CORNWALL AND ISLES OF SCILLY LANDSCAPE CHARACTER STUDY

Overview and Technical Report

May 2007

DIACONO ASSOCIATES

WHITE consultants

Forward

The Cornwall and Isles of Scilly Landscape Character Study 2005-2007 has been developed as a joint project between the local authorities in Cornwall, the National Trust and the AONB units of Cornwall, the Tamar Valley and the Isles of Scilly supported by the Countryside Agency (now Natural England).

Diacono Associates in conjunction with White Consultants were appointed in 2005 to undertake a Landscape Character Assessment for Cornwall and the Isles of Scilly. This updates the Cornwall Landscape Assessment published in 1994.

This report sets out the methodology by which Landscape Character Areas have been identified, based on Landscape Description Units, and brings together the main findings of the study including the initial consultation stages.

Part of the study included an assessment of landscape sensitivity at the level of the Landscape Description Units. This aspect of the study is however to be the subject of further investigation and the findings set out in this report have not therefore been endorsed at this stage by the participating organisations.

This report will form the basis of a number of areas of further research and investigation including landscape sensitivity, and seascape assessment as well as the further consultation on the draft Landscape Character Area Descriptions.

Cornwall and Isles of Scilly Landscape Character Study 2005-2007
Project Management Group
Oct 2007

CORNWALL AND THE ISLES OF SCILLY LANDSCAPE CHARACTER ASSESSMENT

Overview and Technical Report

Final Report

May 2007

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1.0 INTRODUCTION

1.1 Diacono Associates [as coordinators of the Living Landscapes Project] in conjunction with White Consultants were appointed in May 2005 by Cornwall County Council to undertake a landscape character assessment for Cornwall and the Isles of Scilly.

1.2 The objectives of the project are:

- Provision of an up to date holistic description of Cornwall and the Isles of Scilly and its sensitivity to change in a format that is accessible and user friendly.
- Development of planning policy guidance for emerging local development documents including, where appropriate, supplementary planning documents.
- Development of planning and land management guidance, based on the conservation, restoration, enhancement or renewal of the character of Cornwall and the Isles of Scilly.
- Engagement of stakeholders in the development of these areas of work.

1.3 Spatial information is held in the database and much of this can be made available on the website. Reports on various aspects can be prepared as necessary by the relevant authorities. The relationship between the various sources of information is shown in Table 1 Landscape Assessment Information Structure.

1.4 Four hardcopy reports have been prepared as part of this study:

- Overview and technical report [this report]
- Landscape Policy report [advice on linkage of landscape character to policy in District Local Development Documents]
- Landscape Character Supplementary Planning Document/Best Practice Guidance [gateway document linking policy with landscape character assessment primarily for use in development control]
- Consultation Report

1.5 The main text brings together the main findings of the study. The appendices deal with background and detailed information. The character areas are overviewed in Chapter 2 and sensitivity considered in Chapter 3; the consultation process is briefly described in Chapter 4 and the pressures for change and their key effects in Chapter 5. The vision and objectives for Cornwall's and the Isles of Scilly's landscapes are set out in Chapter 6. Appendix 1 sets out the method for the project with a glossary of terms in Appendix 2; Appendix 3 sets out the landscape sensitivity around the main settlements and Appendix 4 sets out the Consultation report [to be included].

2.0 CHARACTER AREAS AND LANDSCAPE DESCRIPTION UNITS OVERVIEW

2.1 The county has been subject to various levels of landscape assessment in the past. At the national level seven joint character areas [JCAs] [also known as regional character areas] have been defined **[**see **Figure 1]**.

- Bodmin Moor
- Carnmenellis
- Cornish Killas
- Hensbarrow
- The Culm

- The Lizard
- West Penwith

2.2 In 1994 the previous Cornwall Landscape Character Assessment was carried out and defined around 28 main character areas. This was based on a landscape assessment method current at the time. These areas are shown in relation to the JCAs in **Figure 2.**

2.3 Various assessments involving landscape have been carried out by districts including urban edge studies by Carrick District Council.

2.4 For the Isles of Scilly one joint character area was defined [JCA158]. A further landscape assessment was carried out in 2002 which broke down the landscapes of the islands into detailed landscape types [see **Figure 3** (to be inserted)**].**

2.5 The method for this project is based on the derivation of Landscape Description Units [LDUs] at a finer grain of analysis and amalgamating these into character areas [CAs]. This has been carried out for the county and Isles of Scilly and is explained in detail in **Appendix 1.** In this revised assessment there are 335 non-urban Landscape Description Units [LDUs] identified in Cornwall and 40 Landscape Character Areas [CAs]. Each of the five inhabited islands in the Isles of Scilly is a character area with the uninhabited islands a separate character area and these are divided into 79 non-urban LDUs in total. The proposed character areas are shown in relation to the JCAs in **Figure 4** and with their component LDUs in **Figure 5.**

2.6 The number of LDUs in each LCA varies considerably depending on the complexity and consistency of the landscape. At the extremes, there is one LDU in one LCA and 37 in another. The average is around 10 LDUs per LCA. As an example Figures 4-7 shows how the relative grain of assessment from JCAs to CAs and LDUs for the Lizard peninsula.

2.7 Seascape characteristics have been recorded for coastal landscape description units noting physical form and features, key viewpoints and views, and other coastal issues. This information is presently outline and could be added to in future to inform detailed strategies for the coast and sea. The suggested method options and use for this is considered in **Appendix 5.**

2.8 The landscape character areas and LDUs reflect the diversity of the landscape which is driven by the geology, the resulting topography and the influence of the sea and water. The exposed igneous granite massifs of Bodmin, Carnmenelis and West Penwith stand above the mudstones and slatey shales of the Killas. The surrounding rocks have metamorphosed in parts leading to localised hardening and the occurrence of minerals such as tin and copper which have led to widespread early industrial landscapes. The gently undulating Culm plateau runs across the border from Devon into North Cornwall. The action of the sea has formed a rugged and varied coastline of cliffs, wide beaches, dunes and coves. The action of water on the land has formed a series of incised river valleys which form drowned rias on the south coast where the land has sunk over time. The complex geology of the Lizard such as serpentine, gabbros and schists give the area its own distinctive character. The Isles of Scilly form the remnants of an upstanding granite landform linked to Cornwall

3.0 SENSITIVITY

3.1 The sensitivity of each LDU has been assessed in terms of:

- Ecological sensitivity
- Cultural sensitivity
- Visual sensitivity

3.2 The detailed method of how sensitivity is derived set out in **Appendix 1.** Essentially, ecological sensitivity assesses the degree of survival of semi natural habitat, ancient woodland and older hedgerows across the LDU. Cultural sensitivity largely reflects the relative time depth (or continuity) of a landscape, and the degree to which its characteristics are exhibited in the landscape (consistency). Visual sensitivity is a measure of the degree to which change is likely to cause a visual impact within a particular landscape. This is a function of topography and the degree of tree cover. Though this can give broad indications of visibility which can be useful as a context, significant variations can occur across LDUs, including around settlements. It is not relevant as an indicator of value. For these reasons it has not been included in further discussion.

3.3 Wider patterns of ecological and are now discussed along with sensitivity around the major settlements. The policy report assesses how each AGLV relates to landscape sensitivity.

BROAD PATTERNS OF SENSITIVITY

Cornwall

3.4 Cornwall has a significant area of intrinsically sensitive landscape. This is demonstrated by the following facts:

- 51 LDUs are very high sensitivity for both ecological and cultural aspects. This amounts to 16% of non-urban LDUs.
- 33 LDUs have very high combined with high sensitivity for the ecological and cultural aspects. This amounts to around 10% of non-urban LDUs.
- 36 LDUs are high sensitivity for both ecological and cultural aspects. This amounts to 11% of non-urban LDUs.

In all this means that 37% of Cornwall's LDUs have a very high/high combined sensitivity.

3.5 151 LDUs [46%] had very high or high ecological sensitivity. Broadly, the most sensitive areas are upland moorland such as Bodmin Moor, coastal areas such as West Penwith, river valley systems and wetland areas such as Goss Moor.

3.6 235 LDUs [70%] had very high or high cultural sensitivity. Broadly, the most sensitive areas are coastal areas such as West Penwith and the Lizard, moorland fringes and river valley systems such as the Tamar.

Isles of Scilly

3.7 Within the Isles of Scilly, 66 of 79 non-urban LDUs have very high ratings for both ecological and cultural aspects. This amounts to 84% of non-urban LDUs.

3.8 The most sensitive areas lie on the coast and envelop the smaller islands while the less sensitive areas form the interior of the five larger islands.

RELATIONSHIP OF SENSITIVITY TO MAIN SETTLEMENTS

Cornwall

3.9 The sensitivity of landscapes around settlements varies across Cornwall. The most constrained settlements with the most culturally sensitive areas around them include Saltash, Penzance, Launceston, Truro, St Ives and Liskeard. The most constrained settlements in terms of ecologically sensitive areas around them include Saltash, Newquay, Hayle and St Ives. Those least constrained are Helston, Redruth and St Austell although many have areas of high sensitivity abutting.

3.10 Each major settlement in Cornwall is discussed in **Appendix 3** in relation to landscape sensitivity by LDU, comments on settlement's relationship with the surrounding countryside and potential areas of constraint based on inherent landscape sensitivity.

Isles of Scilly

3.11 In relation to the Isles of Scilly, Hugh Town is bordered by LDUs of very high sensitivity on the coast and to the north east in both cultural and ecological terms and high to the east in cultural terms only.

RELATIONSHIP OF SENSITIVITY TO LOCAL LANDSCAPE DESIGNATIONS

3.12 In overlaying the AGLV's and the sensitivity analysis a number of conclusions can be reached:

- The AGLV's often coincide with areas where the majority of the area is of very high or high cultural sensitivity although around 20% are predominantly moderate.
- The AGLV's often coincide with areas where the majority of the area is of high ecological sensitivity although around 40% are predominantly moderate. There are few areas where they coincide with very high ecological sensitivity.
- Areas between valleys are often included in AGLV's, possibly as a setting to valleys which themselves are perceived as of high value.
- Small areas of very high and larger areas of high ecological and cultural sensitivity lie outside AGLV's [and AONB's] although the majority are covered by these designations.

4.0 CONSULTATION

4.1 Consultation was carried out on the draft LCAs. Three workshops were held for practitioners in planning and land management for the west/Isles of Scilly, central and eastern districts on 11-13 January 2006 in Penzance, St Austell and at the Sterts Centre, near Liskeard. The days were run to explain the overall findings at LCA level and then workshops held to discuss and collect information on the selected character area boundaries, descriptions, pressures for change and planning and management opportunities.

4.2 A further workshop was held on 17 January in Bodmin for communities [including parish councillors], landowners and developers. The background and overall findings of the study were presented and then workshops held to discuss and collect information on the sample character area boundaries, descriptions and pressures for change. Then further exercises were carried out to investigate people's perceptions including creative writing, 'rich picture', responses to photos of different landscapes and a discussion group.

4.3 All workshops were very well attended and provided useful feedback and information. The comments on accuracy, boundaries and descriptions have been incorporated into the final landscape information where appropriate.

4.4 Future consultation will be defined by the status that authorities wish to place on the assessment. The consultation report in **Appendix 4** sets out how further dissemination/consultation of the county and Isles of Scilly information could be carried out. This is suggested in several steps:

- Finishing consultation on the current LCA at character area level to complete coverage of the county/study area.
- Further consultation at district level possibly combining CA and LDU information.
- Consultation at parish level within character area/LDU framework.

4.5 The districts may wish to develop and adopt the 'gateway' landscape document as a supplementary planning document [SPD] in due course based on the template produced for this study which sets out principles and indicates how the information should be used. At the present stage of the Local Development Plan process it is likely that these will only be treated as material considerations/best practice guidance [BPG] which will have a lower status. LDU sensitivity is an important part of the landscape assessment and will need to form part of the information made available in the BPG or SPD. If SPD is required this will need to be consulted on to comply with each district's Statement for Community Involvement.

5.0 PRESSURES FOR CHANGE, EFFECTS AND RELATED ISSUES

5.1 The landscape of Cornwall faces numerous forces for change - some positive but many potentially negative. The Isles of Scilly face particular challenges due to their island character and size.

BROAD ISSUES

5.2 World markets and increasing free trade mean that the viability of production of food from the land is coming under increasing pressure from low cost global competitors. As a response to this and environmental concerns, the CAP reform measures are a significant influence on changes at local level, including the decoupling of production from subsidy, the Single Farm Payment and the introduction of Environmental Stewardship at entry level, organic entry level and higher level.

5.3 The decline of traditional industries has led to areas of unemployment and deprivation. Now the main employers in Cornwall include tourism, construction, social and health work. These are characterised by low and sometimes seasonal wages.

5.4 The 2001-2006 Objective One programme for Cornwall and the Isles of Scilly has been seeking to improve the social well being and economic performance of the area. It has sought to achieve this by shifting the balance of the economy from declining industries and is including support for tourism, farm diversification, marine technology, renewable energy and media. Improvements to communications are supported, including broadband and improved road, rail and air links. European funding from 2007 onwards has yet to be agreed but Cornwall remains eligible.

5.5 The superb landscape and equable maritime climate of the area has led to an influx of retirees and the establishment of second homes with the consequent increase in prices in desirable rural and coastal areas. Poorer and young people can no longer afford to live and work in rural areas. Services and local businesses such as shops are therefore no longer viable all year round in some villages.

5.6 Climate change is an important consideration in the medium-longer term. The Stern report states that on current trends, average global temperatures will rise 2 to 3°C within the next 50 years or so. This warming will have many severe impacts including rising sea levels. The melting or collapse of ice sheets would eventually threaten land which today is home to one in every 20 people across the globe. Ecosystems will be vulnerable, with around 15 to 40% of the world's species potentially facing extinction after only 2°C. of warming. Extreme weather and related flooding will increase rapidly at high temperatures. The South West based Centre for Climate Change Impact Forecasting anticipates in 2050 that Cornwall, as part of the South West, can expect the following conditions:

- Growing seasons 5-20 days longer
- Wetter, more stormy winters and drier, more droughty summers

- More intense winter precipitation increasing the risk of flooding
- Higher storm surges around the coast
- Annual temperature 0.8-2.3 0C warmer in comparison to a warming trend of only 0.30C in the South West over the last 100 years
- Total sea-level rises of around 0.2-0.8m

5.7 All these factors will put the Isles of Scilly and the coast and adjacent low lying areas of Cornwall at particular risk and is likely to result in major change unless significant measures are taken to reverse the increasing trend in carbon emissions.

5.8 The Eden Project is reinforcing the tourism draw to the county and it is likely the World Heritage Site for Cornwall's mining heritage will add to this.

PRESSURES FOR CHANGE AND RESULTING EFFECTS

5.9 Pressures and resulting effects across the county that were raised during the consultation process include the following:

Agriculture

- Loss of production subsidies may lead to either abandonment of marginal land or intensification of more productive land.
- Termination of ESA in West Penwith is likely to lead to subsequent reduced management of the land and elements covered by the scheme unless Environmental Stewardship schemes are introduced.
- Fragmentation of farm units into smaller parcels may lead to varying management regimes and pressure for development in some.
- Conversion to arable sometimes occurs due to loss of small dairy farms.
- Intensification often leads to subsequent loss of biodiversity, character and nitrate run off.
- Changing farming practice is leading to increased use of contractors for short sharp management of crops without year round management/husbandry of land and associated elements such as hedges and woodland and loss of husbandry skills.
- Increase in size of machinery has effects on lanes and hedges and results in need for wider field openings in places.
- Poor and reduced management of marginal agricultural areas may have a positive or negative effect on biodiversity through changes in habitat (e.g. scrub encroachment, hedgerow changes).
- Increased areas of high value crops such as potatoes, vegetables and bulbs are spreading from the west and leading to a change in character, particularly with associated infrastructure such as sheds and polytunnels.
- Accommodation for intensive agricultural workers can have an impact in places.
- Where dairy remains, the farms tend to be bigger with associated large scale infrastructure.
- Low returns on farming have led to a reduction in management input, resulting in deterioration of walls, Cornish hedges, woodlands etc.
- Excessive stocking rates on moorland/heath has led to poor species diversity.
- Under grazing of moorland/heath due to low stocking rates has led to invasion of scrub, especially gorse, in places.
- Countryside Stewardship and now Environmental Stewardship has led to improved management and husbandry of the land.

- Diversification, resulting in changes of use of agricultural buildings and the land in places, has led to a change in character in places [see below].

Development

- Development pressure on the outskirts of main settlements including Newquay, Penzance, near Plymouth eg Saltash, and other locations can have adverse effects.
- Development pressure related to new road schemes/junctions such as on A30 can have adverse effects e.g. associated development and increased lighting.
- Small scale, incremental development of villages and domestic 'improvements' such as fencing and exotic species hedging can lead to a significant change in character and suburbanisation over time.
- Conversion of farmhouses and farm buildings to rural dwellings can lead to change and suburbanisation of character.
- Light pollution can adversely affect previously 'dark' sites.
- Deterioration of industrial heritage is occurring due to the lack of management.
- Use of white render rather than granite in materials for building facades can erode character.
- Affordable housing in rural locations can be poor quality and degrade local landscape character.

Tourism and recreation

- Demand for upmarket accommodation is leading to conversion of farm buildings in desirable areas into second dwellings/holiday homes.
- Signage on roads for attractions and facilities are detractors in places.
- Demand for new caravan sites in sensitive locations remains, usually near the coast.
- 'Upgrading'/expanding caravan sites to residential caravan parks/chalets/ second homes leads to a semi-permanent change in character in the countryside.
- Car access demands more and larger car parks near attractions.
- Increasing visitor numbers are causing path erosion particularly along the coast.
- Roadside tourist facilities can be detractors.
- World Heritage Sites could create additional visitor destinations with an increase in traffic on minor roads and associated infrastructure.
- Horse related trekking trails, stable blocks and paddocks cause adverse impacts in places.
- Use of off road vehicles including trail bikes and 4x4s lead to erosion and loss of tranquillity.
- Potential for public access pressure on sensitive landscapes such as Goss Moor due to the CROW Act.
- Increased use of estuaries and waterways by leisure craft with associated infrastructure/moorings and wash can affect sensitive areas.

