	m10	t7b	

Key Characteristics

- Shallow, generally well-sorted sediment dominates the SCA.
- Wave action disturbs the sediment.
- Rocky reef habitat found along the northern edge of the SCA (Sarn Badrig).
- Rare carbonate reefs formed by seeping methane support reef fish and invertebrate communities.
- Feeding grounds for sea birds.
- A rich environment, including cetaceans, nursery grounds for demersal fish, and feeding grounds for sea birds.
- Wrecks are found along Sarn Badrig to the north of the SCA. Wrecks within this SCA include the Protected Wrecks of the *Diamond* and the 'Tal y Bont wreck'.
- Flashing Cardinal Marks (bouys) are seen at the end of each Sarn.
- Fishing activity of potting, netting and light trawling.
- Three distinct coastline units are visible of, comprising a long, low sandy beach, steep cliffs and high mountains inland. There are also glimpsed views of the Mawddach Estuary.



Wreck of the 'Diamond'. Image © CADW Author: Wessex archaeology.

Cultural Benefits and Services

Key: Bold shading = widespread; medium shading = localised; no shading = occasional

Leisure, recreation & tourism	Health	Heritage	Education	Religious & spiritual
Watersports		Natural	Formal	Spiritual
		Cultural		

Natural Influences

- Part of the designated Pen Llyn a`r Sarnau/ Llyn Peninsula and the Sarnau SAC.
- Thin layer of quaternary sand and gravel overlying Oligocene, Permo-Triassic and Jurassic sedimentary rock.
- Shallow, flat seabed with a maximum depth of approximately 20m.
- Weak to moderate tidal currents with peak spring velocities less than 0.75ms^{-1} . Maximum tidal range of 4-5m. Waves disturb the shallow seabed in this SCA.
- Well lit, clean, wave disturbed mobile sand and sandy gravel habitat. A community of infauna adapted to regular disturbance and unstable sediment. Infralittoral coarse sediment and rock habitats are found along the north and south borders of the SCA that follow the edges of the Sarnau.
- To the north west of Barmouth there is a rare habitat of carbonate reefs created by seeping methane gas called Holden's Reef. The complex covers a total area of approximately $40,000\text{m}^2$. The reef structure creates a complex habitat with a diverse community including sponges, bryozoans, brittle stars, hiatella (a rock-boring bivalve), algal turf and filamentous red and brown algae. Reef fish community comprising mainly wrasse, gadids (cod-like fish) and gobies.
- Sea birds feed in the shallow waters.
- Cardigan Bay's resident population of bottlenose dolphin can be sighted in this SCA.
- Nursery grounds for commercially important fish including sole and plaice.
- Part of the designated Pen Llyn a`r Sarnau/ Llyn Peninsula and the Sarnau SPA.

Cultural Influences

- Flashing Cardinal Marks at the end of each Sarn. Wrecks are found along the Sarnau to the north and south of the SCA.
- Sea uses include fishing with light otter trawl, boat based static nets and potting for lobster and crab.
- Recreational boats access Barmouth harbour.
- Two Protected Wreck Sites off Sarn Badrig: the 'Tal y Bont wreck' (a well-armed merchant vessel with a cargo of Carrera marble from Italy, sunk 1702) and the *Diamond* (a Nineteenth Century ship built of wood with copper sheathing).
- Sarnau described as a 'ship trap' in the 1870 Admiralty Sailing Directions: *A stranger bound for Barmouth is recommended not to pass within the outer end of the Sarn after dark...*
- Traditional anchorage outside the Barmouth Bar, where vessels would await a pilot before entering the harbour.
- Military losses in the SCA include one of the first British jet fighters, downed in 1961 on the approach to Llanbedr airfield, and a German Junkers 88 bomber which went into the sea off Barmouth in 1941.

Perceptual Qualities

- Looking landward two contrasting coastlines of a long sandy beach (SCA 22) and steep rocky cliffs (SCA 24) are separated by the Mawddach estuary (SCA 23).
- Much of the SCA has an open feel.
- At low tide in the north of the SCA the drying sections of Sarn Badrig present an unusual offshore feature.
- This SCA can experience considerable wave energy with a south-westerly swell.
- At night, flashing Cardinal Marks at the ends of the sarnau provide orientation points and contribute to the night-time seascape.

