CORNWALL, TAMAR VALLEY AND ISLES OF SCILLY AONB LANDSCAPE MONITORING PROJECT

BASELINE RESULTS FOR THE CORNWALL AREA OF OUTSTANDING NATURAL BEAUTY

For:
The Cornwall, Tamar Valley and Isles of Scilly AONB Partnerships

Prepared by:
Land Use Consultants

May 2008

Acknowledgements

This study was led by Sally Parker and Lyndis Cole of Land Use Consultants. Much of the GIS data analysis undertaken for the baseline was undertaken by Faye Davey as part of her PhD at the University of Plymouth.

We would like to thank the AONBs for their guidance, particularly Colette Holden at the Cornwall AONB.

In addition, we are grateful for the attendance by local stakeholders and community representatives at the workshops held to inform this study.

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1. PURPOSE AND FORMAT OF THIS DOCUMENT

1.1. This document details the results from the interpretation of data that was available in the first half of 2008 to inform many of the indicators selected for AONB landscape monitoring.

PROTOCOLS FOR MONITORING AGAINST THE BASELINE

1.2. The methods adopted to interpret the data for this baseline are detailed in a separate document, to enable the same methods to be used for future monitoring. This also includes the monitoring protocols for those indicators that require baseline data collection to be undertaken later in 2008/9 (e.g. through field survey undertaken by students or members of the local AONB communities).

FORMAT AND LAYOUT OF THE BASELINE RESULTS

1.3. This document presents the baseline results for Cornwall AONB, with separate baseline results reports available for the Tamar Valley and Isles of Scilly AONBs.

1.4. The results are presented in a series of tables arranged by LMU, with the key aim being to demonstrate how the selected indicators can be linked back to the character statements drawn up at the outset of the project. For each LMU, information is presented as follows:

- Location of the LMU (with map)
- Constituent character areas / LDUs from the county landscape assessment (2007) that make up the LMU
- Table 1: shows the character statements with bold text indicating landscape elements to be monitored, and a linked column listing the indicators selected to monitor these
- Table 2: lists the selected indicators from the first table in numerical order, with their condition criteria (positive and negative 'trajectories of change') detailed in a separate column. The second column contains the score code for each indicator. The maximum condition score for the LMU is included at the bottom of the table.
- Table 3: is a matrix illustrating the forces for change likely to be acting upon the different landscape elements to be monitored, by likely timeframe.
- Table 4: presents the baseline results for each of the selected indicators, the data source and next date for monitoring. Underlined text indicates where additional baseline data collection needs to be carried out by the AONBs in 2008/9.

ASSESSING LANDSCAPE CONDITION AND CHANGE

1.5. The ultimate goal of this project is to enable the AONB to make an informed assessment of the landscape condition of different parts of their protected landscape, and to monitor how this condition changes over time. This will be achieved by consistently monitoring the same indicators; using the same methods and scales to do this; and monitoring them over set time periods to compare back against the results of the baseline.

Assessing the condition of each Landscape Monitoring Unit

1.6. To assist each AONB unit in making a consistent assessment of the condition of the different parts of the protected landscape, a scoring system has been developed with the selection of **primary** and **secondary** indicators for each LMU (coded with a 'P' and 'S' in the second table for each LMU). To allow for ease of comparison, each LMU has been assigned a total of five primary indicators, with the remaining being allocated as secondary indicators – the number of which will vary by LMU.

1.7. Different scoring weightings have been attached to the two types of indicator, as follows:

- Primary indicators score **two points** if they meet the condition criteria set out in the positive 'desired trajectory of change'. On the other hand, if these indicators, when measured, follow the negative 'trajectory of change', they lose two points.
- Secondary indicators score and lose **one point**, in line with the above.

1.8. These two types of indicator can only be assigned to those being measured at an LMU, or sample square scale. The maximum score for each LMU, broken down by the total for the primary (always scoring 10) and secondary (which varies by LMU) indicators, is shown at the end of the second LMU table in this report.

1.9. Taking the maximum score as 100%, the allocated scores obtained from future monitoring should always be calculated as a percentage of this maximum score, to account for the varying numbers of indicators selected for each LMU. For example, C1's maximum score is 14, so if the monitored indicators score a total of 7 points, this will give the LMU a condition score of 50%.

1.10. We suggest that the percentage bands for landscape condition assessment scoring against the baseline are as follows[1]:

Box 1: Suggested percentage bands for landscape condition assessment

➢ 75 – 100%	Very significant improvement in landscape condition
➢ 50 – 74.9%	Significant improvement in landscape condition
➢ 25 – 49.9%	Moderate improvement in landscape condition
➢ 0 – 24.9%	Stable / minor improvement in landscape condition
➢ less than 0%	Declining landscape condition

[1] These bands may need to be re-visited in light of the application of this methodology by the AONB.

Assessing the landscape condition of AONB areas

1.11. For AONB areas that have more than one constituent LMU, the AONB unit may wish to calculate a condition score for the AONB area as a whole.

1.12. The total score awarded to each constituent LMU through the monitoring of the primary and secondary indicators against the baseline should be added together. This will give the condition score for the AONB area. Added to this score should be the results from the monitoring of indicators measured at an AONB area scale only – such as 1.1: Levels of Tranquillity. These indicators are coded by an 'AA' in the second LMU table presented in this report, and shaded in light grey to clearly distinguish them from the LMU-scale primary and secondary indicators.

1.13. These indicators will be awarded or deducted **one point** respectively depending on whether monitoring shows that they have met the positive or negative 'trajectories of change'.

1.14. In common with the LMU-scale assessment, the total condition score for the AONB area should be expressed as a percentage to account for the variation in the number of selected indicators by LMU. This will be calculated by taking the total score obtained for the AONB area (obtained by combining the LMU monitoring results), and measuring it against the total of the 'maximum scores' for the LMUs. Added to this should be the maximum score that could be achieved for the AONB area-scale indicators – e.g. for Hartland this would be five. A percentage can then be calculated to give the AONB area landscape condition score, measured against the percentage bands presented in Box 1, to come up with an overall assessment of landscape condition at this scale.

Assessing the landscape condition of the AONB

1.15. One indicator, 1.3 Extent of Dark Night Skies, is only able to be monitored at an AONB-wide scale. This is coded in the second LMU table in this report by an 'A'. In line with the AONB area scale indicators, this will be awarded or deducted **one point** respectively depending on whether monitoring shows that the positive or negative 'trajectories of change' have been met.

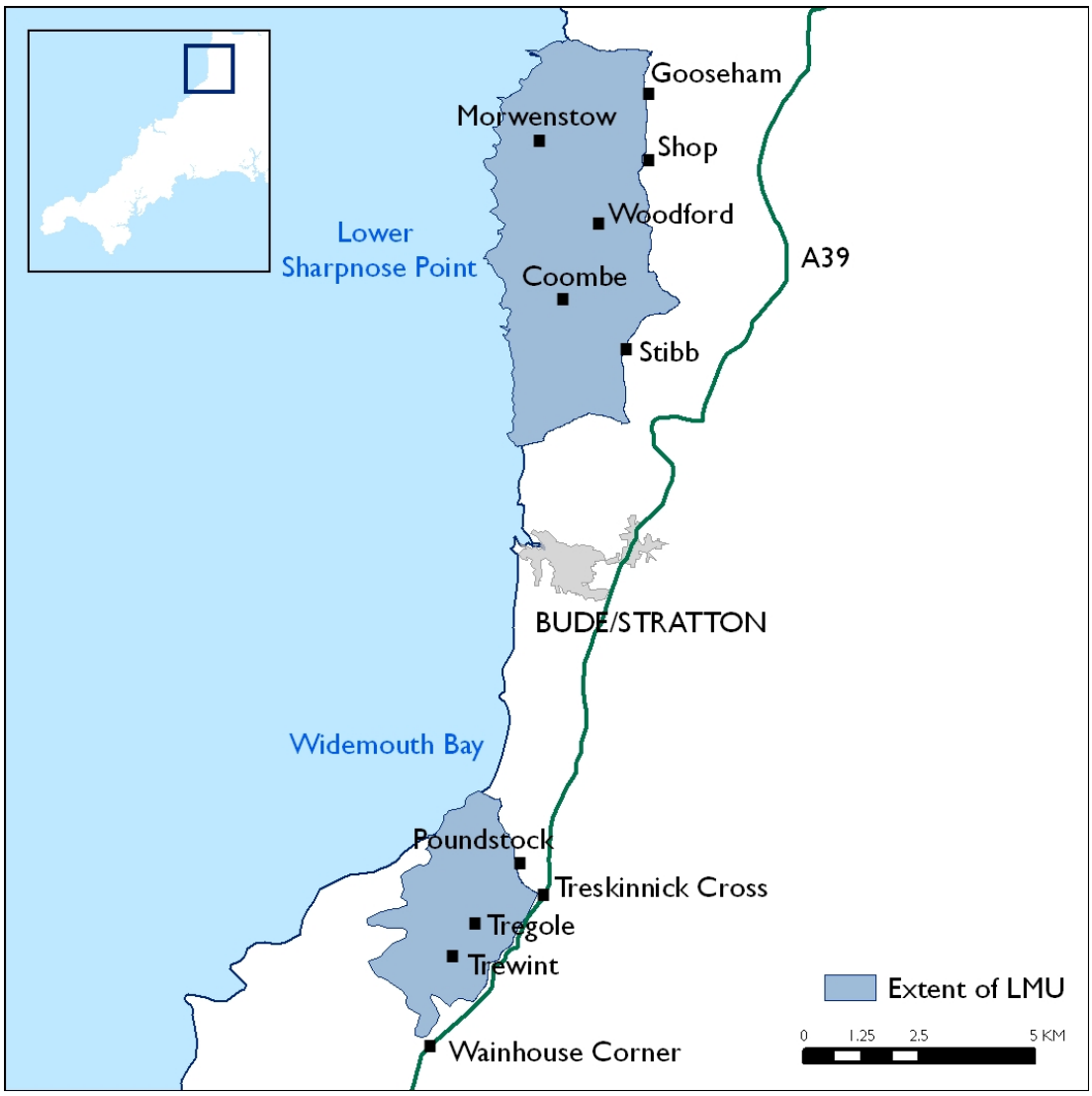
1.16. If an overall condition score is required for the AONB as a whole, the scoring for this indicator should be incorporated into the combined total of the AONB Areas' scores.

1.17. A percentage score can then be calculated, using the combined total scores of the AONB areas, against their combined 'maximum scores' (added to which should be the maximum one point score for the AONB-scale indicator). Again, the percentage bands presented in Box 1 should be used to give an overall landscape condition score for the AONB as a whole.

CORNWALL AONB AREA: HARTLAND

LMU CODE: C1

Location



Links to the Living Landscapes Character Areas

Constituent CAs: CA37, CA38

Constituent LDUs: 109, 110, 111, 112, 128, 319, 321, 322, 324, 320

1.18. Note that the southern half of this LMU falls within the Pentire Point to Widemouth AONB Area.

Table 1: Indicators selected to monitor changes in landscape character

Character statement	Indicators selected by statement
High plateau meeting **sheer coastal cliffs** with striking **wave-cut platform** exposed at low tide. **Low unstable cliffs** and **sandy beaches** in the south.	1.4: Coastal change (coastal erosion)
Extensive **coastal views**, including to Lundy on the horizon	1.2: Levels of intrusion 2.10: Development at sea
Valleys lined by **broadleaved woodlands**, including **ancient semi-natural woodland**	2.1: Extent of woodland and tree cover / type
Band of **coastal heath**, with heather and gorse. **Culm grasslands** are also a feature; forming transition to Devon.	1.5: SSSI condition 2.5: Extent of semi-natural habitats
Medium sized irregular fields (medieval) enclosed by grassy banks and stone-faced hedges, some **larger and more recent enclosures.**	2.4: Field pattern
Exposed **pastoral farmland.** Some **arable** on former heathland areas.	2.2: Agricultural land use 2.3: Extent of biomass planting
The **Norman church** and **vicarage** at Morwenstow are local landmarks.	2.6: Presence [and condition] of historic landscape features
Sparsely populated with **small hamlets** and **isolated farmstead**s linked by **narrow lanes.**	1.1: Levels of tranquillity 1.2: Levels of intrusion 1.3: Extent of dark night skies 2.7: Settlement pattern 2.8: Transport infrastructure
Building materials include **local slates and sandstones**, or **white rendered cob**. Some buildings are **thatched**. **Slate-hanging** is a characteristic cladding.	2.9: Local vernacular building styles

Table 2: The condition criteria for the selected indicators

Indicators selected for the LMU	Score code	Desired trajectories of change
1.1: Levels of tranquillity	AA	Positive: Maintenance or improvement in overall levels of tranquillity Negative: Decline in overall levels of tranquillity
1.2: Levels of intrusion	AA	Positive: Maintenance or improvement in current absence of intrusion Negative: Increase in overall levels of intrusion
1.3: Extent of dark night skies	A	Positive: Maintenance of or increase in overall extent of dark night skies Negative: Decline in overall extent of dark night skies
1.4: Coastal change	AA	Positive: No loss of characteristic features along the coast through erosion / sea level rise Negative: Loss of characteristic features along the coast through erosion / sea level rise
1.5: SSSI condition	AA	Positive: SSSIs are in favourable condition. Where sites are not in favourable condition, there has been an improvement in condition status from previous assessments. Negative: SSSIs are in unfavourable condition. Condition status has declined from previous assessments.
2.1: Extent of woodland and tree cover/type	P	Positive: Maintenance or increase in woodland extent in valleys, including relinked areas of ancient semi-natural woodland. Negative: Increase in woodland or tree cover on the plateau.
2.2: Agricultural land use	P	Positive: Maintain current balance of land uses. Increase in the area of pasture. Decrease in the area of arable. Negative: Increase in the area of land under arable cultivation. Decrease in the area of pasture.
2.3: Extent of biomass planting	S	Positive: No loss of permanent pasture or semi-natural habitats to biomass planting. Biomass planting incorporated within existing areas of cultivated land or woodland, respecting or enhancing characteristic field and woodland patterns. Negative: Biomass planting located within permanent pastoral farmland, outside cultivated land or on the site of semi-natural habitats identified at the time of the baseline survey. The geometric shapes of areas of biomass planting interrupt characteristic field and/or woodland patterns.
2.4: Field pattern	P	Positive: Maintenance of irregular field pattern. Maintenance of overall length of field boundaries and average field size (to account for field amalgamation). Negative: Increase in number of regular enclosures. Decrease in overall length of field boundaries; increase in average field size (to account for field amalgamation).

Indicators selected for the LMU	Score code	Desired trajectories of change
2.5: Extent of semi-natural habitats	P	Positive: Maintenance of or increase in the extent of semi-natural habitats characteristic to the LMU. Negative: Decrease in or fragmentation of the extent of semi-natural habitats characteristic to the LMU.
2.6: Presence [and condition] of historic landscape features	S	Positive: Numbers of recorded above-ground features are stable or increase from baseline numbers. No decline in the overall condition of historic features. Negative: Decrease in the number of above-ground features recorded. Decline in the overall condition of historic features.
2.7: Settlement pattern	P	Positive: Maintenance of the existing settlement pattern of small hamlets and isolated farmsteads. No new development located outside settlement curtilages. No increase in total area of developed land. Negative: Increase in the footprint of hamlets. Increase in the number of properties located outside settlement curtilages. New locations of or growth in non-permanent residential developments. Increase in total area of developed land.
2.8: Transport infrastructure	S	Positive: Maintenance of or decrease in levels of road engineering works, signage and other road furniture. Negative: Increase in levels of road engineering works, signage and other road furniture. Loss of any distinctive types of signage (e.g. finger posts/milestones).
2.9: Local vernacular building styles	S	Positive: New housing/permitted development in sympathy with traditional building character as defined in the baseline surveys. Negative: New housing/permitted development detracts from traditional building character as defined in the baseline surveys.
2.10: Development at sea	AA	Positive: No visible 'industrial scale' developments in view of the coast. Negative: Introduction of 'industrial scale' development visible from the coast
MAXIMUM LMU SCORES	**10** **4**	P = Primary Indicators S = Secondary Indicators

Table 3: Forces for change acting upon the landscape elements to be monitored

	Climate change					Development pressures									Land use changes										Woodland managament changes					WFD response		Industry change		Forces for change identified in exisitng landscape assessments
	Sea level rise/stormy conditions	Coastal squeeze	Increased frequency of droughts	More frequent river flooding	Increased visitor pressure	Tourism developments incl caravan sites, increased signage, car parks	Marine and beach developments (incl demand for moorings)	Housing developments (incl affordable housing due to high house prices)	Industrial and commercial developments	Demand for second homes	Increased light pollution	Deamnd for better communications (e.g aerials, masts)	Sussainable design of new builds	Increase in commuter and tourist traffic incl traffic calming measures and road improvements	Lotting up of agricultural land at sale	Wind farms (on-shore and off-shore) and other RE developments	Reservoirs/water storage	Minerals extraction/quarrying	Non-food crops e.g. bioenergy, industrial - intensification of lowland areas	Longer growing season/higher CO2 levels for new crops	Horticultural expansion - fav. growing conditions, consumer demand	Intensification of production (particularly arable) incl associated infrastructure	Livestock farming changes (reduction in cattle, reduced grazing in uplands, reduced grazing on marginal land)	Farm diversification and hobby farming eg horse/culture	Recreational uses eg golf courses, recreational boating	Decline in local and traditional land/woodland management and building skills	New species of different provenance eg Douglas Fir to respond to climate change	Increased planting in floodplain areas eg SRC	Afforestation (incl due to favourable growing conditions or for carbon sequestration)	Increased growth rates and productivity	Reduced intensity of agriculture to meet WFD targets	Measures to reduce diffuse pollution eg buffer strips, planting next to watercourses, etc	Decline in traditional industries	Local quarry closures	
LMU C1																																	
Striking wave-cut platform exposed at low tide. Low unstable cliffs and sandy beaches																																	
Incised valleys cut steeply through landform, forming waterfalls at the coast																																	
Extensive coastal views																																	
Valleys lined by broadleaved woodlands, including ancient semi-natural woodland																			●														
Coastal heath																			●														
Culm grasslands																			●														Drainage and loss of wet pasture
Medium sized irregular fields (medieval) enclosed by grassy banks and stone-faced hedges, some larger and more recent enclosures																			●														
Exposed pastoral farmland																			●														Bracken invasion on some marginal areas e.g. valley sides
Some arable on former heathland																			●														
The Norman church and vicarage at Morwenstow are local landmarks																																	
Building materials include local slates and sandstones, or white rendered cob. Some buildings are thatched. Slate-hanging is a characteristic cladding																																	
Hamlets and farms linked by narrow lanes																																	Significant tourism pressure with caravans, coastal car parks, signage, farm conversion
Sparsely populated with small hamlets and isolated farmsteads																																	Housing growth in and around Kilkhampton could impact on the AONB

●= area identified as a 'high' opportunity location for miscanthus growing in terms of landscape considerations (Scott Wilson and Land & Landscape Management Ltd, 2004)

Table 4: Baseline results

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td>1.1: Levels of tranquillity</td><td><u>AONB Area Results (Hartland)</u>
<table><tr><th>Category of tranquillity</th><th>Score</th></tr><tr><td>Highest</td><td>51</td></tr><tr><td>Lowest</td><td>-30.6</td></tr><tr><td>Mean</td><td>13.9</td></tr></table>
NB: also take account of the small areas of this LMU that lie outside the Hartland AONB Area.</td><td>AONB area</td><td>CPRE (2007)</td><td>2013/14</td></tr>
<tr><td>1.2: Levels of intrusion</td><td><u>AONB Area Results (Hartland)</u>
<table><tr><th>Category of intrusion</th><th>Area (ha)</th><th>1997 area (ha)</th></tr><tr><td>Disturbed</td><td>3,670</td><td>1,233</td></tr><tr><td>Undisturbed</td><td>10,042</td><td>10,861</td></tr><tr><td>Urban</td><td>1</td><td>0</td></tr></table>
NB: also take account of the small areas of this LMU that lie outside the Hartland AONB Area.
Number of off-shore windfarms: 0</td><td>AONB area</td><td>CPRE (2007)

BWEA (2008)</td><td>2013/14</td></tr>
<tr><td>1.3: Extent of dark night skies</td><td><u>Cornwall AONB Results</u>
<table><tr><th>Category of darkness</th><th>Area (ha)</th><th>1993 area (ha)</th></tr><tr><td>0-1.7</td><td>277</td><td>258</td></tr><tr><td>1.7-50</td><td>442</td><td>527</td></tr><tr><td>50-150</td><td>238</td><td>171</td></tr><tr><td>150-240</td><td>3</td><td>4</td></tr><tr><td>240-255</td><td>0</td><td>0</td></tr></table>
<u>Number of stars in the Orion constellation</u>: The AONB is to organise a ‘star count’ to inform this indicator.</td><td>AONB

AONB area</td><td>CPRE (2000)

Primary data (2008/9)</td><td>2013/14</td></tr>
</table>

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td></td><td><u>Fixed point photography</u>: AONB to establish locations for fixed point photography to monitor this indicator</td><td>LMU</td><td>2008/9</td><td></td></tr>
<tr><td>1.4: Coastal change</td><td><u>The AONB should follow the work of the Coastal Monitoring Project and explore the possibility of sitting on the Steering Group via the Cornwall and Isles of Scilly Coastal Authorities group.</u></td><td>AONB area</td><td>South West Regional Coastal Monitoring Programme (Plymouth University)</td><td>AONB to contact the Cornwall and Isles of Scilly Coastal Authorities by end of 2008</td></tr>
<tr><td>1.5: SSSI condition</td><td><u>AONB Area results (Hartland)</u>
35% Unfavourable Recovering
19% Unfavourable No Change
46% Favourable

See ArcReader Project and Excel Spreadsheet for a breakdown of results for the SSSIs within this LMU – including for sites lying within the adjacent Pentire Point to Widemouth AONB Area.</td><td></td><td>Natural England (web-based information)
See Excel Spreadsheet for a breakdown of assessment dates for SSSIs within this LMU.</td><td>2010 (every 2 years)</td></tr>
<tr><td>2.1: Extent of woodland and tree cover/type</td><td><u>Breakdown by woodland type:</u><table><tr><th>Woodland type</th><th>Area –ha (NIWT figure)</th></tr><tr><td>Broadleaved</td><td>423.1 (365.7)</td></tr><tr><td>Ancient semi-natural</td><td>24.2</td></tr><tr><td>PAWS</td><td>0</td></tr><tr><td>Mixed</td><td>6.3 (9.4)</td></tr><tr><td>Conifer</td><td>45.7 (55.6)</td></tr><tr><td>Scrub</td><td>82</td></tr></table></td><td>LMU</td><td>- Cornwall LIFE dataset (1995)
- Natural England’s Ancient Woodland Inventory (1999)
- National Inventory of Woodland and Trees (2000)</td><td>2013/14</td></tr>
</table>

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td>2.2: Agricultural land use</td><td><u>AONB Area results (Hartland):</u>
<table>
<tr><th>Grassland categories</th><th>Hectares</th></tr>
<tr><td>< 5 years & permanent pasture</td><td>1,314</td></tr>
<tr><td>Rough grazing</td><td>145</td></tr>
<tr><td>Arable categories:</td><td></td></tr>
<tr><td>Cereals</td><td>260</td></tr>
<tr><td>Number of holdings in different size categories:</td><td></td></tr>
<tr><td><5 ha:</td><td>14</td></tr>
<tr><td>Over 20 ha</td><td>25</td></tr>
</table>
NB: also take account of the small areas of this LMU that lie within the Pentire Point to Widemouth AONB Area.