Energy

- Further windfarms on higher ground could exceed landscape capacity creating windfarm landscapes.
- Biomass [Miscanthus] is a potential energy crop to the east of the county. This would affect the character of the fields and field openings [in terms of width] but possibly not the field boundaries.

Coastal areas

- There is intense tourism pressure on the coast during summer months especially around honeypots with car parks, signage, path and dune erosion, water-based recreation and associated facilities and services as mentioned in tourism section.
- Low level or negligible management can lead to scrub and bracken invasion in coastal heathland (this is also supported by site survey feedback).
- Reduction in the fishing industry is leading to a loss of fishing infrastructure and other maritime industries around harbours resulting in a change of character.
- Sea level rise could have very significant impacts on coastal towns and areas, especially the Isles of Scilly.

Infrastructure

- Road improvements on major roads cause significant adverse environmental effects and on minor roads can change their rural character including effects on Cornish hedges and verges.
- Telecommunication masts, aerials and wires can be detractors.

Forestry

- Coniferous plantations have been planted widely and could cause significant changes in character but the pressure for these has reduced.

KEY LANDSCAPE ELEMENTS UNDERGOING CHANGE

5.8 Bringing the above information together to focus on key elements of the Cornish landscape the following are changing and require action:

- **The pattern of field boundaries is** declining due to deterioration of Cornish hedges through reduced management and repair and widening of gateways.
- **Rural dwelling and farmsteads** are changing in character due to second homes and holiday lets.
- **Older farm buildings** are changing in character due to conversion to holiday lets.
- **Farm buildings** are increasing in size and changing in character due to intensification of use including crop type and larger dairy units.
- **Villages** are changing in character and expanding sometimes to the detriment of the countryside.
- **Caravan parks** and tourism chalet developments are expanding in size and number increasingly moving inland.
- **Deciduous woodland** is declining in condition through reduced management
- **Coastal heathland** is declining due to scrub and bracken encroachment and visitor pressure
- **Moorland** is declining through under or overgrazing in parts.
- **Coastal settlements** are declining in places due to past and present tourism development and visitor pressure
- **Industrial heritage sites** are declining due to neglect.
- **Rural lanes** are deteriorating in character due to increased pressure from traffic

5.9 The key elements of the Isles of Scilly landscape which are changing and require action are discussed below.

- **Fieldscapes** are declining due to abandoned bulb fields and the removal or deterioration of stone hedges and shelter fences through reduced management .
- **Rural and coastal dwelling and farmsteads** are changing in character due to second homes and holiday lets.
- **Older farm buildings** are changing in character due to conversion to holiday lets.
- **Main settlements** are under pressure nl from tourism development and visitor numbers.
- **Some heritage sites** are declining due to neglect.
- **Coastal erosion** from footpath use.
- Pressure for more **recreational moorings and associated infrastructure issues.**

6.0 VISION AND OBJECTIVES

6.1 The landscape of Cornwall is recognised as a superb asset and its conservation regarded as important or essential to the area's sustainable future by all relevant strategies from region to district [see Policy Report]. There are, however, potential conflicts in achieving other aims such as economic and social regeneration [eg development, infrastructure works, diversification etc]. While the AONBs and World Heritage sites may be the most valued resource, the landscapes outside the designations are important local landscapes with high sensitivity in many places.

6.2 The Isles of Scilly is entirely covered by an AONB designation. The limited size and distinctive maritime character of the islands means that capacity for change is very limited and yet there is significant pressure to develop the islands to exploit their natural beauty.

6.3 As an overarching approach it is suggested that the following vision and objectives for the whole of Cornwall and the Isles of Scilly are taken into consideration in policy and other documents.

Vision

6.4 Cornwall/The Isles of Scilly will be a place where the character of distinctive and valued natural and cultural landscapes, seascapes and the built environment will be protected, conserved and enhanced over time, contributing to a high quality of life.

6.5 Landscapes and seascapes will be vibrant, viable and well managed and elements important to their distinctive character and diversity conserved. The biodiversity, cultural heritage, sensitivity, tranquillity and wildness of landscapes and seascapes will be respected and their capacity for change not exceeded. Elements and features which will be given particular consideration will include Cornish hedges and gateways; geological features such as tors and cliffs; prehistoric and industrial heritage features including quoits, harbours and mine buildings; coastal heath, dunes and beaches; rias and estuaries; inland waterbodies and wetlands; moorland; deciduous woodland and tree cover; permanent and culm pasture; rural settlement and lanes.

6.6 People will come to value and access their local landscape and respect, protect and manage it positively. Development will improve the relationship between settlement and the surrounding landscape. Other uses such as quarrying or waste disposal will restore the land to beneficial use in character with the surrounding landscape.

Objectives

6.7 A strategy emerging from this study could have the following objectives:

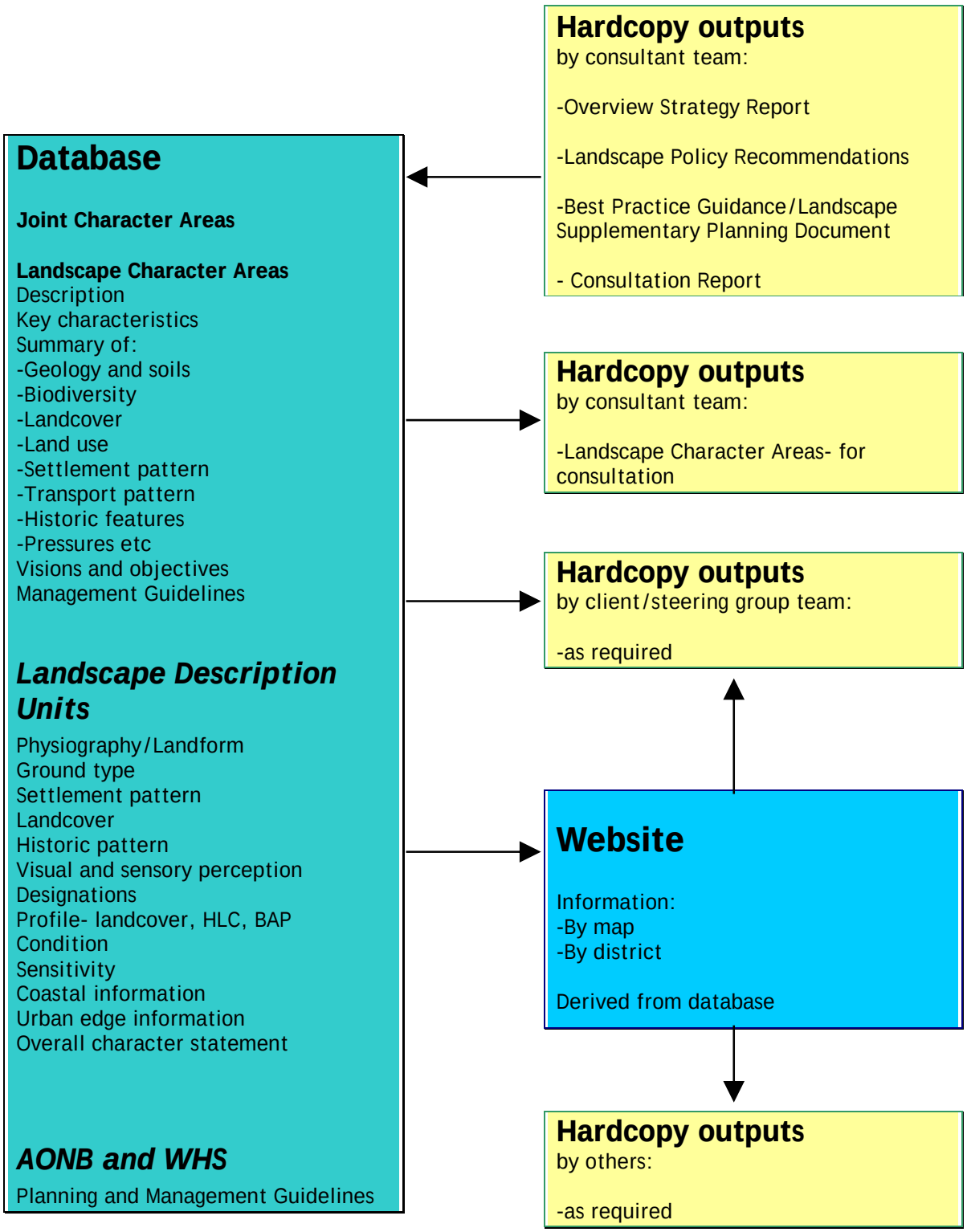
- Implement and carry forward the vision using the landscape character assessment and other sources of information.
- Protect, conserve and enhance the landscape and seascape character of Cornwall and the Isles of Scilly
- Conserve and enhance the nature conservation interest to provide a wide mosaic of habitats and sites which are sustainable and are connected with wildlife corridors.
- Identify, protect , maintain and interpret the heritage resource building on the archaeological trust, WHS, historic landscape character and extensive urban survey work.
- Support the rural economy and diversification where it protects and reinforces the positive characteristics of the landscape.
- Manage tourism, access, countryside and coastal recreation to conserve and enhance the most sensitive landscapes and seascapes avoiding deterioration of the resource as a whole.
- Support development where it protects and reinforces the positive characteristics of the landscape and seascape.
- Disseminate information of landscape character to raise awareness in local authorities, professional advisors, communities, developers and landowners.
- Produce guidance to bring landscape character into planning and land management decisions.
- Collect further landscape character information at a more detailed level.