Forces for Change

Summary	Key forces for change							
<p>Natural variability in marine habitats and their communities.</p> <p>Climate change may impact marine ecosystem processes and prevailing conditions.</p> <p>EU fisheries policy reform is likely to alter fishing practices which in turn impacts marine habitats.</p> <p>Seasonal variation in tourism and recreational boating.</p> <p>Natural processes impact on marine archaeology such as wrecks through corrosion or covering by sediment.</p> <p>Potential for offshore wind farm development.</p> <p>Potential for gas and oil exploration.</p> <p>MOD firing practice area in the adjacent SCA 34 Cardigan Bay impacting on the tranquillity of the SCA.</p> <p>Potential threat to landward skylines from onshore wind farm development.</p>	Special Qualities	Natural processes/ climate change	Visitor pressure	Marine use- commercial and fishing	Offshore energy or minerals	Development pressure/ transport routes	Land management changes	MOD use
	Welsh Language							
	Diversity of landscapes, including coastal landscape features & expansive views							
	Rural agricultural communities and their associated features							
	Richness of habitats and biodiversity							
	Cultural heritage							
	Remoteness, tranquillity and wildness							
	Access to land and water and recreation/ enjoyment							
	Geology and geomorphological features							
	Islands							
	Archaeology and history including historic parks and gardens							
	Soil, air and water quality							
	Key		Change occurring in the area affecting the selected special quality					

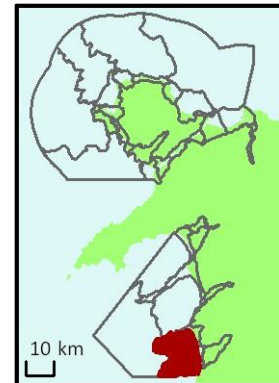
Inherent Sensitivity

Theme	Factors making the area more sensitive	Factors making the area less sensitive
Coastal geometry and landform	Close to shore, particularly adjacent to SCA 22, and therefore highly visible in views from the coast. Conditions create a rich and unusual marine environment.	
Existing development	Use for fishing.	
The visual experience	Visible in views from high land onshore, and from popular coastal locations.	
Tranquillity	Shallow bathymetry and proximity to shore mean few large ships in this SCA.	

SEASCAPE CHARACTER AREA 35: ABERDYFI BAY

Location and Context

This Offshore SCA is located in the south of the Study Area, and comprises the marine area to the west of Borth and Tywyn. It is separated from SCA 34: Barmouth Bay by Sarn-y-bwch. The southern boundary of the SCA is the edge of the Study Area. To the east are SCA 25: Tywyn and sarn-ybwch, and SCA 26: Borth. To the west is SCA 36: Cardigan Bay.