<u>The AONB should collect information from a representative sample of farmers within the LMU to further pinpoint agricultural land use.</u></td><td>AONB area

LMU</td><td>Defra June Agricultural Census (2007)

2008/9 data collection</td><td>2013/14</td></tr>
<tr><td>2.3: Extent of biomass planting</td><td>There are currently no agreements for Energy Crops planting through the Energy Crops Scheme in this LMU. The AONB should check the Defra dataset every two years to monitor this.</td><td>LMU</td><td>Defra ECS data (2008)</td><td>2010</td></tr>
<tr><td>2.4: Field pattern</td><td>Total length of field boundaries by sample square:
<u>Sample square SS2009</u>
<table>
<tr><th>Boundary / feature type</th><th>Length (m)</th></tr>
<tr><td>Cornish hedgebank</td><td>3,902</td></tr>
<tr><td>Stone wall</td><td>182</td></tr>
<tr><td>Wooded</td><td>1,982</td></tr>
<tr><td>Gate</td><td>60</td></tr>
</table>
<u>Sample square SS2115</u>
<table>
<tr><th>Boundary / feature type</th><th>Length (m)</th></tr>
<tr><td>Cornish hedgebank</td><td>12,333</td></tr>
<tr><td>Wooded</td><td>2,224</td></tr>
<tr><td>Gate</td><td>129</td></tr>
</table></td><td>Sample squares</td><td>Cornwall aerial photographs (2005)</td><td>2010/11</td></tr>
</table>

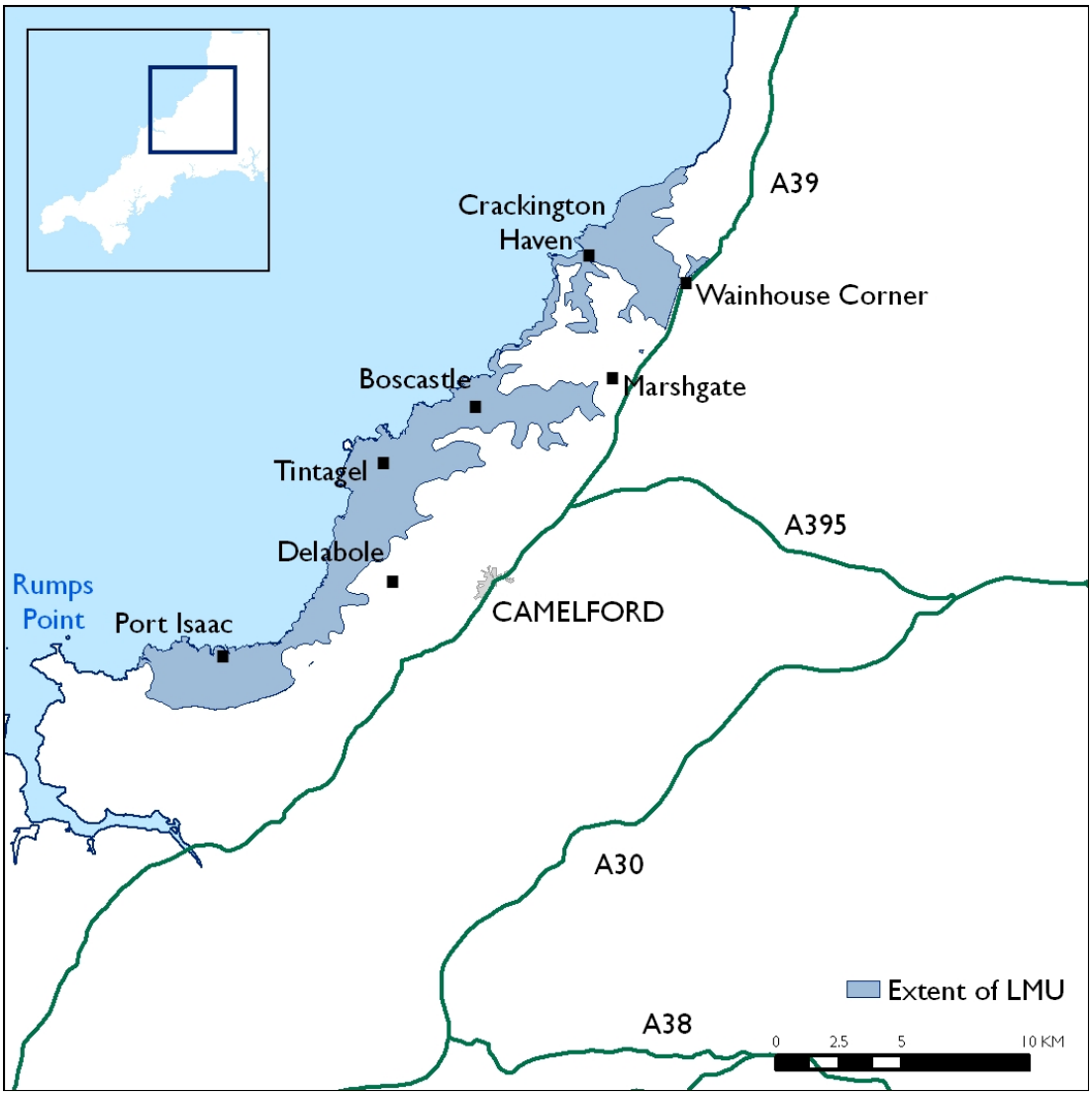
<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td></td><td>Field boundary pattern by sample square:
<table>
<tr><th>Sample square</th><th>Total sinuous (m)</th><th>Total straight (m)</th></tr>
<tr><td>SS2009</td><td>2,413</td><td>5,685</td></tr>
<tr><td>SS2115</td><td>2,769</td><td>11,915</td></tr>
</table>
Average field size by sample square:
Sample square SS2009: 4 ha
Sample square SS2115: 3 ha</td><td></td><td></td><td></td></tr>
<tr><td>2.5: Extent of semi-natural habitats</td><td>Habitat calculations:
<table>
<tr><th>Habitat</th><th>Area (ha)</th></tr>
<tr><td>Dwarf shrub heath (broad habitat)</td><td>18.9</td></tr>
<tr><td>Unimproved grassland</td><td>2.2</td></tr>
</table>
NB see the ArcReader Project and Excel spreadsheet for a further breakdown of heathland habitat types found in this LMU.</td><td>LMU</td><td>Cornwall LIFE data (1995)</td><td>2013/14</td></tr>
<tr><td>2.6: Presence [and condition] of historic landscape features</td><td>Number of extant features:
<table>
<tr><th>Age classification</th><th>Number of features in 2 sample squares</th></tr>
<tr><td>Prehistoric</td><td>4</td></tr>
<tr><td>Medieval</td><td>1</td></tr>
<tr><td>Post Medieval</td><td>7</td></tr>
<tr><td>Modern</td><td>1</td></tr>
<tr><td>Unknown</td><td>1</td></tr>
<tr><td>TOTAL</td><td>14</td></tr>
</table>
Condition of features
Information on the condition of historic features could be obtained by the AONBs through the English Heritage Heritage at Risk project.</td><td>Sample square</td><td>Information to be obtained through the Heritage at Risk project (launched 8 July 2008)</td><td>2013/14</td></tr>
</table>

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td>2.7: Settlement pattern</td><td>Total area of development categories:<table><tr><th>Category</th><th>Area (ha)</th></tr><tr><td>Permanent</td><td>1.6</td></tr></table>Refer to the Arc Reader project for settlement distribution within the sample squares.</td><td>Sample squares</td><td>Cornwall aerial photographs (2005)</td><td>2010/11</td></tr>
<tr><td>2.8: Transport infrastructure</td><td>Baseline to be established through community survey</td><td>Sample squares</td><td>Community survey 2008/9</td><td>2013/14</td></tr>
<tr><td>2.9: Local vernacular building styles</td><td>Baseline to be established through community survey</td><td>Sample squares</td><td>Community survey 2008/9</td><td>2013/14</td></tr>
<tr><td>2.10: Development at sea</td><td>AONB to collect information from the Local Planning Authority on any proposals for off-shore developments.</td><td>AONB area</td><td>LPA records (2008/9)</td><td>2010</td></tr>
</table>

CORNWALL AONB: PENTIRE POINT TO WIDEMOUTH

LMU CODE: C2

Location



Links to the Living Landscapes Character Areas

Constituent CAs: CA35, CA37

Constituent LDUs: 48, 107, 108, 248, 249, 307, 323, 318

Table 1: Indicators selected to monitor changes in landscape character

Character statement	Indicators selected by statement
Craggy coastline with **dramatic cliffs** (highest in Cornwall) and many **offshore rocks** and **stacks.**	1.4: Coastal change (coastal erosion) 2.10: Development at sea
Exposure to coastal winds means **tree growth limited** to steep sided stream valleys, apart from **ancient dwarf oak woods** at Dizzard, near St Gennys.	2.1: Extent of woodland and tree cover / type
Coastal heathland and **valley mires** valued for biodiversity. Coastal heathland is found along the cliffs and within coastal valleys.	1.5: SSSI condition 2.5: Extent of semi-natural habitats
Irregular, small and medium sized fields bounded by treeless Cornish hedges and slate walls forming a strong network. Former downland areas enclosed by **post medieval/20th century large rectilinear fields. Open field system** at Forrabury Stitches a distinctive feature.	2.4: Field pattern
Pastoral land use with some **arable** on cliff edge	2.2: Agricultural land use 2.3: Extent of biomass planting
Medieval churches and the **Norman castle** at Tintagel Island are prominent features. **Slate mining** apparent on the coast.	2.6: Presence [and condition] of historic landscape features
Scattered farmstead groups and **hamlets** associated with the medieval enclosures. Small **nucleated fishing villages** located along the coast, including Port IsAc, Port Gaverne, Port Quin, and Boscastle.	1.1: Levels of tranquillity 1.2: Levels of intrusion 1.3: Extent of dark night skies 2.7: Settlement pattern 3.8: Levels of fishing industry activity
Winding B roads linking settlement along the coast, running inland at points leaving some parts inaccessible. **Narrow lanes** enclosed by high hedges link farmsteads and scattered dwellings.	1.2: Levels of intrusion 2.8: Transport infrastructure
Traditional local vernacular of **slate with red brick detail** – slate used for roofing and hanging.	2.9: Local vernacular building styles

Table 2: The condition criteria for the selected indicators

Indicators selected for the LMU	Score code	Desired trajectories of change
1.1: Levels of tranquillity	AA	Positive: Maintenance or improvement in overall levels of tranquillity Negative: Decline in overall levels of tranquillity
1.2: Levels of intrusion	AA	Positive: Maintenance or improvement in current absence of intrusion Negative: Increase in overall levels of intrusion
1.3: Extent of dark night skies	A	Positive: Maintenance of or increase in overall extent of dark night skies Negative: Decline in overall extent of dark night skies
1.5: SSSI condition	AA	Positive: SSSIs are in favourable condition. Where sites are not in favourable condition, there has been an improvement in condition status from previous assessments. Negative: SSSIs are in unfavourable condition. Condition status has declined from previous assessments.
1.4: Coastal change	AA	Positive: No loss of characteristic features along the coast through erosion / sea level rise Negative: Loss of characteristic features along the coast through erosion / sea level rise
2.1: Extent of woodland and tree cover/type	P	Positive: Maintenance of or increase in woodland extent in stream valleys. Increase in the area of ancient dwarf oak woodland. Negative: Increase in woodland or tree cover on the plateau. Reduction in the total area of ancient dwarf oak woodland.
2.2: Agricultural land use	P	Positive: Maintain current balance of land uses. Increase in the area of pasture. Decrease in the area of arable. Negative: Increase in the area of land under arable cultivation. Decrease in the area of pasture.
2.3: Extent of biomass planting	S	Positive: No loss of permanent pasture or semi-natural habitats to biomass planting. Biomass planting incorporated within existing areas of cultivated land or woodland, respecting or enhancing characteristic field and woodland patterns. Negative: Biomass planting located within permanent pastoral farmland, outside cultivated land or on the site of semi-natural habitats identified at the time of the baseline survey. The geometric shapes of areas of biomass planting interrupt characteristic field and/or woodland patterns.
2.4: Field pattern	P	Positive: Maintenance of irregular field pattern and open field system at Forrabury. No increase in average field size. No further enclosure of downland. Negative: Increase in number of regular enclosures. Increase in average field size. Further enclosure of downland areas. Sub-division of open fields at Forrabury.

Indicators selected for the LMU	Score code	Desired trajectories of change
2.5: Extent of semi-natural habitats	P	Positive: Maintenance of or increase in the extent of semi-natural habitats characteristic to the LMU. Negative: Decrease in or fragmentation of the extent of semi-natural habitats characteristic to the LMU.
2.6: Presence [and condition] of historic landscape features	S	Positive: Numbers of recorded above-ground features are stable or increase from baseline numbers. No decline in the overall condition of historic features. Negative: Decrease in the number of above-ground features recorded. Decline in the overall condition of historic features.
2.7: Settlement pattern	P	Positive: Maintenance of the existing settlement pattern of scattered farmstead groups and hamlets. Fishing villages retain their nucleated form. No new development located outside settlement curtilages. No increase in total area of developed land. Negative: Increase in the footprint of hamlets and fishing villages. Increase in the number of properties located outside settlement curtilages. New locations of or growth in non-permanent residential developments. Increase in total area of developed land.
2.8: Transport infrastructure	S	Positive: Maintenance of or decrease in levels of road engineering works, signage and other road furniture. Negative: Increase in levels of road engineering works, signage and other road furniture. Loss of any distinctive types of signage (e.g. finger posts/milestones).
2.9: Local vernacular building styles	S	Positive: New housing/permitted development in sympathy with traditional building character as defined in the baseline surveys. Negative: New housing/permitted development detracts from traditional building character as defined in the baseline surveys.
2.10: Development at sea	AA	Positive: No visible 'industrial scale' developments in view of the coast. Negative: Introduction of 'industrial scale' development visible from the coast
3.8: Levels of fishing industry activity	S	Positive: No decline in the overall number of active fishing fleets Negative: Decline in the overall number of active fishing fleets.
MAXIMUM LMU SCORES	**10** **5**	P = Primary Indicators S = Secondary Indicators

Table 3: Forces for change acting upon the landscape elements to be monitored

	Climate change					Development pressures										Land use changes										Woodland managament changes					WFD response		Industry change		Forces for change identified in exisitng landscape assessments
	Sea level rise/stormy conditions	Coastal squeeze	Increased frequency of droughts	More frequent river flooding	Increased visitor pressure	Tourism developments incl caravan sites, increased signage, car parks	Marine and beach developments (incl demand for moorings)	Housing developments (incl affordable housing due to high house prices)	Industrial and commercial developments	Demand for second homes	Increased light pollution	Deamnd for better communications (e.g aerials, masts)	Sustainable design of new builds	Increase in commuter and tourist traffic incl traffic calming measures and road improvements	Lotting up of agricultural land at sale	Wind farms (on-shore and off-shore) and other RE developments	Reservoirs/water storage	Minerals extraction/quarrying	Non-food crops e.g. bioenergy, industrial - intensification of fowland areas	Longer growing season/higher CO2 levels for new crops	Horticultural expansion - fav. growing conditions, consumer demand	Intensification of production (particularly arable) incl associated infrastructure	Livestock farming changes (reduction in cattle, reduced grazing in uplands, reduced grazing on marginal land)	Farm diversification and hobby farming eg horseyculture	Recreational uses eg golf courses, recreational boating	Decline in local and traditional land/woodland management and building skills	New species of different provenance eg Douglas Fir to respond to climate change	Increased planting in floodplain areas eg SRC	Afforestation (incl due to favourable growing conditions or for carbon sequestration)	Increased growth rates and productivity	Reduced intensity of agriculture to meet WFD targets	Measures to reduce diffuse pollution eg buffer strips, planting next to watercourses, etc	Decline in traditional industries	Local quarry closures	
LMU C2																																			
Craggy coastline with dramatic cliffs (highest in Cornwall) and many offshore rocks and stacks																																			
Exposure to coastal winds means tree growth limited to steep sided stream valleys, apart from ancient dwarf oak woods at Dizzard																																			
Occasional wind sculpted hedgerow trees																																			
Coastal heathland																																			
Wet valley woodlands																																			
Valley mires																																			
Oak woodlands																																			
Cornish hedges																																			
Pastoral land use																																			
Arable on cliff edge																																			
Irregular, small and medium sized fields bounded by treeless Cornish hedges and slate walls forming a strong network																																			Loss of hedges identified as an issue
Former downland areas enclosed by post medieval/20th century large rectilinear fields																																			
Open field system at Forrabury Stitches a distinctive feature																																			
Scattered farmstead groups and hamlets																																			
Small nucleated fishing villages																																			
Winding B roads linking settlement along the coast, running inland at points leaving some parts inaccessible. Narrow lanes enclosed by high hedges link farmsteads and scattered dwellings.																																			
Medieval churches and the Norman castle at Tintagel Island are prominent features.																																			Visitor pressure particularly significant around Tintagel
Slate mining remains apparent on the coast																																			
Traditional local vernacular of slate with red brick detail																																			

Table 4: Baseline results

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td>1.1: Levels of tranquillity</td><td><u>AONB Area Results (Pentire Point to Widemouth)</u>
<table><tr><th>Category of tranquillity</th><th>Score</th></tr><tr><td>Highest</td><td>48.8</td></tr><tr><td>Lowest</td><td>-33.0</td></tr><tr><td>Mean</td><td>14.0</td></tr></table></td><td>AONB area</td><td>CPRE (2007)</td><td>2013/14</td></tr>
<tr><td>1.2: Levels of intrusion</td><td><u>AONB Area Results (Pentire Point to Widemouth)</u>
<table><tr><th>Category of intrusion</th><th>Area (ha)</th><th>1997 area (ha)</th></tr><tr><td>Disturbed</td><td>2,444</td><td>2,067</td></tr><tr><td>Undisturbed</td><td>16,518</td><td>15,958</td></tr><tr><td>Urban</td><td>35</td><td>13</td></tr></table>
Number of off-shore windfarms: 0</td><td>AONB area</td><td>CPRE (2007)

BWEA (2008)</td><td>2013/14</td></tr>
<tr><td>1.3: Extent of dark night skies</td><td><u>Cornwall AONB Results</u>
<table><tr><th>Category of darkness</th><th>Area (ha)</th><th>1993 area (ha)</th></tr><tr><td>0-1.7</td><td>277</td><td>258</td></tr><tr><td>1.7-50</td><td>442</td><td>527</td></tr><tr><td>50-150</td><td>238</td><td>171</td></tr><tr><td>150-240</td><td>3</td><td>4</td></tr><tr><td>240-255</td><td>0</td><td>0</td></tr></table>
<u>Number of stars in the Orion constellation:</u> <u>The AONB is to organise a ‘star count’ to inform this indicator.</u>
<u>Fixed point photography:</u> <u>AONB to establish locations for fixed point photography to monitor this indicator</u></td><td>AONB

AONB area

LMU</td><td>CPRE (2000)

Primary data (2008/9)

2008/9</td><td>2013/14</td></tr>
</table>

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td>1.4: Coastal change</td><td><u>The AONB should follow the work of the Coastal Monitoring Project and explore the possibility of sitting on the Steering Group via the Cornwall and Isles of Scilly Coastal Authorities group.</u></td><td>AONB area</td><td>South West Regional Coastal Monitoring Programme (Plymouth University)</td><td>AONB to contact the Cornwall and Isles of Scilly Coastal Authorities by end of 2008</td></tr>
<tr><td>1.5: SSSI condition</td><td><u>AONB Area results (Pentire Point to Widemouth)</u>
76% Favourable
15% Unfavourable Recovering
9% Unfavourable No Change

See ArcReader Project and Excel Spreadsheet for a breakdown of results for the SSSIs within this LMU.</td><td>AONB area</td><td>Natural England (web-based information)
See Excel Spreadsheet for a breakdown of assessment dates for SSSIs within this LMU.</td><td>2010 (every 2 years)</td></tr>
<tr><td>2.1: Extent of woodland and tree cover/type</td><td><u>Breakdown by woodland type:</u><table><tr><th>Woodland type</th><th>Area –ha (NIWT figure)</th></tr><tr><td>Broadleaved</td><td>469.4 (330.2)</td></tr><tr><td>Ancient semi-natural</td><td>68.6</td></tr><tr><td>PAWS</td><td>0</td></tr><tr><td>Mixed</td><td>4.2 (1.5)</td></tr><tr><td>Conifer</td><td>6.7 (1.1)</td></tr><tr><td>Scrub</td><td>149.1</td></tr></table></td><td>LMU</td><td>- Cornwall LIFE dataset (1995)
- Natural England’s Ancient Woodland Inventory (AWI) (1999, online version dated 21/2/07)
- Forestry Commission’s National Inventory of Woodland and Trees (2000)</td><td>2013/14</td></tr>
</table>

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td>2.2: Agricultural land use</td><td><u>AONB Area Results (Pentire Point to Widemouth):</u>
<table><tr><th>Grassland categories</th><th>Hectares</th></tr><tr><td>< 5 years & permanent pasture</td><td>9,412</td></tr><tr><td>Rough grazing</td><td>350</td></tr><tr><td>Arable categories:</td><td></td></tr><tr><td>Cereals</td><td>260</td></tr><tr><td>Horticultural categories:</td><td></td></tr><tr><td>Orchards</td><td>1</td></tr><tr><td>Total horticultural crops</td><td>6</td></tr><tr><td colspan="2">Number of holdings in different size categories:</td></tr><tr><td><5 ha:</td><td>93</td></tr><tr><td>5-10 ha:</td><td>29</td></tr><tr><td>10-20 ha:</td><td>38</td></tr><tr><td>Over 20 ha</td><td>134</td></tr></table>
<u>The AONB should collect information from a representative sample of farmers within the LMU to further pinpoint agricultural land use.</u></td><td>AONB area

LMU</td><td>Defra June Agricultural Census (2007)

2008/9 data collection</td><td>2013/14</td></tr>
<tr><td>2.3: Extent of biomass planting</td><td>There are currently no agreements for Energy Crops planting through the Energy Crops Scheme in this LMU. The AONB should check the Defra dataset every two years to monitor this.</td><td>LMU</td><td>Defra ECS data (2008)</td><td>2010</td></tr>
<tr><td>2.4: Field pattern</td><td>Total length of field boundaries by sample square:
<u>Sample square SX0080</u>
<table><tr><th>Boundary / feature type</th><th>Length (m)</th></tr><tr><td>Cornish hedgebank</td><td>8,823</td></tr><tr><td>Stone wall</td><td>55</td></tr><tr><td>Wooded</td><td>2,630</td></tr><tr><td>Gate</td><td>38</td></tr></table><u>Sample square SX0789</u>
<table><tr><th>Boundary / feature type</th><th>Length (m)</th></tr><tr><td>Cornish hedgebank</td><td>7,765</td></tr></table></td><td>Sample squares</td><td>Cornwall aerial photographs (2005)</td><td>2010/11</td></tr>
</table>