TABLE 1

Landscape Assessment Information Structure

TABLE 1

LANDSCAPE ASSESSMENT INFORMATION STRUCTURE



FIGURES

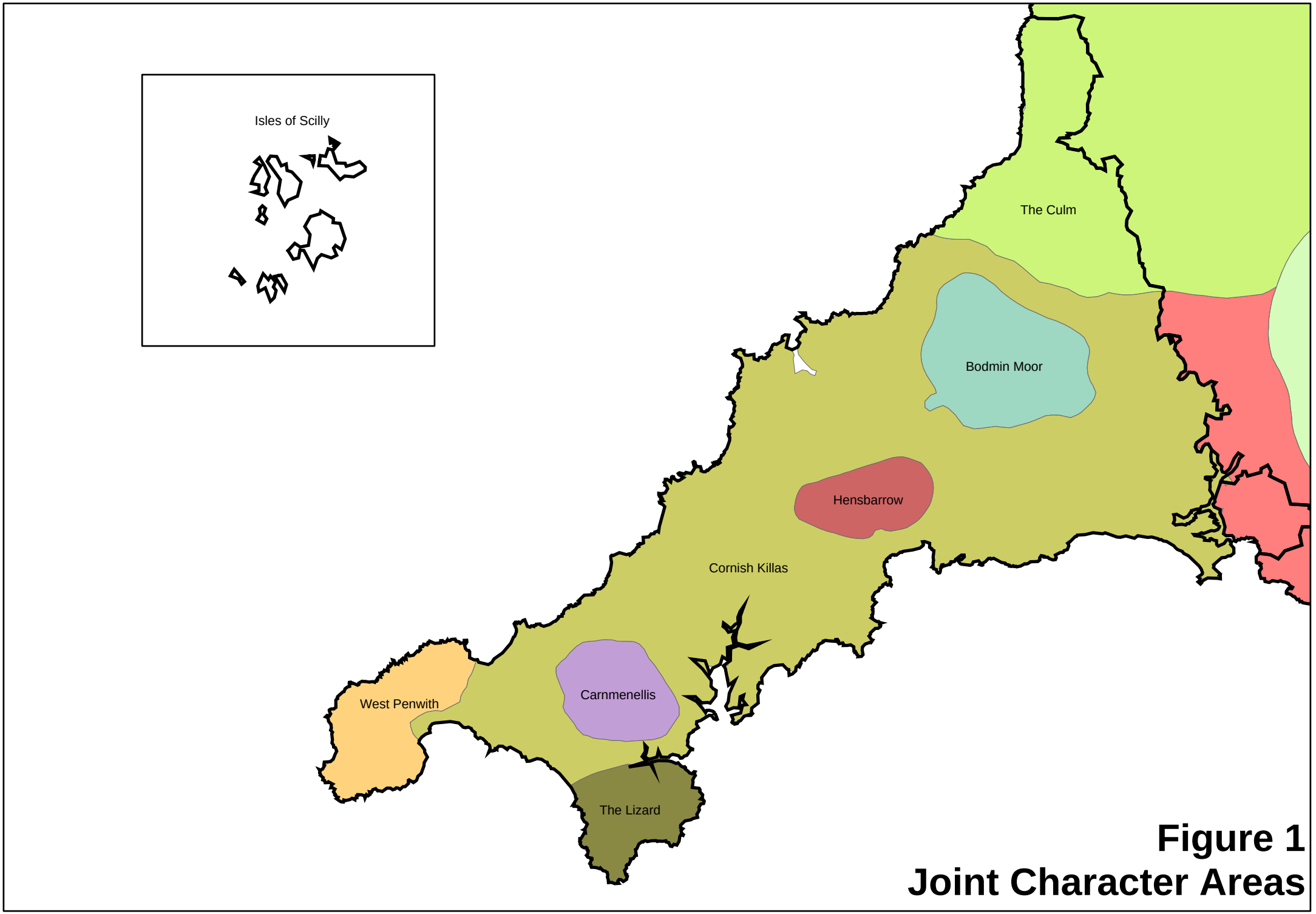


Figure 1
Joint Character Areas

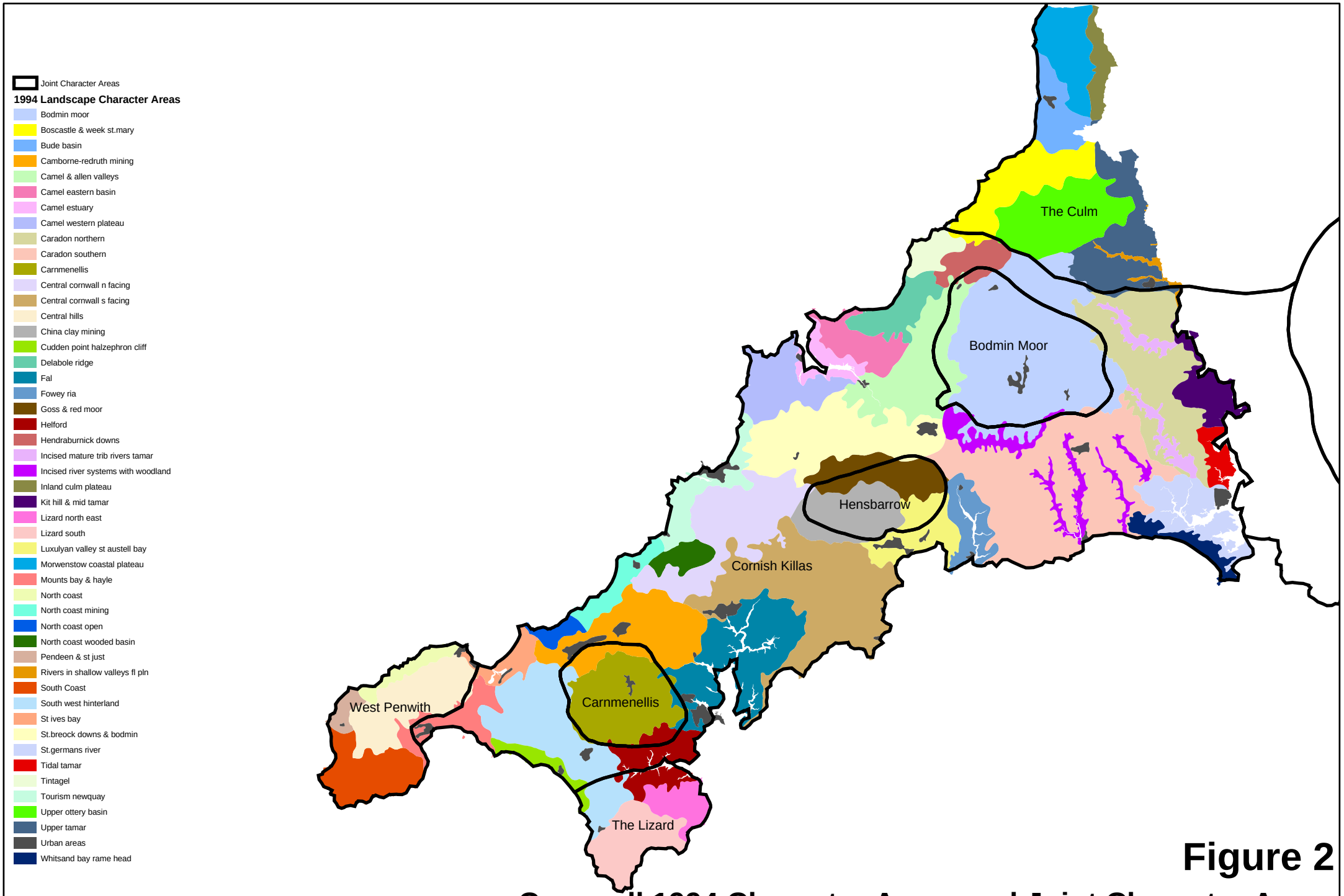


Figure 2

Cornwall 1994 Character Areas and Joint Character Areas

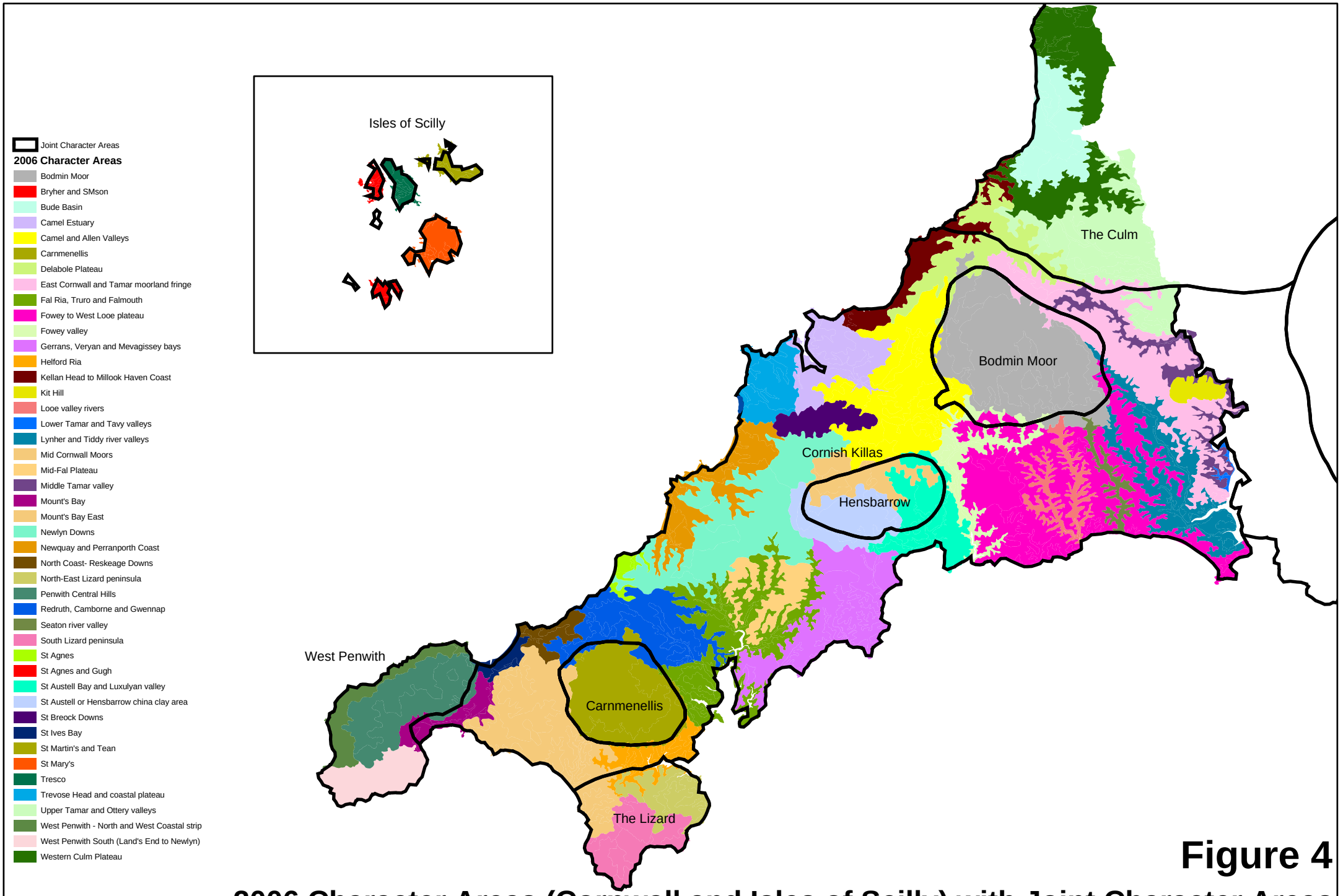


Figure 4

2006 Character Areas (Cornwall and Isles of Scilly) with Joint Character Areas

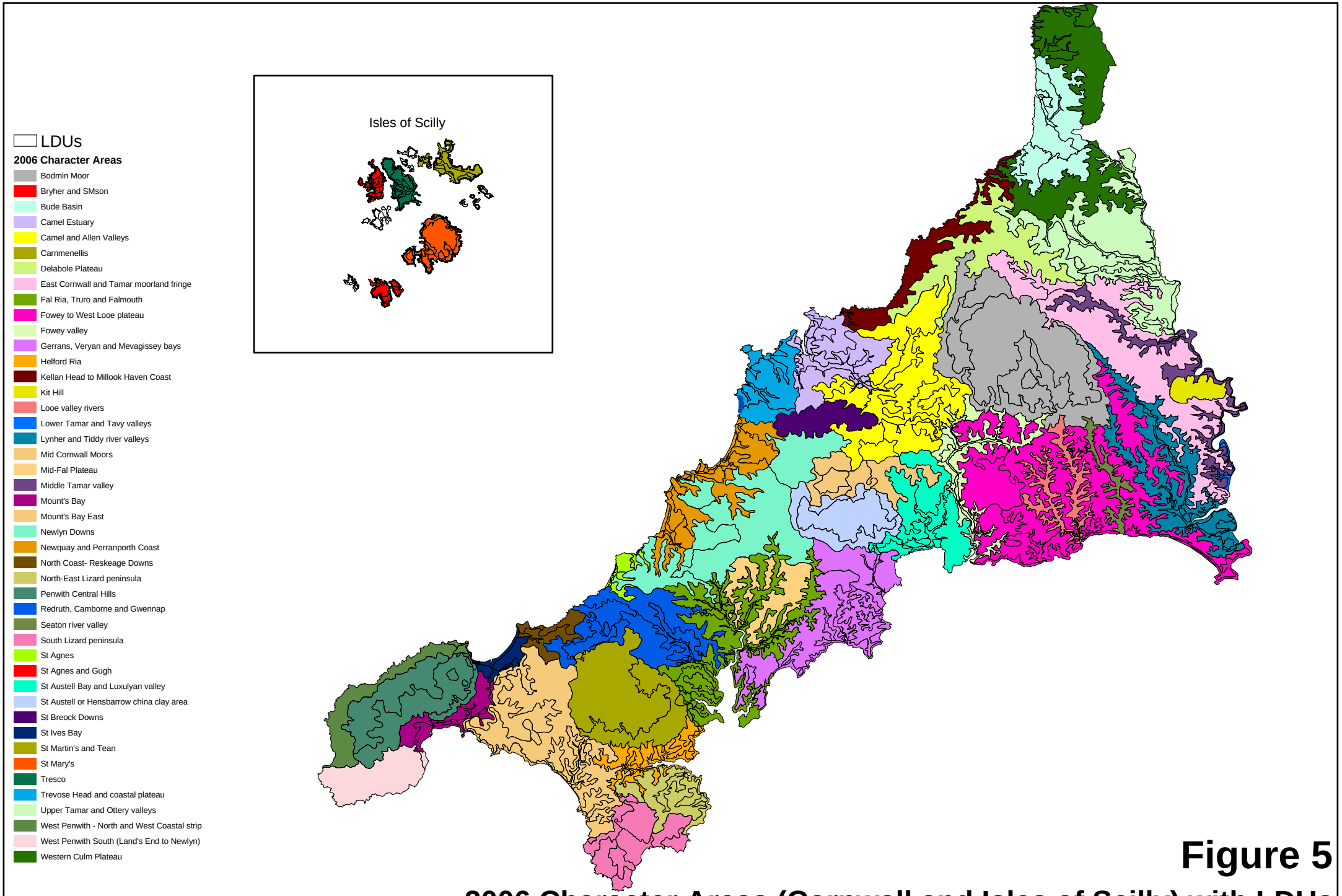


Figure 5

2006 Character Areas (Cornwall and Isles of Scilly) with LDUs

APPENDIX 1

METHOD

THE LIVING LANDSCAPES METHOD

DEFINITIVE AND DESCRIPTIVE STEPS AS UNDERTAKEN AS PART OF THE CORNWALL AND ISLES OF SCILLY LANDSCAPE CHARACTER STUDY

January 2007

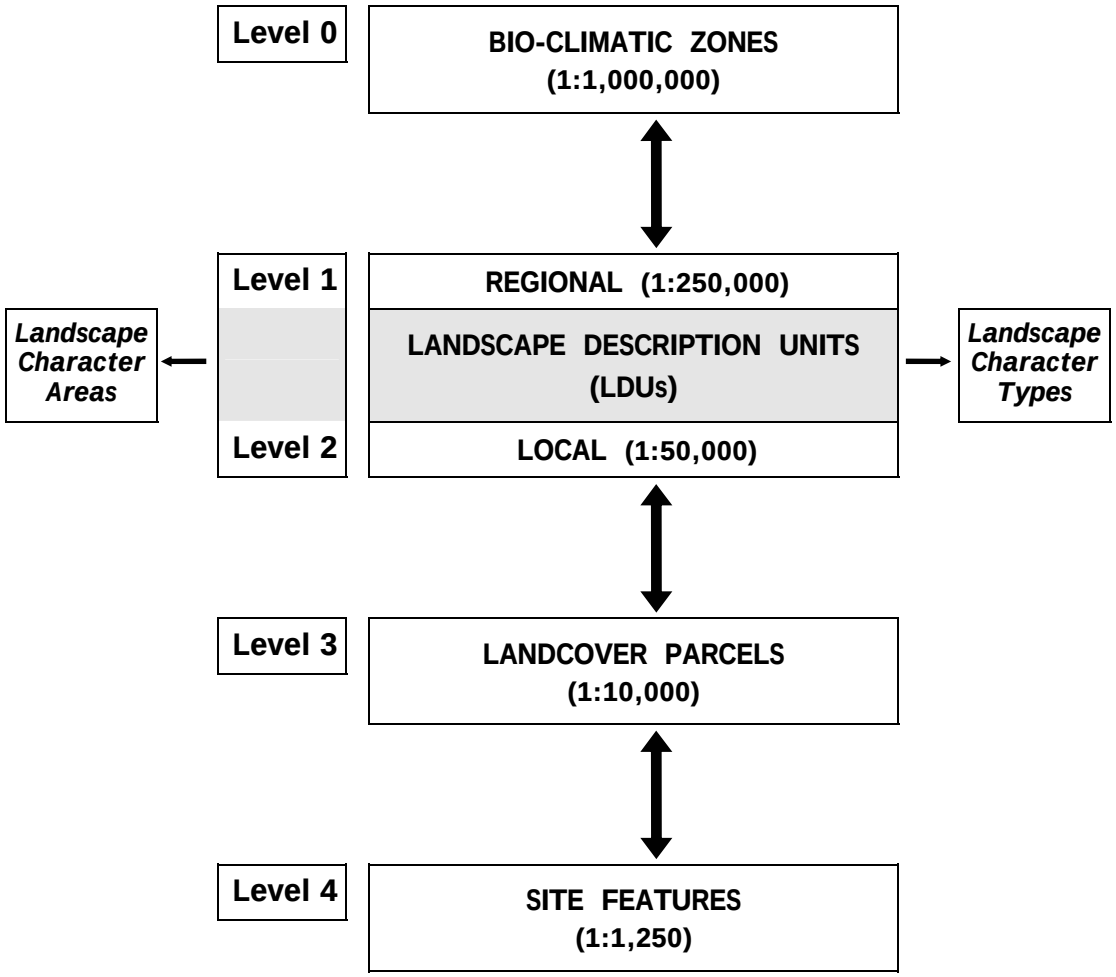
The importance of the spatial framework

A key component of the character-based approach to rural decision making that has been developed as The Living Landscapes Method is the use of Geographical Information System (GIS) technology, which is now widely available. GIS allows datasets to be displayed showing the relationship between an entity (eg a polygon or line), and its attributes (eg length, height, condition). Any GIS software can be used to perform these tasks, including ArcGIS and MapInfo.

This technology greatly facilitates the storage, analysis and presentation of spatial (map based) data, allowing environmental and other information to be compared ***across both space and time***, thus enabling the user to ask questions of the data and to generate hypotheses. The use of GIS also necessitates a rigorous approach to data storage and manipulation, and hence provides the opportunity for establishing a structured database of archival quality.

For GIS to be used effectively as a decision support tool it is essential to create a structured, spatial framework for describing and evaluating the countryside. This framework operates at different spatial levels, ranging from the national/regional (1:250,000), through the county/ district (1:50,000[1]), down to the individual farm/site (1:10,000).

Figure 1: Assessment hierarchy at different levels of spatial resolution



[1] This is the scale at which Cornwall and Isles of Scilly Landscape Character Study was undertaken)

Figure 1 illustrates the relationship between the different levels of assessment. The *landscape scale*, which is between 1:50,000 and 1:250,000, sits in the middle of the diagram, can be defined as a scale of assessment that is smaller than the global environment, but larger than the individual site. It is the integrating scale, providing a landscape context for farm and site based (Level 3) decision making, whilst linking with and (providing the focus for) national/regional policy objectives.

Landscape Description Units

The fundamental building block of the hierarchy at the landscape level is the **Landscape Description Unit** (LDU). LDUs are distinct and relatively homogenous units of land, each defined by a series of ***definitive*** attributes, so called because they define the extent of each spatial unit.

There are **four** attributes used to define LDUs at Level 2

- *physiography* and *ground type*, which together encapsulate the underlying natural dimension of the landscape

- *landcover*, reflecting surface vegetation; and *cultural pattern*, which describes the structural component of the cultural landscape.

Definitive attributes are derived through a process of overlay mapping which is traditionally achieved by physically overlaying a number of acetate sheets one on top of the other. Carrying out the same process on GIS not only overcomes the problems associated with enlarging/ reducing source maps at different scales, but it also allows far greater scope in the actual analysis of the data. The digital datasets used in defining LDUs vary with availability from the client and are primarily undertaken with national datasets to promote consistency across the country, using local datasets that are relevant to landscape character. In this study this includes: geology, 10m contours, soils (paper based), farm census data, settlements, woodland, ancient woodland, Historic Landscape Classification (HLC), OS 1:50,000, and the National Typology.

The natural dimension of the landscape (physiography and ground type) is mapped first, not only because it provides a context for analysing the historical evolution of the landscape, but also because the baseline attributes of relief, geology and soils have 'real' boundaries which can be readily defined. In practice this entails firstly defining the more immediately distinct areas, where the pattern of topography relates clearly to changes in geology and soil. Cultural attributes do not usually have such clearly defined boundaries, but because of the constraints that have historically been imposed on land utilisation by slope, soil fertility and drainage it is often possible to map cultural patterns at the landscape scale using the emerging LDU framework. The comparison of data to help define the less immediately visible distinctions in the landscape is an iterative one, and there are frequent occasions where local data has been used to inform decision making. For example, a break in slope which coincides with a change in soil type and tree cover to the plateau above will be easily identifiable as a sharp boundary, where a few steps takes you into a clearly different landscape, whereas the transition between a dispersed and a nucleated settlement pattern in a rolling landscape maybe several kilometres wide - the HLC, along with the OS 1:50k, is invaluable in such instances for helping to derive the most appropriate line.

The characterisation of urban areas is beyond the scope of this project, and having defined physiographic units, urban areas are defined as distinct urban units and do not form part of the cultural analysis.

Each aspect of the analysis, and the attributes defined is outlined below. Each of these subdivisions has been developed by those using the Living Landscapes Method since 1997, and is consistent with other areas in the country where this method has been employed.

Physiographic analysis

Physiography is an expression of the shape and structure of the land surface as influenced both by the nature of the underlying geology and the effect of subsequent geomorphological processes. Two definitive attributes are used at Level 2, one defining the geological structure (and relative relief) of the unit and the other to describe the form (and relative relief) of the land surface. This is derived from interpretation of the relationship between geological and contour data. Physiographic boundaries should ideally follow clear 'breaks in slope' that are related to geological boundaries. Where there is no obvious break in slope (eg. the transition between the dip slope of an escarpment and an adjoining vale) a 'best fit' line (ie. a line that has been adjusted to match the surface landform) should be defined that reflects the geological boundary. The physiographic character is denoted in the GIS in the Phys_D column.

Coastal dunes - low hills/ridges of sand piled up by the wind along sandy coasts

Marine levels - extensive areas of flat land formed by the recent deposition of waterbourne drift, mainly of marine origin, in low-lying coastal areas - land usually at or below sea level and may include intertidal flats covered by water at high tide.

River valleys - flat, low-lying land formed by the recent deposition of waterbourne drift in larger river valleys, but also including other low-lying areas formed from lacustrine (lake) drift.

Rocky foreshore – rocky coastal foreshore within the intertidal zone.

Hard rock high hills – uniformly elevated tracts of high ground, generally over 300 metres (1000 feet), with a rolling, in places undulating topography.

Hard rock plateau – uniformly elevated tracts of rolling relief, usually bounded on one or more sides by steeper ground which drops to lower land - often dissected by narrow, steep sided valleys at a greater level of detail.

Hard rock lowlands – areas of intermediate relief, generally <90m (300 feet), with an apparent rolling, in places undulating topography.

Hard rock slopes and ridges – distinct, often steep sided tracts of elevated/steeply undulating land, generally well defined by clear breaks in slope in the form of valley sides.

Hard rock cliffs – distinct, often steep sided tracts of elevated/steeply undulating land, generally well defined by clear breaks in slope in the form of coastal slopes and cliffs

Hard rock uplands – elevated tracts of land with a pronounced undulating, in places steeply sloping relief, comprising hilltops, ridges and narrow, often steep sided valleys.

Ground type analysis

Ground type is an expression of the soil forming environment and its influence in determining the surface pattern of vegetation and land use. Two definitive attributes are used at Level 2, one describing the nature of the underlying bedrock/drift, the other to reflect variations in the process of soil formation related to drainage and soil fertility. This is derived from interpretation of geological (rock type), soils and land use data (including farm census data and HLC where appropriate). The ground type is denoted in the GIS in the Ecol_D column

Saltmarsh - uncultivated tracts of coastal marshland developed directly on unconsolidated mud/silt and covered by the sea at high tide - also includes slightly elevated areas with muddy channels.

Fenland - marginal land associated with organic soils derived from partially decomposed plant remains - perennially wet where undrained, but in many places (eg. The Fens) groundwater controlled by ditches and pumps.

Wet meadowland - slowly permeable mineral soils developed on alluvial drift and supporting wetland, or relic wetland (lines of willow, reeds in ditches) vegetation. Seasonal or perennial waterlogging is the main constraint to agricultural production.