Open view across Aberdyfi Bay from Borth. Image © Fiona Fyfe

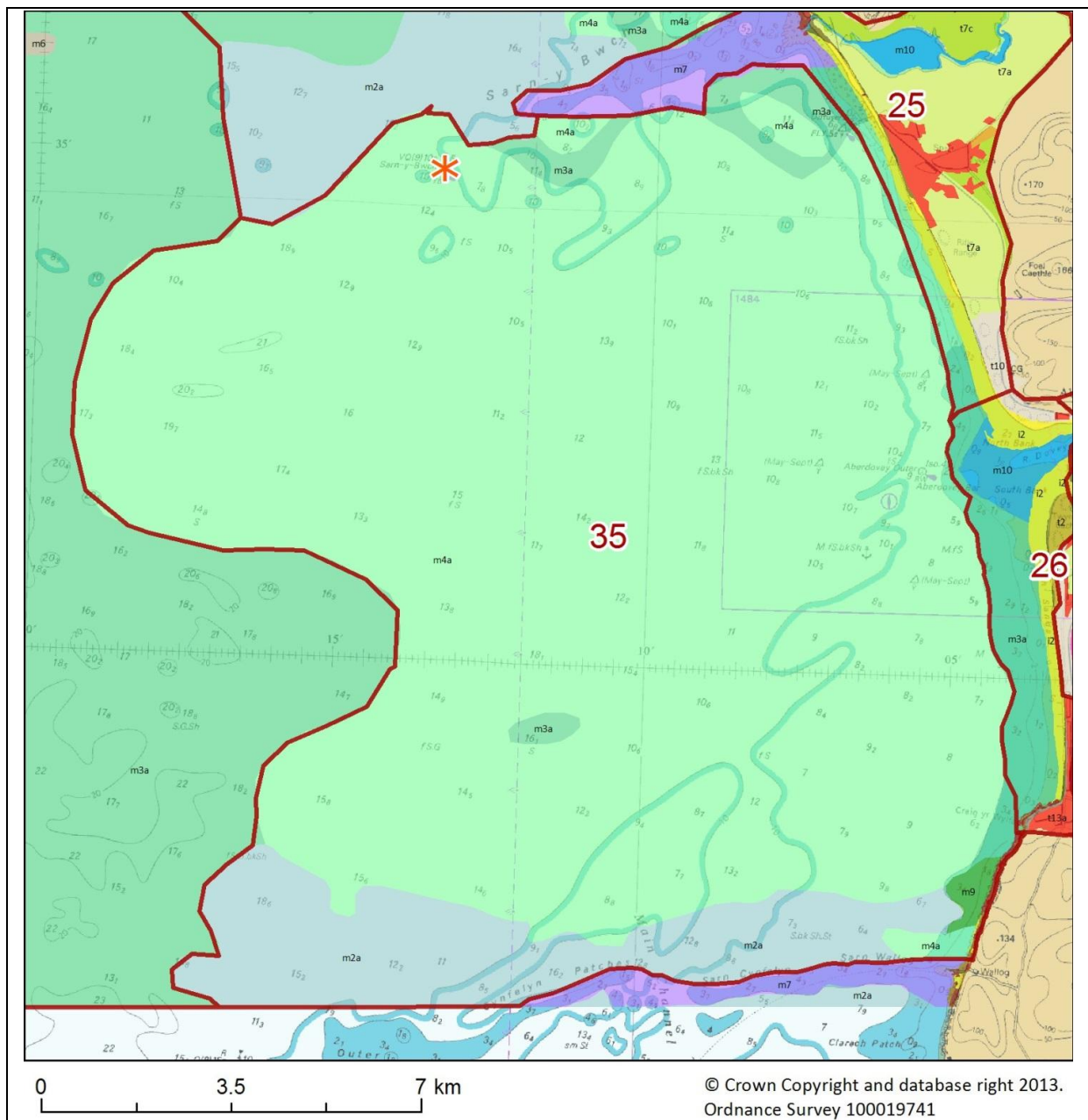
Summary Description

Shallow sand dominates the seabed of this SCA. Towards the west the seabed sediment becomes coarser, but remains shallow. Westerly waves travel across the SCA before breaking on the beaches in SCA 25 and 26.

The low-lying coastal plain quickly disappears from view away from shore. However, the high hills of Snowdonia can still be seen on the eastern horizon. The hills of the Lleyn Peninsula appear as 'islands' on the northern horizon. Flashing Cardinal Marks (buoys) on the ends of the sarnau are important features visible from within this SCA, particularly at night. The SCA is used by recreational craft and small fishing boats, but is too shallow for larger commercial shipping.

Constituent Seascape Character Types

Please refer to Appendix I for a list of constituent Seascape Character Types.



Seascape Character Types in Aberdyfi Bay SCA. Refer to the key on pages 96-99 for full descriptions.

Star symbol	m3a	m7	t2	t13a
i2	m4a	m9	t7a	
m2a	m6	m10	t7c	

Key Characteristics

- Shallow, mobile sand substrate, regularly disturbed by wave action.
- Weak to moderate tidal currents.
- Infaunal community resistant to disturbance.
- Rocky habitats found along the Sarnau that form the north and south boundaries of the SCA.
- Spawning and nursery grounds for commercially important demersal fish.
- Cetaceans such as bottlenose dolphins can be sighted.
- Fishing activity includes light trawling and potting.
- Historic associations with herring fishing, and the export of lead ore.