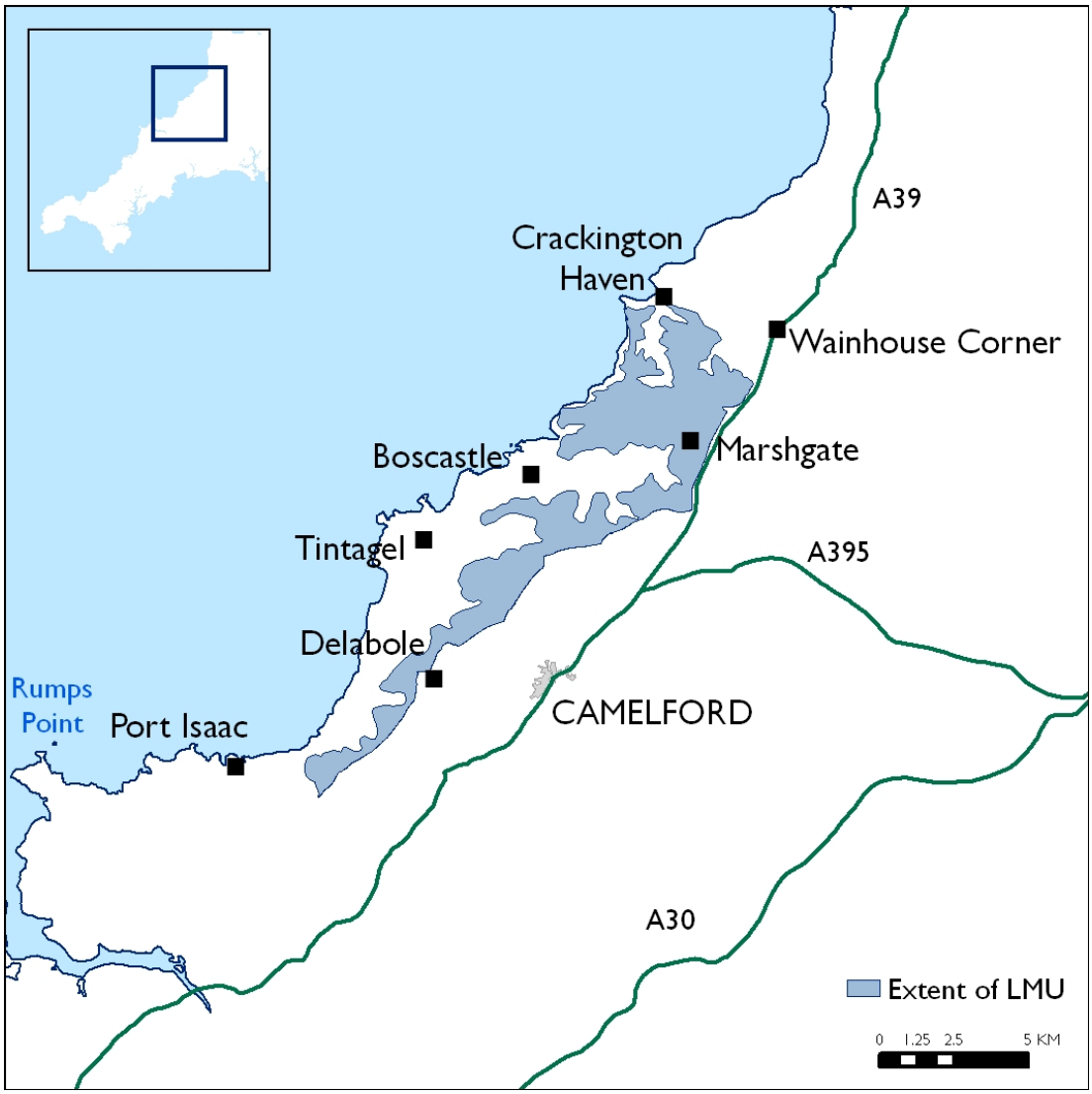
<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td></td><td>
<table>
<tr><td>Wooded</td><td>1,225</td></tr>
</table>
Field boundary pattern by sample square:
<table>
<tr><th>Sample square</th><th>Total sinuous (m)</th><th>Total straight (m)</th></tr>
<tr><td>SX0080</td><td>1,601</td><td>11,104</td></tr>
<tr><td>SX0789</td><td>996</td><td>9,655</td></tr>
</table>
Average field size by sample square:
Sample square SX0080: 1.3 ha
Sample square SX0789: 2 ha</td><td></td><td></td><td></td></tr>
<tr><td>2.5: Extent of semi-natural habitats</td><td>Habitat calculations:
<table>
<tr><th>Habitat</th><th>Area (ha)</th></tr>
<tr><td>Dwarf shrub heath (broad habitat)</td><td>151.8</td></tr>
<tr><td>Unimproved grassland</td><td>2.6</td></tr>
<tr><td>Wetland</td><td>7.5</td></tr>
</table>
NB see the ArcReader Project and Excel spreadsheet for a further breakdown of heathland habitat types found in this LMU</td><td>LMU</td><td>Cornwall LIFE data (1995)</td><td>2013/14</td></tr>
<tr><td>2.6: Presence [and condition] of historic landscape features</td><td>Number of extant features:
<table>
<tr><th>Age classification</th><th>Number of features in 2 sample squares</th></tr>
<tr><td>Prehistoric</td><td>2</td></tr>
<tr><td>Historic</td><td>2</td></tr>
<tr><td>Medieval</td><td>3</td></tr>
<tr><td>Post Medieval</td><td>13</td></tr>
<tr><td>TOTAL</td><td>20</td></tr>
</table>
Condition of features
Information on the condition of historic features could be obtained through the Heritage at Risk project (English Heritage).</td><td>Sample square</td><td>Cornwall CC Historic Environment Record (April 2008)

Potential future monitoring in conjunction with the Historic Environment Service/Heritage at Risk Project (July 2008)</td><td>2013/14</td></tr>
</table>

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td>2.7: Settlement pattern</td><td>Total area of development categories:<table><tr><th>Category</th><th>Area (ha)</th><th>No. of caravans/tents</th></tr><tr><td>Permanent</td><td>19.6</td><td></td></tr><tr><td>Chalet/static caravan</td><td>0.9</td><td>6</td></tr><tr><td>Temp. caravans/tents</td><td>4.3</td><td>150</td></tr></table>Refer to the Arc Reader project for settlement distribution within the sample squares.</td><td>Sample squares</td><td>Cornwall aerial photographs (2005)</td><td>2010/11</td></tr>
<tr><td>2.8: Transport infrastructure</td><td>Baseline to be established through community survey</td><td>Sample squares</td><td>Community survey 2008/9</td><td>2013/14</td></tr>
<tr><td>2.9: Local vernacular building styles</td><td>Baseline to be established through community survey</td><td>Sample squares</td><td>Community survey 2008/9</td><td>2013/14</td></tr>
<tr><td>2.10: Development at sea</td><td>AONB to collect information from the Local Planning Authority on any proposals for off-shore developments.</td><td>AONB area</td><td>LPA records (2008/9)</td><td>2010</td></tr>
<tr><td>3.8: Levels of fishing industry activity</td><td>Total number of active fishing fleets:<table><tr><th>Harbour</th><th>Number of active fishing vessels</th></tr><tr><td>Boscastle</td><td>3</td></tr><tr><td>Port Gaverne</td><td>4</td></tr><tr><td>Port IsAc</td><td>13</td></tr><tr><td>Port Quin</td><td>1</td></tr><tr><td>TOTAL</td><td>21</td></tr></table></td><td>AONB area</td><td>Cornwall Sea Fisheries Survey (December 2006)</td><td>2013/14</td></tr>
</table>

LMU CODE: C3

Location



Links to the Living Landscapes Character Areas

Constituent CAs: CA36, CA31

Constituent LDUs: 315, 317

Table 1: Indicators selected to monitor changes in landscape character

Character statement	Indicators selected by statement
Open landscape strongly influenced by coastal winds.	1.2: Levels of intrusion 2.1: Extent of woodland and tree cover/type
Exposure limiting tree growth, with **sculpted hedgerow trees**.	2.1: Extent of woodland and tree cover / type 3.4: Field boundary condition and species
Lowland heath with some wet heath and bog patches.	1.5: SSSI condition 2.5: Extent of semi-natural habitats
Mainly **large-scale rectilinear fields** enclosed by Cornish hedges, with or without slate/quartz facing and topped by turf and occasional hawthorn, blackthorn or gorse. Wind pruned beech hedges characterise hedgebanks on highest land. Some **medieval field patterns** in parts.	2.4: Field pattern 3.4: Field boundary condition and species
Land use predominantly **improved pasture** with some **rough grassland** and **arable**	2.2: Agricultural land use 2.3: Extent of biomass planting
Prehistoric barrows crowning high ridgeline. **Slate quarry** south of Delabole.	2.6: Presence [and condition] of historic landscape features
Area crossed by **minor roads** running along ridge tops and linking to surrounding valleys. **Broad verges** with variety of wild grasses and flowers.	1.2: Levels of intrusion 2.8: Transport infrastructure
Dispersed settlement with **small clustered villages** and **hamlets** and larger linear settlement of Delabole in south. On higher land are **scattered farmsteads, cottages and houses.**	1.1: Levels of tranquillity 1.2: Levels of intrusion 1.3: Extent of dark night skies 2.7: Settlement pattern
Slate is the characteristic building material (sourced from local quarries)	2.9: Local vernacular building styles

Table 2: The condition criteria for the selected indicators

Indicators selected for the LMU	Score code	Desired trajectories of change
1.1: Levels of tranquillity	AA	Positive: Maintenance or improvement in overall levels of tranquillity Negative: Decline in overall levels of tranquillity
1.2: Levels of intrusion	AA	Positive: Maintenance or improvement in current absence of intrusion Negative: Increase in overall levels of intrusion
1.3: Extent of dark night skies	A	Positive: Maintenance of or increase in overall extent of dark night skies Negative: Decline in overall extent of dark night skies
1.5: SSSI condition	AA	Positive: SSSIs are in favourable condition. Where sites are not in favourable condition, there has been an improvement in condition status from previous assessments. Negative: SSSIs are in unfavourable condition. Condition status has declined from previous assessments.
2.1: Extent of woodland and tree cover/type	P	Positive: No increase in tree cover on the plateau. Decrease in the area under conifer plantation. Negative: Increase in tree cover on the plateau. Increase in the total area of conifer plantation.
2.2: Agricultural land use	P	Positive: Maintenance of the extent of pasture. Maintenance of or an increase in the area of rough grassland. Decrease in the extent of arable cultivation. Negative: Increase in the area of land under arable cultivation. Decrease in the area of pasture and/or rough grassland.
2.3: Extent of biomass planting	S	Positive: No loss of permanent pasture or semi-natural habitats to biomass planting. Biomass planting incorporated within existing areas of cultivated land or woodland, respecting or enhancing characteristic field and woodland patterns. Negative: Biomass planting located within permanent pastoral farmland, outside cultivated land or on the site of semi-natural habitats identified at the time of the baseline survey. The geometric shapes of areas of biomass planting interrupt characteristic field and/or woodland patterns.
2.4: Field pattern	P	Positive: Maintenance of total area of medieval fields. Maintenance of overall length of field boundaries; no increase in average field size. Negative: Decrease in the total area of medieval fields. Decrease in overall length of field boundaries; increase in average field size.

Indicators selected for the LMU	Score code	Desired trajectories of change
2.5: Extent of semi-natural habitats	P	Positive: Maintenance of or increase in the extent of semi-natural habitats characteristic to the LMU. Negative: Decrease in or fragmentation of the extent of semi-natural habitats characteristic to the LMU.
2.6: Presence [and condition] of historic landscape features	S	Positive: Numbers of recorded above-ground features are stable or increase from baseline numbers. No decline in the overall condition of historic features. Negative: Decrease in the number of above-ground features recorded. Decline in the overall condition of historic features.
2.7: Settlement pattern	P	Positive: Maintenance of the existing dispersed settlement pattern of small villages, and hamlets, along with scattered farms and individual properties on higher ground. No new development located outside settlement curtilages. No increase in total area of developed land. Negative: Increase in the footprint of hamlets and villages. Increase in the number of properties located outside settlement curtilages. New locations of or growth in non-permanent residential developments. Increase in total area of developed land.
2.8: Transport infrastructure	S	Positive: Maintenance of or decrease in levels of road engineering works, signage and other road furniture. Negative: Increase in levels of road engineering works, signage and other road furniture. Loss of any distinctive types of signage (e.g. finger posts/milestones).
2.9: Local vernacular building styles	S	Positive: New housing/permitted development in sympathy with traditional building character as defined in the baseline surveys. Negative: New housing/permitted development detracts from traditional building character as defined in the baseline surveys.
3.4: Field boundary condition	S	Positive: No decrease in the total length of Cornish hedge boundaries (*cross refer with the 2.4 Field Patterns indicator*). Any new lengths constructed with slate/quartz facing and planted with hawthorn, blackthorn, gorse or beech. No decrease in the overall number of hedgerow trees. Negative: Decrease in the total length of Cornish hedge boundaries (*cross refer with the 2.4 Field Patterns indicator*). New/replacement stone facing of different material(s) to slate/quartz. New planting with different species to hawthorn, blackthorn, gorse or beech. Decrease in the overall number of hedgerow trees.
MAXIMUM LMU SCORES	**10** **5**	P = Primary Indicators S = Secondary Indicators

Table 3: Forces for change acting upon the landscape elements to be monitored

	Climate change					Development pressures										Land use changes											Woodland managament changes				WFD response		Industry change		Forces for change identified in exisitng landscape assessments
	Sea level rise/stormy conditions	Coastal squeeze	Increased frequency of droughts	More frequent river flooding	Increased visitor pressure	Tourism developments incl caravan sites, increased signage, car parks	Marine and beach developments (incl demand for moorings)	Housing developments (incl affordable housing due to high house prices)	Industrial and commercial developments	Demand for second homes	Increased light pollution	Deamnd for better communications (e.g aerials, masts)	Sustainable design of new builds	Increase in commuter and tourist traffic incl traffic calming measures and road improvements	Loosing up of agricultural land at sale	Wind farms (on-shore and off-shore) and other RE developments	Reservoirs/water storage	Minerals extraction(quarrying	Non-food crops e.g. bioenergy, industrial - intensification of lowland areas	Longer growing season/higher CO_2 levels for new crops	Horticultural expansion - fav. growing conditions, consumer demand	Intensification of production (particularly arable) incl associated infrastructure	Livestock farming changes (reduction in cattle, reduced grazing in uplands, reduced grazing on marginal land)	Farm diversification and hobby farming eg horseyculture	Recreational uses eg golf courses, recreational boating	Decline in local and traditional land/woodland management and building skills	New species of different provenance eg Douglas Fir to respond to climate change	Increased planting in floodplain areas eg SRC	Afforestation (incl due to favourable growing conditions or for carbon sequestration)	Increased growth rates and productivity	Reduced intensity of agriculture to meet WFD targets	Measures to reduce diffuse pollution eg buffer strips, planting next to watercourses, etc	Decline in traditional industries	Local quarry closures	
LMU C3																																			
Open landscape strongly influenced by coastal winds																																			Coniferous plantations identified as a pressure
Plateau ridge incised by short tributary streams.																																			
Exposure restricting tree growth, with sculpted hedgerow trees																																			
mire in upper valley bottoms																																			Drainage identified as an issue
Lowland heath with some wet heath and bog patches																																			
large-scale rectilinear fields enclosed by Cornish hedges																																			Removal of hedges identified as a pressure
Wind pruned beech hedges characterise hedgebanks on highest land																																			Removal of hedges identified as a pressure
Some medieval field patterns in parts																																			Removal of hedges identified as a pressure
predominantly improved pasture with some rough grassland																																			
Some arable																																			
Prehistoric barrows crowning high ridgeline																																			
Slate quarry south of Delabole																																			
Area crossed by minor roads running along ridge tops and linking to surrounding valleys																																			
Broad verges with variety of wild grasses and flowers																																			
Dispersed settlement with small clustered villages and hamlets																																			
On higher land are scattered farmsteads, cottages and houses.																																			
Larger linear settlement of Delabole in south																																			

Table 4: Baseline results

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<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
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<table><tr><th>Category of tranquillity</th><th>Score</th></tr><tr><td>Highest</td><td>48.8</td></tr><tr><td>Lowest</td><td>-33.0</td></tr><tr><td>Mean</td><td>14.0</td></tr></table></td><td>AONB area</td><td>CPRE (2007)</td><td>2013/14</td></tr>
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<tr><td>1.3: Extent of dark night skies</td><td><u>Cornwall AONB Results</u>
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<u>Number of stars in the Orion constellation</u><u>: The AONB is to organise a ‘star count’ to inform this indicator.</u>

<u>Fixed point photography</u><u>: AONB to establish locations for fixed point photography to monitor this indicator</u></td><td>AONB

AONB area

LMU</td><td>CPRE (2000)

Primary data (2008/9)

2008/9</td><td>2013/14</td></tr>
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<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td>1.5: SSSI condition</td><td><u>AONB Area results (Pentire Point to Widemouth)</u>
76% Favourable
15% Unfavourable Recovering
9% Unfavourable No Change

See ArcReader Project and Excel Spreadsheet for a breakdown of results for the SSSIs within this LMU.</td><td>AONB area</td><td>Natural England (web-based information)
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<tr><td>2.1: Extent of woodland and tree cover/type</td><td><u>Breakdown by woodland type:</u><table><tr><th>Woodland type</th><th>Area –ha (NIWT figure)</th></tr><tr><td>Broadleaved</td><td>45.8 (8.5)</td></tr><tr><td>Ancient semi-natural</td><td>0.2</td></tr><tr><td>PAWS</td><td>0</td></tr><tr><td>Mixed</td><td>0.6</td></tr><tr><td>Conifer</td><td>1.3</td></tr><tr><td>Scrub</td><td>11.7</td></tr></table></td><td>LMU</td><td>- Cornwall LIFE dataset (1995)
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<tr><td>2.4: Field pattern</td><td>Total length of field boundaries by sample square:
Sample square SX0886
<table><tr><th>Boundary / feature type</th><th>Length (m)</th></tr><tr><td>Cornish hedgebank</td><td>10,113</td></tr><tr><td>Wooded</td><td>497</td></tr><tr><td>Gate</td><td>72</td></tr></table>Sample square SX1492
<table><tr><th>Boundary / feature type</th><th>Length (m)</th></tr><tr><td>Cornish hedgebank</td><td>14,629</td></tr><tr><td>Wooded</td><td>1,352</td></tr></table>Field boundary pattern by sample square:
<table><tr><th>Sample square</th><th>Total sinuous (m)</th><th>Total straight (m)</th></tr><tr><td>SX0886</td><td>869</td><td>10,419</td></tr><tr><td>SX1492</td><td>108</td><td>15,934</td></tr></table>Average field size by sample square:
Sample square SX0886: 3.5 ha
Sample square SX1492: 2.6 ha</td><td>Sample squares</td><td>Cornwall aerial photographs (2005)</td><td>2010/11</td></tr>
</table>

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td>2.5: Extent of semi-natural habitats</td><td>Habitat calculations:
<table><tr><th>Habitat</th><th>Area (ha)</th></tr><tr><td>Dwarf shrub heath (broad habitat)</td><td>4.7</td></tr><tr><td>Wetland</td><td>6.4</td></tr></table>
NB see the ArcReader Project and Excel spreadsheet for a further breakdown of heathland habitat types found in this LMU</td><td></td><td>Cornwall LIFE data (1995)</td><td>2013/14</td></tr>
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<table><tr><th>Age classification</th><th>Number of features in 2 sample squares</th></tr><tr><td>Prehistoric</td><td>4</td></tr><tr><td>Medieval</td><td>1</td></tr><tr><td>Post Medieval</td><td>7</td></tr><tr><td>Modern</td><td>1</td></tr><tr><td>Unknown</td><td>1</td></tr><tr><td>TOTAL</td><td>14</td></tr></table>
Condition of features
<u>Information on the condition of historic features could be obtained through the Heritage at Risk project (English Heritage).</u></td><td>Sample square</td><td>Cornwall CC Historic Environment Record (April 2008)

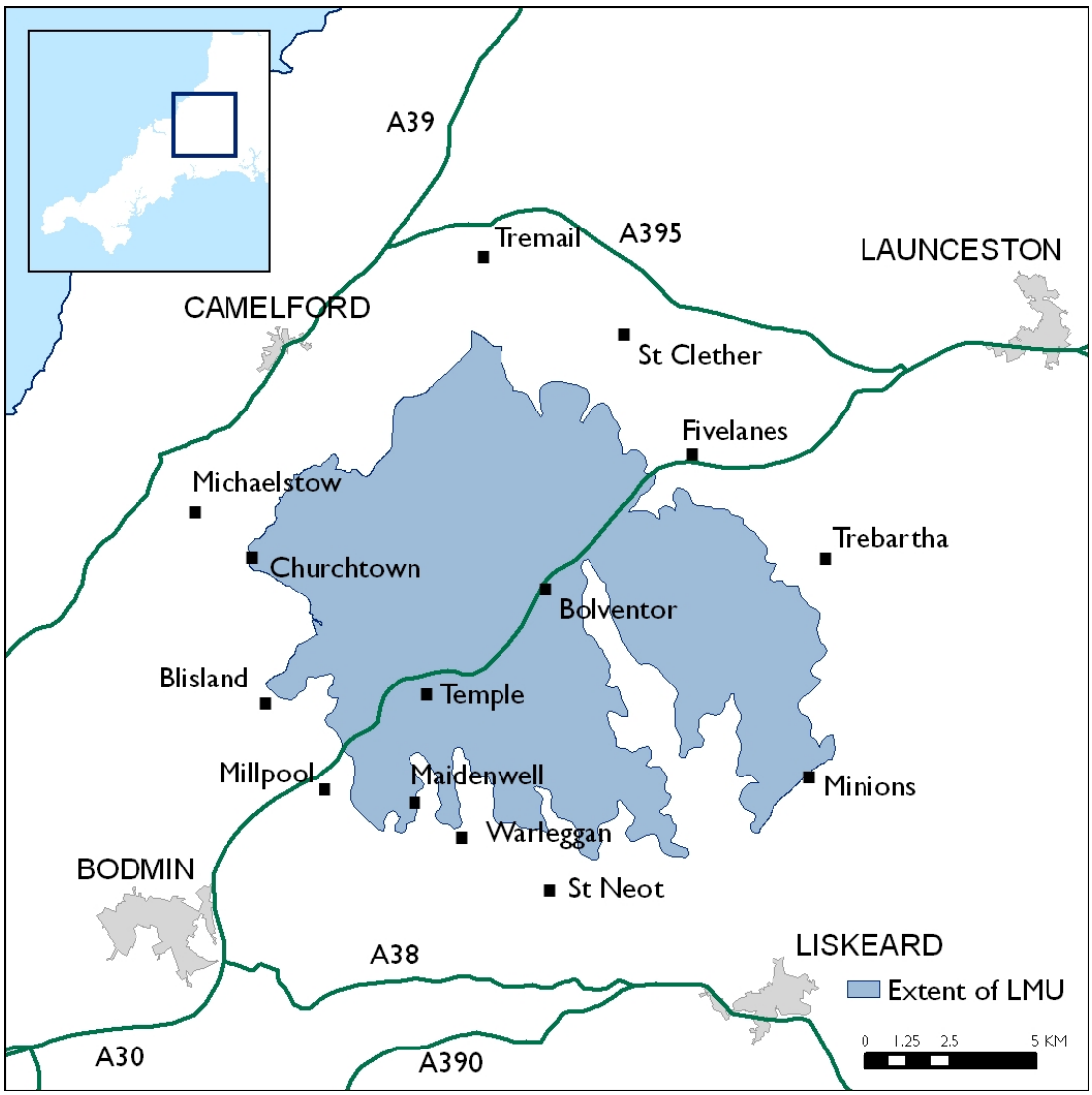
Potential future monitoring in conjunction with the Historic Environment Service/Heritage at Risk Project (July 2008)</td><td>2013/14</td></tr>
<tr><td>2.7: Settlement pattern</td><td>Total area of permanent development:
<table><tr><th>Category</th><th>Area (ha)</th></tr><tr><td>Permanent</td><td>5.0</td></tr></table>
Refer to the Arc Reader project for settlement distribution within the sample squares.</td><td>Sample squares</td><td>Cornwall aerial photographs (2005)</td><td>2010/11</td></tr>
</table>

Indicator	Results from 2008 analysis	Scale	Source of data and date	Next date for monitoring
2.8: Transport infrastructure	Baseline to be established through community survey	Sample squares	Community survey 2008/9	2013/14
2.9: Local vernacular building styles	Baseline to be established through community survey	Sample squares	Community survey 2008/9	2013/14
3.4: Field boundary condition and species	Baseline to be established through field survey.	Sample square	Field survey 2008.	2013/14