Dry meadowland - free-draining mineral soils developed on alluvial drift. Seasonal waterlogging may be a constraint to agricultural production but in most places groundwater is controlled by ditches and pumps.

Sandy brown soils - light, free-draining sandy and coarse loamy soils developed on soft sandstones and sandy drift. In places can include localised patches of wetland, or nutrient poor/podzolic soils.

Sandlands - nutrient poor (podzolic) sandy or coarse loamy soils, some with a humic topsoil, supporting dwarf shrub heath, acidic grassland, or relic heathy vegetation (bracken, gorse, etc.) - associated normally with sandstone, or sandy drift.

Dune sands - low hills/ridges of unconsolidated sands piled up by the wind along sandy coasts. Also includes gravel ridges formed by wave action.

Intertidal sands - uncultivated tracts of coastal sand covered by the sea at high tide.

Bare hard rock – uncultivated tracts of sparsely vegetated land associated with cliffs, steeply sloping upland terrain, or rocky headlands covered by the sea at high tide.

Brown soils with localised wetland on hard rock – reddish/brown, free-draining mineral soils developed on hard mudstone, or siltstone - associated in places with tracts of waterlogged soils which often give rise to patches of relic semi-natural vegetation.

Humic gleyed soils on hard rocks – heavy land with slowly permeable base poor loamy and clayey soils. The land is mainly under permanent grassland due to seasonal waterlogging, but in places tracts of peaty soils give rise to patches of wet heath and/or bog.

Impoverished brown soils on hard rock – nutrient poor (podzolic) loamy, or in places sandy soils, some with a humic topsoil, supporting acidic grassland, or relic heathy vegetation (bracken, gorse, etc).

Impoverished gleyed soils on hard rocks – heavy land with slowly permeable base poor loamy and clayey soils. The land is mainly under permanent grassland due to seasonal waterlogging, but in places tracts of impoverished soils give rise to patches of wet heath and/or bog.

Impoverished gleyed soils on igneous rocks - heavy land with slowly permeable base poor loamy and clayey soils. The land is mainly under permanent grassland due to seasonal waterlogging, but in places tracts of impoverished soils give rise to patches of wet heath and/or bog.

Impoverished humic soils – nutrient poor (podzolic) peaty soils, supporting dwarf shrub heath/moor, or relic moorland vegetation.

Impoverished humic soils on igneous rocks – heavy land with slowly permeable base poor loamy and clayey soils. The land is mainly under permanent grassland due to seasonal waterlogging, but in places tracts of peaty soils give rise to patches of wet heath and/or bog.

Impoverished soils on disturbed igneous rocks – nutrient poor (podzolic) loamy soils, supporting dwarf shrub heath, acidic grassland, or relic heathy vegetation (bracken, gorse, etc.) - often associated with tracts of disturbed land where mining is still active.

Impoverished soils on igneous rocks – nutrient poor (podzolic) loamy soils, some with a humic topsoil, supporting dwarf shrub heath, acidic grassland, or relic heathy vegetation (bracken, gorse, etc).

Loamy brown soils - reddish/brown, free-draining mineral soils developed on mudstone, siltstone, or drift.

Loamy brown soils with impoverished patches - reddish/brown, free-draining mineral soils developed on hard mudstone, or siltstone, with associated patches of impoverished soils, often giving rise to relics of semi-natural vegetation.

Loamy brown soils with shallow patches - reddish/brown, free-draining mineral soils developed on hard mudstone, or siltstone, with associated patches of shallow soils often giving rise to relics of semi-natural vegetation.

Shallow brown soils on hard rock – reddish/brown, free-draining mineral soils developed on hard mudstone, or siltstone - associated in places with tracts of shallow soils which often give rise to patches of relic semi-natural vegetation.

Shallow soils on limestone - free draining loamy soils developed directly over chalk or limestone at elevations below about 300m (1000ft) - frequently distinguished by stony soils and/or rock outcrops with relic calcareous grassland on steeper slopes.

Landcover analysis

Landcover is an expression of the type of vegetation (natural and man made) covering the land surface. Two definitive attributes are used at Level 2, one describing the predominant land use/type of farming, the other reflecting the contribution that trees and woodlands make to the character of the landscape. The broad pattern of primary land use and associated tree cover at the farm type level as related to the inherent physical (slope, drainage, fertility) and economic constraints within a particular area. Farm census, all woodland (including national Ancient Woodland), HLC,

and countywide Land Cover datasets are used as appropriate. The pattern of land cover is denoted by 2-digit 'Land_D' code within the GIS database.

Ancient wooded - landscapes characterised by extensive areas of broadleaved woodlands, mainly of ancient origin (as defined on the ancient woodland inventory), which pre-date the surrounding enclosure pattern. This pattern typically displays clear signs of piecemeal woodland clearance, including irregular woodland outlines and frequent woodland place names ending in terms such as 'ley' and 'hurst'.

Secondary wooded - landscapes with a dynamic tree cover pattern, characterised by extensive patches of recent (in historical terms) secondary and/or plantation woodlands which are often superimposed unconformably on a pre-existing unwooded landscape.

Settled farmlands - arable landscapes characterised by small coverts and/or thinly scattered, or small groups of trees, often associated with farmsteads, in an otherwise 'open' setting, typically created by Parliamentary type enclosure of arable field, or former 'waste'.

Open farmlands - treeless tracts of cultivated land where natural constraints, or traditional management practices, generally preclude the establishment of tree cover.

Ancient pastoral farmlands - pastoral landscapes characterised by a mixture of scattered, often dense, hedgerow trees (typically oak) and small irregularly shaped woods, mostly of ancient origin.

Estate pastures - pastoral landscapes characterised by an ordered pattern of discrete field sized, or larger, estate plantations/coverts which were planted at the same time, or which post date the surrounding enclosure pattern.

Settled pastures - pastoral landscapes characterised by small coverts and/or thinly scattered, or small groups of trees, often associated with farmsteads, in an otherwise 'open' setting, typically created by Parliamentary type enclosure of former 'waste'.

Open pastures - treeless tracts of pastoral farmland where natural constraints, or traditional management practices, generally preclude the establishment of tree cover.

Secondary wooded wildland - uncultivated, tracts of predominantly semi-natural vegetation characterised by recent (in historical terms) tracts of naturally regenerated woodland/secondary tree cover.

Open wildland - treeless, usually uncultivated, tracts of open land where natural constraints (climate and/or soils), or traditional management practices, generally preclude the establishment of tree cover.

Disturbed - treeless tracts of disturbed land where the existing land use (eg. mineral extraction, etc.) generally precludes the establishment of tree cover.

Secondary wooded pastures - unwooded, pastoral landscapes characterised by scattered trees (usually in hedgerows, or along ditches) and small patches of scrub.

Cultural pattern analysis

Cultural pattern is an expression of the structural component of the cultural landscape as reflected in the historic pattern of enclosure

and rural settlement. Two definitive attributes are derived, one describing the broad pattern of village formation and settlement dispersion, the other reflecting the structure (size/tenure) of agricultural holdings. Farm census data (where available), the OS base and HLC are used in deriving this information as appropriate. The cultural pattern is denoted in the 'Sett_D' code within the GIS database.

Clustered with estate farms - settled rural landscapes characterised by multiple settlement clusters and large (>65 ha) estate farms (defined as those areas where >50% of the land is managed by tenant farmers).

Clustered with large farms - settled rural landscapes characterised by multiple settlement clusters and medium to large sized (<95 ha), often tenanted farms.

Clustered with small farms - settled rural landscapes characterised by clusters of wayside dwellings and small (<65 ha), mainly owner occupied farms.

Dispersed with small farms - rural landscapes characterised by loose clusters of dwellings and small (<65 ha), mainly owner occupied farms.

Settled common - an often densely settled rural landscape characterised by loose clusters of dwellings and small (<65 ha), mainly owner occupied farms within a surveyor enclosed pattern of small-medium sized rectilinear fields.

Meadow and marsh - largely unsettled agricultural landscapes often characterised by a surveyor enclosed pattern of large rectilinear fields on river floodplains and coastal grazing marsh.

Meadowland - small sized farms - largely unsettled agricultural landscapes associated with small, mainly owner occupied farms on river floodplains.

Unsettled wildland - extensive areas of uncultivated, mainly unenclosed land (including moor, heath, coastal dunes and salt marsh) characterised by the virtual absence of human habitation.

Mining with small farms – semi-urbanised landscapes characterised by ribbon development, loose clusters of dwellings and small (<65 ha), mainly owner occupied farms.

Definitive and descriptive information

The definition of discrete LDUs provides units which are the building blocks of the landscape. The four definitive attributes (physiography, ground type, land cover and cultural pattern) tell us much about each LDU, but not the complete picture. Descriptive information, such as the visual and perceptual aspects of landscape, must also be collected and this coverage of LDUs provides the meaningful and structured spatial framework for gathering this descriptive information about the landscape. ***Descriptive*** attributes include both character-based information (eg species associations, building styles, etc.), as well as qualitative information relating to the significance of particular attributes, their condition and their vulnerability to change. All of this information is held on a GIS database linked to the LDU polygons.

The process of LDU mapping and subsequent characterisation with other descriptive data also enables broad patterns to be distinguished, which in turn makes it possible to begin to understand the relationship between the many factors that contribute to landscape character. The iterative nature of this process greatly

assists in the understanding of how a particular landscape has developed and is the key to assessing the character of that landscape.

Once the inherent character of the land has been described it is then much easier to understand and describe the more intangible aesthetic aspects of the landscape, such as scale, form and enclosure. Although these are the qualities which are most apparent to viewers on the ground, the fact that they are almost invariably controlled by either relief, or the surface pattern of vegetation and land use, explains why the LDUs defined by the process of overlay mapping can be used as a basis for defining Landscape Character Types and/or Character Areas.

Similarly, it is much easier to evaluate the condition of a particular landscape, or its capacity to accept change, where this is underpinned by a working knowledge of how that landscape has evolved.

Field survey

The field survey provides the opportunity to undertake a number of key tasks, including:

- incorporating the visual/aesthetic/perceptual dimension
- recording the condition of the landscape, including both the ecological and cultural aspects
- verifying LDUs and identifying any refinements to LDU and Character Areas boundaries
- assessing any particular qualities, and/or problems in areas of particular pressure or sensitivity, including seascapes.

It also provides the basis for deriving or reviewing Character Area boundaries and associated descriptions.

The survey form

The survey form was developed in partnership with the Steering Group, and was designed to ensure that a structured, consistent recording of information was possible. Character and condition information is collected in distinct sections, in a mixture of guided responses (ie selection from a list of alternatives) with associated descriptive sections. This provides the consistency of responses in the guided responses which allows these responses to be mapped (eg field size), as well as greater descriptive colour.

The overall character and overall condition statements give the surveyor the opportunity to draw together the more structured responses recorded on the form: these descriptive statements are important in informing both LD and Character Area level work.

Some aspects of the study were considered to require additional survey, and as such the field survey included extra sections for recording information where relevant. These aspects and their sections of the field survey were developed and agreed between the consultants and the Steering Group and include: urban-rural fringe (in agreed locations), coastal areas, seascapes, and AONB areas. Urban areas themselves were not surveyed.

The programme of survey

The field survey programme involved visiting each LDU for Cornwall and the Isles of Scilly during the summer of 2005. The consultants were not employed to undertake the survey itself, but to coordinate the process and provide an in-the-field resource for surveyors to call upon. Two consultants were available to the field groups at all times, and accompanied each new group in its first survey to promote consistency and answer initial queries.

Following input of the LDU data, the initial consultation stage and subsequent analysis of the data, some additional surveys were carried out during the summer of 2006 to provide additional validation and resurvey any revised LDU areas.

Incorporation into the LCA database

The survey sheets are input into the LCA MS Access database for ease of analysis and digestion using a designed input form, and to -make linking with the GIS database more easily achieved. When this link is made, each LDU polygon in the GIS is linked to the information held in the MS Access database, and becomes visible when selected in the GIS, and where appropriate, mapable. The information on the forms is transferred directly without editing and can be subsequently amended at a later date as part of an ongoing monitoring programme.

Profiling

The LDUs provide the appropriate spatial framework within which to collect and give meaning to a range of other site specific information at a landscape scale, and in turn provide users with more information about each LDU. For example, the HLC, Land Cover and biodiversity information which are site specific (ie at Level 3 and/or 4) can be linked to the LDU level through a profiling process.

The profiling process is a simple one, and involves deriving the proportion of each HLC/biodiversity/land use type for each LDU as a percentage. The profiling process was agreed with appropriate officers and was carried out for each HLC type, BAP habitat, ancient woodland and Land Cover type.

Developing the natural and cultural profile for each LDU using these datasets places these more detailed data within their broader landscape context. Each of the percentage coverages for the agreed datasets was incorporated within the Access database and is both mapable and can form part of each LDU reporting profile.

The characterisation process

LDUs are the building blocks of the landscape, and it is common to agglomerate these into larger Landscape Character Types and/or Character Areas. The latter refer to geographically discrete areas, while the former is a generic term and usually a particular type of landscape can occur in many different places.

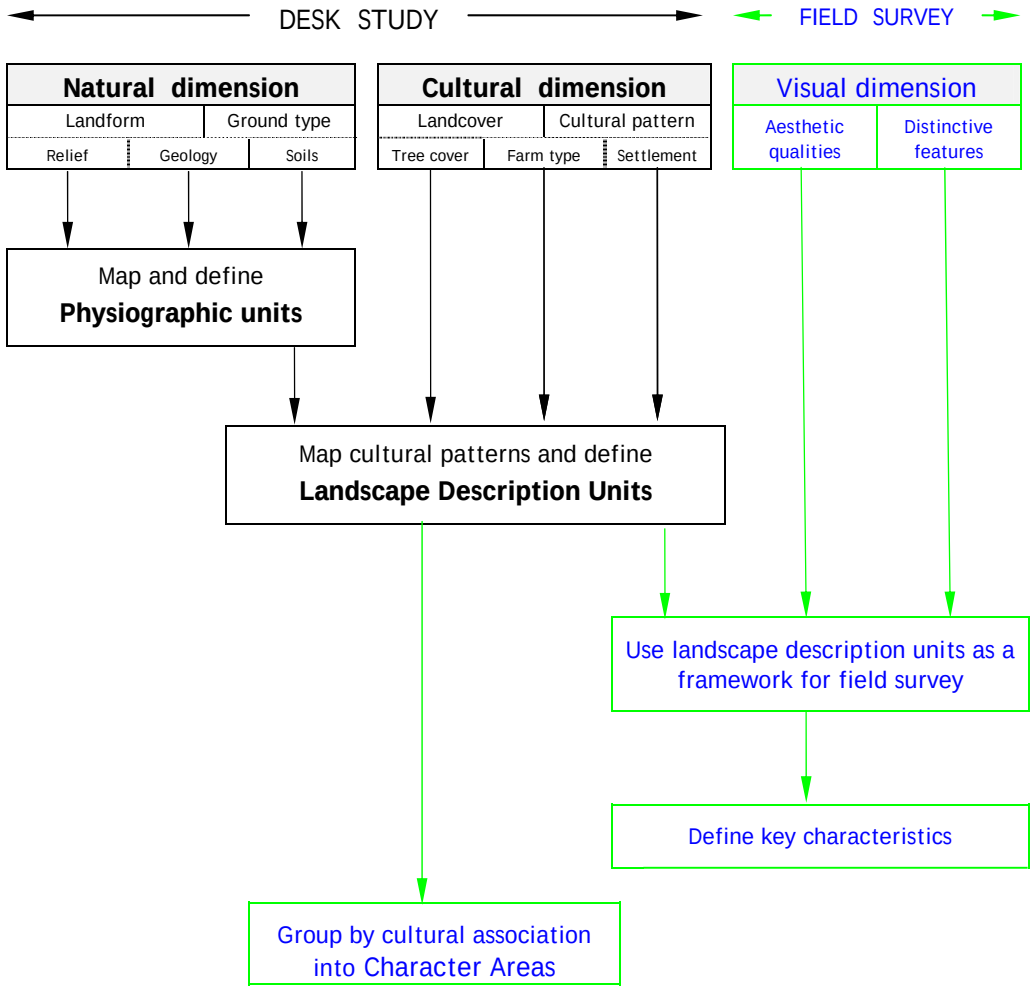
The reason for making a distinction between Landscape Character Types and Character Areas is largely a practical one. Landscape

Character Types are very much a management tool and this is the level at which most countryside planning and land management activity takes place. For most people, however, landscape is strongly associated with place. Hence, although Character Areas often comprise several different types of landscape, they are a more appropriate vehicle for presenting countryside information to a public audience.

Landscape Character Areas are primarily employed to inform and communicate issues and initiatives at the broader, landscape scale. In this instance, Character Areas were requested as the landscape unit above LDUs, and the 493 LDUs in Cornwall and the Isles of Scilly agglomerated into 45 Character Areas. These CAs are at a scale which equate with broader perceptions of landscapes and each has associated aims and priorities appropriate to its scale. They are therefore particularly useful in communicating the future of larger, yet coherent, understandable areas (rather than dealing with the building blocks of the landscape), and may be of particular use in engaging with the wider public as they are readily identifiable visually and perceptually.

The process of deriving Character Areas is covered in the current LCA Guidance published by the Countryside Agency[2],

Figure 3: The character assessment process in this study



[2] Landscape Character Assessment: Guidance for England and Scotland - Published by the Countryside Agency and Scottish National Heritage, 2002
http://www.countryside.gov.uk/Publications/articles/Publication_tcm2-14588.asp

and relies much on available visual and other perceptual information. The main sources for undertaking this process in Cornwall and the Isles of Scilly were the existing Cornwall and Isles of Scilly Character Areas and the LDU field survey sheets. The 1994 CAs were used as the basis for the new CAs, and where the match with the LDU boundaries and the descriptive information collected by client surveyors was sound this was very much a task of updating and refining boundaries. At the other extreme, where the 1994 CAs were found to require replacement, the field survey information provided the main resource for deciding how the pattern of definitive information held in the LDUs was visually represented in the landscape. It is an iterative process, and although many Character Areas are easily defined by referring to the definitive and descriptive data, where the pattern is less clearly apparent then discussion between client and consultant to achieve consensus was used.