*View from Aberdyfi looking out to sea
Image © Fiona Fyfe*

Cultural Benefits and Services

Key: Bold shading = widespread; medium shading = localised; no shading = occasional

Leisure, recreation & tourism	Health	Heritage	Education	Religious & spiritual
Watersports		Natural	Formal	Spiritual
		Cultural		

Natural Influences

- Part of the designated site Pen Lleyl a'r Sarnau/ Lleyl Peninsula and the Sarnau SAC.
- Thin quaternary sand overlying Jurassic and undivided sedimentary rock.
- A shallow and flat area of seabed with a depth of 10 – 20m below chart datum.
- Weak to moderate tidal currents with peak spring velocities of less than 0.5 ms^{-1} . Maximum tidal range is 4-5m. Wave action disturbs the sediment throughout this SCA.
- Mainly infralittoral mobile sand with an infaunal community resistant to disturbance. Small patches of infralittoral coarse and mixed sediment are also present.
- The shallow sediment is used as a feeding ground for sea birds.
- Cardigan Bay's resident population of bottlenose dolphin are commonly sighted in this SCA.
- Plaice spawn in the area from December to March.
- Nursery grounds for commercially important fish including sole and plaice.
- Part of the designated Pen Lleyl a'r Sarnau/ Lleyl Peninsula and the Sarnau SPA.

Cultural Influences

- Fishing activity includes light otter trawling, boat based static nets and potting for lobster, crab and prawn.
- Recreational boating takes place in this SCA, including coastal rowing.
- Flashing Cardinal Marks (buoys) seen on the end of each sarn.
- Historic association with a herring fishery dating back to at least Elizabethan times. The small open-decked vessels could be drawn up on the beach at Upper Borth if their masters chose not to bring them inside Aberdyfi Bar.
- Borth and the Dyfi mentioned as gathering places for a fishing fleet in the *Inventories of ships and mariners* implemented by Elizabeth I's privy council between 1555 and 1558.
- Historically, an important maritime trade passed across this SCA: In 1830s, average annual exports from Aberdyfi were 500 tons of bark; 40,000ft of oak timber; 150,000 ft of oak poles; 100 tons of lead ore, and 1500 tons of slate. Imports included 5000 tons of grain; 1000 tons of coal; 500 tons of culm, 2000 tons of limestone, and groceries and other ships goods.
- Navigation approaching the mouth of the Dyfi relied on sightings of Pendinas in relation to Craig Las, in order to clear the Aberdyfi Bar. A pole beacon at Moel Ynys, Ynyslas provided a leading mark in the Eighteenth Century.
- Wreck of Avro Anson aircraft which crashed into the sea off Aberdyfi in 1941.

Perceptual Qualities

- Views of an open coastline dominated by a low lying beach and backed by a coastal plain, with higher hills inland.
- Glimpsed views into the Dyfi Estuary.
- Boat activity consists of recreational boats and small fishing vessels.
- This SCA can receive considerable wave action, particularly in prevailing south-westerly conditions, creating a dramatic quality.
- Flashing Cardinal Marks can be seen at the end of each sarn, providing orientation and creating a strong sense of place at night.

Forces for Change

Summary	Key forces for change							
	Special Qualities	Natural processes/ climate change	Visitor pressure	Marine use- commercial and fishing	Offshore energy or minerals	Development pressure/ transport routes	Land management changes	MOD use
Natural variability in marine habitats and their communities.								
Climate change may impact marine ecosystem processes and prevailing conditions.								
EU fisheries policy reform is likely to alter fishing practices which in turn impacts marine habitats.	Welsh Language							
Seasonal variation in tourism and recreational boating.	Diversity of landscapes, including coastal landscape features & expansive views							
Natural processes impact on marine archaeology such as wrecks through corrosion or covering by sediment.	Rural agricultural communities and their associated features							
Potential for offshore wind farm development.	Richness of habitats and biodiversity							
Potential for gas and oil exploration.	Cultural heritage							
MOD firing practice area in the adjacent SCA 34 Cardigan Bay impacting on the tranquillity of the SCA.	Remoteness, tranquillity and wildness							
Potential threat to landward skylines from onshore wind farm development.	Access to land and water and recreation/ enjoyment							
	Geology and geomorphological features							
	Islands							
	Archaeology and history including historic parks and gardens							
	Soil, air and water quality							
	Key	Change occurring in the area affecting the selected special quality						

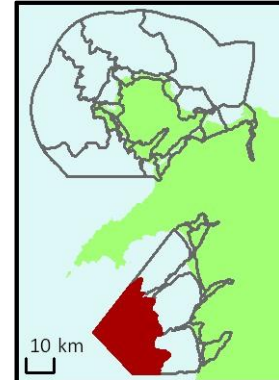
Inherent Sensitivity

Theme	Factors making the area more sensitive	Factors making the area less sensitive
Coastal geometry and landform	Open views to/from this SCA.	
Existing development	Use for fishing.	
The visual experience	Visible in views from high land onshore, and from popular coastal locations.	
Tranquillity	Shallow bathymetry and proximity to shore mean few large ships in this SCA.	