CORNWALL AONB: BODMIN MOOR

LMU CODE: C4

Location



Links to the Living Landscapes Character Areas

Constituent CAs: CA32

Constituent LDUs: 028, 074, 304, 308, 309

Table 1: Indicators selected to monitor changes in landscape character

Character statement	Indicators selected by statement
Panoramic views across the moorland and beyond.	1.2: Levels of intrusion 2.1: Extent of woodland and tree cover/type
Little tree cover on plateau, aside from large **coniferous plantation blocks**. Incised valleys clothed with **woodland**, extending into the fringing farmland.	2.1: Extent of woodland and tree cover / type
Extensive open **moorland** on the uplands: coarse grassland, **wet heath** and patches of scrubby bracken and gorse. Some **marshy vegetation** fringing streams, with large areas of **peat and blanket bog**.	1.5: SSSI condition 2.5: Extent of semi-natural habitats
Plateau mostly **unenclosed**. **Rectilinear fields** around the moorland edges (in-takes) bounded by **stone walls** or fencing.	2.4: Field pattern 3.4: Field boundary condition and species
Plateau **common grazed** by **cattle** and **sheep**. **Rough grazing** around the edges	2.2: Agricultural land use 2.3: Extent of biomass planting
High concentration of important historic features including the remains of abandoned **Neolithic, Bronze Age and Medieval enclosures, settlements** and **relics** of a ritual landscape. Former **china clay workings** visible in the central moorland landscape, with **relic pools, chimneys and engine houses.**	2.6: Presence [and condition] of historic landscape features
LMU dissected by main A30 trunk road. **Open, winding lanes** across the moor, becoming more enclosed on sloping land.	1.2: Levels of intrusion 2.8: Transport infrastructure
Sparse settlement with occasional **isolated granite farmsteads.**	1.1: Levels of tranquillity 1.2: Levels of intrusion 1.3: Extent of dark night skies 2.7: Settlement pattern 2.9: Local vernacular building styles

Table 2: The condition criteria for the selected indicators

Indicators selected for the LMU	Score code	Desired trajectories of change
1.1: Levels of tranquillity	AA	Positive: Maintenance or improvement in overall levels of tranquillity Negative: Decline in overall levels of tranquillity
1.2: Levels of intrusion	AA	Positive: Maintenance or improvement in current absence of intrusion Negative: Increase in overall levels of intrusion
1.3: Extent of dark night skies	A	Positive: Maintenance of or increase in overall extent of dark night skies Negative: Decline in overall extent of dark night skies
1.5: SSSI condition	AA	Positive: SSSIs are in favourable condition. Where sites are not in favourable condition, there has been an improvement in condition status from previous assessments. Negative: SSSIs are in unfavourable condition. Condition status has declined from previous assessments.
2.1: Extent of woodland and tree cover/type	P	Positive: No increase or a decrease in tree cover on the plateau. Decrease in the area under conifer plantation. Maintenance of or increase in extent of woodland on valley sides and farmland fringes. Negative: Increase in tree cover on the plateau. Increase in the total area of conifer plantation. Decrease in extent of woodland on valley sides and farmland fringes.
2.2: Agricultural land use	P	Positive: No decrease in the area of land used for rough grazing. Negative: Decrease in the area of land used for rough grazing. Increase in the number of smallholdings.
2.3: Extent of biomass planting	S	Positive: No loss of permanent pasture or semi-natural habitats to biomass planting. Biomass planting incorporated within existing areas of cultivated land or woodland, respecting or enhancing characteristic field and woodland patterns. Negative: Biomass planting located within permanent pastoral farmland, outside cultivated land or on the site of semi-natural habitats identified at the time of the baseline survey. The geometric shapes of areas of biomass planting interrupt characteristic field and/or woodland patterns.
2.4: Field pattern	P	Positive: Plateau remains unenclosed. Maintenance of overall length of field boundaries around moorland edges. Negative: Increase in the number of rectilinear fields/increase in overall length of field boundaries around moorland edges. New enclosures on plateau areas.
2.5: Extent of semi-natural habitats	P	Positive: Maintenance of or increase in the extent of semi-natural habitats characteristic to the LMU. Negative: Decrease in or fragmentation of the extent of semi-natural habitats characteristic to the LMU.

Indicators selected for the LMU	Score code	Desired trajectories of change
2.6: Presence [and condition] of historic landscape features	S	Positive: Numbers of recorded above-ground features are stable or increase from baseline numbers. No decline in the overall condition of historic features. Negative: Decrease in the number of above-ground features recorded. Decline in the overall condition of historic features.
2.7: Settlement pattern	P	Positive: Maintenance of the existing sparse settlement pattern. No new development on the moorland plateau. No increase in average farmstead size. Negative: Increase in the overall area of developed land. New development on the moorland plateau. Increase in average farmstead size.
2.8: Transport infrastructure	S	Positive: Maintenance of or decrease in levels of road engineering works, signage and other road furniture. Negative: Increase in levels of road engineering works, signage and other road furniture. Loss of any distinctive types of signage (e.g. finger posts/milestones).
2.9: Local vernacular building styles	S	Positive: New housing/permitted development in sympathy with traditional building character as defined in the baseline surveys. Negative: New housing/permitted development detracts from traditional building character as defined in the baseline surveys.
3.3: Presence of traditional livestock types	S	Positive: Maintenance of the total number of cattle and/or ponies used for rough grazing. Increase in the overall proportion of upland, hardy livestock types used compared to commercial types. No increase in sheep numbers. Negative: Significant change in the total number of cattle and/or ponies used for rough grazing (increase or decrease). Decrease in the overall proportion of hardy upland livestock types used compared to commercial types. Increase in sheep numbers.
3.4: Field boundary condition	S	Positive: Stone walls are stock proof and well maintained in keeping with local building styles/materials. No increase in the total length of fencing. Negative: Gappy stone walls or inappropriate restoration works. Increase in total length of fencing.
MAXIMUM LMU SCORES	**10** **6**	P = Primary Indicators S = Secondary Indicators

Table 3: Forces for change acting upon the landscape elements to be monitored

	Climate change					Development pressures										Land use changes												Woodland managament changes				WFD response		Industry change		Forces for change identified in exisitng landscape assessments
	Sea level rise/stormy conditions	Coastal squeeze	Increased frequency of droughts	More frequent river flooding	Increased visitor pressure	Tourism developments incl caravan sites, increased signage, car parks	Marine and beach developments (incl demand for moorings)	Housing developments (incl affordable housing due to high house prices)	Industrial and commercial developments	Demand for second homes	Increased light pollution	Deamnd for better communications (e.g aerials, masts)	Sustainable design of new builds	Increase in commuter and tourist traffic incl traffic calming measures and road improvements	Lotting up of agricultural land at sale	Wind farms (on-shore and off-shore) and other RE developments	Reservoirs/water storage	Minerals extraction/quarrying	Non-food crops e.g. bioenergy, industrial - intensification of lowland areas	Longer growing season/higher CO2 levels for new crops	Horticultural expansion - fav. growing conditions, consumer demand	Intensification of production (particularly arable) incl associated infrastructure	Livestock farming changes (reduction in cattle, reduced grazing in uplands, reduced grazing on marginal land)	Farm diversification and hobby farming eg horseyculture	Recreational uses eg golf courses, recreational boating	Decline in local and traditional land/woodland management and building skills	New species of different provenance eg Douglas Fir to respond to climate change	Increased planting in floodplain areas eg SRC	Afforestation (incl due to favourable growing conditions or for carbon sequestration)	Increased growth rates and productivity	Reduced intensity of agriculture to meet WFD targets	Measures to reduce diffuse pollution eg buffer strips, planting next to watercourses, etc	Decline in traditional industries	Local quarry closures	
LMU C4																																			
Granite mass with prominent tors and scree ('clitter') slopes																																			
Dissected by many streams and rivers, forming waterfalls																																			
Springs and wet flushes on plateau.																																			
Little tree cover on plateau, aside from large coniferous plantation blocks.																																			Extensions to conifer plantations identified as a pressure
Incised valleys clothed with woodland																																			e.g. hydro schemes
Extensive open moorland with large areas of peat and blanket bog																																			Loss of heathland from unsympathetic agricultural improvements highlighted as issue
Some marshy vegetation fringing streams																																			
Plateau mostly unenclosed - common grazed by cattle and sheep																																			
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86% Unfavourable Recovering
6% Unfavourable Declining
5% Unfavourable No Change
3% Favourable

See ArcReader Project and Excel Spreadsheet for a breakdown of results for the SSSIs within this LMU.</td><td></td><td>Natural England (web-based information)
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<tr><td>2.4: Field pattern</td><td>Total length of field boundaries by sample square:
Sample square SX1479
<table><tr><th>Boundary / feature type</th><th>Length (m)</th></tr><tr><td>Cornish hedgebank</td><td>567</td></tr><tr><td>Wooded</td><td>920</td></tr><tr><td>Stone wall</td><td>1,089</td></tr><tr><td>Gap</td><td>40</td></tr></table>Sample square SX2376
<table><tr><th>Boundary / feature type</th><th>Length (m)</th></tr><tr><td>Cornish hedgebank</td><td>570</td></tr><tr><td>Wooded</td><td>768</td></tr><tr><td>Stone wall</td><td>9,946</td></tr></table>Field boundary pattern by sample square:<table><tr><th>Sample square</th><th>Total sinuous (m)</th><th>Total straight (m)</th></tr><tr><td>SX1479</td><td>-</td><td>3,411</td></tr><tr><td>SX2376</td><td>2,873</td><td>9,724</td></tr></table>Average field size by sample square:
Sample square SX1479: No fields in this square (moorland)
Sample square SX2376: 2.3 ha</td><td>Sample squares</td><td>Cornwall aerial photographs (2005)</td><td>2010/11</td></tr>
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Condition of features
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<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td>2.7: Settlement pattern</td><td>Total area of development categories:<table><tr><th>Category</th><th>Area (ha)</th><th>No. of caravans/tents</th></tr><tr><td>Permanent</td><td>0.5</td><td></td></tr></table>Refer to the Arc Reader project for settlement distribution within the sample squares.</td><td>Sample squares</td><td>Cornwall aerial photographs (2005)</td><td>2010/11</td></tr>
<tr><td>2.8: Transport infrastructure</td><td>Baseline to be established through community survey (primary data)</td><td>Sample squares</td><td>Community survey 2008/9</td><td>2013/14</td></tr>
<tr><td>2.9: Local vernacular building styles</td><td>Baseline to be established through community survey (primary data)</td><td>Sample squares</td><td>Community survey 2008/9</td><td>2013/14</td></tr>
<tr><td>3.3: Presence of traditional livestock types</td><td>Baseline to be established through a questionnaire survey of sample farms</td><td>Sample square/LMU</td><td>Questionnaire survey 2008/9</td><td>2009/10 (repeated annually)</td></tr>
<tr><td>3.4: Field boundary condition and species</td><td>Baseline to be established through field survey in 2008 (primary data).</td><td>Sample square</td><td>Field survey 2008.</td><td>2013/14</td></tr>
</table>

LMU CODE: C5

Location

Links to the Living Landscapes Character Areas

Constituent CAs: CA22, CA25, CA26, CA29, CA32, CA33

Constituent LDUs: 075, 208, 239, 241, 242, 243, 245, 254, 301, 310, 311, 356, 358, 240, 056

Table 1: Indicators selected to monitor changes in landscape character

Character statement	Indicators selected by statement
Incised valleys with clear streams; slopes covered by **dense woodland**, including ash, oak, hazel and hawthorn.	1.5: SSSI condition 2.1: Extent of woodland and tree cover/type
Mixture of **anciently enclosed** pastures with **sinuous boundaries**, surrounded by **rectilinear enclosures** of more recent origin on the edge of the moor.	2.4: Field pattern
Fields bounded by **Cornish hedges** with frequent **hedgerow trees** or occasional **stone walls.**	3.4: Field boundary condition and species
Mixture of **pasture** and **cultivated fields**	2.2: Agricultural land use 2.3: Extent of biomass planting
Relict field systems, numerous **prehistoric features**, **mining remains**, **former quarries and related workings** around Caradon Hill and the Minions.	2.6: Presence [and condition] of historic landscape features
Granite and slate cottages, including **miners' terraces.** Substantial **granite chimneys** and **slate hangings** are particular features of some buildings.	2.9: Local vernacular building styles
Network of **winding lanes** with strong sense of enclosure.	1.2: Levels of intrusion 2.8: Transport infrastructure
Sheltered **small villages** and **church towns** of a secluded character.	1.1: Levels of tranquillity 1.2: Levels of intrusion 1.3: Extent of dark night skies 2.7: Settlement pattern

Table 2: The condition criteria for the selected indicators

Indicators selected for the LMU	Score code	Desired trajectories of change
1.1: Levels of tranquillity	AA	Positive: Maintenance or improvement in overall levels of tranquillity Negative: Decline in overall levels of tranquillity
1.2: Levels of intrusion	AA	Positive: Maintenance or improvement in current absence of intrusion Negative: Increase in overall levels of intrusion
1.3: Extent of dark night skies	A	Positive: Maintenance of or increase in overall extent of dark night skies Negative: Decline in overall extent of dark night skies
1.5: SSSI condition	AA	Positive: SSSIs are in favourable condition. Where sites are not in favourable condition, there has been an improvement in condition status from previous assessments. Negative: SSSIs are in unfavourable condition. Condition status has declined from previous assessments.
2.1: Extent of woodland and tree cover/type	P	Positive: Maintenance of or increase in extent of semi-natural woodland cover on valley slopes. Negative: Decrease in semi-natural woodland extent on valley slopes. Increase in other woodland types.
2.2: Agricultural land use	P	Positive: Maintain current balance of land uses. Increase in the area of pasture. Negative: Increase in the area of land under cultivation. Decrease in the area of pasture.
2.3: Extent of biomass planting	S	Positive: No loss of permanent pasture or semi-natural habitats to biomass planting. Biomass planting incorporated within existing areas of cultivated land or woodland, respecting or enhancing characteristic field and woodland patterns. Negative: Biomass planting located within permanent pastoral farmland, outside cultivated land or on the site of semi-natural habitats identified at the time of the baseline survey. The geometric shapes of areas of biomass planting interrupt characteristic field and/or woodland patterns.
2.4: Field pattern	P	Positive: Maintenance of irregular field pattern. Maintenance of overall length of field boundaries; no increase in average field size. Negative: Increase in number of rectilinear enclosures. Decrease in overall length of field boundaries; increase in average field size.

Indicators selected for the LMU	Score code	Desired trajectories of change
2.6: Presence [and condition] of historic landscape features	P	Positive: Numbers of recorded above-ground features are stable or increase from baseline numbers. No decline in the overall condition of historic features. Negative: Decrease in the number of above-ground features recorded. Decline in the overall condition of historic features.
2.7: Settlement pattern	P	Positive: Maintenance of the existing sparse settlement pattern. No new development located outside settlement curtilages. No increase in the total area of development. Negative: Increase in the overall area of developed land. Increase in the total area of development.
2.8: Transport infrastructure	S	Positive: Maintenance of or decrease in levels of road engineering works, signage and other road furniture. Negative: Increase in levels of road engineering works, signage and other road furniture. Loss of any distinctive types of signage (e.g. finger posts/milestones).
2.9: Local vernacular building styles	S	Positive: New housing/permitted development in sympathy with traditional building character as defined in the baseline surveys. Negative: New housing/permitted development detracts from traditional building character as defined in the baseline surveys.
3.4: Field boundary condition	S	Positive: Stone walls and Cornish hedges are stock proof and well maintained in keeping with local building styles/materials. No decrease in the overall number of hedgerow trees. Negative: Gappy stone walls or Cornish hedges or inappropriate restoration works out of character with local building styles/materials. Decrease in the overall number of hedgerow trees.
MAXIMUM LMU SCORES	**10** **4**	P = Primary Indicators S = Secondary Indicators

Table 3: Forces for change acting upon the landscape elements to be monitored

	Climate change					Development pressures									Land use changes											Woodland managament changes				WFD response		Industry change	
	Sea level rise/stormy conditions	Coastal squeeze	Increased frequency of droughts	More frequent river flooding	Increased visitor pressure	Tourism developments incl caravan sites, increased signage, car parks	Marine and beach developments (incl demand for moorings)	Housing developments (incl affordable housing due to high house prices)	Industrial and commercial developments	Demand for second homes	Increased light pollution	Deamnd for better communications (e.g aerials, masts)	Sustainable design of new builds	Increase in commuter and tourist traffic incl traffic calming measures and road improvements	Lotting up of agricultural land at sale	Wind farms (on-shore and off-shore) and other RE developments	Reservoirs/water storage	Minerals extraction/quarrying	Non-food crops e.g. bioenergy, industrial - intensification of lowland areas	Longer growing season/higher CO2 levels for new crops	Horticultural expansion - fav. growing conditions, consumer demand	Intensification of production (particularly arable) incl associated infrastructure	Livestock farming changes (reduction in cattle, reduced grazing in uplands, reduced grazing on marginal land)	Farm diversification and hobby farming eg horseyculture	Recreational uses eg golf courses, recreational boating	Decline in local and traditional land/woodland management and building skills	New species of different provenance eg Douglas Fir to respond to climate change	Increased planting in floodplain areas eg SRC	Afforestation (incl due to favourable growing conditions or for carbon sequestration)	Increased growth rates and productivity	Reduced intensity of agriculture to meet WFD targets	Measures to reduce diffuse pollution eg buffer strips, planting next to watercourses, etc	Decline in traditional industries	Local quarry closures
LMU C5																																	
Incised valleys with clear streams																																	
slopes covered by dense woodland																																	
Mixture of anciently enclosed pastures with sinuous boundaries, surrounded by rectilinear enclosures of more recent origin on the edge of the moor																																	
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Network of winding lanes with strong sense of enclosure																																	
Sheltered small villages and church towns of a secluded character.																																	

Table 4: Baseline results

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td>1.1: Levels of tranquillity</td><td><u>AONB Area Results (Bodmin Moor)</u>
<table><tr><th>Category of tranquillity</th><th>Score</th></tr><tr><td>Highest</td><td>41.8</td></tr><tr><td>Lowest</td><td>-11.2</td></tr><tr><td>Mean</td><td>20.1</td></tr></table></td><td>AONB area</td><td>CPRE (2007)</td><td>2013/14</td></tr>
<tr><td>1.2: Levels of intrusion</td><td><u>AONB Area Results (Bodmin Moor)</u>
<table><tr><th>Category of intrusion</th><th>Area (ha)</th><th>1997 area (ha)</th></tr><tr><td>Disturbed</td><td>9</td><td>0</td></tr><tr><td>Undisturbed</td><td>2,588</td><td>2,371</td></tr><tr><td>Urban</td><td>0</td><td>0</td></tr></table></td><td>AONB area</td><td>CPRE (2007)</td><td>2013/14</td></tr>
<tr><td>1.3: Extent of dark night skies</td><td><u>Cornwall AONB Results</u>
<table><tr><th>Category of darkness</th><th>Area (ha)</th><th>1993 area (ha)</th></tr><tr><td>0-1.7</td><td>277</td><td>258</td></tr><tr><td>1.7-50</td><td>442</td><td>527</td></tr><tr><td>50-150</td><td>238</td><td>171</td></tr><tr><td>150-240</td><td>3</td><td>4</td></tr><tr><td>240-255</td><td>0</td><td>0</td></tr></table>
<u>Number of stars in the Orion constellation</u>: <u>The AONB is to organise a ‘star count’ to inform this indicator.</u>

<u>Fixed point photography</u>: <u>AONB to establish locations for fixed point photography to monitor this indicator</u></td><td>AONB

AONB area

LMU</td><td>CPRE (2000)

Primary data (2008/9)

2008/9</td><td>2013/14</td></tr>
</table>

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td>1.5: SSSI condition</td><td><u>AONB Area results (Bodmin Moor)</u>
86% Unfavourable Recovering
6% Unfavourable Declining
5% Unfavourable No Change
3% Favourable

See ArcReader Project and Excel Spreadsheet for a breakdown of results for the SSSIs within this LMU.</td><td></td><td>Natural England (web-based information)
See Excel Spreadsheet for a breakdown of assessment dates for SSSIs within this LMU.</td><td>2010 (every 2 years)</td></tr>
<tr><td>2.1: Extent of woodland and tree cover/type</td><td><u>Breakdown by woodland type:</u>
<table><tr><th>Woodland type</th><th>Area –ha (NIWT figure)</th></tr><tr><td>Broadleaved</td><td>600.4 (447.6)</td></tr><tr><td>Ancient semi-natural</td><td>1.6</td></tr><tr><td>PAWS</td><td>8.4</td></tr><tr><td>Mixed</td><td>35.3 (33.3)</td></tr><tr><td>Conifer</td><td>103.9 (101.7)</td></tr><tr><td>Scrub</td><td>89.6</td></tr></table></td><td>LMU</td><td>- Cornwall LIFE dataset (1995)
- Natural England’s Ancient Woodland Inventory (1999)
- National Inventory of Woodland and Trees (2000)</td><td>2013/14</td></tr>
<tr><td>2.2: Agricultural land use</td><td><u>AONB Area Results (Bodmin Moor):</u>
<table><tr><th>Grassland categories</th><th>Hectares</th></tr><tr><td>< 5 years & permanent pasture</td><td>11,658</td></tr><tr><td>Rough grazing</td><td>3,167</td></tr><tr><td>Arable categories:</td><td></td></tr><tr><td>Cereals</td><td>131</td></tr><tr><td>Combinable crops</td><td>131</td></tr><tr><td colspan="2">Number of holdings in different size categories:</td></tr><tr><td><5 ha:</td><td>159</td></tr><tr><td>5-10 ha:</td><td>38</td></tr><tr><td>10-20 ha:</td><td>32</td></tr><tr><td>Over 20 ha</td><td>115</td></tr></table></td><td>AONB area</td><td>Defra June Agricultural Census (2007)</td><td>2013/14</td></tr>
</table>

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td></td><td>The AONB should collect information from a representative sample of farmers within the LMU to further pinpoint agricultural land use.</td><td>LMU</td><td>2008 data collection</td><td></td></tr>
<tr><td>2.3: Extent of biomass planting</td><td>Number of agreements through ECS: 1
Energy Crops type: Short Rotation Coppice
Area of land: 9 ha
Start date: 1/10/2006
End date: 30/9/2011</td><td>LMU</td><td>Defra ECS data (2008)
Aerial photographic interpretation if planting is visible in next round of aerial photos.</td><td>2010</td></tr>
<tr><td>2.4: Field pattern</td><td>Total length of field boundaries by sample square:
Sample square SX1868
<table>
<tr><th>Boundary / feature type</th><th>Length (m)</th></tr>
<tr><td>Cornish hedgebank</td><td>12,780</td></tr>
<tr><td>Wooded</td><td>3,980</td></tr>
<tr><td>Stone wall</td><td>93</td></tr>
<tr><td>Gap</td><td>40</td></tr>
</table>
Sample square SX2369
<table>
<tr><th>Boundary / feature type</th><th>Length (m)</th></tr>
<tr><td>Cornish hedgebank</td><td>7,093</td></tr>
<tr><td>Wooded</td><td>5,570</td></tr>
<tr><td>Stone wall</td><td>55</td></tr>
</table>
Field boundary pattern by sample square:
<table>
<tr><th>Sample square</th><th>Total sinuous (m)</th><th>Total straight (m)</th></tr>
<tr><td>SX1868</td><td>7,802</td><td>9,266</td></tr>
<tr><td>SX2369</td><td>6,319</td><td>6,649</td></tr>
</table>
Average field size by sample square:
Sample square SX1868: 1.4 ha
Sample square SX2369: 2 ha</td><td>Sample squares</td><td>Cornwall aerial photographs (2005)</td><td>2010/11</td></tr>
</table>

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td>2.6: Presence [and condition] of historic landscape features</td><td>Number of extant features:<table><tr><th>Age classification</th><th>Number of features in 2 sample squares</th></tr><tr><td>Historic</td><td>4</td></tr><tr><td>Medieval</td><td>3</td></tr><tr><td>Post Medieval</td><td>15</td></tr><tr><td>Unknown</td><td>2</td></tr><tr><td>TOTAL</td><td>24</td></tr></table>Condition of features
Information to be obtained from the World Heritage site team for the LMU's mining features.
Information on the condition of historic features could be obtained through the Heritage at Risk project (English Heritage).</td><td>Sample square</td><td>Cornwall CC Historic Environment Record (2008)

Potential future monitoring in conjunction with the Historic Environment Service/Heritage At Risk Project (July 2008)
World Heritage Site monitoring programme</td><td>2013/14</td></tr>
<tr><td>2.7: Settlement pattern</td><td>Total area of development categories:<table><tr><th>Category</th><th>Area (ha)</th><th>No. of caravans/tents</th></tr><tr><td>Permanent</td><td>8.0</td><td></td></tr></table>Refer to the Arc Reader project for settlement distribution within the sample squares.</td><td>Sample squares</td><td>Cornwall aerial photographs (2005)</td><td>2010/11</td></tr>
<tr><td>2.8: Transport infrastructure</td><td>Baseline to be established through community survey (primary data)</td><td>Sample squares</td><td>Community survey 2008/9</td><td>2013/14</td></tr>
<tr><td>2.9: Local vernacular building styles</td><td>Baseline to be established through community survey (primary data)</td><td>Sample squares</td><td>Community survey 2008/9</td><td>2013/14</td></tr>
<tr><td>3.4: Field boundary condition and species</td><td>Baseline to be established through field survey in 2008 (primary data).</td><td>Sample square</td><td>Field survey 2008.</td><td>2013/14</td></tr>
</table>

CORNWALL AONB: CAMEL ESTUARY

LMU CODE: C6

Location

Links to the Living Landscapes Character Areas

Constituent CAs: CA33, CA34

Constituent LDUs: 029, 050, 071, 072, 179, 183, 186, 191, 359, 190, 051, 004, 307, 191, 192

1.19. Please note that the two coastal areas of the LMU to either side of the mouth of the Estuary fall outside this AONB area (to the east – Pentire Point to Widemouth, to the west, Trevose Head to Stepper Point).