Sensitivity

The LDU is also the scale at which to derive and consider sensitivity. Our approach to deriving sensitivity is based on the approach pioneered for the Countryside Agency in Shropshire to map landscape sensitivity and derive a measure of capacity (soon to be published as Best Practice Guidance).

This ground breaking work and our input into the recent Topic Paper (which complements the LCA Guidance) the distinction between sensitivity and capacity has become clearer. Sensitivity has now become accepted as a landscape-related concept – i.e. it is related to the nature of the landscape, rather than to any proposed agent of change, and therefore does not vary for different proposed changes.

The approach uses the physical and cultural attributes of each LDU to derive maps of inherent landscape sensitivity that take into account differences in the ecological, cultural and visual characteristics of the unit. The method also includes a desk based analysis of tranquillity (based on mapping areas not impacted by sources such as urban centres, traffic routes etc) which provides a useful objective indication of tranquillity for verification in the field, although this was not required as part of the Cornwall brief.

The technique is as objective as possible, transparent, and provides a consistent assessment and evaluation across the LDUs. Capacity is particular to the type of change considered and may therefore vary with type of change. Thus, while a landscape may be highly sensitive to change, it may have a moderate capacity to accommodate, for example, bio-fuel planting, but only a low capacity to accommodate housing development.

Sensitivity - Ecological Sensitivity

The oldest (and by implication most sensitive) landscapes are those that still survive in a semi-natural state (i.e. heathland, moorland, etc.). Most landscapes in the lowlands, however, have been settled and improved for agricultural production and as a result, any surviving semi-natural habitat is almost invariably associated with the cultural pattern (e.g. woodlands, field boundaries and other 'man made' features). Where such patches still survive they will increase overall sensitivity. Analysis of patch survival is largely a predictive exercise which looks at the current pattern of land use within the context of 'productive' and more 'marginal' ground types - the assumption being that a settled arable landscape associated with good (brown/gleyed) soils is likely to have fewer patches of

semi-natural habitat than a pastoral landscape associated with marginal (wetland, heathland, chalk & limestone or moorland) soils.

The desk based sensitivity evaluation establishes where the landscape character implies that there will be ecologically significant habitats, likely to be at risk. It does not refer to designations etc as these are clearly not landscape based but deals with the site specifics and as such offer protection and/or information at that scale. Three components are examined, using LDU data sources, as outlined in the table below.

Agricultural potential	Influences surface vegetation/land use Derived from geology, fertility and drainage
Agricultural use	Primary use of land; reflects woodland cover/farming type
Woodland pattern	Highlights where ancient woodland/remnants are likely within agricultural landscapes

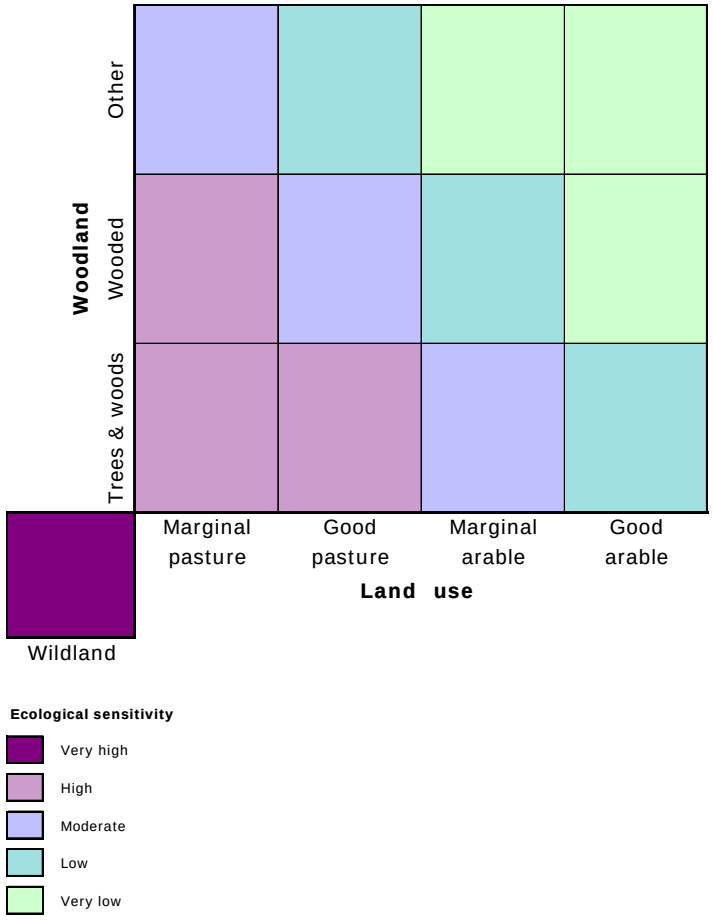
The analysis makes three main assumptions:

- agriculturally marginal land is more likely to be of ecological interest than good agricultural land
- pastoral land is more likely to support ecological interest as a result of less intensive use than arable
- landscapes with woodland of ancient character are the more ecologically valuable than other woodland character, and of these those characterised by fragmented woods and hedgerow remnants are more sensitive than larger woodland blocks (largely due to lack of protection/awareness).

The relationship between these elements helps to define the relative likelihood of ecological value, and therefore ecological sensitivity to impacts. The matrix below illustrates how these components have been analysed.

Ecological Sensitivity Matrix

The woodland category 'other' includes pastoral or arable landscapes characterised by thinly scattered/groups of trees; 'wildland' refers to semi-natural landscapes, typically associated with marginal, usually lowland heath or coastal dune/marshland.



characteristics are exhibited in the landscape (consistency). A similar approach is adopted as for ecological sensitivity, based on a clear conceptual framework based on matrices and drawing on consistent, robust data.

The measure of landscape continuity is derived by examining the scale and age of the landscape: on the vertical axis of the Continuity matrix landscape scale is ranked (small at the bottom to large at the top) - the assumption being that small scale agricultural landscapes tend to be more sensitive to change than their larger scale counterparts. On the horizontal axis the attributes are ranked by landcover pattern (pastoral landscapes with ancient woods on the left to arable landscapes with secondary tree cover on the right) - the assumption being that heritage (natural and cultural) features representing visible relics of an older pattern, are more likely to have survived in pastoral landscapes.

Scale	Expresses structural component of the landscape, combination of settlement pattern and land cover
Pattern	Establishes extent to which landscape is planned or organic. Indicative of age.

Sensitivity - Cultural Sensitivity

Cultural sensitivity largely reflects the relative time depth (or continuity) of a landscape, and the degree to which its

The continuity analysis has two main assumptions:

- smaller scale, more organic landscapes are an indication of age, and therefore likely to be of higher cultural interest and sensitivity

- organic landscapes are more culturally sensitive than planned as their time depth and very nature implies non-recreatability.

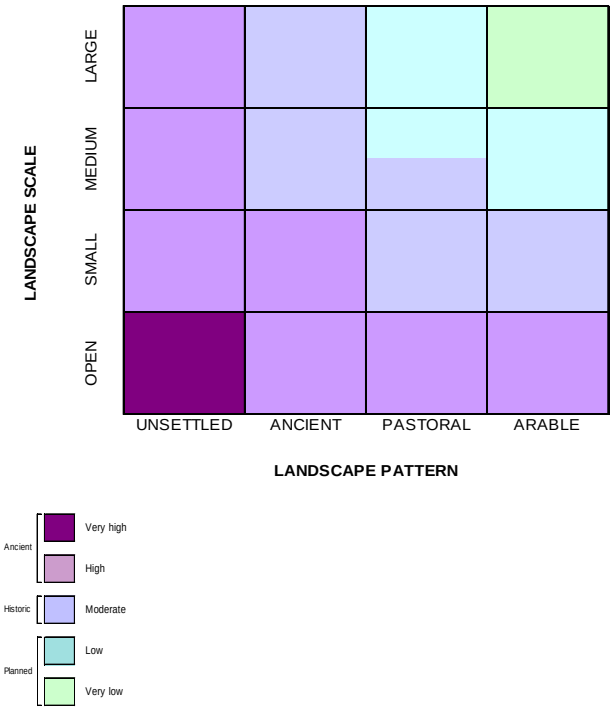
Farm type and tree cover are particularly influential in controlling the consistency of the cultural pattern at this level. Settlement pattern tends to vary at a much broader scale, whilst land use is more suited as an indicator of condition. Relatively good baseline digital data for both farm type and tree cover is also available, which makes it possible to rigorously define each of the different farm/tree cover types that underpin the LDU analysis. Thus an 'ancient wooded' character will be stronger in an LDU where there is widespread woodland cover that is consistently ancient (as defined in the Ancient Woodland Inventory) than in another LDU where the woodland cover is localised and/or comprises a mixture of ancient woods and more recent plantations. The same applies to farm type. The most distinctive agricultural landscapes are those dominated by small owner occupied farms on the one hand and those characterised by large estates on the other. LDUs that are wholly one or the other will have a strongly unified character.

The relationship between continuity and consistency indicates the likelihood of the landscape providing elements of cultural value, and therefore cultural sensitivity to change.

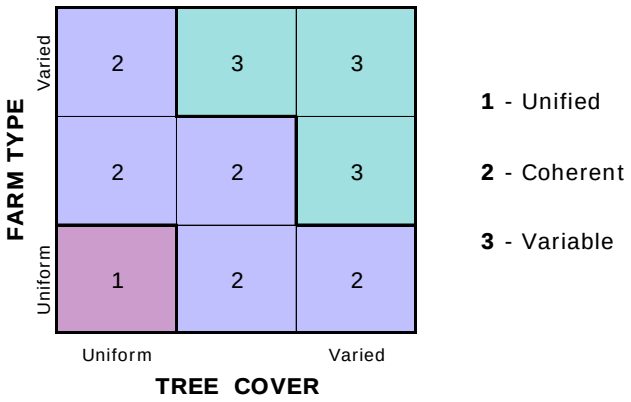
The continuity matrix shows a distinct 'time depth' continuum ranging from the older unsettled and small scale, ancient wooded landscapes in the bottom left hand corner to the more recent larger scale 'planned' landscapes at the top right. The slight subdivisions (e.g. in medium scale/pastoral landscapes) into 'Moderate' and 'Low' reflect where landscapes approach the larger end of the medium scale, and the continuity is lower.

Cultural Sensitivity Matrices

Continuity

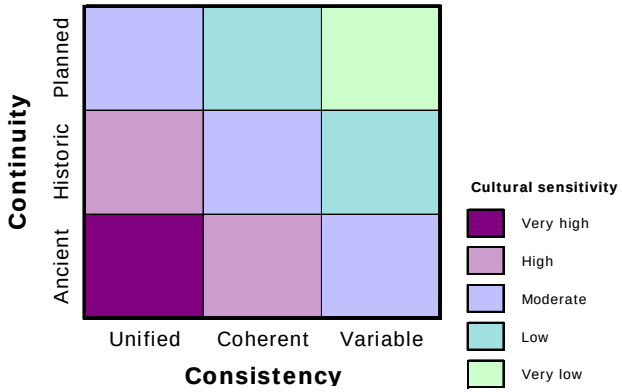


Consistency



Consistency is a measure of the uniformity of pattern for farm type and tree cover for each LDU. This is used to derive an indication of consistency from 'unified' to 'variable'.

Cultural Sensitivity (continuity with consistency)



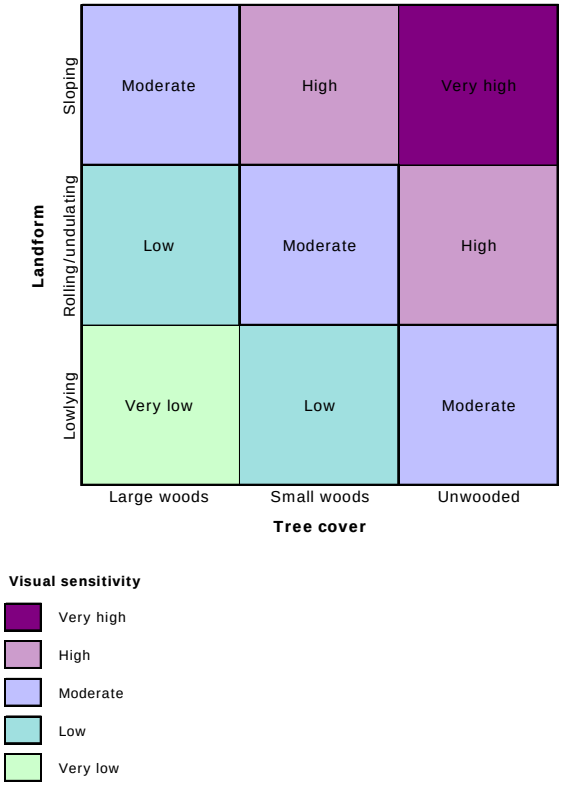
The combination of the continuity and consistency values in the matrix above provides a measure of the sensitivity of each LDU. The landscapes that are most sensitive to change are those that occur in the bottom left hand corner (i.e. those that are considered to be 'ancient' and/or strongly unified) whilst those that are variable in character and/or more recent in origin are likely to be less sensitive.

Sensitivity - Visual Sensitivity

Visual sensitivity or 'visibility' is the third component of landscape sensitivity, and is a measure of the degree to which change is likely to cause a visual impact within a particular landscape. A visibility measure can be defined, as outlined in the recent Topic Paper[3], as "a function particularly of the landform of a particular type of landscape and of the presence of potentially screening land cover, especially trees and woodland": thus, an upland landscape with little tree cover would have a high visibility score whereas a well-wooded lowland landscape would have a very low score.

[3] Topic Paper 6 - Techniques and criteria for judging capacity and sensitivity, Published by The Countryside Agency, 2003
http://www.countryside.gov.uk/LAR/Landscape/CC/landscape/LCATopicPaper.asp

The matrix below illustrates these relationships and how they affect visual sensitivity.



APPENDIX 2

GLOSSARY OF TERMS

Cornwall Landscape Assessment

GLOSSARY OF TERMS

Note: This glossary is not a complete coverage of all words or terms used in the study. It does not cover technical geological, ecological or historical landscape terms. Rather, it addresses those terms used as part of this method or in the descriptions, where meanings diverge from common parlance or are not explained in the method statement.

Amenity (Planting)- planting to provide environmental benefit such as decorative or screen planting.

Analysis- the process of dividing up the landscape into its component parts to gain a better understanding of it.

Ancient Woodland- land continuously wooded since AD 1600. It is an extremely valuable ecological resource, usually with a high diversity of flora and fauna.

Apparent- object visible in the landscape.

Approach- the step-by-step process by which landscape assessment is undertaken.

Arable- land used for growing crops other than grass or woody species.

Assessment- term to describe all the various ways of looking at, analysing, evaluating and describing the landscape.

Biodiversity- The variety of life including all the different habitats and species in the world.

Conservation- the protection and careful management of natural and built resources and the environment.

Capacity [landscape]- the ability of a landscape to accommodate different amounts of change or development of the specific type.

Carr- woodland in waterlogged terrain. Characteristics species include alder, willow/sallow.

Character- a distinct, recognisable and consistent pattern of elements, features and qualities in the landscape that makes one landscape different from another, rather than better or worse.

Characteristics- elements, features and qualities [see definition] which make a particular contribution to distinctive character.

Character Area [CA] area with common characteristics- in this study it is made up of a number of adjacent landscape description units with common perceptual and other characteristics.

Characterisation- the process of identifying areas of similar character, classifying and mapping them and describing their character.

Condition- the degree to which a landscape is soundly managed, is fit for purpose or achieves optimum biodiversity.

Coppicing- the traditional method of woodland management in which trees are cut down near to the ground to encourage the production of long, straight shoots that can be harvested.

Consistent- relatively unchanging element or pattern across a given area of landscape.