SEASCAPE CHARACTER AREA 36: CARDIGAN BAY

Location and Context

This Offshore SCA is located in the south-west of the study area. It is in the open sea to the west of SCA 34: Barmouth Bay and SCA 35: Aberdyfi Bay.



Sunset over Cardigan Bay, as seen from Aberystwyth. Image © Fiona Fyfe

Summary Description

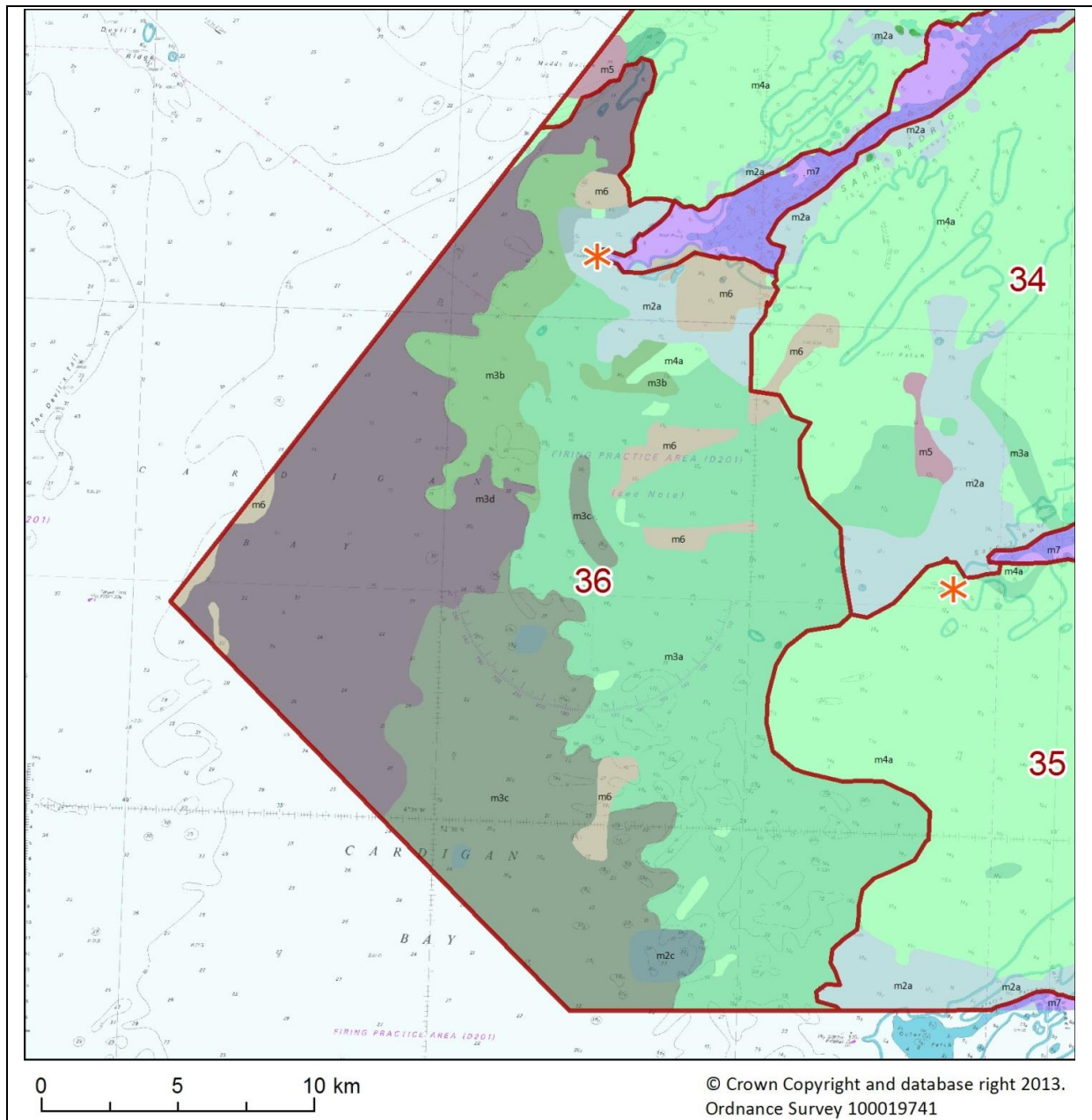
The seabed of this SCA is dominated by coarse sediment. It is generally shallow in depth, with variable high/ moderate energy mainly due to wave action.