Table 1: Indicators selected to monitor changes in landscape character

Character statement	Indicators selected by statement
Broad river valley and estuary landscape, with **mud and sand banks** revealed at low tide along the estuary. Exposed coast at Polzeath with **low slate cliffs** in places backed by **sand dunes** at Daymer Bat and Harbour Cove.	1.4: Coastal change (coastal erosion) 2.10: Development at sea
Substantial areas of **mudflats, saltmarsh** and **creeks** with associated **wetlands.**	1.5: SSSI condition 2.5: Extent of semi-natural habitats
Small tributary streams contain many **small woods** containing willow, poplar, oak and frequent gorse, with **ash woodlands** on higher ground. Exposed areas have little tree cover.	2.1: Extent of woodland and tree cover / type
Mixture of **small to medium, irregular medieval enclosures** and **larger, more regular fields** of recent enclosure. **Slate walls** and **stone-faced hedgebanks** bound fields and roads, topped by vegetation with few hedgerow trees.	2.4: Field pattern
Arable and **pastoral fields** on valley sides. Some **orchards** remain features of the landscape.	2.2: Agricultural land use 2.3: Extent of biomass planting 3.2: Extent of traditional orchards
Churches and **Bronze Age barrows** are characteristic features. Prideaux Place **deer park** and **garden** on western fringes of Padstow Bay.	2.6: Presence [and condition] of historic landscape features 3.5: Extent [and condition] of designed landscapes
Steep falling lanes bounded by high stone walls and hedges cross streams with small bridges and end in dead ends at the creeksides	2.8: Transport infrastructure
Clustered slate farmsteads and **small hamlets** related to the medieval field pattern. Visual influence of fringing settlements such as Padstow and Wadebridge.	1.1: Levels of tranquillity 1.2: Levels of intrusion 1.3: Extent of dark night skies 2.7: Settlement pattern 2.9: Local vernacular building styles
Sandy beaches along the estuary shores popular with tourists, along with the estuary itself for **water-based recreation**.	3.9: Number of moorings

Table 2: The condition criteria for the selected indicators

Indicators selected for the LMU	Score code	Desired trajectories of change
1.1: Levels of tranquillity	AA	Positive: Maintenance or improvement in overall levels of tranquillity Negative: Decline in overall levels of tranquillity
1.2: Levels of intrusion	AA	Positive: Maintenance or improvement in current absence of intrusion Negative: Increase in overall levels of intrusion
1.3: Extent of dark night skies	A	Positive: Maintenance of or increase in overall extent of dark night skies Negative: Decline in overall extent of dark night skies
1.4: Coastal change	AA	Positive: No loss of characteristic features along the coast through erosion / sea level rise Negative: Loss of characteristic features along the coast through erosion / sea level rise
1.5: SSSI condition	AA	Positive: SSSIs are in favourable condition. Where sites are not in favourable condition, there has been an improvement in condition status from previous assessments. Negative: SSSIs are in unfavourable condition. Condition status has declined from previous assessments.
2.1: Extent of woodland and tree cover/type	P	Positive: Maintenance of or increase in woodland cover along tributary streams and ash woodlands on higher ground. Negative: Increase in woodland or tree cover in exposed areas. Decrease in woodland cover along streams and on higher ground
2.2: Agricultural land use	P	Positive: Maintain current balance of land uses. Increase in the area of pasture. Negative: Increase in the area of land under arable cultivation. Decrease in the area of pasture. Increase in the number of smallholdings.
2.3: Extent of biomass planting	S	Positive: No loss of permanent pasture or semi-natural habitats to biomass planting. Biomass planting incorporated within existing areas of cultivated land or woodland, respecting or enhancing characteristic field and woodland patterns. Negative: Biomass planting located within permanent pastoral farmland, outside cultivated land or on the site of semi-natural habitats identified at the time of the baseline survey. The geometric shapes of areas of biomass planting interrupt characteristic field and/or woodland patterns.

Indicators selected for the LMU	Score code	Desired trajectories of change
2.4: Field pattern	P	Positive: Maintenance of irregular field pattern. Maintenance of overall length of field boundaries and average field size (to account for field amalgamation). Negative: Increase in number of regular enclosures. Decrease in overall length of field boundaries; Positive: Maintenance of irregular field pattern. Maintenance of overall length of field boundaries; no increase in average field size. Negative: Increase in number of rectilinear enclosures. Decrease in overall length of field boundaries; increase in average field size.
2.5: Extent of semi-natural habitats	P	Positive: Maintenance of or increase in the extent of semi-natural habitats characteristic to the LMU. Negative: Decrease in or fragmentation of the extent of semi-natural habitats characteristic to the LMU.
2.6: Presence [and condition] of historic landscape features	S	Positive: Numbers of recorded above-ground features are stable or increase from baseline numbers. No decline in the overall condition of historic features. Negative: Decrease in the number of above-ground features recorded. Decline in the overall condition of historic features.
2.7: Settlement pattern	P	Positive: Maintenance of the existing settlement pattern of small hamlets and isolated farmsteads. No new development located outside settlement curtilages. No increase in total area of developed land. Negative: Increase in the footprint of hamlets. Increase in the number of properties located outside settlement curtilages. New locations of or growth in non-permanent residential developments. Increase in total area of developed land.
2.8: Transport infrastructure	S	Positive: Maintenance of or decrease in levels of road engineering works, signage and other road furniture. Negative: Increase in levels of road engineering works, signage and other road furniture. Loss of any distinctive types of signage (e.g. finger posts/milestones).
2.9: Local vernacular building styles	S	Positive: New housing/permitted development in sympathy with traditional building character as defined in the baseline surveys. Negative: New housing/permitted development detracts from traditional building character as defined in the baseline surveys.

Indicators selected for the LMU	Score code	Desired trajectories of change
2.10: Development at sea	AA	Positive: No visible 'industrial scale' developments in view of the coast. Negative: Introduction of 'industrial scale' development visible from the coast.
3.2: Extent of traditional orchards	S	Positive: No loss in the total area of traditionally managed orchards. New areas of traditional orchard planting. Negative: Loss in the total area of traditionally managed orchards.
3.9: Number of moorings	S	Positive: No new locations used for moorings. No increase in the size and/or density of existing areas of moorings. Negative: Mooring areas developed in new locations. Increase in the size and/or density of existing moorings.
MAXIMUM LMU SCORES	**10**	P = Primary Indicators
	6	S = Secondary Indicators

Table 3: Forces for change acting upon the landscape elements to be monitored

	Climate change					Development pressures									Land use changes										Woodland managament changes				WFD response		Industry change		Forces for change identified in exisitng landscape assessments
	Sea level rise/stormy conditions	Coastal squeeze	Increased frequency of droughts	More frequent river flooding	Increased visitor pressure	Tourism developments incl caravan sites, increased signage, car parks	Marine and beach developments (incl demand for moorings)	Housing developments (incl affordable housing due to high house prices)	Industrial and commercial developments	Demand for second homes	Increased light pollution	Deamnd for better communications (e.g aerials, masts)	Sustainable design of new builds	Increase in commuter and tourist traffic incl traffic calming measures and road improvements	Loosing up of agricultural land at sale	Wind farms (on-shore and off-shore) and other RE developments	Reservoirs/water storage	Minerals extraction/quarrying	Non-food crops e.g. bioenergy, industrial - intensification of lowland areas	Longer growing season/higher CO2 levels for new crops	Horticultural expansion - fav. growing conditions, consumer demand	Intensification of production (particularly arable) incl associated infrastructure	Livestock farming changes (reduction in cattle, reduced grazing in uplands, reduced grazing on marginal land)	Farm diversification and hobby farming eg horseyculture	Recreational uses eg golf courses, recreational boating	Decline in local and traditional land/woodland management and building skills	New species of different provenance eg Douglas Fir to respond to climate change	Increased planting in floodplain areas eg SRC	Afforestation (incl due to favourable growing conditions or for carbon sequestration	Increased growth rates and productivity	Reduced intensity of agriculture to meet WFD targets	Measures to reduce diffuse pollution eg buffer strips, planting next to watercourses, etc	Decline in traditional industries	Local quarry closures	
LMU C6																																	
Broad river valley and estuary landscape, with mud and sand banks revealed at low tide																																	
Exposed coast at Polzeath with low slate cliffs in places backed by sand dunes																																	
Small tributary streams contain many small woods containing willow, poplar, oak and frequent gorse																																	Lack of woodland management identified
ash woodlands on higher ground.																																	
Exposed areas have little tree cover.																																	
Substantial areas of mudflats, saltmarsh and creeks with associated wetlands																																	
Mixture of small to medium, irregular medieval enclosures and larger, more regular fields of recent enclosure																																	
Slate walls and stone-faced hedgebanks bound fields and roads, topped by vegetation with few hedgerow trees																																	
Arable and pastoral fields on valley sides with some horticulture																																	Horsiculture identified as a land use pressure
Clustered farmsteads and small hamlets related to the medieval field pattern																																	area; expansion of coastal villages; farm conversions to holiday accommodation
Distinctive arched stone bridges cross lower ridges of the River Amble																																	
Prideaux Place deer park and garden on western fringes of estuary. Churches and Bronze Age barrows are key historic features.																																	
Steep falling lanes cross streams with small bridges and end in dead ends at the creeksides																																	
Sandy beaches along the estuary shores popular with tourists, along with the estuary itself for water-based recreation.																																	
Visual influence of Padstow and Camel (outside AONB) and related tourism developments.																																	

Table 4: Baseline results

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td>1.1: Levels of tranquillity</td><td><u>AONB Area Results (Camel Estuary)</u>
<table><tr><th>Category of tranquillity</th><th>Score</th></tr><tr><td>Highest</td><td>30.9</td></tr><tr><td>Lowest</td><td>-13.2</td></tr><tr><td>Mean</td><td>8.3</td></tr></table>
NB: also take account of the small areas of this LMU that lie outside the Camel Estuary AONB Area.</td><td>AONB area</td><td>CPRE (2007)</td><td>2013/14</td></tr>
<tr><td>1.2: Levels of intrusion</td><td><u>AONB Area Results (Camel Estuary)</u>
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Number of off-shore windfarms: 0</td><td>AONB area</td><td>CPRE (2007)

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<u>Number of stars in the Orion constellation:</u> The AONB is</td><td>AONB

AONB</td><td>CPRE (2000)

Primary data (2008/9)</td><td>2013/14</td></tr>
</table>

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<tr><td></td><td>to organise a ‘star count’ to inform this indicator.

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LMU</td><td>

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<tr><td>1.5: SSSI condition</td><td><u>AONB Area results (Camel Estuary)</u>
100% Unfavourable No Change (Amble Marshes SSSI)

<u>SSSIs outside the Camel Estuary AONB Area:</u>
Harbour Cove SSSI: Favourable
Pentire Peninsular SSSI: Favourable
Stepper Point SSSI: Favourable</td><td>AONB area</td><td>Natural England (web-based information)
See Excel Spreadsheet for a breakdown of assessment dates for SSSIs within this LMU.</td><td>2010 (every 2 years)</td></tr>
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<table><tr><th>Woodland type</th><th>Area –ha (NIWT figure)</th></tr><tr><td>Broadleaved</td><td>106.1 (78.8)</td></tr><tr><td>Ancient semi-natural</td><td>0</td></tr><tr><td>PAWS</td><td>0</td></tr><tr><td>Mixed</td><td>0.5</td></tr><tr><td>Conifer</td><td>2.4</td></tr><tr><td>Scrub</td><td>63.4</td></tr></table></td><td>LMU</td><td>- Cornwall LIFE dataset (1995)
- Natural England’s Ancient Woodland Inventory (1999)
- National Inventory of Woodland and Trees (2000)</td><td>2013/14</td></tr>
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<tr><td>2.2: Agricultural land use</td><td><u>AONB Area Results (Camel Estuary):</u>
<table><tr><th>Grassland categories</th><th>Hectares</th></tr><tr><td>< 5 years & permanent pasture</td><td>1,755</td></tr><tr><td>Arable categories:</td><td></td></tr><tr><td>Cereals</td><td>253</td></tr><tr><td colspan="2">Number of holdings in different size categories:</td></tr><tr><td><5 ha:</td><td>14</td></tr><tr><td>Over 20 ha:</td><td>27</td></tr></table>
<u>The AONB should collect information from a representative sample of farmers within the LMU to further pinpoint agricultural land use.</u></td><td>AONB area

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<tr><td>2.4: Field pattern</td><td>Total length of field boundaries by sample square:
<u>Sample square SW9272</u><table><tr><th>Boundary / feature type</th><th>Length (m)</th></tr><tr><td>Cornish hedgebank</td><td>11,241</td></tr><tr><td>Wooded</td><td>4,024</td></tr><tr><td>Gate</td><td>58</td></tr></table><u>Sample square SW9475</u><table><tr><th>Boundary / feature type</th><th>Length (m)</th></tr><tr><td>Cornish hedgebank</td><td>4,195</td></tr><tr><td>Wooded</td><td>7,335</td></tr><tr><td>Stone wall</td><td>55</td></tr><tr><td>Gate</td><td>24</td></tr></table><u>Sample square SW9673</u><table><tr><th>Boundary / feature type</th><th>Length (m)</th></tr><tr><td>Cornish hedgebank</td><td>6,908</td></tr><tr><td>Wooded</td><td>9,214</td></tr></table></td><td>Sample squares</td><td>Cornwall aerial photographs (2005)</td><td>2010/11</td></tr>
</table>

<table>
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<tr><td></td><td>
<table>
<tr><td>Gate</td><td>58</td></tr>
<tr><td>Gap</td><td>13.2</td></tr>
</table>
Field boundary pattern by sample square:
<table>
<tr><th>Sample square</th><th>Total sinuous (m)</th><th>Total straight (m)</th></tr>
<tr><td>SW9272</td><td>2,580</td><td>13,183</td></tr>
<tr><td>SW9475</td><td>3,034</td><td>8,731</td></tr>
<tr><td>SW9673</td><td>2,213</td><td>14,244</td></tr>
</table>
Average field size by sample square:
Sample square SW9272: 2 ha
Sample square SW9475: 1.6 ha
Sample square SW9673: 1.7 ha</td><td></td><td></td><td></td></tr>
<tr><td>2.5: Extent of semi-natural habitats</td><td>Habitat calculations:
<table>
<tr><th>Habitat</th><th>Area (ha)</th></tr>
<tr><td>Dwarf shrub heath (broad habitat)</td><td>6.8</td></tr>
<tr><td>Dunes</td><td>3.2</td></tr>
<tr><td>Maritime cliff</td><td>28.7</td></tr>
<tr><td>Saltmarsh</td><td>30.7</td></tr>
</table>
NB see the ArcReader Project and Excel spreadsheet for a further breakdown of heathland habitat types found in this LMU</td><td>LMU</td><td>Cornwall LIFE data (1995)</td><td>2013/14</td></tr>
<tr><td>2.6: Presence [and condition] of historic landscape features</td><td>Number of extant features:
<table>
<tr><th>Age classification</th><th>Number of features in 2 sample squares</th></tr>
<tr><td>Prehistoric</td><td>1</td></tr>
<tr><td>Post Medieval</td><td>1</td></tr>
<tr><td>TOTAL</td><td>2</td></tr>
</table>
Condition of features
Information on the condition of historic features could be</td><td>Sample square</td><td>Cornwall CC Historic Environment Record (2008)

Potential future monitoring in conjunction with the Historic Environment Service/Heritage at</td><td>2013/14</td></tr>
</table>

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td></td><td>obtained through the Heritage at Risk project (English Heritage).</td><td></td><td>Risk Project (July 2008)</td><td></td></tr>
<tr><td>2.7: Settlement pattern</td><td>Total area of development categories:<table><tr><th>Category</th><th>Area (ha)</th><th>No. of caravans/tents</th></tr><tr><td>Permanent</td><td>7.7</td><td></td></tr><tr><td>Chalet/static caravan</td><td>0.4</td><td>6</td></tr><tr><td>Temp. caravans/tents</td><td>1.6</td><td>14</td></tr><tr><td>Agricultural glasshouses</td><td>0.3</td><td></td></tr></table>Refer to the Arc Reader project for settlement distribution within the sample squares.</td><td>Sample squares</td><td>Cornwall aerial photographs (2005)</td><td>2010/11</td></tr>
<tr><td>2.8: Transport infrastructure</td><td>Baseline to be established through community survey</td><td>Sample squares</td><td>Community survey 2008/9</td><td>2013/14</td></tr>
<tr><td>2.9: Local vernacular building styles</td><td>Baseline to be established through community survey</td><td>Sample squares</td><td>Community survey 2008/9</td><td>2013/14</td></tr>
<tr><td>2.10: Development at sea</td><td>AONB to collect information from the Local Planning Authority on any proposals for off-shore developments.</td><td>AONB area</td><td>LPA records (2008/9)</td><td>2010</td></tr>
<tr><td>3.2: Extent of traditional orchards</td><td>Total area of traditionally managed orchards:
0.5 ha
Total area of derelict orchards:
0.33 ha</td><td>Sample square</td><td>Cornwall County Council dataset (2002)
Cornwall aerial photographs (2005)</td><td>2010/11</td></tr>
</table>

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td>3.5: Extent [and condition] of designed landscapes</td><td>Designed landscapes within and beyond the LMU:<table><tr><th>Name of parkland</th><th>Area in LMU (ha)</th><th>Total area (ha)</th></tr><tr><td colspan="3">GRADE II</td></tr><tr><td>Prideaux Place</td><td>10.3</td><td>15.3</td></tr></table><u>Condition of designed landscapes:</u>
<u>The AONB should link in with English Heritage's Landscapes at Risk project, which is due to report in July 2008.</u></td><td>LMU</td><td>Register of Parks and Gardens of Special Historic Interest (2006, English Heritage)

Potential future monitoring in conjunction with the Historic Environment Service/Landscapes at Risk Project (July 2008)</td><td>2013/14</td></tr>
<tr><td>3.9: Number of moorings</td><td>Total number of moorings: 200 (approx)
Most of the moorings are at Port Arthur and Rock, with more further up the Camel (many belonging to Wadebridge Sailing Club).</td><td>AONB area</td><td>Padstow Harbour Commissioners pers comm (March 2008)</td><td>2013/14</td></tr>
</table>

CORNWALL AONB: TREVOSE HEAD TO STEPPER POINT

LMU CODE: C7

Location

Links to the Living Landscapes Character Areas

Constituent CAs: CA19

Constituent LDUs: 003, 046, 047, 052, 053, 054, 073, 113, 114, 180

Table 1: Indicators selected to monitor changes in landscape character

Character statement	Indicators selected by statement
Low-lying coastline with indented **cliffs** and **stacks**, with open and expansive **views**.	1.4: Coastal change (coastal erosion) 2.10: Development at sea
Largely **treeless** and exposed landscape; windswept **tamarisk hedgerow trees** are a feature. **Riparian woodland** in valley bottoms.	2.1: Extent of woodland and tree cover / type 3.4: Field boundary condition and species
Extensive **coastal heath** with **sand dunes** behind Harbour Cove on mouth of Camel Estuary. **Beaches** at Treyarnon, Porthcothan, Bedruthan, Harlyn and Constantine.	1.4: Coastal change (coastal erosion) 1.5: SSSI condition 2.5: Extent of semi-natural habitats
Strong pattern of **medium-sized fields** of **medieval enclosure**; **recent enclosures** of former coastal heath along the coast are **larger and regular**.	2.4: Field pattern
Cornish hedges and **slate walls** are boundary features. Many walls contain bracken, fern and bramble along with grasses and wildflowers.	3.4: Field boundary condition and species
Mixture of **arable** and **improved pasture**. **Rough grazing** on the coastal strip.	2.2: Agricultural land use 2.3: Extent of biomass planting
Many **prehistoric features** along the coast – barrows, cliff castles and notable artefact scatters.	2.6: Presence [and condition] of historic landscape features
Prominent **lighthouse** at Trevose Head.	3.7: Presence of navigation marks
B3276 is main road through the area, linked by an **even network of narrow lanes** bounded by slate hedges or walls.	2.8: Transport infrastructure
Clustered settlement pattern of small farms; **larger settlements of medieval origin** on or near coast. Large recreational facility (golf course) and many large static caravan sites go right to the cliff top.	1.1: Levels of tranquillity 1.2: Levels of intrusion 1.3: Extent of dark night skies 2.7: Settlement pattern
Local slate is a unifying feature; used in housing, stone walls and Cornish hedges which enclose narrow lanes that cross the area. Also key element of the area's historic character.	2.9: Local vernacular building styles

Table 2: The condition criteria for the selected indicators

Indicators selected for the LMU	Score code	Desired trajectories of change
1.1: Levels of tranquillity	AA	Positive: Maintenance or improvement in overall levels of tranquillity Negative: Decline in overall levels of tranquillity
1.2: Levels of intrusion	AA	Positive: Maintenance or improvement in current absence of intrusion Negative: Increase in overall levels of intrusion
1.3: Extent of dark night skies	A	Positive: Maintenance of or increase in overall extent of dark night skies Negative: Decline in overall extent of dark night skies
1.4: Coastal change	AA	Positive: No loss of characteristic features along the coast through erosion / sea level rise Negative: Loss of characteristic features along the coast through erosion / sea level rise
1.5: SSSI condition	AA	Positive: SSSIs are in favourable condition. Where sites are not in favourable condition, there has been an improvement in condition status from previous assessments. Negative: SSSIs are in unfavourable condition. Condition status has declined from previous assessments.
2.1: Extent of woodland and tree cover/type	P	Positive: Maintenance of or increase in woodland extent in valley bottoms. No increase in woodland cover on the plateau. Negative: Increase in woodland cover on the plateau. Decrease in woodland cover in the valleys.
2.2: Agricultural land use	P	Positive: Maintenance of current mixture of land uses. Maintenance of or increase in the area of rough grazing land. Negative: Increase in the extent of arable. Loss of areas of pasture or rough grazing land.
2.3: Extent of biomass planting	S	Positive: No loss of permanent pasture or semi-natural habitats to biomass planting. Biomass planting incorporated within existing areas of cultivated land or woodland, respecting or enhancing characteristic field and woodland patterns. Negative: Biomass planting located within permanent pastoral farmland, outside cultivated land or on the site of semi-natural habitats identified at the time of the baseline survey. The geometric shapes of areas of biomass planting interrupt characteristic field and/or woodland patterns.