Cornish Hedge/Hedgerow- field boundary in Cornwall and the Isles of Scilly. In the context of this study the term includes the variety of field boundaries in the study area including stone faced banks or turf banks, with or without hedging plants on the top,

	and stone walls [see definition of hedge].The stone is derived from the locality eg slate, granite etc.
Culm Pasture-	species rich wet unimproved pasture associated with the Culm measures in Devon and Cornwall.
Cultural pattern-	expression of the historic pattern of enclosure and rural settlement.
Dominant-	main defining feature or pattern.
Element-	individual component parts of the landscape such as field boundaries, woodlands, trees, patches of similar vegetation, outbuildings, structures and rock outcrops.
Feature-	prominent eye catching elements e.g. wooded hill top or chapel.
Fen-	Biodiversity Action Plan category relating to mire.
Field Boundary-	the defined edge of a field whether fence, hedge, bank, ditch or wall.
Field Size -	Large 2 Ha Above, Medium Around 1.5 Ha, Small Less Than 1 Ha.
Geology-	the study of the origin, structure, composition and history of the Earth together with the processes that have led to its present state.
Ground Type-	expression of the soil forming environment and its influence in determining the surface pattern of vegetation and land use.
Hedge-	fence of shrubs or low trees, living or dead, or of turf or stone. Those strictly a row of bushes forming a hedge, hedgerow has been taken to mean the same as a hedge.
Hedge bank-	Earth bank or mound relating to a hedge.
Heritage Coast-	A coastal designation without statutory weight.
Horticulture-	intensive form of cropping, such as vegetables or fruit.
Improved [in relation to soils or pasture]	Addition of fertiliser and, in the case of pasture, reseeding with more productive grass species.
Joint Character Area-	area of land [one of 159] based on broad landscape character defined by a national landscape character assessment in 1990s for the Countryside Agency corresponding with nationally derived Natural Areas defined by English Nature eg Bodmin Moor.
Landcover-	combinations of natural and man-made elements including vegetation that cover the land surface.
Landscape-	primarily the visual appearance of the land including its shape, form and colours. However, landscape is not purely a visual phenomena. The landscape relies on a range of other aspects including geology, landform, soils, ecology, archaeology, landscape history, land use, settlement character and pattern and cultural associations.
Landscape Description Unit [LDU]-	distinct and relatively homogenous unit of land, each defined by four attributes- physiography and ground type, landcover and cultural pattern.
Landform-	combinations of slope and elevation, the producer shape and form of the land.
Landscape Character-	see Character.
Landscape Character	see Character Area

Area [CA]-	
Mixed Farmland-	a combination of arable and pastoral farmland.
Mosaic-	mix of different landcovers at a fine grain such as woodland, pasture and heath.
Objective-	method of assessment in which personal feelings and opinions do not influence characterisation.
Outcrop-	the area where a particular rock appears at the surface.
Pastoral-	land down to grass either grazed by animals or for cutting.
Physiography-	expression of the shape and structure of the land surface as influenced both by the nature of the underlying geology and the effect of geomorphological processes.
Polygon-	discrete digitised area in a geographic information system[GIS].
Prominent-	noticeable feature or pattern in the landscape.
Protect-	to keep from harm.
Qualities-	aesthetic [objective visible patterns]or perceptual [subjective responses by the landscape assessor] attributes of the landscape such as those relating to scale or tranquillity respectively.
Regional Character Areas-	See Joint Character Areas
Restore-	repair or renew.
Riparian-	vegetation associated with the water body, usually a river or stream.
Semi-natural vegetation-	vegetation which has been modified by humans that is still of significant nature conservation interest because it is composed of native plant species, is similar in structure to natural types and supports native animal communities.
Sensitivity [of Landscape]-	the inherent sensitivity of the landscape itself, irrespective of the type of change that may occur. In this project, it is divided into cultural, ecological and visual sensitivity.
Sense of Place-	the character of a place that makes it locally distinctive ie different from other places.
Sensory-	that which is received through the senses ie sight, hearing, smell, touch.
Settlement-	all dwellings/habitations, whether single or clustered in towns and villages.
Settlement Pattern-	the predominant pattern of settlement in an area.
Subjective-	method of assessment in which personal views and reaction are used in the characterisation process.
Topography-	term used to describe the features of the Earth's surface.
Tranquillity	Term used to describe low levels of built development, traffic, noise and artificial lighting.
Vernacular-	built in the local style, from local materials.
Wildland-	land with little or no management for agriculture or for settlement, often remote.

Abbreviations

AGLV	Area Of Great Landscape Value
AOD	Above Ordnance Datum
AONB	Area of Natural Beauty
BAP	Biodiversity Action Plan
CA	Character area
cSAC	Candidate Special Area of Conservation
GIS	Geographic information system
JCA	Joint character area
LBAP	Local Biodiversity Action Plan
LCA	Landscape character assessment
LDU	Landscape description unit
PSAC	Provisional Special Area of Conservation
SAC	Special Area of Conservation
SAM	Scheduled Ancient Monument
SPA	Special Protection Area
SSSI	Site of Special Scientific Interest

APPENDIX 3

LANDSCAPE SENSITIVITY ADJACENT TO MAIN SETTLEMENTS

Settlement	*LDU_No*	*LCA No*	*Cultural sensitivity*	*Ecological sensitivity*	*Potential visibility*	*Inherent sensitivity comments*	*Site survey sheet summary urban edge comments*	*Potential areas of constraint*
Bodmin	206	CA33	High	Moderate	High			
Bodmin	208	CA33	Moderate	Moderate	Moderate			
Bodmin	251	CA33	High	Moderate	High			
Bodmin	252	CA33	Moderate	Moderate	High			
Bodmin	254	CA21	Very high	High	Moderate			
						The landscape to the north, west and south is the most sensitive- with two indicators being high [LDU 251]. [Note Bodmin Castle to east is also a sensitive area.]	Highly indented settlement edge to south and east should be retained including important corridor upto Beacon. Views to landmarks and older urban edge important to retain.	Restrict development particularly to the south and in green corridors.
Bude	127	CA38	High	Very high	High			
Bude	128	CA38	High	Moderate	Moderate			
Bude	320	CA38	High	Moderate	Moderate			
Bude	326	CA38	High	Moderate	Low			
						The most sensitive areas are the ecologically sensitive golf course [very high]. Potential visibility is highest on the sloping land around the settlement.	The edge facing the golf course[LDU127] is of Edwardian/Victorian character. Urban sprawl is an issue in LDU 128.	Restrict development west across river. Address rivers edge/floodplain positively. Avoid developing golf course and joining town to Flexbury to north. Limit urban sprawl inland on sloping/higher land.
Camelford	307	CA33	Very high	Moderate	High			
Camelford	317	CA36	Moderate	Moderate	Moderate			
Camelford	356	CA32	Very high	High	Moderate			
						The ecological sensitivity is high in the valley to the east. The cultural sensitivity is high to the east,west and south. Potential visibility is high on the sloping higher ground to the west.	no comments	Restrict development particularly in the valley to the east and sloping ground to the west.
Falmouth/ Penryn	058	CA13	Moderate	Moderate	Moderate			
Falmouth/ Penryn	104	CA09	Moderate	Moderate	High			
Falmouth/ Penryn	156	CA09	Moderate	Moderate	Moderate			
Falmouth/ Penryn	159	CA13	Moderate	Moderate	Moderate			
Falmouth/ Penryn	161	CA13	High	High	High			
Falmouth/ Penryn	163	CA10	High	High	Moderate			

Settlement	*LDU_No*	*LCA No*	*Cultural sensitivity*	*Ecological sensitivity*	*Potential visibility*	*Inherent sensitivity comments*	*Site survey sheet summary urban edge comments*	*Potential areas of constraint*
Falmouth/ Penryn	165	CA13	Moderate	High	High			
Falmouth/ Penryn	368	CA09	Moderate	High	High			
						The most sensitive areas are to the west [LDU 163] which is culturally and ecologically sensitive and the open land either side of Penrhyn River [LDUs 161and 165]. The coast is ecologically sensitive south of Falmouth [LDU368]. Potential visibility is highest to the north east and south west on the valley slopes.	Bungalows are encroaching to the south along the coast and Penrhyn has industrial character in parts.	Keep Penrhyn and Falmouth separate ensuring the valley sides of the Penrhyn River are retained unspoilt. Limit further growth south along coast. LDU163 to the west is sensitive and should be protected.
Hayle	059	CA05	Moderate	Moderate	Low			
Hayle	060	CA04	High	Moderate	Very low			
Hayle	142	CA06	Moderate	Moderate	High			
Hayle	144	CA06	Moderate	Moderate	High			
Hayle	146	CA05	High	Very high	Moderate			
Hayle	148	CA05	Very high	Very high	High			
Hayle	289	CA06	Moderate	Moderate	High			
Hayle	290	CA06	Moderate	Moderate	Moderate			
						The estuary and coastal strip has high ecological sensitivity and the cultural sensitivity is moderate to the south. Potential visibility is lower to the east.	The edge to the docks and estuary are important with historic significance [LDU146]. Expansion of the town is ongoing eastward into 59.	Restrict inappropriate development on estuary and dock edge.
Helston	150	CA06	Moderate	Moderate	High			
Helston	151	CA06	Moderate	Moderate	High			
Helston	153	CA06	High	Moderate	Very low			
Helston	154	CA06	High	Moderate	Very low			
Helston	363	CA06	Moderate	Moderate	Moderate			
						The River Cober and Loe valley bottoms have high cultural sensitivity. All other adjacent cultural and ecological sensitivities are moderate. Potential visibility is highest to the west on the valley slopes.	There are views to landmarks from valley bottom to the south. The eastern edge of the town has many new estates, some related to RAF base.	Restrict and take particular care with development in valley to west.
Launceston	209	CA31	High	High	Low			
Launceston	210	CA31	High	High	High			
Launceston	211	CA26	High	Moderate	Moderate			
Launceston	212	CA31	High	High	Moderate			

Settlement	*LDU_No*	*LCA No*	*Cultural sensitivity*	*Ecological sensitivity*	*Potential visibility*	*Inherent sensitivity comments*	*Site survey sheet summary urban edge comments*	*Potential areas of constraint*
Launceston	214	CA31	High	High	Low			
Launceston	312	CA26	Very high	Moderate	Moderate			
Launceston	316	CA31	Very high	High	High			
						The cultural sensitivity of all LDUs around the town are either very high [Kensey valley sides] or high. Ecological sensitivity is high with the exception of the higher land to the south and south east [LDUs 211 and 312]. Potential visibility is highest on the valley slopes.	The river corridor is considered a significant open corridor separating the town from Lanstephan.	Development should be restricted in the river valley sides and bottoms.
Liskeard	218	CA22	High	Moderate	Low			
Liskeard	220	CA22	High	Moderate	Moderate			
Liskeard	224	CA22	High	Moderate	Moderate			
Liskeard	227	CA23	Very high	High	Moderate			
Liskeard	092	CA24	Very high	High	Moderate			
						The narrow valleys to the east [Seaton] and west [Looe] of the town are of high sensitivity in ecological and very high in cultural terms [LDUs 92 and 227]. While the cultural sensitivity is high on the intervening ridge to the north and south the ecological sensitivity is moderate. Potential visibility is generally moderate.	Flanks East and West Looe valleys with an abrupt but soft edge to East Lyland. Industry to west.	Restrict development in valleys .
Newquay	009	CA15	Very high	Very high	Moderate			
Newquay	010	CA15	Very high	Very high	Moderate			
Newquay	076	CA15	Moderate	Moderate	Moderate			
Newquay	175	CA15	Moderate	High	Very high			
Newquay	176	CA15	High	Very high	High			
Newquay	178	CA15	Moderate	Moderate	Moderate			
Newquay	348	CA15	Moderate	Moderate	High			
Newquay	352	CA15	High	Very high	Very high			
Newquay	353	CA15	High	Moderate	High			
Newquay	374	CA14	Moderate	Moderate	Moderate			
						Ecological sensitivity is very high along the coast but moderate along the river valleys covering most of Newquay inland. Cultural sensitivity is high on the golf course and along the Porth valley. Potential visibility is high all round the town.	The urban edge to the coast is dominated by tourism development which also is spreading north. This is detractive in parts. New development is spreading north east.	Improve quality of tourism development along coast limiting spread north and south. Protect and enhance coastal edge including golf course and valleys.

Settlement	*LDU_No*	*LCA No*	*Cultural sensitivity*	*Ecological sensitivity*	*Potential visibility*	*Inherent sensitivity comments*	*Site survey sheet summary urban edge comments*	*Potential areas of constraint*
Penzance	067	CA04	Very high	Very high	Moderate			
Penzance	132	CA01	Moderate	Moderate	High			
Penzance	133	CA04	Moderate	Moderate	Moderate			
Penzance	134	CA04	High	High	Low			
Penzance	139	CA03	Very high	Moderate	High			
Penzance	277	CA01	Moderate	High	Moderate			
Penzance	417	CA04	Very high	Moderate	Moderate			
						The most sensitve area is the beach/coast to the east. LDU139- a sloping hillside to the north east of the town which has very high cultural and high visibility sensitivity. . The landscape is ecologically sensitive to the south west and culturally very sensitive to the west and north.	The shoulder of Trythogga is important dividing up built land.	Quarry to the south is a constraint. Easiest expansion is to east on A30 corridor in landscape terms – hillsides behind vulnerable and prominent. The seafront is sensitive.
Redruth/Camborne	080	CA11	Moderate	Moderate	High			
Redruth/Camborne	119	CA28	Moderate	Moderate	High			
Redruth/Camborne	170	CA11	Moderate	Moderate	Moderate			
Redruth/Camborne	171	CA11	Moderate	Moderate	Moderate			
Redruth/Camborne	174	CA11	Moderate	Moderate	Moderate			
Redruth/Camborne	258	CA10	Moderate	High	High			
Redruth/Camborne	418	CA11	Moderate	Moderate	Moderate			
						The most sensitive areas are of high ecological sensitivity to the south and south east of the conurbation up the slopes towards Carnmenellis. Elsewhere the sensitivity is moderate for ecological and is moderate throughout for cultural sensitivity. Potential visibility is highest to the south and north on the hill and valley slopes.	Views to the landmark of Carn Brea are important.	Restrict development up the slopes to the south and in the river valleys to the north.
St Austell	002	CA39	Very high	Very high	Moderate			
St Austell	198	CA16	High	Moderate	Low			
St Austell	200	CA16	High	Moderate	Moderate			
St Austell	201	CA39	Moderate	Moderate	Moderate			

Settlement	*LDU_No*	*LCA No*	*Cultural sensitivity*	*Ecological sensitivity*	*Potential visibility*	*Inherent sensitivity comments*	*Site survey sheet summary urban edge comments*	*Potential areas of constraint*
St Austell	088	CA39	Moderate	Moderate	Low			
St Austell	355	CA39	High	High	High			
St Austell	370	CA16	Moderate	Moderate	Moderate			
St Austell	409	CA17	Moderate	High	High			
						The most sensitive area is the beach at Carlyon Bay which is very high for both ecological and cultural sensitivity. The valley and slopes to the north [LDUs 355 and 409] are high for both ecological and cultural sensitivity while the coastal area and hills and valley to the south [LDUs 200 and 198] are high in terms of cultural sensitivity. Elsewhere sensitivity is moderate. Potential visibility is highest to the north on the slopes.	A391 forms a strong boundary to the north east and views are possible of china clay pits from the south.	Restrict development to the south and east along the coast and in valley to north east.
St Ives	017	CA05	Very high	Very high	Moderate			
St Ives	018	CA02	Very high	Very high	Moderate			
St Ives	019	CA02	Very high	Very high	Moderate			
St Ives	135	CA02	Very high	Very high	Very high			
St Ives	137	CA05	Moderate	Moderate	Moderate			
St Ives	278	CA02	High	Moderate	High			
St Ives	281	CA03	High	Moderate	High			
St Ives	282	CA03	Very high	High	High			
St Ives	283	CA02	High	High	High			
						The most sensitive areas for the ecological and cultural criteria are the beaches. Ecologically the northwestern edges of the town are sensitive. Potential visibility is highest to the south and west on sloping land.	St Ives Head is very sensitive. There is pressure for settlement expansion east in LDU137.	Restrict development to the south and west.
Saltash	039	CA27	Very High	Very High	Moderate			
Saltash	042	CA25	Very high	Very high	Moderate			
Saltash	234	CA25	Very high	High	Moderate			
Saltash	245	CA25	Very high	High	Moderate			
Saltash	311	CA26	Moderate	Moderate	Moderate			
Saltash	412	CA29	Very high	Moderate	High			
Saltash	413	CA26	High	Moderate	Moderate			

Settlement	*LDU_No*	*LCA No*	*Cultural sensitivity*	*Ecological sensitivity*	*Potential visibility*	*Inherent sensitivity comments*	*Site survey sheet summary urban edge comments*	*Potential areas of constraint*
Saltash						Both the ecological and cultural sensitivity are very high to the north along the estuary and to the south on the estuary. Cultural sensitivity remains very high but ecological sensitivity drops to high along the Latchbrook leat to the south east. To the north [LDU412] cultural sensitivity is very high and ecological sensitivity is moderate. Both criteria are moderate to the north east. Potential visibility is highest to the north on the slopes.	To the south new housing and school do not fit well into the landscape while the older settlement around the church [St Stephens] do. Views to Plymouth are possible.	Restrict development to the south, south west and north, particularly along the estuary edge and valleys.
Torpoint	232	CA25	Moderate	Moderate	Moderate			
Torpoint	334	CA25	Very high	Very high	Moderate			
Torpoint	T25	CA25	Very high	Very high	Moderate			
						Cultural and ecological sensitivity are very high along the estuary edge and are moderate inland. Potential visibility is moderate.	no comments	Restrict development on the estuary edge but also note sensitivity of Antony Park.
Truro	024	CA13	Very high	Very high	Moderate			
Truro	391	CA13	Very high	Moderate	High			
Truro	393	CA16	High	Moderate	Moderate			
Truro	396	CA13	Very high	Moderate	High			
Truro	397	CA13	High	Moderate	Low			
Truro	398	CA13	Very high	Moderate	High			
Truro	399	CA13	High	Moderate	Low			
Truro	402	CA13	High	Moderate	High			
Truro	403	CA14	Moderate	Moderate	Moderate			
Truro	405	CA13	Very high	Moderate	High			
Truro	416	CA11	Moderate	Moderate	Moderate			
						Ecological and cultural sensitivity is very high on the Truro River to the south. Cultural sensitivity is very high on all other valley sides to the north and south and high on the ridge to the east. Cultural sensitivity is high to the north on the River Allen valley bottom and River Kenwyn valley. Ecological sensitivity is moderate elsewhere. Potential visibility is high on the sloping valley sides.	View corridor along Truro River into town from the south is important	Restrict development in river valleys.

Settlement	*LDU_No*	*LCA No*	*Cultural sensitivity*	*Ecological sensitivity*	*Potential visibility*	*Inherent sensitivity comments*	*Site survey sheet summary urban edge comments*	*Potential areas of constraint*
Wadebridge	186	CA34	High	Moderate	Moderate			
Wadebridge	190	CA34	High	High	Low			
Wadebridge	192	CA33	High	Moderate	Moderate			
Wadebridge	238	CA33	High	Moderate	Moderate			
Wadebridge	358	CA33	High	High	Moderate			
Wadebridge	359	CA34	High	Moderate	High			
Wadebridge	360	CA33	High	Moderate	High			
						Ecological sensitivity is high along the river corridor and on the hills and valleys to the south. Cultural sensitivity is high all round the settlement. Potential visibility is high on the sloping land to the north east, south and west.	The river corridor around Polmorla is significant and has ecological value.	Restrict development in the river corridors and along the estuary edge, especially to the south.

APPENDIX 4

CONSULTATION REPORT

CORNWALL AND THE ISLES OF SCILLY

LANDSCAPE CHARACTER STUDY

TAKING PUBLIC CONSULTATION FORWARD

Final Report

March 2007

Jane Corbett

CONTENTS

Tables

Boxes

Appendices

1.0 INTRODUCTION

In 2005 a new assessment of the landscape character of Cornwall and the Isles of Scilly was undertaken. This was designed to update and extend the 1994 Cornwall Landscape Assessment. The aim of the study was to update information about the landscape and its condition and to provide important guidance for both planning and land management decisions.