From this distance out to sea, features on the coast are difficult to distinguish, but the high hills of Snowdonia are visible on the eastern horizon, and the flashing Cardinal Marks on the ends of the sarnau can also be seen. Large ships using St Georges channel are visible to the west. This SCA is used for scallop dredging, light otter trawling and potting.

The area is in ongoing military use and retains a military character. It is used for various applications including land and sea-launched missile firings.

Constituent Seascape Character Types

Please refer to Appendix I for a list of constituent Seascape Character Types.



Seascape Character Types in Cardigan Bay SCA. Refer to the key on pages 96-99 for full descriptions.

Star symbol	m3a	m3d	m6
m2a	m3b	m4a	m7
m2c	m3c	m5	

Key Characteristics

- A mixture of sediment types in 20-30m of water.
- Regular disturbance of the seabed sediment by wave action.
- Robust infauna that is adapted to mobile coarse sediment.
- Cetaceans are regularly sighted including bottlenose dolphin.
- Demersal fish spawning grounds, and important scallop fishing grounds.
- Commercial shipping can be seen to the west. Flashing Cardinal Marks (buoys) at the ends of the sarnau can also be seen, especially at night.
- Remote open water with very limited views of land.
- Ongoing military use, including missile testing.

Cultural Benefits and Services

Key: Bold shading = widespread; medium shading = localised; no shading = occasional

Leisure, recreation & tourism	Health	Heritage	Education	Religious & spiritual
Watersports		Natural	Formal	Spiritual
		Cultural		

Natural Influences

- Quaternary sand, sandy gravel and mixed sediment overlying Jurassic and Permo-Triassic sedimentary rock.
- Relatively shallow and flat sea bed of 20-30m below chart datum in depth. Active bedforms including sand waves and sand ripples are present.
- Moderate tidal currents of up to 1ms^{-1} peak spring velocity. Maximum tidal range of approximately 4m. Exposed to south westerly waves that disturb the shallow sediment.
- Mostly infralittoral mobile coarse sediments with robust infauna. Patches of cobble reefs may also be present in places with epifauna including hydroids, soft corals and bryozoans such as ross coral.
- Cetaceans can be sighted in this SCA.
- Plaice and whiting spawning grounds.

Cultural Influences

- Scallop fishing grounds.
- Fishing activity includes scallop dredging, light otter trawling and potting (for lobster, crab and whelk).
- MOD firing practice and testing area, encompassing 6500sq. km. of seascape defined as sanitized airspace.
- Reports of downed WW2 aircraft, including a Vickers Wellington Bomber.
- Ongoing military use has resulted in a 'hole' in the wrecks data. However, there are several reported sinkings in this area, including the very early steamship the *Lee* in 1840, whilst on passage from Cork to Liverpool.

Perceptual Qualities

- Open water, with land barely visible. This creates a sense of disorientation, and also a sense of remoteness.
- Wave energy can be considerable, creating a dramatic and wild quality.
- Occasional MOD use reduces tranquillity.
- Flashing Cardinal Marks at the ends of the sarnau visible at night, providing orientation and a sense of place.

Forces for Change

Summary	Key forces for change							
	Special Qualities	Natural processes/ climate change	Visitor pressure	Marine use- commercial and fishing	Offshore energy or minerals	Development pressure/ transport routes	Land management changes	MOD use
Natural variability in marine habitats and their communities.								
Climate change may impact on marine ecosystem processes and prevailing conditions.								
EU fisheries policy reform is likely to alter fishing practices which in turn impacts on marine habitats.	Welsh Language							
Natural processes impact on marine archaeology such as wrecks, through corrosion or covering by sediment.	Diversity of landscapes, including coastal landscape features & expansive views							
Potential for offshore wind farm development.	Rural agricultural communities and their associated features							
Potential for gas and oil exploration.	Richness of habitats and biodiversity							
MOD firing practice area impacting on tranquillity of the SCA.	Cultural heritage							
Potential threat to landward skylines from onshore wind farm development.	Remoteness, tranquillity and wildness							
	Access to land and water and recreation/ enjoyment							
	Geology and geomorphological features							
	Islands							
	Archaeology and history including historic parks and gardens							
	Soil, air and water quality							
	Key		Change occurring in the area affecting the selected special quality					

Inherent Sensitivity

Theme	Factors making the area more sensitive	Factors making the area less sensitive
Coastal geometry and landform		
Existing development	Use as fishing grounds.	
The visual experience		From this distance offshore, little intervisibility between coast and sea surface, leading to sense of remoteness.
Tranquillity	High levels of tranquillity, as few pleasure craft at this distance offshore.	Presence of larger vessels to west reduces sense of tranquillity, as does occasional military use.