Indicators selected for the LMU	Score code	Desired trajectories of change
2.4: Field pattern	P	Positive: Maintenance of total area of medieval fields. Maintenance of overall length of field boundaries; no increase in average field size (to account for field amalgamation). No further enclosure of coastal heath. Negative: Increase in the number of large-scale rectilinear fields along coast. Decrease in overall length of field boundaries; increase in average field size (to account for field amalgamation).
2.5: Extent of semi-natural habitats	P	Positive: Maintenance of or increase in the extent of semi-natural habitats characteristic to the LMU. Negative: Decrease in or fragmentation of the extent of semi-natural habitats characteristic to the LMU.
2.6: Presence [and condition] of historic landscape features	S	Positive: Numbers of recorded above-ground features are stable or increase from baseline numbers. No decline in the overall condition of historic features. Negative: Decrease in the number of above-ground features recorded. Decline in the overall condition of historic features.
2.7: Settlement pattern	P	Positive: Maintenance of the existing settlement pattern of small hamlets and isolated farmsteads. No new development located outside settlement curtilages. No increase in total area of developed land. Decrease in the area of static caravans along the cliff edge. Negative: Increase in the footprint of hamlets. Increase in the number of properties located outside settlement curtilages. New locations of or growth in non-permanent residential developments. Increase in total area of developed land. Increase in the area of static caravans along the cliff edge.
2.8: Transport infrastructure	S	Positive: Maintenance of or decrease in levels of road engineering works, signage and other road furniture. Negative: Increase in levels of road engineering works, signage and other road furniture. Loss of any distinctive types of signage (e.g. finger posts/milestones).
2.9: Local vernacular building styles	S	Positive: New housing/permitted development in sympathy with traditional building character as defined in the baseline surveys. Negative: New housing/permitted development detracts from traditional building character as defined in the baseline surveys.
2.10: Development at sea	AA	Positive: No visible 'industrial scale' developments in view of the coast. Negative: Introduction of 'industrial scale' development visible from the coast.

Indicators selected for the LMU	Score code	Desired trajectories of change
3.4: Field boundary condition	S	Positive: No decrease in the total length of Cornish hedge or wall boundaries (*cross refer with the 2.4 Field Patterns indicator*). Any new lengths constructed with slate facing (preferably in a herring-bone pattern) and planted with tamarisk along the coast. No decrease in the overall number of tamarisk hedgerow trees. Negative: Decrease in the total length of Cornish hedge or wall boundaries (*cross refer with the 2.4 Field Patterns indicator*). New/replacement stone facing of different material(s) to slate. New planting along the coast with different species to tamarisk. Decrease in the overall number of tamarisk hedgerow trees.
3.7: Presence of navigation marks	S	Positive: Navigation marks in active use. Negative: Navigation marks no longer in use.
MAXIMUM LMU SCORES	**10** **6**	P = Primary Indicators S = Secondary Indicators

Table 3: Forces for change acting upon the landscape elements to be monitored

	Climate change					Development pressures										Land use changes											Woodland managament changes				WFD response		Industry change	
	Sea level rise/stormy conditions	Coastal squeeze	Increased frequency of droughts	More frequent river flooding	Increased visitor pressure	Tourism developments incl caravan sites, increased signage, car parks	Marine and beach developments (incl demand for moorings)	Housing developments (incl affordable housing due to high house prices)	Industrial and commercial developments	Demand for second homes	Increased light pollution	Deamnd for better communications (e.g aerials, masts)	Sustainable design of new builds	Increase in commuter and tourist traffic incl traffic calming measures and road improvements	Lotting up of agricultural land at sale	Wind farms (on-shore and off-shore) and other RE developments	Reservoirs/water storage	Minerals extraction/quarrying	Non-food crops e.g. bioenergy, industrial - intensification of lowland areas	Longer growing season/higher CO2 levels for new crops	Horticultural expansion - fav. growing conditions, consumer demand	Intensification of production (particularly arable) incl associated infrastructure	Livestock farming changes (reduction in cattle, reduced grazing in uplands, reduced grazing on marginal land)	Farm diversification and hobby farming eg horseyculture	Recreational uses eg golf courses, recreational boating	Decline in local and traditional land/woodland management and building skills	New species of different provenance eg Douglas Fir to respond to climate change	Increased planting in floodplain areas eg SRC	Afforestation (incl due to favourable growing conditions or for carbon sequestration)	Increased growth rates and productivity	Reduced intensity of agriculture to meet WFD targets	Measures to reduce diffuse pollution eg buffer strips, planting next to watercourses, etc	Decline in traditional industries	Local quarry closures
LMU C7																																		
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Table 4: Baseline results

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<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td>1.1: Levels of tranquillity</td><td><u>AONB Area Results (Trevose Head to Stepper Point)</u>
<table><tr><th>Category of tranquillity</th><th>Score</th></tr><tr><td>Highest</td><td>30.9</td></tr><tr><td>Lowest</td><td>-13.2</td></tr><tr><td>Mean</td><td>8.3</td></tr></table></td><td>AONB area</td><td>CPRE (2007)</td><td>2013/14</td></tr>
<tr><td>1.2: Levels of intrusion</td><td><u>AONB Area Results (Trevose Head to Stepper Point)</u>
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<u>Fixed point photography</u>: <u>AONB to establish locations for</u></td><td>AONB

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<tr><td>1.5: SSSI condition</td><td>AONB Area results (Trevose Head to Stepper Point)
86% Favourable
14% Unfavourable no change

See ArcReader Project and Excel Spreadsheet for a breakdown of results for the SSSIs within this LMU.</td><td></td><td>Natural England (web-based information)
See Excel Spreadsheet for a breakdown of assessment dates for SSSIs within this LMU.</td><td>2010 (every 2 years)</td></tr>
<tr><td>2.1: Extent of woodland and tree cover/type</td><td>Breakdown by woodland type:<table><tr><th>Woodland type</th><th>Area –ha (NIWT figure)</th></tr><tr><td>Broadleaved</td><td>11.8 (3.1)</td></tr><tr><td>Ancient semi-natural</td><td>0</td></tr><tr><td>PAWS</td><td>0</td></tr><tr><td>Mixed</td><td>1.3</td></tr><tr><td>Conifer</td><td>2.8</td></tr><tr><td>Scrub</td><td>37.5</td></tr></table></td><td>LMU</td><td>- Cornwall LIFE dataset (1995)
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<tr><td>2.2: Agricultural land use</td><td>AONB Area Results (Trevose Head to Stepper Point):<table><tr><th>Grassland categories</th><th>Hectares</th></tr><tr><td>< 5 years & permanent pasture</td><td>848</td></tr><tr><td>Arable categories:</td><td></td></tr><tr><td>Cereals</td><td>429</td></tr><tr><td colspan="2">Number of holdings in different size categories:</td></tr><tr><td><5 ha:</td><td>12</td></tr><tr><td>Over 20 ha</td><td>14</td></tr></table></td><td>AONB area</td><td>Defra June Agricultural Census (2007)</td><td>2013/14</td></tr>
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<tr><td></td><td>The AONB should collect information from a representative sample of farmers within the LMU to further pinpoint agricultural land use.</td><td>LMU</td><td>2008/9 data collection</td><td></td></tr>
<tr><td>2.3: Extent of biomass planting</td><td>There are currently no agreements for Energy Crops planting through the Energy Crops Scheme in this LMU. The AONB should check the Defra dataset every two years to monitor this.</td><td>LMU</td><td>Defra ECS data (2008)</td><td>2010</td></tr>
<tr><td>2.4: Field pattern</td><td>Total length of field boundaries by sample square:
Sample square SW8672
<table><tr><th>Boundary / feature type</th><th>Length (m)</th></tr><tr><td>Cornish hedgebank</td><td>8,443</td></tr><tr><td>Wooded</td><td>3,612</td></tr><tr><td>Gate</td><td>72</td></tr><tr><td>Stone wall</td><td>146</td></tr></table>Sample square SW8774
<table><tr><th>Boundary / feature type</th><th>Length (m)</th></tr><tr><td>Cornish hedgebank</td><td>11,964</td></tr><tr><td>Wooded</td><td>3,074</td></tr><tr><td>Gate</td><td>77</td></tr><tr><td>Gap</td><td>39</td></tr></table>Field boundary pattern by sample square:<table><tr><th>Sample square</th><th>Total sinuous (m)</th><th>Total straight (m)</th></tr><tr><td>SW8672</td><td>1,568</td><td>11,084</td></tr><tr><td>SW8774</td><td>2,523</td><td>13,002</td></tr></table>Average field size by sample square:
Sample square SW8672: 2.2 ha
Sample square SW8774: 2.4 ha</td><td>Sample squares</td><td>Cornwall aerial photographs (2005)</td><td>2010/11</td></tr>
</table>

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td>2.5: Extent of semi-natural habitats</td><td>Habitat calculations:<table><tr><th>Habitat</th><th>Area (ha)</th></tr><tr><td>Dwarf shrub heath (broad habitat)</td><td>13.6</td></tr><tr><td>Dunes</td><td>12.8</td></tr><tr><td>Wetland</td><td>4.1</td></tr></table>NB see the ArcReader Project and Excel spreadsheet for a further breakdown of heathland habitat types found in this LMU</td><td>LMU</td><td>Cornwall LIFE data (1995)</td><td>2013/14</td></tr>
<tr><td>2.6: Presence [and condition] of historic landscape features</td><td>Number of extant features:<table><tr><th>Age classification</th><th>Number of features in 2 sample squares</th></tr><tr><td>Prehistoric</td><td>1</td></tr><tr><td>Historic</td><td>1</td></tr><tr><td>Post Medieval</td><td>1</td></tr><tr><td>TOTAL</td><td>3</td></tr></table>Condition of features
<u>Information on the condition of historic features could be obtained through the Heritage at Risk project (English Heritage).</u></td><td>Sample square</td><td>Cornwall CC Historic Environment Record (April 2008)

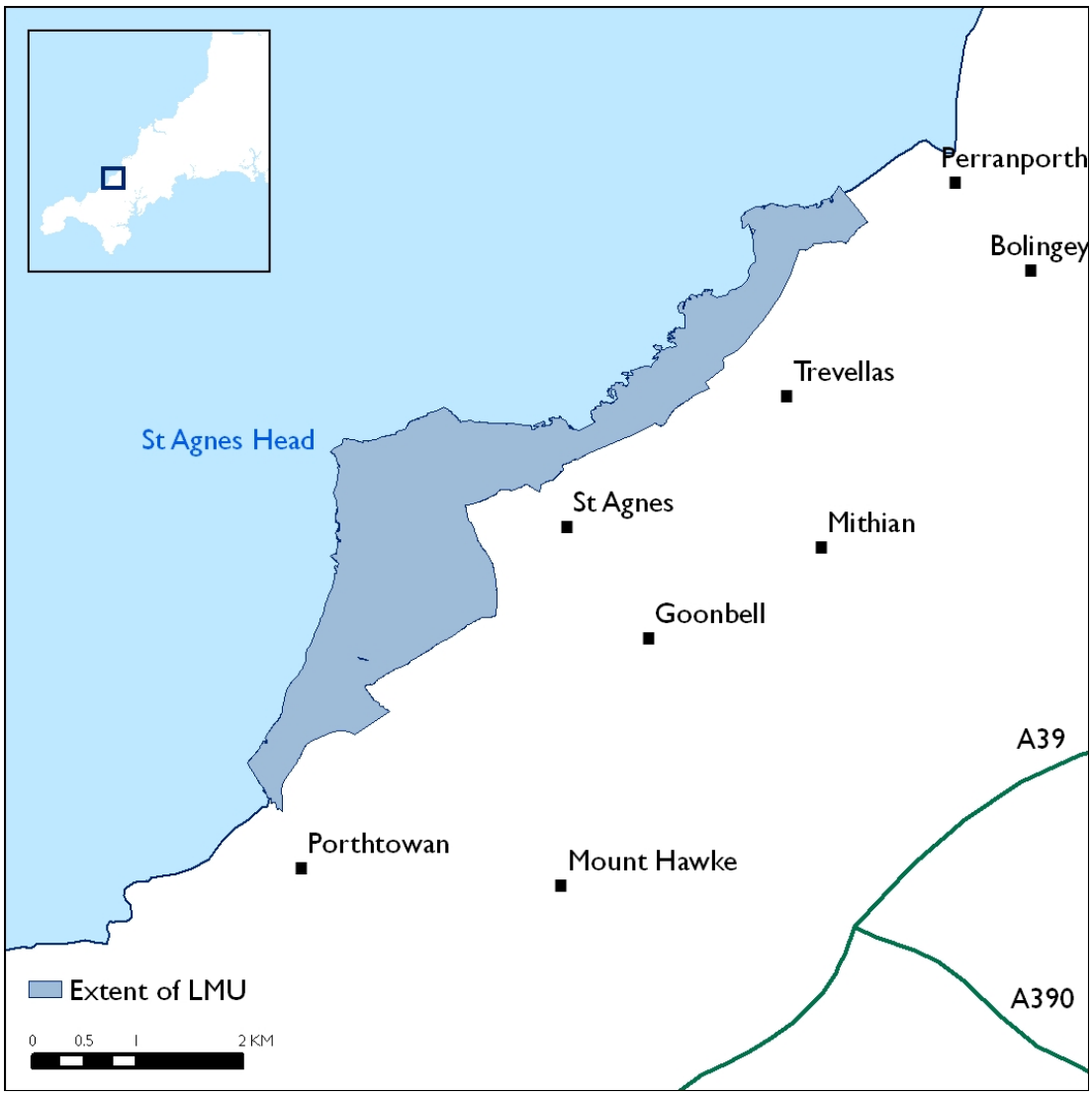
Potential future monitoring in conjunction with the Historic Environment Service/Heritage at Risk Project (July 2008)</td><td>2013/14</td></tr>
<tr><td>2.7: Settlement pattern</td><td>Total area of development categories:<table><tr><th>Category</th><th>Area (ha)</th><th>No. of caravans/tents</th></tr><tr><td>Permanent</td><td>14.7</td><td></td></tr><tr><td>Chalet/static caravan</td><td>1.7</td><td>6</td></tr><tr><td>Temp. caravans/tents</td><td>23.6</td><td>796</td></tr></table></td><td>Sample squares</td><td>Cornwall aerial photographs (2005)</td><td>2010/11</td></tr>
</table>

Indicator	Results from 2008 analysis	Scale	Source of data and date	Next date for monitoring
	Refer to the Arc Reader project for settlement distribution within the sample squares.			
2.8: Transport infrastructure	Baseline to be established through community survey	Sample squares	Community survey 2008/9	2013/14
2.9: Local vernacular building styles	Baseline to be established through community survey	Sample squares	Community survey 2008/9	2013/14
2.10: Development at sea	AONB to collect information from the Local Planning Authority on any proposals for off-shore developments.	AONB area	LPA records (2008/9)	2010
3.4: Field boundary condition and species	Baseline to be established through field survey in 2008.	Sample square	Field survey 2008.	2013/14
3.7: Presence of navigation marks	**Number of navigation marks:** 1 (lit) – Trevose Head	AONB area	Admiralty Leisure (2002) 1st Leisure Edition Navigation Chart: SC1156	2013/14

CORNWALL AONB: ST AGNES

LMU CODE: C8

Location



Links to the Living Landscapes Character Areas

Constituent CAs: CA12, CA14

Constituent LDUs: 265, 266, 267, 268, 269, 270, 271, 272, 273, 403, 118, 117

Table 1: Indicators selected to monitor changes in landscape character

Character statement	Indicators selected by statement
Narrow coastal strip comprised of a windswept undulating plateau, dissected by short streams flowing to the coast. **Extensive sandy, low tide beaches** between **high slate cliffs** forming dramatic coastline.	1.4: Coastal change (coastal erosion) 2.10: Development at sea
Open and exposed with **little tree cover**; extensive views along coast. **Scrubby woodland** (willow, elder, blackthorn, sycamore) lines streams.	2.1: Extent of woodland and tree cover / type
Extensive areas of **coastal heathland**, subject to severe wind pruning. **Calcareous wind-blown sand** on some slopes giving rise to lime-loving grasses and flowers. **Small pools** associated with former mining areas are valued habitats.	1.5: SSSI condition 2.5: Extent of semi-natural habitats
Off the heath are **field enclosures typical of former miners' small-holdings**. Matrix of Cornish hedges and walls encloses **permanent pasture, rough grazing** and some **arable** on valley slopes. **Mixture of ancient and recent enclosures.**	2.2: Agricultural land use 2.3: Extent of biomass planting 2.4: Field pattern
Tin, copper, iron and lead **mining remains** including **engine houses** along the cliffs and other mining complexes within steep-sided valleys. **Prehistoric cairns** along coast and **Tubbys Cliff Castle**.	2.6: Presence [and condition] of historic landscape features 3.6: Extent of bare mining spoil
Small former **mining settlements** located on valley sides, supplemented by new bungalow developments out of keeping with local vernacular styles. **Farmsteads of stone and slate** scattered throughout. **Ruined harbours** from mining activity are features of villages along coast - now popular tourist spots. Some **fishing industry** along the coast at St Agnes.	1.1: Levels of tranquillity 1.2: Levels of intrusion 1.3: Extent of dark night skies 2.7: Settlement pattern 2.9: Local vernacular building styles 3.8: Levels of fishing industry activity
Area mainly crossed by **minor roads**, with many of the old **mining tracks, tramways, railways and roads** remaining.	2.8: Transport infrastructure

Table 2: The condition criteria for the selected indicators

Indicators selected for the LMU	Score code	Desired trajectories of change
1.1: Levels of tranquillity	AA	Positive: Maintenance or improvement in overall levels of tranquillity Negative: Decline in overall levels of tranquillity
1.2: Levels of intrusion	AA	Positive: Maintenance or improvement in current absence of intrusion Negative: Increase in overall levels of intrusion
1.3: Extent of dark night skies	A	Positive: Maintenance of or increase in overall extent of dark night skies Negative: Decline in overall extent of dark night skies
1.4: Coastal change	AA	Positive: No loss of characteristic features along the coast through erosion / sea level rise Negative: Loss of characteristic features along the coast through erosion / sea level rise
1.5: SSSI condition	AA	Positive: SSSIs are in favourable condition. Where sites are not in favourable condition, there has been an improvement in condition status from previous assessments. Negative: SSSIs are in unfavourable condition. Condition status has declined from previous assessments.
2.1: Extent of woodland and tree cover/type	P	Positive: Maintenance of or increase in woodland cover along streams (where coastal heath is no longer prevalent). Negative: Increase in woodland cover on the plateau and at the expense of coastal heath along stream sides.
2.2: Agricultural land use	S	Positive: Maintenance of current mixture of land uses. Maintenance of or increase in the area of rough grazing land. Decrease in the area of arable cultivation on slopes. Negative: Increase in the extent of arable on valley slopes or elsewhere. Loss of areas of pasture or rough grazing land.
2.3: Extent of biomass planting	S	Positive: No loss of permanent pasture or semi-natural habitats to biomass planting. Biomass planting incorporated within existing areas of cultivated land or woodland, respecting or enhancing characteristic field and woodland patterns. Negative: Biomass planting located within permanent pastoral farmland, outside cultivated land or on the site of semi-natural habitats identified at the time of the baseline survey. The geometric shapes of areas of biomass planting interrupt characteristic field and/or woodland patterns.

Indicators selected for the LMU	Score code	Desired trajectories of change
2.4: Field pattern	P	Positive: Maintenance of irregular field pattern and distinctive patterns of land linked to miners' small-holdings. Maintenance of overall length of field boundaries; no increase in average field size (to account for field amalgamation). Negative: Increase in number of regular enclosures. Decrease in overall length of field boundaries; increase in average field size (to account for field amalgamation). Decrease in number of fields linked to miners' small holdings.
2.5: Extent of semi-natural habitats	P	Positive: Maintenance of or increase in the extent of semi-natural habitats characteristic to the LMU. Negative: Decrease in or fragmentation of the extent of semi-natural habitats characteristic to the LMU.
2.6: Presence [and condition] of historic landscape features	P	Positive: Numbers of recorded above-ground features are stable or increase from baseline numbers. No decline in the overall condition of historic features. Negative: Decrease in the number of above-ground features recorded. Decline in the overall condition of historic features.
2.7: Settlement pattern	P	Positive: Maintenance of the existing settlement pattern of miners' settlements, individual farmsteads and fishing villages. No increase in total area of developed land outside existing settlement curtilages. Reduction in the size and number of caravan sites. Negative: Increase in development outside settlement curtilages (e.g. expansion of St Agnes, Porthtowan and Perranporth Airport). New locations of or growth in non-permanent residential developments, particularly caravans. Increase in total area of developed land.
2.8: Transport infrastructure	S	Positive: Maintenance of or decrease in levels of road engineering works, signage and other road furniture. Negative: Increase in levels of road engineering works, signage and other road furniture. Loss of any distinctive types of signage (e.g. finger posts/milestones).
2.9: Local vernacular building styles	S	Positive: New housing/permitted development in sympathy with traditional building character as defined in the baseline surveys. Negative: New housing/permitted development detracts from traditional building character as defined in the baseline surveys.

Indicators selected for the LMU	Score code	Desired trajectories of change
2.10: Development at sea	AA	Positive: No visible 'industrial scale' developments in view of the coast. Negative: Introduction of 'industrial scale' development visible from the coast.
3.6: Extent of bare mining spoil	S	Positive: Maintenance of or increase in the total area of visible mining spoil (when compared to baseline calculations) Negative: Decrease in the total area of visible mining spoil (when compared to baseline calculations)
3.8: Levels of fishing industry activity	S	Positive: No decline in the overall number of active fishing fleets Negative: Decline in the overall number of active fishing fleets.
MAXIMUM LMU SCORES	**10**	P = Primary Indicators
	6	S = Secondary Indicators

Table 3: Forces for change acting upon the landscape elements to be monitored

	Climate change					Development pressures									Land use changes											Woodland managament changes				WFD response		Industry change		Forces for change identified in exisitng landscape assessments
	Sea level rise/stormy conditions	Coastal squeeze	Increased frequency of droughts	More frequent river flooding	Increased visitor pressure	Tourism developments incl caravan sites, increased signage, car parks	Marine and beach developments (incl demand for moorings)	Housing developments (incl affordable housing due to high house prices)	Industrial and commercial developments	Demand for second homes	Increased light pollution	Deamnd for better communications (e.g aerials, masts)	Sustainable design of new builds	Increase in commuter and tourist traffic incl traffic calming measures and road improvements	Losing up of agricultural land at sale	Wind farms (on-shore and off-shore) and other RE developments	Reservoirs/water storage	Minerals extraction(quarrying	Non-food crops e.g. bioenergy, industrial - intensification of lowland areas	Longer growing season/higher CO2 levels for new crops	Horticultural expansion - fav. growing conditions, consumer demand	Intensification of production (particularly arable) incl associated infrastructure	Livestock farming changes (reduction in cattle, reduced grazing in uplands, reduced grazing on marginal land)	Farm diversification and hobby farming eg horseyculture	Recreational uses eg golf courses, recreational boating	Decline in local and traditional land/woodland management and building skills	New species of different provenance eg Douglas Fir to respond to climate change	Increased planting in floodplain areas eg SRC	Afforestation (incl due to favourable growing conditions or for carbon sequestration	Increased growth rates and productivity	Reduced intensity of agriculture to meet WFD targets	Measures to reduce diffuse pollution eg buffer strips, planting next to watercourses, etc	Decline in traditional industries	Local quarry closures	
LMU C8																																	
Narrow coastal strip comprised of a windswept undulating plateau																																	
Extensive sandy, low tide beaches between high slate cliffs forming dramatic coastline																																	
short streams flowing to the coast																																	
extensive views along coast																																	
Open and exposed with little tree cover																																	
Scrubby woodland lines streams.																																	
Extensive areas of coastal heathland																																	
Calcareous wind-blown sand on some slopes giving rise to lime-loving grasses and flowers																																	
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Mixture of ancient and recent enclosures																																	
Matrix of Cornish hedges and walls																																	
permanent pasture, rough grazing and some arable on valley slopes																																	
Tin, copper, iron and lead mining remains. Ruined harbours from mining activity are features of villages along coast (popular tourist spots).																																	Conservation of mining heritage (in deteriorating condition) a priority
Small former mining settlements located on valley sides, supplemented by new bungalow developments																																	Residential conversions of farms an issue
Area mainly crossed by minor roads, with many of the old mining tracks, tramways, railways and roads remaining.																																	