This Landscape Character Assessment Study has been developed by Diacono Associates in association with White Consultants.

In the original study design it was recognized that public consultation forms an important element of Landscape Character Assessment (LCA), but that the resources to undertake this consultation were limited. As the study nears its conclusion this report outlines the action taken on public consultation to date and outlines recommendations for how this could be taken forward. It focuses particularly on strategies for consultation at the local community level.

The study covers Level 2 of the hierarchy of landscape information available in England as defined below:

Level 1	National/Regional level- eg Joint Character Areas
Level 2	County/District level- Landscape Character Areas and Landscape Description Units
Level 3	Site level- eg Historic Landscape Character areas

2.0 OUTPUTS FROM THE LANDSCAPE CHARACTER STUDY

When the LCA study was commissioned it was recognized that there were two major tasks: to develop a new and more disaggregated level of units (Land Description Units referred to as LDUs) to the assessment process and using this information to revise the existing Character Areas. Character Areas were drawn up in 1994 and their boundaries and profiles needed revision in the light of new information and analysis.

The aim is to produce a single hierarchical landscape framework. There are three linked stages: the desk study, the field survey and stakeholder consultation. The study has confirmed 40 Character Areas for Cornwall and 5 for the Isles of Scilly. 492 Landscape Description Units have been derived.

The output of the study will be made available in report form with an integrated database and a website, to be made freely available to planners at the county and district level and the wider public.

The database links the different spatial scales in a structured way and integrates previously disparate information, from the regional right through to site specific data.

The data is at its most comprehensive at character area level, so this forms the starting point for public consultation.

Box One

Reporting Structure on Character Areas [Level 2]

The study report and database includes the following information in the profile for each Character Area:

- Constituent LDUs
- Location
- Designations
- Description
- Key Characteristics
- Geology and Soils
- Topography and drainage
- Biodiversity
- Land Cover
- Land Use
- Field and woodland pattern
- Settlement pattern
- Transport pattern
- Historic Features
- Condition
- Pressures
- Sensitivity
- Aesthetic and sensory
- Distinctive features
- Visions and Objectives
- Planning and Land Management Guidelines

Reporting Structure on Landscape Description Units (LDUs)
The study report and database includes the following information in the profile for each Landscape Description Unit:

- Overall Character Summary
- Overall Condition summary
- Identified Management Issues
- Physiography
- Ground Type
- Land Cover
- Settlement Pattern
- Ecological sensitivity
- Cultural Sensitivity
- Visual Sensitivity
- Designations
- Ecological Profiling
- Cultural/Historical Profiling

Following desk study and field survey an initial round of public consultation workshops were undertaken, discussed in more detail in the next section. These helped to validate the Character Area profiles, to add useful information and to highlight areas where more information was needed. Subsequently the Character Area information was reviewed to take into account information gathered from the stakeholder workshops and feedback from the management group.

A further study output is a Best Practice Guidelines Template document which sets out for developers and others how to take landscape character into account. This may be adopted as a Supplementary Planning Document as part of the Local Development Frameworks in due course.

3.0 PUBLIC CONSULTATION TO DATE

CURRENT STATUS OF STAKEHOLDER AND COMMUNITY CONSULTATION

As the LCA study developed a distinction was made between stakeholder consultation (focusing on planners and stakeholder organisations at the county and district level) and consultation with local communities, their representatives at parish level and in the non-governmental sector. It was recognized that different styles of consultation would be needed, due to the different levels of prior knowledge that could be assumed and the different spatial scales involved.

Three stakeholder workshops were held for practitioners in planning and land management in late 2005/early 2006. The days were run to explain the overall findings at LCA level followed by workshops to discuss and collect information on the selected Character Area boundaries, descriptions, pressures for change and planning and management opportunities. This is illustrated in Photographs in **Appendix B.**

A further workshop was held in January 2006 in Bodmin for consultation at the community level and this is described in more detail below. This is illustrated in Photographs in **Appendix C.**

All the workshops were very well attended. The comments on accuracy, boundaries and descriptions have been incorporated into the final landscape information where appropriate.

DESIGN OF THE LOCAL COMMUNITY CONSULTATION WORKSHOP

The format for the workshop is shown in **Appendix A.**

Just under fifty people were present. In the event this included some county and district level planners, as well as parish level community representatives. Participants were invited to comment on the study at the Character Area level and those present commented on 16 of the Character Areas covered by the study. Perhaps unsurprisingly given the location of the workshop, Character Areas in the north of the county were better covered than in the south, although representatives from the Isles of Scilly had travelled specially to be present.

Consultation tools already developed in the context of the CPRE study and further innovative practice with the Caradon Hills Area Heritage Project were employed. Specific innovations were the development of creative writing workshops on landscape perceptions and the extension of the rich picture exercise to include consideration of future landscape scenarios under different management implications. The format for the workshop is included in Appendix 1. The workshop worked with the maps and reports produced by the LCA study.

Although the attendance at the workshop was very good it could not be claimed that this one workshop was representative of the whole of the study area. Participants were able to comment on 16 out of the 45 Character Areas. In some cases the groups were as small as two people per Character Area.

It is recommended that at least two more workshops would be need in different locations to ensure that all Character Areas are represented.

RESULTS OF THE LOCAL COMMUNITY CONSULTATION WORKSHOP

A short report on the workshop covering the recommendations for each Character Area has already been submitted to the Management Group. This focused on specific feedback on the Character Area descriptions, key characteristics, boundaries and pressures for change. Participants were invited to amend or add to these aspects of the Character Area profiles. It

is understood this information would be used to prepare the final version of the report on the Revised Character Areas and Descriptions.

Box 2

Landscape Character Community Workshop Findings

The workshop demonstrated that:

- There is a widespread understanding that it is useful to assess the natural and cultural dimensions of landscape rather than just visual ones and that landscape can be assessed at different spatial levels in a nested way
- Participants could work effectively at the character area level and comment on the Character Area profiles using maps and written descriptions
- They were particularly keen to comment on the validity of the boundaries for the Character Areas and if needed make map based recommendations for boundary changes
- The different groups varied in the emphasis they gave to the description, key characteristics and boundaries. They had useful information to be added to the descriptions and key characteristics and were often keen to add to the list of pressures
- They wanted to see specific management guidelines for their areas

The Management Group specifically requested a report on the responses to the Character Area descriptions. Other valuable information was collected at the workshop and could still be made available if requested.

Box 3

Further Information from the Community Consultation Workshop and a Review of the Consultation Tools

Creative Writing Exercise
Both planners and local community participants opted for this workshop. It generated some wonderfully expressive writing on participants' response to sense of place and, perceptions of landscape character. This was of great value in giving fresh personal perspectives on landscape, what is valued and why, a sense of time depth and personal experience of pressures for change. Good quality information can be generated in a relatively short time in a well designed workshop.

A selection of quotes form the writing could add colour to any future study reports. It would be possible to invite a wider range of people to submit their own writing to the website to increase the geographical coverage, although this may require some editing to ensure it all of useable quality.

Rich Picture Exercise
Two groups took part enthusiastically in this exercise. It was particularly valuable in drawing out more of a shared understanding of current landscape character, the specific impact of pressures for change and more innovatively likely future scenarios for landscape character and condition under different management options. This is also a useful exercise for developing a shared vision of the future landscape. The output is pictorial and text based and can be added to future reports.

Photographic Exercise
This was a useful exercise in examining specific Character Areas and pressures for change. Other consultant-facilitated workshops have demonstrated that this can be targeted on specific landscape units in areas in more spatially concentrated workshops.

Plenary Discussions
The plenary discussions were lively and an important part of the interaction on the day. They provided the forum for articulating some of the concerns about how information is shared and communicated between the county, district and parish level with a common concern by parish groups that they were collecting information e.g. in Parish Plans which may not always be taken into account in the county study. The two of course work at very different spatial scales and it is not possible for a county level study to go down to the in depth local spatial scale that parish level exercises use. But this did raise some useful concerns about how best to link top down expert driven processes with more bottom up approaches.

The workshop served to reinforce how much pride and identify there is with the landscape of Cornwall and concerns about unregulated pressures for change.

All of these tools could be used in district or parish led consultation exercises that using a workshop format. Their value is greatest when there is a well defined spatial area covered e.g. a specific Character Area, group of adjacent Character Areas or LDUs.

Table 1

Types of Information Resulting from Public Consultation Workshop January 2006

(Consultation at the Character Area Level)

Type of information	Exercise	Action/Outcome	Database/Website
C.A. Description: Additions/amendments to	Group Discussion	Important that is well recognised and accepted for validation, but only add/amend if in line with LCA method	
Key Characteristics: Additions to	Group Discussion	Important that is well recognised and accepted for validation, but only add/amend if in line with LCA	
Boundaries: Suggested changes to	Group Discussion	Important that is well recognised and accepted for validation, but only add/amend if in line with LCA method	
Pressures: Additions to	Group Discussion	Area of greatest discussion re what's included and relative importance	Included in database. Could also include as separate section on public perceptions in the website
Aesthetic and Sensory: Additions to and more detailed information	Creative Writing	Often specific locations rather than C.A. level, rich information and some time depth	Include examples as separate section on public perceptions in the website
Visions and Objectives:	Group Discussion, Rich Picture Exercise		Include examples as separate section on public perceptions on the website
Management guidelines	Group Discussion	Consider and add if valid and relate to verifiable evidence base.	

4.0 STRATEGIES AND TOOLS FOR CONSULTATION

DIFFERENT APPROACHES TO CONSULTATION

There is a useful distinction between validation, consultation and greater involvement at the community level.

Validation
This approach invites confirmation that existing information in pre-designed categories makes sense in the light of participants' knowledge and invites them to add to this in a predetermined way. It can check, for example, that the key characteristics and description of a Character Area or LDU are recognisable and make sense to local stakeholders and that reports and websites are in a consistent and easy to use form.

This kind of information can be collected in a variety of ways, ranging from postal and online questionnaires to workshops.

Consultation
Is a broader or more open ended process where participants are also invited to comment on the way the data is structured and presented and potential uses of it. It is a more interactive process. Local communities often have valuable information to add, particularly on the cultural landscape (e.g. recent changes in land use, land cover, management practices). But this can also happen on the ecological side e.g. the presence or absence of species and the management of habitats. Local communities are often concerned with and have a valuable local perspective on social and economic drivers for change.

Some of the data collected may be factual. Equally important is perceptual information. This kind of information can also be collected in a variety of ways. Workshops, if well facilitated, can be very helpful in moving from simple data collection to learning in a social context and developing consensus e.g. on pressures for change, visions and management guidelines.

Involvement
Using well established participatory techniques this enables those taking part to either be involved at an earlier design stage of a study and/or to be directly involved in collecting information and evaluating its significance. These techniques inevitably tend to require more resources and will probably require a longer elapsed time.

A well facilitated process can enable rural communities and local planning authorities to work more closely together in defining visions, preparing strategies and implementing planning policies.

TECHNIQUES FOR CONSULTATION

As part of the North Cornwall Local Development Framework North Cornwall District Council has prepared a 'Statement of Community Involvement' (North Cornwall District Council 2006). This provides a useful basic summary of possible consultation and involvement methods.

Box 4

Consultation and Involvement Methods
Distributing draft documents
Using existing networks
Focus groups
The media

Newsletters
Mobile services provide advice and information
Public meetings
Public exhibitions
Website
Workshops and seminars

It needs to be remembered that local communities are rarely homogenous. There may be differences in knowledge and motivation between those who are actively involved in land use and land management and those who are not. Age and length of residence in the area can also lead to significant differences.

One of the practical concerns is that landscape units do not map neatly onto administrative units. It is likely that any consultation exercise would need to consider whether to consider landscape areas spread across county, district or parish boundaries.

Where resources are very tight there may be hard decisions to take about the best approach to consultation.

Three possible approaches are outlined below:

- Aim for representative coverage of the county by undertaking consultation about all Character Areas
- Prioritise resources to concentrate on selected Character Areas e.g., those in particularly good or poor condition
- Prioritise resources on areas where there is a strong local initiative or forum which provides a ready contact with local groups who are well motivated

These approaches are not mutually exclusive; the latter approach could be used to develop a model for practices that might be adopted by other areas at a later stage.

TYPES OF INFORMATION THAT CAN BE GENERATED FROM LOCAL COMMUNITY CONSULTATION

Table 2 below shows the kind of information that can result from public consultation and involvement at a more disaggregated level, for example at the LDU level.

Table Two

Landscape Character Assessment and Public Consultation:
Kinds of Information Generated at the Local Level
(e.g. from Community Landscape Character Statements, Parish Plans etc)

Type of information	**Action/outcome (Define if applies to level 2 or 3)**
Key characteristics	Additions or rewordings may be suggested to enrich, incorporate if appropriate
Changes to boundaries	Investigate, but only change if this is in line with the whole methodology
Geology	Unlikely
Topography and drainage	Unlikely
Detailed information on soil type	Only useful at level 3

Recent changes in habitat	May be useful site specific information, could be useful to assessment of condition or level 3 analysis
Land cover	May be useful site specific information, could be useful to assessment of condition or level 3 analysis
Recent changes in landuse	Often a lot of comment, use to investigate if queries about condition
Changes to field and woodland pattern	Could be useful to assessment of condition or level 3 analysis
Settlement pattern	May be useful site specific information, could be useful to assessment of condition or level 3 analysis
Historic and archaeological information	Can enrich study, most likely to be useful at level 3
Condition	Likely to be feedback once distinction between character and condition well understood
Pressures	Likely to be a lot of feedback. Can inform need for management guidelines.
Forces for change	Likely to be a lot of feedback. Can inform need for management guidelines.
Sensitivity	May be useful site specific information, could be useful to assessment of condition or level 3 analysis
Aesthetic and sensory	Valuable local perceptions
Vision and objectives	Likely to be useful feedback with well facilitated discussion. Can inform need for management guidelines.
Management Guidelines	Likely to be useful feedback with well facilitated discussion. Can inform management guidelines.

5.0 COMMUNITY CONSULTATION AT THE DISTRICT AND PARISH LEVEL

THE NATIONAL AND DISTRICT PLANNING CONTEXT

Decisions about the best possible strategies and outcomes for public consultation need to be taken in the light of the national context. This report seeks to reflect best possible practice in local community consultation on landscape character.

There are also two other relevant developments. The first is the focus by the Office of the Deputy Prime Minister on sustainable communities, which has encouraged some experimentation with new consultation approaches, some of which are landscape related.

The second is recent changes in the way the planning system works due to the 2004 Planning Act. This replaces the old system of structure and local plans with local development frameworks (LDFs). LDFs are a portfolio of documents to deliver the planning strategy. This should involve the preparation of a 'Statement of Community Involvement' (SCI). Community involvement may be encouraged either at the level of formulating an overall strategic framework [including priorities for landscape] or specific planning applications. Community involvement can be seen as an on going process rather than a one off procedure.

An early example is provided by North Cornwall District which has decided to involve communities in its procedures for sustainability appraisals and strategic environmental assessment.

The districts in Cornwall and the Isles of Scilly will differ in the speed with which they move towards a Statement of Community Involvement and what it is used for. Given the county level spatial framework now provided by the Landscape Character Assessment districts should be encouraged to build landscape information and criteria into their SCIs.

How can or should the county level Landscape Character Assessment undertaken best assist the local development framework process?

Box 5

How can the Landscape Character Assessment assist with Local Development Frameworks?

Possible options are:

- Make available to interested districts the workshop format used in January 2006 so that they can *use the consultation tools* in them or adapt them for specific community involvement exercises they are conducting themselves
- *Complete the study in report and website form so that it is a resource* that can be consulted by planners at the district level and local community representatives at an appropriate spatial scale.
- Work with districts to develop *best practice for a minimum level of validation and ideally more in depth consultation*
- *Design a more interactive website* so that as new information becomes available collected at the district and community level it can be integrated into the database and website. However, care is needed not to confuse sources of data and time of amendment [see Section 6.0].
- Work with districts to design community consultation and involvement practices on landscape character that *can collect data in more depth or at a more disaggregated scale* than would have been possible within the county study. This will entail taking public consultation down from the Character Area to the LDU level.
- Statutory consultation in due course once the landscape character assessment has been finalised on sensitivity information and the best practice guidance document in order to make this information SPD.

Notes:
These options are not mutually exclusive and may take place over different time scales.

To ensure that the LCA study is fully utilised within the planning system in future public consultation should ensure that it meets the policies for community engagement set out in the District Statements of Community Involvement (SCI) as a minimum standard. PPS12 set out nine tests for a SCI shown below. These tests relate to consultation on district Local Development Documents rather than the LCA explicitly, but to ensure coherence in the consultation strategy as a whole it would obviously make sense to work to common standards.

Box 6

PPS12 Tests for a Statement of Community Involvement

1) Local Planning Authority has complied with the minimum requirements for consultation as set out in Regulations 9

2) Local Planning Authority's strategy for community involvement links with other community involvement initiatives e.g. the Community Strategy

3) Statement identifies in general terms which local community groups and other bodies will be consulted

4) Statement identifies how the community and other bodies can be involved in a timely and accessible manner

5) Methods of consultation to be employed are suitable for the intended audience and for the different stages in the preparation of Local Development Documents

6) Resources are available to manage community involvement effectively

7) Statement shows how the results of community involvement will be fed into the preparation of Development Plan Documents and Supplementary Planning Documents

8) Authority has mechanisms for reviewing the Statement of Community Involvement

9) Statement clearly describes the planning authority's policy for Consultation on planning applications.

The tests make good general sense, but refer more to the methods of and outcomes of consultation rather than the content of what it is about.