Bibliography

- Eryri Local Development Plan 2007 - 2022. Snowdonia National Park Authority
- Snowdonia National Park Management Plan 2010-2015 - Snowdonia National Park Authority

APPENDIX 1: RELEVANT ELDP POLICIES

Strategic Policy A: National Park Purposes and Sustainable Development (A)

The Local Development Plan seeks to ensure that new development promotes the principles of sustainable development in ways which further National Park purposes and duty whilst conserving and enhancing the National Park's 'Special Qualities'. Proposals which compromise National Park purposes will be refused. The following considerations should be taken into account to help deliver sustainable development in Snowdonia:

- i. Give the highest priority to the protection and enhancement of the natural beauty, wildlife and cultural heritage.
- ii. Promote opportunities for the understanding and enjoyment of the 'Special Qualities' of the area by the public.
- iii. Safeguarding and improvement of the health, safety, economic and social well being of local communities.
- iv. Conserve and enhance the characteristic biodiversity of Snowdonia.
- v. Respecting and enhancing the historic environment.
- vi. Efficient use of land and infrastructure.
- vii. Conservation of the quality and quantity of natural resources including water, air, soil and geodiversity.
- viii. Encourage the sustainable development of settlements in ways which respect their character and function within the settlement strategy.
- ix. Enablement of inclusive access to services, facilities and employment whilst minimising the environmental impact of transport.
- x. Provision of good quality sustainable design.
- xi. Promotion of development which meets the housing needs of local communities through a mix of dwelling types, and tenures predominantly through affordable housing to meet local need.
- xii. Encouragement of developments that conserve, promote and enhance the linguistic heritage of Snowdonia's communities.
- xiii. Securing development of previously developed land (brownfield land) where that land is in a sustainable location in preference to greenfield sites.
- xiv. Preventing inappropriate development in areas which are at risk from flooding or which contribute to the risk of flooding.

Strategic Policy D: Natural Environment (D)

The natural resources, biodiversity, geodiversity and 'Special Qualities' of the Snowdonia National Park will be protected from inappropriate development. Where development is deemed acceptable developers will be expected to ensure that the natural environment is protected and enhanced.

Proposals should not adversely affect the National Park's biodiversity resources including designated sites from an international through to a local level, as well as wider biodiversity resources e.g. habitats and species outside designated sites.

Development proposals which are likely to adversely affect the integrity of European designated sites (either alone or in combination with other plans of projects) will not be permitted unless the requirements of the Conservation of Habitats and Species Regulations 2010 have been fulfilled and hence the following criteria can be met:

- i. There is no alternative solution.
- ii. There are imperative reasons of over-riding public interest for the development.

The following requirements will apply to development affecting nationally and locally designated sites:

- iii. The location, design and construction of the development is such that damage to nature conservation features are mitigated, and opportunities for nature conservation gain are taken.
- iv. Compensatory measures are provided if necessary.
- v. The remaining nature conservation features are protected and enhanced and provision is made for their management.

Development will only be permitted within the Undeveloped Coast where it can be demonstrated that a coastal location is essential. Development which harms the unspoilt landscape character or wildlife habitats will not be permitted.

Development Policy 2: Development and the Landscape (2)

The scale and design of new development, including its setting and landscaping should respect and conserve the character of the landscape. Unacceptable impacts on the landscape will be resisted and particular regard will be had to the protection of:

- i. Section 3 areas of natural beauty¹.
- ii. Undeveloped coast.
- iii. Panoramas visible from significant viewpoints.
- iv. Landscape character areas based on LANDMAP and as defined in the Landscapes of Eryri Supplementary Planning Guidance.

¹ As defined under section 3 of the Wildlife and Countryside Amendment Act 1985.