Table 4: Baseline results

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td>1.1: Levels of tranquillity</td><td><u>AONB Area Results (St Agnes)</u>
<table><tr><th>Category of tranquillity</th><th>Score</th></tr><tr><td>Highest</td><td>46.6</td></tr><tr><td>Lowest</td><td>-35.0</td></tr><tr><td>Mean</td><td>10.0</td></tr></table></td><td>AONB area</td><td>CPRE (2007)</td><td>2013/14</td></tr>
<tr><td>1.2: Levels of intrusion</td><td><u>AONB Area Results (St Agnes)</u>
<table><tr><th>Category of intrusion</th><th>Area (ha)</th><th>1997 area (ha)</th></tr><tr><td>Disturbed</td><td>2,052</td><td>1,984</td></tr><tr><td>Undisturbed</td><td>12,583</td><td>10,725</td></tr><tr><td>Urban</td><td>0</td><td>0</td></tr></table>
Number of off-shore windfarms: 0</td><td>AONB area</td><td>CPRE (2007)

BWEA (2008)</td><td>2013/14</td></tr>
<tr><td>1.3: Extent of dark night skies</td><td><u>Cornwall AONB Results</u>
<table><tr><th>Category of darkness</th><th>Area (ha)</th><th>1993 area (ha)</th></tr><tr><td>0-1.7</td><td>277</td><td>258</td></tr><tr><td>1.7-50</td><td>442</td><td>527</td></tr><tr><td>50-150</td><td>238</td><td>171</td></tr><tr><td>150-240</td><td>3</td><td>4</td></tr><tr><td>240-255</td><td>0</td><td>0</td></tr></table>
<u>Number of stars in the Orion constellation</u>: <u>The AONB is to organise a ‘star count’ to inform this indicator.</u>

<u>Fixed point photography</u>: <u>AONB to establish locations for fixed point photography to monitor this indicator</u></td><td>AONB

AONB area

LMU</td><td>CPRE (2000)

Primary data (2008/9)

2008/9</td><td>2013/14</td></tr>
</table>

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td>1.4: Coastal change</td><td><u>The AONB should follow the work of the Coastal Monitoring Project and explore the possibility of sitting on the Steering Group via the Cornwall and Isles of Scilly Coastal Authorities group.</u></td><td>AONB area</td><td>South West Regional Coastal Monitoring Programme (Plymouth University)</td><td>AONB to contact the Coastal Authorities by end of 2008.</td></tr>
<tr><td>1.5: SSSI condition</td><td><u>AONB Area results (St Agnes)</u>
69% Favourable
31% Unfavourable recovering

See ArcReader Project and Excel Spreadsheet for a breakdown of results for the SSSIs within this LMU.</td><td></td><td>Natural England (web-based information)
See Excel Spreadsheet for a breakdown of assessment dates for SSSIs within this LMU.</td><td>2010 (every 2 years)</td></tr>
<tr><td>2.1: Extent of woodland and tree cover/type</td><td><u>Breakdown by woodland type:</u><table><tr><th>Woodland type</th><th>Area –ha (NIWT figure)</th></tr><tr><td>Broadleaved</td><td>3.6</td></tr><tr><td>Ancient semi-natural</td><td>0</td></tr><tr><td>PAWS</td><td>0</td></tr><tr><td>Mixed</td><td>0</td></tr><tr><td>Conifer</td><td>0.7</td></tr><tr><td>Scrub</td><td>26.6</td></tr></table></td><td>LMU</td><td>- Cornwall LIFE dataset (1995)
- Natural England’s Ancient Woodland Inventory (1999)
- National Inventory of Woodland and Trees (2000)</td><td>2013/14</td></tr>
<tr><td>2.2: Agricultural land use</td><td><u>AONB Area Results (St Agnes):</u><table><tr><th>Grassland categories</th><th>Hectares</th></tr><tr><td>< 5 years & permanent pasture</td><td>248</td></tr><tr><th colspan="2">Number of holdings in different size categories:</th></tr><tr><td><5 ha:</td><td>12</td></tr></table><u>The AONB should collect information from a representative sample of farmers within the LMU to further pinpoint agricultural land use.</u></td><td>AONB area

LMU</td><td>Defra June Agricultural Census (2007)

2008/9 data collection</td><td>2013/14</td></tr>
</table>

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td>2.3: Extent of biomass planting</td><td>There are currently no agreements for Energy Crops planting through the Energy Crops Scheme in this LMU. The AONB should check the Defra dataset every two years to monitor this.</td><td>LMU</td><td>Defra ECS data (2008)</td><td>2010</td></tr>
<tr><td>2.4: Field pattern</td><td>Total length of field boundaries by sample square:
Sample square SW7050
<table><tr><th>Boundary / feature type</th><th>Length (m)</th></tr><tr><td>Cornish hedgebank</td><td>9,704</td></tr><tr><td>Wooded</td><td>839</td></tr><tr><td>Gate</td><td>10</td></tr><tr><td>Stone wall</td><td>788</td></tr></table>Sample square SW7151
<table><tr><th>Boundary / feature type</th><th>Length (m)</th></tr><tr><td>Cornish hedgebank</td><td>1,797</td></tr><tr><td>Wooded</td><td>421</td></tr></table>Field boundary pattern by sample square:
<table><tr><th>Sample square</th><th>Total sinuous (m)</th><th>Total straight (m)</th></tr><tr><td>SW7050</td><td>1,917</td><td>10,284</td></tr><tr><td>SW7151</td><td>717</td><td>1,251</td></tr></table>Average field size by sample square:
Sample square SW7050: 1.4 ha
Sample square SW7151: 0.6 ha</td><td>Sample squares</td><td>Cornwall aerial photographs (2005)</td><td>2010/11</td></tr>
<tr><td>2.5: Extent of semi-natural habitats</td><td>Habitat calculations:
<table><tr><th>Habitat</th><th>Area (ha)</th></tr><tr><td>Dwarf shrub heath (broad habitat)</td><td>235.8</td></tr><tr><td>Wetland</td><td>0.7</td></tr></table>NB see the ArcReader Project and Excel spreadsheet for a further breakdown of heathland habitat types found in this LMU</td><td>LMU</td><td>Cornwall LIFE data (1995)</td><td>2013/14</td></tr>
</table>

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td>2.6: Presence [and condition] of historic landscape features</td><td>Number of extant features:<table><tr><th>Age classification</th><th>Number of features in 2 sample squares</th></tr><tr><td>Prehistoric</td><td>3</td></tr><tr><td>Historic</td><td>2</td></tr><tr><td>Post Medieval</td><td>6</td></tr><tr><td>Modern</td><td>2</td></tr><tr><td>TOTAL</td><td>13</td></tr></table>Condition of features
Information to be obtained from the World Heritage site team for the LMU's mining features.
Information on the condition of historic features could be obtained through the Heritage at Risk project (English Heritage).</td><td>Sample square</td><td>Cornwall CC Historic Environment Record (April 2008)

World Heritage Site condition monitoring programme

Potential future monitoring in conjunction with the Historic Environment Service/Heritage at Risk Project (July 2008)</td><td>2013/14</td></tr>
<tr><td>2.7: Settlement pattern</td><td>Total area of development categories:<table><tr><th>Category</th><th>Area (ha)</th><th>No. of caravans/tents</th></tr><tr><td>Permanent</td><td>12.1</td><td></td></tr><tr><td>Temp. caravans/tents</td><td>3.1</td><td>66</td></tr></table>Refer to the Arc Reader project for settlement distribution within the sample squares.</td><td>Sample squares</td><td>Cornwall aerial photographs (2005)</td><td>2010/11</td></tr>
<tr><td>2.8: Transport infrastructure</td><td>Baseline to be established through community survey</td><td>Sample squares</td><td>Community survey 2008/9</td><td>2013/14</td></tr>
<tr><td>2.9: Local vernacular building styles</td><td>Baseline to be established through community survey</td><td>Sample squares</td><td>Community survey 2008/9</td><td>2013/14</td></tr>
</table>

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td>2.10: Development at sea</td><td>AONB to collect information from the Local Planning Authority on any proposals for off-shore developments.</td><td>AONB area</td><td>LPA records (2008/9)</td><td>2010</td></tr>
<tr><td>3.6: Extent of bare mining spoil</td><td>Total area of visible spoil:
3.1 ha</td><td>Sample square</td><td>Cornwall aerial photographs (2005)</td><td>2010/11</td></tr>
<tr><td>3.8: Levels of fishing industry activity</td><td>Total number of active fishing fleets:<table><tr><th>Harbour</th><th>Number of active fishing vessels</th></tr><tr><td>St Agnes</td><td>3</td></tr><tr><td>TOTAL</td><td>3</td></tr></table></td><td>AONB area</td><td>Cornwall Sea Fisheries Survey (December 2006)</td><td>2013/14</td></tr>
</table>

CORNWALL AONB: GODREVY TO PORTREATH

LMU CODE: C9

Location

Links to the Living Landscapes Character Arms

Constituent CAs: CA28, CA11, CA05

Constituent LDUs: 080, 017, 079, 120, 169, 119

Table 1: Indicators selected to monitor changes in landscape character

Character statement	Indicators selected by statement
Sheer **exposed cliffs** of gritty shales forming dramatic coastal scenery. **Panoramic views** from Godrevy Point.	1.4: Coastal change (coastal erosion) 2.10: Development at sea
Red River fringed by **deciduous and mixed woodland**, including the **oakwoods** of Tehidy Country Park.	2.1: Extent of woodland and tree cover / type
Extensive sands and dunes ('towans') extending from St Ives Bay, with flower-rich **calcareous grasslands**. **Coastal heath** and **flower-rich grasslands** along the cliff-tops.	1.5: SSSI condition 2.5: Extent of semi-natural habitats
Narrow strip of **rough ground** along coast. Mixture of **arable** and **pasture** elsewhere, along with some **horticulture** in the west.	2.2: Agricultural land use 2.3: Extent of biomass planting 3.1: Extent of covered horticultural production
Large, rectangular fields characterise open, exposed landscape, contrasting with **smaller scale anciently enclosed field pattern** inland and towards Godrevy Point. Low stone hedges with occasional wind-pruned hawthorn/blackthorn bound fields.	2.4: Field patterns
Rich archaeological evidence within the towans from Mesolithic period onwards, including **tumuli** and **fort remains**. Country park at Tehidy.	2.6: Presence [and condition] of historic landscape features
Lighthouse on Godrevy Island	3.7: Presence of navigation marks
Scattered settlements and farmsteads, with some **clusters of housing** in the valley. Housing complex at Tehidy House.	1.1: Levels of tranquillity 1.2: Levels of intrusion 1.3: Extent of dark night skies 2.7: Settlement pattern
The **B3301 coastal road** provides access to numerous cliff top car parks. Otherwise the area defined by **minor roads**.	2.8: Transport infrastructure

Table 2: The condition criteria for the selected indicators

Indicators selected for the LMU	Score code	Desired trajectories of change
1.1: Levels of tranquillity	AA	Positive: Maintenance or improvement in overall levels of tranquillity Negative: Decline in overall levels of tranquillity
1.2: Levels of intrusion	AA	Positive: Maintenance or improvement in current absence of intrusion Negative: Increase in overall levels of intrusion
1.3: Extent of dark night skies	A	Positive: Maintenance of or increase in overall extent of dark night skies Negative: Decline in overall extent of dark night skies
1.4: Coastal change	AA	Positive: No loss of characteristic features along the coast through erosion / sea level rise Negative: Loss of characteristic features along the coast through erosion / sea level rise
1.5: SSSI condition	AA	Positive: SSSIs are in favourable condition. Where sites are not in favourable condition, there has been an improvement in condition status from previous assessments. Negative: SSSIs are in unfavourable condition. Condition status has declined from previous assessments.
2.1: Extent of woodland and tree cover/type	P	Positive: Maintenance of or increase in woodland cover along the Red River and the oakwoods at Tehidy, including through re-linking areas of semi-natural woodland. Negative: Increase in woodland cover along the exposed coast. Decrease in woodland cover along the Red River and the oakwoods at Tehidy.
2.2: Agricultural land use	P	Positive: Maintain current balance of land uses. No increase in arable or covered horticultural production (*cross refer to indicator 3.1)*. Maintain or increase extent of pasture and rough grazing land. Negative: Increase in arable and/or covered horticulture. Decrease in the area of pasture. Decrease in the area of rough grazing land.
2.3: Extent of biomass planting	S	Positive: No loss of permanent pasture or semi-natural habitats to biomass planting. Biomass planting incorporated within existing areas of cultivated land or woodland, respecting or enhancing characteristic field and woodland patterns. Negative: Biomass planting located within permanent pastoral farmland, outside cultivated land or on the site of semi-natural habitats identified at the time of the baseline survey. The geometric shapes of areas of biomass planting interrupt characteristic field and/or woodland patterns.

Indicators selected for the LMU	Score code	Desired trajectories of change
2.4: Field pattern	P	Positive: Maintenance of irregular field pattern. Maintenance of overall length of field boundaries; no increase in average field size (to account for field amalgamation). Negative: Increase in number of rectilinear enclosures. Decrease in overall length of field boundaries; increase in average field size (to account for field amalgamation). Changes to ancient field pattern inland and towards Godrevy Point.
2.5: Extent of semi-natural habitats	P	Positive: Maintenance of or increase in the extent of semi-natural habitats characteristic to the LMU. Negative: Decrease in or fragmentation of the extent of semi-natural habitats characteristic to the LMU.
2.6: Presence [and condition] of historic landscape features	S	Positive: Numbers of recorded above-ground features are stable or increase from baseline numbers. No decline in the overall condition of historic features. Negative: Decrease in the number of above-ground features recorded. Decline in the overall condition of historic features.
2.7: Settlement pattern	P	Positive: Maintenance of the existing settlement pattern of scattered settlements and farmsteads. No increase in total area of developed land outside existing settlement curtilages (e.g. extention of Camborne, South Tehidy and Illogan). No increase in the number and/or size of coastal car parks or other tourism-related developments. Negative: Increase in development outside settlement curtilages. New locations of or growth in non-permanent residential developments or tourism-related developments (e.g. coastal car parks).
2.8: Transport infrastructure	S	Positive: Maintenance of or decrease in levels of road engineering works, signage and other road furniture. Negative: Increase in levels of road engineering works, signage and other road furniture. Loss of any distinctive types of signage (e.g. finger posts/milestones).

Indicators selected for the LMU	Score code	Desired trajectories of change
2.10: Development at sea	AA	Positive: No visible 'industrial scale' developments in view of the coast. Negative: Introduction of 'industrial scale' development visible from the coast.
3.1: Extent of covered horticultural production	S	Positive: Maintenance of or an increase in area of land under traditional horticultural production. Decrease in the area of covered horticulture (e.g. polytunnels, glasshouses). Negative: Increase in area of land under covered horticultural production. Loss of areas of traditional horticulture to intensive forms of production or other land uses (including land abandonment).
3.7: Presence of navigation marks	S	Positive: Navigation marks in active use. Negative: Navigation marks no longer in use.
MAXIMUM LMU SCORES	**10** **5**	P = Primary Indicators S = Secondary Indicators

Table 3: Forces for change acting upon the landscape elements to be monitored

	Climate change					Development pressures										Land use changes											Woodland managament changes				Wfd response		Industry change		Forces for change identified in exisiting landscape assessments
	Sea level rise/stormy conditions	Coastal squeeze	Increased frequency of droughts	More frequent river flooding	Increased visitor pressure	Tourism developments incl caravan sites, increased signage, car parks	Marine and beach developments (incl demand for moorings)	Housing developments (incl affordable housing due to high house prices)	Industrial and commercial developments	Demand for second homes	Increased light pollution	Deamnd for better communications (e.g aerials, masts)	Sustainable design of new builds	Increase in commuter and tourist traffic incl traffic calming measures and road improvements	Lotting up of agricultural land at sale	Wind farms (on-shore and off-shore) and other RE developments	Reservoirs/water storage	Minerals extraction/quarrying	Non-food crops e.g. bioenergy, industrial - intensification of lowland areas	Longer growing season/higher CO2 levels for new crops	Horticultural expansion - fav. growing conditions, consumer demand	Intensification of production (particularly arable) incl associated infrastructure	Livestock farming changes (reduction in cattle, reduced grazing in uplands, reduced grazing on marginal land)	Farm diversification and hobby farming eg horseculture	Recreational uses eg golf courses, recreational boating	Decline in local and traditional land/woodland management and building skills	New species of different provenance eg Douglas Fir to respond to climate change	Increased planting in floodplain areas eg SRC	Afforestation (incl due to favourable growing conditions or for carbon sequestration)	Increased growth rates and productivity	Reduced intensity of agriculture to meet WFD targets	Measures to reduce diffuse pollution eg buffer strips, planting next to watercourses, etc	Decline in traditional industries	Local quarry closures	
LMU C9																																			
Sheer exposed cliffs of gritty shales forming dramatic coastal scenery																																			
Panoramic views from Godrevy Point.																																			
Red River fringed by deciduous and mixed woodland, including the oakwoods of Tehidy Country Park.																																			Red River valley is declining through lack of management
Extensive sands and dunes with flower-rich calcareous grasslands																																			
Coastal heath and flower-rich grasslands along the cliff-tops.																																			Decline in management of coastal heath an issue - bracken encroachment
Large, rectangular fields characterise open, exposed landscape, contrasting with smaller scale anciently enclosed field pattern inland and towards Godrevy Point																																			Intensification of land use including horticulture an issue
Low stone hedges with occasional wind-pruned hawthorn/blackthorn bound fields.																																			
Narrow strip of rough ground along coast																																			
Mixture of arable and pasture elsewhere, along with some horticulture in the west																																			
Rich archaeological evidence within the towans from Mesolithic period onwards																																			
Ornamental parkland at Tehidy																																			
Golf course at Tehidy																																			
The B3301 coastal road provides access to numerous cliff top car parks. Otherwise the area defined by minor roads.																																			
Scattered settlements and farmsteads, with some clusters of housing in the valley.																																			
Housing complex at Tehidy House.																																			

Table 4: Baseline results

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td>1.1: Levels of tranquillity</td><td><u>AONB Area Results (Godrevy to Portreath)</u>
<table><tr><th>Category of tranquillity</th><th>Score</th></tr><tr><td>Highest</td><td>42.3</td></tr><tr><td>Lowest</td><td>-35.4</td></tr><tr><td>Mean</td><td>3.5</td></tr></table></td><td>AONB area</td><td>CPRE (2007)</td><td>2013/14</td></tr>
<tr><td>1.2: Levels of intrusion</td><td><u>AONB Area Results (Godrevey to Portreath)</u>
<table><tr><th>Category of intrusion</th><th>Area (ha)</th><th>1997 area (ha)</th></tr><tr><td>Disturbed</td><td>844</td><td></td></tr><tr><td>Undisturbed</td><td>3,701</td><td></td></tr><tr><td>Urban</td><td>2.3</td><td>0</td></tr></table>Number of off-shore windfarms: 0</td><td>AONB area</td><td>CPRE (2007)

BWEA (2008)</td><td>2013/14</td></tr>
<tr><td>1.3: Extent of dark night skies</td><td><u>Cornwall AONB Results</u>
<table><tr><th>Category of darkness</th><th>Area (ha)</th><th>1993 area (ha)</th></tr><tr><td>0-1.7</td><td>277</td><td>258</td></tr><tr><td>1.7-50</td><td>442</td><td>527</td></tr><tr><td>50-150</td><td>238</td><td>171</td></tr><tr><td>150-240</td><td>3</td><td>4</td></tr><tr><td>240-255</td><td>0</td><td>0</td></tr></table><u>Number of stars in the Orion constellation</u><u>: The AONB is to organise a ‘star count’ to inform this indicator.</u>

<u>Fixed point photography</u><u>: AONB to establish locations for fixed point photography to monitor this indicator</u></td><td>AONB

AONB area

LMU</td><td>CPRE (2000)

Primary data (2008/9)

2008/9</td><td>2013/14</td></tr>
</table>

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td>1.4: Coastal change</td><td>The AONB should follow the work of the Coastal Monitoring Project and explore the possibility of sitting on the Steering Group via the Cornwall and Isles of Scilly Coastal Authorities group.</td><td>AONB area</td><td>South West Regional Coastal Monitoring Programme (Plymouth University)</td><td>AONB to contact the Coastal Authorities by end of 2008.</td></tr>
<tr><td>1.5: SSSI condition</td><td>AONB Area results (Godrevy to Portreath)
100% Favourable

See ArcReader Project and Excel Spreadsheet for a breakdown of results for the SSSIs within this LMU.</td><td></td><td>Natural England (web-based information)
See Excel Spreadsheet for a breakdown of assessment dates for SSSIs within this LMU.</td><td>2010 (every 2 years)</td></tr>
<tr><td>2.1: Extent of woodland and tree cover/type</td><td>Breakdown by woodland type:<table><tr><th>Woodland type</th><th>Area –ha (NIWT figure)</th></tr><tr><td>Broadleaved</td><td>88.6 (83.8)</td></tr><tr><td>Ancient semi-natural</td><td>0</td></tr><tr><td>PAWS</td><td>39.4</td></tr><tr><td>Mixed</td><td>11.4 (6.0)</td></tr><tr><td>Conifer</td><td>14.1 (19.5)</td></tr><tr><td>Scrub</td><td>46.2</td></tr></table></td><td>LMU</td><td>- Cornwall LIFE dataset (1995)
- Natural England’s Ancient Woodland Inventory (1999)
- National Inventory of Woodland and Trees (2000)</td><td>2013/14</td></tr>
<tr><td>2.2: Agricultural land use</td><td>AONB Area Results (Godrevy to Portreath):
No statistics are available from Defra for this AONB area due to data protection issues. The AONB should collect information through questionnaire surveys with a representative sample of farmers within the LMU.<table><tr><th colspan="2">Number of holdings in different size categories:</th></tr><tr><td>Over 20 ha</td><td>8</td></tr></table></td><td>LMU</td><td>Defra June Agricultural Census (2007)</td><td>2013/14</td></tr>
<tr><td>2.3: Extent of biomass planting</td><td>There are currently no agreements for Energy Crops planting through the Energy Crops Scheme in this LMU. The AONB should</td><td>LMU</td><td>Defra ECS data (2008)</td><td>2010</td></tr>
</table>