LANDSCAPE CHARACTER ASSESSMENT AT THE PARISH LEVEL

Parish Plans and Village Design Statements

Moving down from the district level there is valuable potential for public consultation at the parish level. This may be through working with an individual parish, or with groups of parishes which share an interest at the landscape level.

The two most common ways for this to happen at a parish level currently is to work with a parish preparing a Village Design Statement (VDS) or a Parish Plan (PP). In both cases explicitly building a Landscape Character Assessment in considerably strengthens the process. It ensures the focus is enlarged beyond the built settlement to the wider landscape in which it is set and maps out the often complex and subtle relationships between landscape character and the built settlement. In both of these providing a specific set of procedures for undertaking a community level Landscape Character Assessment strengthens and complements what would otherwise be done.

Recent Cheshire Landscape Trust publications offer recent and imaginative examples of both these processes, VDS and PP, such as at Weaverham [see References]. These processes will have a much more effective outcome where a good quality county level LCA study already exists. The county level study needs to be easily accessible and easy to interpret by parish planners and local community groups. The county level study provides the overall spatial framework and context for these more localised studies.

The local studies then enrich the county framework by providing much more disaggregated information at the LDU or LCP level e.g. on recent landuse or changes or habitat changes. They add valuable data on local perceptions of landscape character and condition. They are particularly valuable for developing coherent local stakeholder statements on visions, objectives and management guidelines which can be taken account of in the planning system. A coherent and objective strategic framework needs to be maintained at the county and in due course the district level which places local level inputs in their wider context. But a combination of workshops which are both informative and consultative followed by opportunities for the wider public to comment on draft documents should provide a process of dialogue which is an essential meeting point between top down expert led assessment methods and bottom up participatory procedures.

The PP or VDS may be initiated in several ways. There may be existing strong parish forums at the parish level where the parish initiates the project. Alternatively it can result from the broader framework of a county, district or landscape level approach where these studies are facilitated in a sample of parishes. The latter will ensure that a consistent process is used making it easier to prioritise scarce resources for follow on action.

COMMUNITY LANDSCAPE CHARACTER ASSESSMENTS

It is also possible to undertake a stand alone 'Community Landscape Character Assessment'. This can be centred on a parish or more commonly group of adjacent parishes foaling with a shared landscape description unit. A very useful summary of best practice in doing this is provided in a recent CPRE Report (CPRE 2005). This has the advantage of an explicit landscape character focus. Local motivation to undertake these will be strongest when they are well resourced and where there is confidence that the output will be used within the planning system.

These consultation methods are based around a stakeholder workshop with a follow-up evaluation workshop. The workshops are both informative, spreading understanding of landscape character assessment and consultative: collecting new forms of data or perceptions not previously available at this local level. It adds value to the county level study. The output is a Community Landscape Character Statement.

LANDSCAPE CHARACTER ASSESSMENT AT THE MULTIPARISH LEVEL

The LCA process may also be used by groups of parishes for a variety of reasons to do with designation or funding possibilities at the landscape level. It may for example be through the work of an AONB, a bid for a World Heritage Site or Local Heritage bid, such as that undertaken by the Caradon Hill Area Heritage Project. Although such projects often develop for more than landscape reasons the LCA can perform a valuable role in helping to ensure that the project boundaries make sense in landscape terms, that the different attributes of the landscape are well documented and that future management is sensitive to landscape character.

FACILITATING THE DIFFERENT LEVELS OF LANDSCAPE CHARACTER ASSESSMENT

In some parts of the country community level landscape initiatives including assessment begins as the result from parish level initiatives before a county or regional LCA has been undertaken.

Where there is a county or regional assessment in existence this is tremendous resource that can be drawn upon and enriched.

In its simplest form parish level assessment can help to add useful information and validate the descriptions in the county study.

It is not necessarily a simple dichotomy between a top down/expert driven process or a bottom up one.

Local communities have valuable perceptions, information and aspirations which can go well beyond simply filling in details at a more disaggregated level than a county study could undertake.

A natural starting point for districts would be to work with data and spatial framework offered by the county study and then resource the completion of a well chosen sample of Community Level Character Statements. This would generate valuable data in its own right, but also provide good quality demonstrations of what can be achieved.

Box 7

Summary of What A County level LCA Offers to District and Parish Level Initiatives

- A description of each landscape
- A list of its key characteristics
- A database and set of maps of the different landscapes
- An integrated spatial framework
- A consistent methodology for assessing landscape and developing management guidelines

6.0 INCLUSION OF CONSULTATION DATA IN THE STUDY DATABASE AND WEBSITE

ADDING DATA TO THE DATABASE AND WEBSITE

Data collected through public consultation will serve as variety of purposes:

- Validation that there is broad public understanding and acceptance of the Character Area profiles
- Enriching the information base e.g. on forces for change
- Addition of more detailed information at LDU level and below
- Use to enrich the framework and database for localised studies e.g. Parish Plans and Community Landscape Character Assessments
- Use within District Level 'Statements of Community Involvement'

Not all of this data will need to be displayed in the website.

In general terms the database and website have been designed so it is possible to add existing fields for data resulting from public consultation.

The management group needs to decide how it wants the website to be used and its development resourced.

It is recommended that a special section of the website should be set up which displays some of the results from public consultation. Table 1 shows the kinds of data that are likely to be of greatest public interest and particular value. They need to be in a clearly defined area of the database and website to avoid confusion about what has been used at each stage of the methodology.

At this stage data on public consultation is unlikely to be fully representative of the whole county. Provision needs to be made to update it on a regular basis as new forms of county or district consultation and or local community involvement are undertaken. Since some of these may be at a highly disaggregated level or use a range of methodologies, it may be sufficient simply to highlight where and when such studies and consultation exercises are being undertaken, rather than expect to update the county database and website with data from each of these localised studies.

Once a particular LCA version has been consulted on and any appropriate comments incorporated and fully justified then a version of this LCA should remain unchanged [say as a pdf on the website and as a hardcopy] until further structured amendments are made and consultation is carried out. A rolling updated version could be devised in parallel with this.

LOCAL COMMUNITY USE OF THE DATABASE AND WEBSITE

The website should make clear the kinds of data available in the county study as a framework for more local studies and how to access it.

One key issue for clarification is whether the management group aims to enable local communities:

- to access information on their areas of interest from an existing database via the website

- to have the facility to add data they have collected themselves so that it is directly available to planners as well as the wider public.

The latter would obviously make the website more of an interactive resource, but will require more resources including on going maintenance of the website, specified fields where new data (both quantitative and qualitative) can be entered, monitoring of the quality of the data added and a user friendly interface.

In assessing the desired outcome it needs to be recognized that some parishes and local community groups will be more actively involved in landscape related initiatives, so this is unlikely to result in an even coverage across the county.

7.0 RECOMMENDATIONS AND TIMEFRAME

The aim of consultation overall should be to plan for sustainable future landscapes and specifically to assist with local planning and sustainable land management.

To be effective, public consultation needs to be as representative as possible, given the resources and timescale available.

Plans for public consultation can be seen as falling into two phases:

- To complete the existing study and achieve the immediate outcomes set for the study within the resources available.

- To provide a framework for wider or more comprehensive consultation to be undertaken in the next three to four years. This would work in partnership with and provide a guiding framework for initiatives being undertaken at the district and parish level.

Ideally the first process of consultation should aim to provide a good foundation for the second phase.

Participants at the community consultation workshop in January 2006 were able to comment on 16 out of the 45 Character Areas. In some cases there were only one or two people able to comment on a specific Character Area. To ensure more even coverage of the county as whole it is recommended that two more workshops using a similar workshop format are held at other locations in the county.

In the longer term the scope for taking the consultation down to the LDU level should be investigated. It is often easier for local communities to make an effective input at this more disaggregated level. This will be more resource intensive and may be either a county or district level initiative.

A natural starting point for districts would be to work with data and spatial framework offered by the county study and then resource the completion of a well chosen sample of Community Level Character Statements or Village Design Statements with a Parish Landscape Statement built in. A pilot study, of for example ten statements, should reflect a good range of landscape types and may focus initially on areas of particular sensitivity.

This would generate valuable data in its own right, but also provide good quality demonstrations of what can be achieved. This could be designed and resourced as a joint county and district exercise.

REFERENCES

Council for the Preservation of Rural England (2005) 'Unlocking the Landscape: Action Pack: Preparing and Community Landscape Character Statement'
Very accessible description of the methodology for Community Landscape Character Statements

Living Landscapes Project (2006) 'Caradon Hill Area Heritage Project Part 2: Public Consultation Exercise Report' by Jane Corbett and Patricia Shears
Contains a description of consultation tools on LCA in a local stakeholders' workshop with a summary of the kinds of data generated, including some very good examples of creative writing.

hhtp/OWLS.oxforshire.gov.uk Oxfordshire Wildlife and Landscape Study
An example of a county level LCA website designed for use by planners and local residents. Local residents can search by parish and landscape type. The study has been subject to a limited consultation process to date, but this is likely to upgraded. At this stage members of the public are invited to send in information or images of the landscapes and wildlife habitats in their parish to be added to the database.

The Countryside Agency (2005) 'Burwardsley Village Design and Parish Landscape Statement'.
Example of a Village Design Statement with a good quality Parish Landscape Statement, approved as Supplementary Planning Guidance by Chester City Council.

The Countryside Agency (2005) 'Weaverham Village Design and Parish Landscape Statement'.
Example of a Village Design Statement with a good quality Parish Landscape Statement, approved as Supplementary Planning Guidance by Vale Royal Borough Council. This includes a useful summary of linkages with and between different levels of Landscape Character Assessment.

APPENDIX 1

Cornwall and Isles of Scilly Landscape Character Study
Landscape Character Community Workshop January 17th 2006

Time	Session	Purpose
9.30-10.30	***Room set up*** ***Meet with facilitators***	Briefing
10.30-11.00	***Registration/Tea/Coffee***	Greet arrivals
11.00-12.00	**Introduction to the Workshop and Study**	Introduction to the workshop
12.00-12.55	**Session 1** **Group Activity/ Discussion**	Aims of the project Overall purpose of consultation Brief outline of LCA methodology Examples of CAs and LDUs Study outputs Outline of proposed database and website How participants/consultation can help Divide into 3 groups to look at local Character Area
12.55-13.00		
13.00-14.00	***Lunch, coffee/tea***	
14.00-15.00	**Session 2** **Group Activity/ Discussion**	Ask each group to gather round appropriate large scale map on a table Ask for volunteer to take notes and report back to plenary session (provide notebook, pen, flip chart) This session is designed to gather opinions on which aspects of the data are likely to be most useful Facilitators are to invite comments on: • Draft descriptions • Validity of boundaries • (Pressures for change: last 10 mins) Outline of next group activities and group nos. New groups to form (3) for choice of activity Group 1 Creative writing Group 2 Rich picture/Discussion Group 3 Photographic/Discussion To gather information on any/all of: • Perceptions of the local landscape • What is valued in the landscape • Pressures for change • Vision for the landscape • Management opportunities Groups 2 and 3 need volunteer to take notes and report back Participants to focus on CAs they are familiar with and exchange information about different CAs
15.00-15.20	*Tea/coffee*	

15.20- 16.00	**Report Back Session**	Volunteers from each session/group to report back on findings of each session (3 groups, 2 sessions, 6 reports in 40 minutes, creative writing will need more time)
16.00- 16.30	**Plenary Session**	1. Intro on feedback and future use of information gathered during day plus opportunities to make further inputs 2. Opportunities for participants to comment/ask questions/make suggestions on the study, add cultural information, use of database, management issues 3. Next steps with the project, how to find out more and future use of the study Closing of workshop

APPENDIX B
PHOTOGRAPHS OF PUBLIC CONSULTATION: STAKEHOLDER WORKSHOPS

PHOTOGRAPHS OF PUBLIC CONSULTATION:
STAKEHOLDER WORKSHOPS

Discussion of Specific Character Area Descriptions

Studying Maps

Working on the Vision and Objectives

APPENDIX C

PHOTOGRAPHS OF PUBLIC CONSULTATION: COMMUNITY CONSULTATION WORKSHOP

Studying the Character Area Profiles

Discussion of a Specific Character Area

Studying Maps

Preparing Suggested Additions and Amendments

Rich Picture Exercise on Forces for Change, Visions and Objectives

CORNWALL AND THE ISLES OF SCILLY LANDSCAPE CHARACTER ASSESSMENT

Seascape Addendum

February 2007

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Introduction

The client has requested guidance on how to take forward the seascape assessment commenced in the study and using this as a tool to help manage change.

The Brief

The brief states [p9]:

3.1.1 The contractor will review and refine existing character areas ….. (for which the Cornwall landscape assessment (1994) and the Isles of Scilly landscape character assessment (2002) and associated data sets…….. will be a primary resource base). This will include:

……

- consideration of seascape assessment

The Proposal

In response, the proposal states:

Field survey

The field survey provides the opportunity to undertake a number of key tasks, including:

- incorporating the visual/aesthetic/perceptual dimension;
- recording the condition of the landscape, including the ecological and cultural;
- identifying any refinements to LDU and Character Areas boundaries;
- assessing any particular qualities, and/or problems in areas of particular pressure or sensitivity including seascapes.

……

Seascape considerations

The coastal area of Cornwall and the entire Isles of Scilly are recognised as a seascape of international importance. It is a superb resource and one of the main reasons people visit the area. The pressures here are considerable, and in recognition of this we propose to develop an additional survey section for coastal areas, using the Seascapes Guidance[6]. Pat and Simon's experience in developing the Seascapes approach will not only ensure Best Practice, but also that the method is integrated and compatible with the approach adopted for the rest of the study and with the National Landscape Character Assessment Guidance.

We will focus primarily on coastal rather than offshore issues, identifying the key characteristics and their condition as well as factors including the physical form of the coastline and hinterland, key views, and sensitive receptors. Overall, this information would provide the

basis for specific guidance for key areas. LLP has recently been recruited by UNEP to undertake the development of a typology of Mediterranean coastal landscapes, and any relevant developments in this project will also be considered.

This makes it clear the information collected will be as part of the field survey as an addition to the Landscape Description Units [LDU] information [and not part of the core LLP methodology]. It also makes clear it is focussed on coastal rather than offshore issues. This means that the assessment is not a full seascape assessment as set out in the '*Guide to Best Practice in Seascape Assessment'*, March 2001, M.Hill et al and which has been further developed by Scottish Natural Heritage and the Countryside Council for Wales. This would have involved definition of separate regional seascape

units using digital terrain modelling and associated visibility analysis with associated data. Each seascape unit would be defined by key headlands and comprise of a sea, coast and land components. These boundaries would not be concurrent with the LDUs or landscape character areas.

Project Implementation

The coastal related fields put forward for the field survey within the resources of the study were as follows:

Field survey form extract:

(6) COASTAL (for coastal area of LDUs noted on LDU definition sheet)

geometry		**plan form**			**vertical form**	
straight	☐	linear	☐	indented cliffs	☐	lowlying	☐
shallow concave	☐	large bay(s)	☐	estuary/inlet/ria	☐	low cliffs/rocks	☐
deep bay	☐	small bay(s)	☐	other (desc)	☐	high cliffs	☐
convex	☐	cove	☐	convex	☐	dunes	☐

visible shore

mud ☐ sand ☐ shingle ☐ boulders ☐ pebbles ☐ other

notable visible physical features (including geology):

built aspects *	E	M	**coastal activities** (Sea/Land)	S	L
coastal settlements	☐	☐	recreation	☐	☐
harbours	☐	☐	commercial fishing	☐	☐
installations - onshore	☐	☐	shipping	☐	☐
installations - offshore	☐	☐	habitation	☐	☐
other (desc)	☐	☐	other	☐	☐

distinctive features (positive or negative)

key viewpoints/views

other impacts/issues particular to the coast

The information collected generally fell short of what would have been desirable to provide consistent and useful information. Despite this, Character Area descriptions describe coastal character and management guidelines also make recommendations for the coast based on other information.

The way forward

If further work is to be carried out, consideration should be given as to whether a resurvey for each LDU coast is most realistic or whether a full seascape assessment is required. Three alternatives are set out below:

Using existing survey form:

Site assessment could use the existing form which could usefully be filled up with richer information in terms of larger text fields such as notable physical features, key viewpoints/views and other impacts and issues. This information could be used:

- as a baseline to define what is most important/distinctive in any LDU coastline
- to be queried/analysed to build up a picture of the character of the coastline by LDU
- to inform further management recommendations for AONB and character areas
- to monitor change

Expanding survey form

Alternatively, the form could be augmented with more fields to allow more potential for queries. Changes and additions could include:

- Separating estuary, ria, inlet in plan form section
- Adding fields on the physical characteristics of the sea itself eg presence of islands

- Giving options for distinctive features as well as a text field to allow queries eg islands, mining remains etc
- Separating Key viewpoints/receptors from Key views
- Adding fields on:
    - Uses in the sea
    - Uses on the coast
    - Tranquillity
    - Openness and enclosure
    - Exposure
    - Diversity
    - Sense of scale
    - Condition overall and of various elements
    - Evidence of erosion/damage
    - etc

It is important to note that this additional information would not make the study a 'seascape assessment' as LDUs do not correspond to seascape units, but it may be felt that LDUs provide the most useful unit to record and manage seascape issues. The database/website would also need to be amended to accommodate this information.

Full Seascape Assessment Option:
The benefits are that it will be a more comprehensive approach which will consider the sea itself and may form of a basis for a sensitivity and capacity of renewable energy development which may help reduce the potential for climate change. This is a rapidly evolving area of work, and methodologies are constantly being refined. It is suggested that appropriate best practice guidance is studied as the basis for further work, including the Key References below.

Key References

Enviros, 2005, *Guidance on the assessment of the impact of offshore windfarms: seascape and visual impact report,* DTI.

Hill et al ,2001, *Guide to best practice in seascape assessment*, Countryside Council for Wales, and University College, Dublin, Brady Shipman Martin.

University of Newcastle, 2005, Commissioned Report no. 103, *An assessment of the sensitivity and capacity of the Scottish seascape in relation to windfarms,* Scottish Natural Heritage.