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td></td><td>check the Defra dataset every two years to monitor this.</td><td></td><td></td><td></td></tr>
<tr><td>2.4: Field pattern</td><td>Total length of field boundaries by sample square:
Sample square SW6042
<table><tr><th>Boundary / feature type</th><th>Length (m)</th></tr><tr><td>Cornish hedgebank</td><td>8,637</td></tr><tr><td>Wooded</td><td>2,839</td></tr></table>Sample square SW6444
<table><tr><th>Boundary / feature type</th><th>Length (m)</th></tr><tr><td>Cornish hedgebank</td><td>7,825</td></tr><tr><td>Wooded</td><td>973</td></tr><tr><td>Gate</td><td>52</td></tr></table>Field boundary pattern by sample square:<table><tr><th>Sample square</th><th>Total sinuous (m)</th><th>Total straight (m)</th></tr><tr><td>SW6042</td><td>1,640</td><td>10,248</td></tr><tr><td>SW6444</td><td>1,525</td><td>9,989</td></tr></table>Average field size by sample square:
Sample square SW6042: 3.2 ha
Sample square SW6444: 2.6 ha</td><td>Sample squares</td><td>Cornwall aerial photographs (2005)</td><td>2010/11</td></tr>
<tr><td>2.5: Extent of semi-natural habitats</td><td>Habitat calculations:<table><tr><th>Habitat</th><th>Area (ha)</th></tr><tr><td>Dwarf shrub heath (broad habitat)</td><td>35.5</td></tr><tr><td>Dunes</td><td>41.8</td></tr><tr><td>Maritime cliff</td><td>20.5</td></tr><tr><td>Wetland</td><td>1.7</td></tr></table>NB see the ArcReader Project and Excel spreadsheet for a further breakdown of heathland habitat types found in this LMU</td><td>LMU</td><td>Cornwall LIFE data (1995)</td><td>2013/14</td></tr>
<tr><td>2.6: Presence [and condition] of historic</td><td>Number of extant features:<table><tr><th>Age classification</th><th>Number of features</th></tr></table></td><td>Sample square</td><td>Cornwall CC Historic Environment Record</td><td>2013/14</td></tr>
</table>

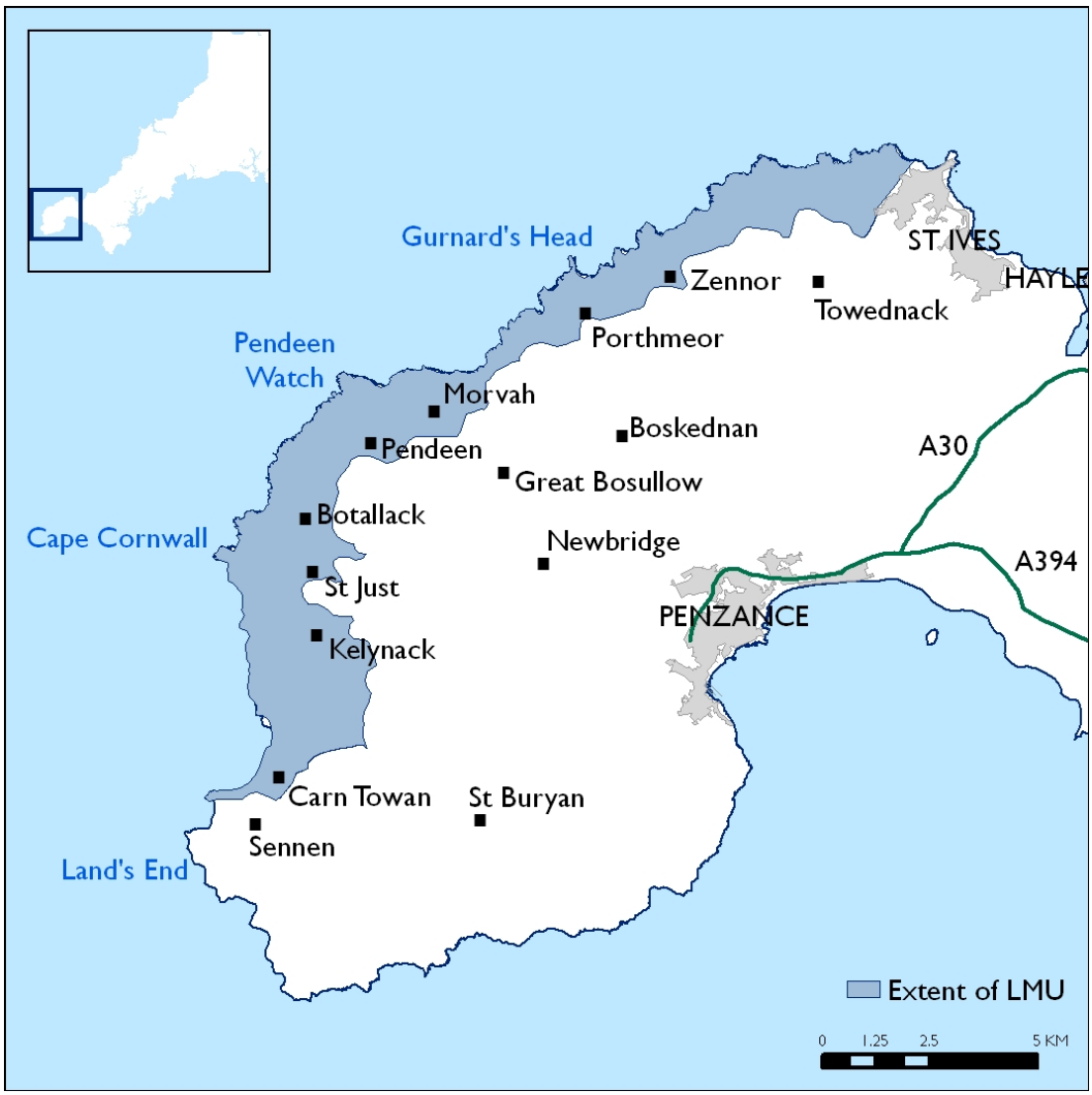
<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td>landscape features</td><td><table><tr><th></th><th>in 2 sample squares</th></tr><tr><td>Prehistoric</td><td>1</td></tr><tr><td>Historic</td><td>2</td></tr><tr><td>Post Medieval</td><td>3</td></tr><tr><td>Modern</td><td>1</td></tr><tr><td>TOTAL</td><td>7</td></tr></table>
Condition of features
Information to be obtained from the World Heritage site team for the LMU's mining features.
Information on the condition of historic features could be obtained through the Heritage at Risk project (English Heritage).</td><td></td><td>(April 2008)

Potential future monitoring in conjunction with the Historic Environment Service/Heritage at Risk Project (July 2008)
World Heritage Site monitoring programme</td><td></td></tr>
<tr><td>2.7: Settlement pattern</td><td>Total area of development categories:<table><tr><th>Category</th><th>Area (ha)</th><th>No. of caravans/tents</th></tr><tr><td>Permanent</td><td>4.3</td><td></td></tr></table>Refer to the Arc Reader project for settlement distribution within the sample squares.</td><td>Sample squares</td><td>Cornwall aerial photographs (2005)</td><td>2010/11</td></tr>
<tr><td>2.8: Transport infrastructure</td><td>Baseline to be established through community survey</td><td>Sample squares</td><td>Community survey 2008/9</td><td>2013/14</td></tr>
<tr><td>2.10: Development at sea</td><td>AONB to collect information from the Local Planning Authority on any proposals for off-shore developments.</td><td>AONB area</td><td>LPA records (2008/9)</td><td>2010</td></tr>
<tr><td>3.1: Extent of covered horticultural production</td><td>Baseline to be established through field survey</td><td>Sample square</td><td>Field survey 2008</td><td>2013/14</td></tr>
<tr><td>3.7: Presence of navigation marks</td><td>Number of navigation marks: 1 (lit) – Godrevy Island</td><td>LMU</td><td>Admiralty Leisure (2002) 1st Leisure Edition Navigation Chart: SC1149</td><td>2013/14</td></tr>
</table>

CORNWALL AONB: WEST PENWITH

LMU CODE: C10

Location



Links to the Living Landscapes Character Areas

Constituent CAs: CA02

Constituent LDUs: 278, 280, 283

Table 1: Indicators selected to monitor changes in landscape character

Character statement	Indicators selected by statement
Exposed coastal shelf punctuated by short narrow valleys and rocky coves. **Sheer granite cliffs** in places with **chambered coastal profile** elsewhere. Broad **sandy bay** at Whitesand.	1.4: Coastal change (coastal erosion) 2.10: Development at sea
Wild coastline with **extensive views** across the Atlantic.	2.10: Development at sea
Limited tree cover with small valleys lined with **scrub** and **willow carr**.	2.1: Extent of woodland and tree cover / type
Coastal heathland with valued scrub habitats; patches of **lowland heath** and **mires** in the valleys.	1.5: SSSI condition 2.5: Extent of semi-natural habitats
Land use predominantly **pasture** for dairy and beef cattle with some **arable** and **horse keeping**. **Rough summer grazing** on the coastal heath.	2.2: Agricultural land use 2.3: Extent of biomass planting
Small irregular fields enclosed by **granite-faced treeless hedgebanks** and **stone walls**. **Prehistoric fields** are smaller and more irregular.	2.4: Field patterns 3.4: Field boundary condition and species
Wealth of **ancient sites**; standing stones, prehistoric field pattern, stone circles, chambered tombs, courtyard house settlements, quoits, fogous and cliff-castles e.g. at Gurnard's Head. **Old mining remains** at St Just, Pendeen and Carn Galver are valued as part of the World Heritage Site.	2.6: Presence [and condition] of historic landscape features 3.6: Extent of bare mining spoil
Clustered settlement pattern with **small farms** with **prehistoric and medieval granite farmsteads** at regular intervals. **Villages** centred on granite square-towered churches (e.g. Zennor and Morvah). **Linear developments** along the northern coastal road.	1.1: Levels of tranquillity 1.2: Levels of intrusion 1.3: Extent of dark night skies 2.7: Settlement pattern 2.9: Local vernacular building styles
Main settlements at St Just and the western fringes of St Ives. **Caravan parks, camp sites and other tourism developments** near St Ives and around Whitehaven Bay.	1.1: Levels of tranquillity 1.2: Levels of intrusion 1.3: Extent of dark night skies 2.7: Settlement pattern
Minor roads run off the B3306 that skirts the inland edge of the area to the coast, often ending in dead ends.	2.8: Transport infrastructure

Table 2: The condition criteria for the selected indicators

Indicators selected for the LMU	Score code	Desired trajectories of change
1.1: Levels of tranquillity	AA	Positive: Maintenance or improvement in overall levels of tranquillity Negative: Decline in overall levels of tranquillity
1.2: Levels of intrusion	AA	Positive: Maintenance or improvement in current absence of intrusion Negative: Increase in overall levels of intrusion
1.3: Extent of dark night skies	A	Positive: Maintenance of or increase in overall extent of dark night skies Negative: Decline in overall extent of dark night skies
1.4: Coastal change	AA	Positive: No loss of characteristic features along the coast through erosion / sea level rise Negative: Loss of characteristic features along the coast through erosion / sea level rise
1.5: SSSI condition	AA	Positive: SSSIs are in favourable condition. Where sites are not in favourable condition, there has been an improvement in condition status from previous assessments. Negative: SSSIs are in unfavourable condition. Condition status has declined from previous assessments.
2.1: Extent of woodland and tree cover/type	S	Positive: Maintenance of or increase in tree cover along valleys. No increase in scrub cover. Negative: Increase in tree/woodland cover across the LMU apart from in valleys. Increase in areas of scrub.
2.2: Agricultural land use	P	Positive: Maintenance of or increase in extent of pastoral farmland. Continued summer grazing on coastal heath. Decrease in the extent of arable. Decrease in the area of land used for horse keeping. Negative: Decrease in the extent of pastoral farmland. Reduced summer grazing on coastal heath. Increase in land under arable cultivation or horse keeping. Increase in area of land no longer in agricultural production.
2.3: Extent of biomass planting	S	Positive: No loss of permanent pasture or semi-natural habitats to biomass planting. Biomass planting incorporated within existing areas of cultivated land or woodland, respecting or enhancing characteristic field and woodland patterns. Negative: Biomass planting located within permanent pastoral farmland, outside cultivated land or on the site of semi-natural habitats identified at the time of the baseline survey. The geometric shapes of areas of biomass planting interrupt characteristic field and/or woodland patterns.

Indicators selected for the LMU	Score code	Desired trajectories of change
2.4: Field pattern	P	Positive: Maintenance of irregular field pattern. Maintenance of overall length of field boundaries; no increase in average field size (to account for field amalgamation). Negative: Decrease in overall length of field boundaries; increase in average field size (to account for field amalgamation).
2.5: Extent of semi-natural habitats	P	Positive: Maintenance of or increase in the extent of semi-natural habitats characteristic to the LMU. Negative: Decrease in or fragmentation of the extent of semi-natural habitats characteristic to the LMU.
2.6: Presence [and condition] of historic landscape features	P	Positive: Numbers of recorded above-ground features are stable or increase from baseline numbers. No decline in the overall condition of historic features. Negative: Decrease in the number of above-ground features recorded. Decline in the overall condition of historic features.
2.7: Settlement pattern	P	Positive: Maintenance of the varied medieval and prehistoric settlement pattern. No spread of development outside settlement cartilages (including around St Ives and Whitehaven). Decrease in the number and/or size of camping/caravan sites. No increase in the size of farmsteads. Negative: New development located outside settlement cartilages. Increase in the size of settlements and farmsteads. New locations of caravan/camping sites and/or expansion of existing sites.
2.8: Transport infrastructure	S	Positive: Maintenance of or decrease in levels of road engineering works, signage and other road furniture. Negative: Increase in levels of road engineering works, signage and other road furniture. Loss of any distinctive types of signage (e.g. finger posts/milestones).
2.9: Local vernacular building styles	S	Positive: New housing/permitted development in sympathy with traditional building character as defined in the baseline surveys. Negative: New housing/permitted development detracts from traditional building character as defined in the baseline surveys.

Indicators selected for the LMU	Score code	Desired trajectories of change
2.10: Development at sea	AA	Positive: No visible 'industrial scale' developments in view of the coast. Negative: Introduction of 'industrial scale' development visible from the coast.
3.4: Field boundary condition and species	S	Positive: No reduction in the total length of stone walls or hedgebanks (*cross refer to 2.4 Field Patterns indicator)*. Hedgebanks and stone walls are stock proof. Any new sections are constructed of granite in sympathy with local building styles. No increase in tree cover on hedgebanks. Negative: Reduction in the total length of stone walls or hedgebanks (*cross refer to 2.4 Field Patterns indicator)*. Gappy stone walls or hedgebanks. New sections constructed in stone other than granite and out of sympathy with local building styles. Increase in tree cover on hedgebanks.
3.6: Extent of bare mining spoil	S	Positive: Maintenance of or increase in the total area of visible mining spoil (when compared to baseline calculations). Negative: Decrease in the total area of visible mining spoil (when compared to baseline calculations).
MAXIMUM LMU SCORES	**10** **6**	P = Primary Indicators S = Secondary Indicators

Table 3: Forces for change acting upon the landscape elements to be monitored

	Climate change					Development pressures									Land use changes												Woodland managament changes				WFD response		Industry change		Forces for change identified in exisitng landscape assessments
	Sea level rise/stormy conditions	Coastal squeeze	Increased frequency of droughts	More frequent river flooding	Increased visitor pressure	Tourism developments incl caravan sites, increased signage, car parks	Marine and beach developments (incl demand for moorings)	Housing developments (incl affordable housing due to high house prices)	Industrial and commercial developments	Demand for second homes	Increased light pollution	Deamnd for better communications (e.g aerials, masts)	Sustainable design of new builds	Increase in commuter and tourist traffic incl traffic calming measures and road improvements	Losing up of agricultural land at sale	Wind farms (on-shore and off-shore) and other RE developments	Reservoirs/water storage	Minerals extraction(quarrying	Non-food crops e.g. bioenergy, industrial - intensification of lowland areas	Longer growing season/higher CO2 levels for new crops	Horticultural expansion - fav. growing conditions, consumer demand	Intensification of production (particularly arable) incl associated infrastructure	Livestock farming changes (reduction in cattle, reduced grazing in uplands, reduced grazing on marginal land)	Farm diversification and hobby farming eg horseyculture	Recreational uses eg golf courses, recreational boating	Decline in local and traditional land/woodland management and building skills	New species of different provenance eg Douglas Fir to respond to climate change	Increased planting in floodplain areas eg SRC	Afforestation (incl due to favourable growing conditions or for carbon sequestration	Increased growth rates and productivity	Reduced intensity of agriculture to meet WFD targets	Measures to reduce diffuse pollution eg buffer strips, planting next to watercourses, etc	Decline in traditional industries	Local quarry closures	
LMU C10																																			
Exposed coastal shelf punctuated by short narrow valleys and rocky coves. Sheer granite cliffs in places with chambered coastal profile elsewhere.	■		■		■																														
Broad sandy bay at Whitesand.						■	■																		■										
Wild coastline with extensive views across the Atlantic						■	■	■				■				■																				
Limited tree cover with small valleys lined with scrub and willow carr			■																						■		■	■	■	■					
Coastal heathland with valued scrub habitats		■	■		■		■															■	■	■	■										
lowland heath and mires in the valleys.			■		■																		■				■								Invasive species in stream valleys
Small irregular fields enclosed by granite-faced treeless hedgebanks and stone walls. Prehistoric fields are smaller and more irregular															■							■		■	■									Intensification and arable conversion leading to loss of field boundaries/patterns
Land use predominantly pasture with rough summer grazing on coastal heath		■	■																■	■	■	■	■	■	■						■	■			Invasive species on abandoned pasture
Wealth of ancient sites; standing stones, prehistoric field pattern, stone circles, chambered tombs…					■											■			■			■	■												
Old mining remains at St Just, Pendeen and Carn Galver					■	■									■	■						■	■		■										Potential increase in visitors to WHS
Clustered settlement pattern with small farms with prehistoric and medieval granite farmsteads at regular intervals								■		■			■		■									■		■								■	Change from farming hamlets to holiday homes losing link between farmsteads and land
Villages centred on granite square-towered churches (e.g. Zennor and Morvah)								■		■	■																								Pressure from affordable housing in villages
Linear developments along the northern coastal road.						■	■	■																											
Minor roads run off the B3306 that skirts the inland edge of the area to the coast, often ending in dead ends				■				■						■																					Widening of roads for tourist traffic identified as a pressure; potential additional visitors to WHS
St Just and the western fringes of St Ives are main settlements						■		■		■																									
Caravan parks, camp sites and other tourism developments near St Ives and around Whitehaven Bay.						■	■																		■										

Table 4: Baseline results

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<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
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<table><tr><th>Category of tranquillity</th><th>Score</th></tr><tr><td>Highest</td><td>42.3</td></tr><tr><td>Lowest</td><td>-31.2</td></tr><tr><td>Mean</td><td>5.3</td></tr></table></td><td>AONB area</td><td>CPRE (2007)</td><td>2013/14</td></tr>
<tr><td>1.2: Levels of intrusion</td><td><u>AONB Area Results (West Penwith)</u>
<table><tr><th>Category of intrusion</th><th>Area (ha)</th><th>1997 area (ha)</th></tr><tr><td>Disturbed</td><td>1,020</td><td>292</td></tr><tr><td>Undisturbed</td><td>1,440</td><td>1,454</td></tr><tr><td>Urban</td><td>0.4</td><td>0</td></tr></table>Number of off-shore windfarms: 0</td><td>AONB area</td><td>CPRE (2007)

BWEA (2008)</td><td>2013/14</td></tr>
<tr><td>1.3: Extent of dark night skies</td><td><u>Cornwall AONB Results</u>
<table><tr><th>Category of darkness</th><th>Area (ha)</th><th>1993 area (ha)</th></tr><tr><td>0-1.7</td><td>277</td><td>258</td></tr><tr><td>1.7-50</td><td>442</td><td>527</td></tr><tr><td>50-150</td><td>238</td><td>171</td></tr><tr><td>150-240</td><td>3</td><td>4</td></tr><tr><td>240-255</td><td>0</td><td>0</td></tr></table><u>Number of stars in the Orion constellation:</u> <u>The AONB is to organise a ‘star count’ to inform this indicator.</u>

<u>Fixed point photography:</u> <u>AONB to establish locations for fixed point photography to monitor this indicator</u></td><td>AONB

AONB area

LMU</td><td>CPRE (2000)

Primary data (2008/9)

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</table>

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td>1.4: Coastal change</td><td><u>The AONB should follow the work of the Coastal Monitoring Project and explore the possibility of sitting on the Steering Group via the Cornwall and Isles of Scilly Coastal Authorities group.</u></td><td>AONB area</td><td>South West Regional Coastal Monitoring Programme (Plymouth University)</td><td>AONB to contact the Coastal Authorities by end of 2008.</td></tr>
<tr><td>1.5: SSSI condition</td><td><u>AONB Area results (West Penwith)</u>
92% Favourable
8% Unfavourable recovering
0.3% Unfavourable declining

See ArcReader Project and Excel Spreadsheet for a breakdown of results for the SSSIs within this LMU.</td><td></td><td>Natural England (web-based information)
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<tr><td></td><td>
<table>
<tr><td>Root crops</td><td>113</td></tr>
<tr><td>Other</td><td>22</td></tr>
<tr><td>Horticultural categories:</td><td></td></tr>
<tr><td>Total horticultural crops</td><td>85</td></tr>
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<tr><td>2.3: Extent of biomass planting</td><td>There are currently no agreements for Energy Crops planting through the Energy Crops Scheme in this LMU. The AONB should check the Defra dataset every two years to monitor this.</td><td>LMU</td><td>Defra ECS data (2008)</td><td>2010</td></tr>
<tr><td>2.4: Field pattern</td><td>Total length of field boundaries by sample square:
Sample square SW3734
<table>
<tr><th>Boundary / feature type</th><th>Length (m)</th></tr>
<tr><td>Cornish hedgebank</td><td>1,005</td></tr>
<tr><td>Wooded</td><td>1,388</td></tr>
<tr><td>Stone wall</td><td>16,071</td></tr>
</table>
Sample square SW4840
<table>
<tr><th>Boundary / feature type</th><th>Length (m)</th></tr>
<tr><td>Cornish hedgebank</td><td>8,464</td></tr>
<tr><td>Wooded</td><td>1,786</td></tr>
<tr><td>Stone wall</td><td>5,451</td></tr>
<tr><td>Gate</td><td>22</td></tr>
</table>
Field boundary pattern by sample square:
<table>
<tr><th>Sample square</th><th>Total sinuous (m)</th><th>Total straight (m)</th></tr>
</table></td><td>Sample squares</td><td>Cornwall aerial photographs (2005)</td><td>2010/11</td></tr>
</table>

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td></td><td>
<table>
<tr><td>SW3734</td><td>6,590</td><td>11,889</td></tr>
<tr><td>SW4840</td><td>8,816</td><td>7,111</td></tr>
</table>
Average field size by sample square:
Sample square SW3734: 0.6 ha
Sample square SW4840: 0.8 ha</td><td></td><td></td><td></td></tr>
<tr><td>2.5: Extent of semi-natural habitats</td><td>Habitat calculations:
<table>
<tr><th>Habitat</th><th>Area (ha)</th></tr>
<tr><td>Dwarf shrub heath (broad habitat)</td><td>130.6</td></tr>
<tr><td>Broadleaved woodland / wetland</td><td>1.5</td></tr>
<tr><td>Wetland</td><td>33.6</td></tr>
</table>
NB see the ArcReader Project and Excel spreadsheet for a further breakdown of heathland habitat types found in this LMU</td><td>LMU</td><td>Cornwall LIFE data (1995)</td><td>2013/14</td></tr>
<tr><td>2.6: Presence [and condition] of historic landscape features</td><td>Number of extant features:
<table>
<tr><th>Age classification</th><th>Number of features in 2 sample squares</th></tr>
<tr><td>Prehistoric</td><td>4</td></tr>
<tr><td>Medieval</td><td>2</td></tr>
<tr><td>Post Medieval</td><td>16</td></tr>
<tr><td>Modern</td><td>1</td></tr>
<tr><td>Unknown</td><td>2</td></tr>
<tr><td>TOTAL</td><td>25</td></tr>
</table>
Condition of features
Information to be obtained from the World Heritage site team for the LMU's mining features.
Information on the condition of historic features could be obtained through the Heritage at Risk project (English Heritage).</td><td>Sample square</td><td>Cornwall CC Historic Environment Record (April 2008)

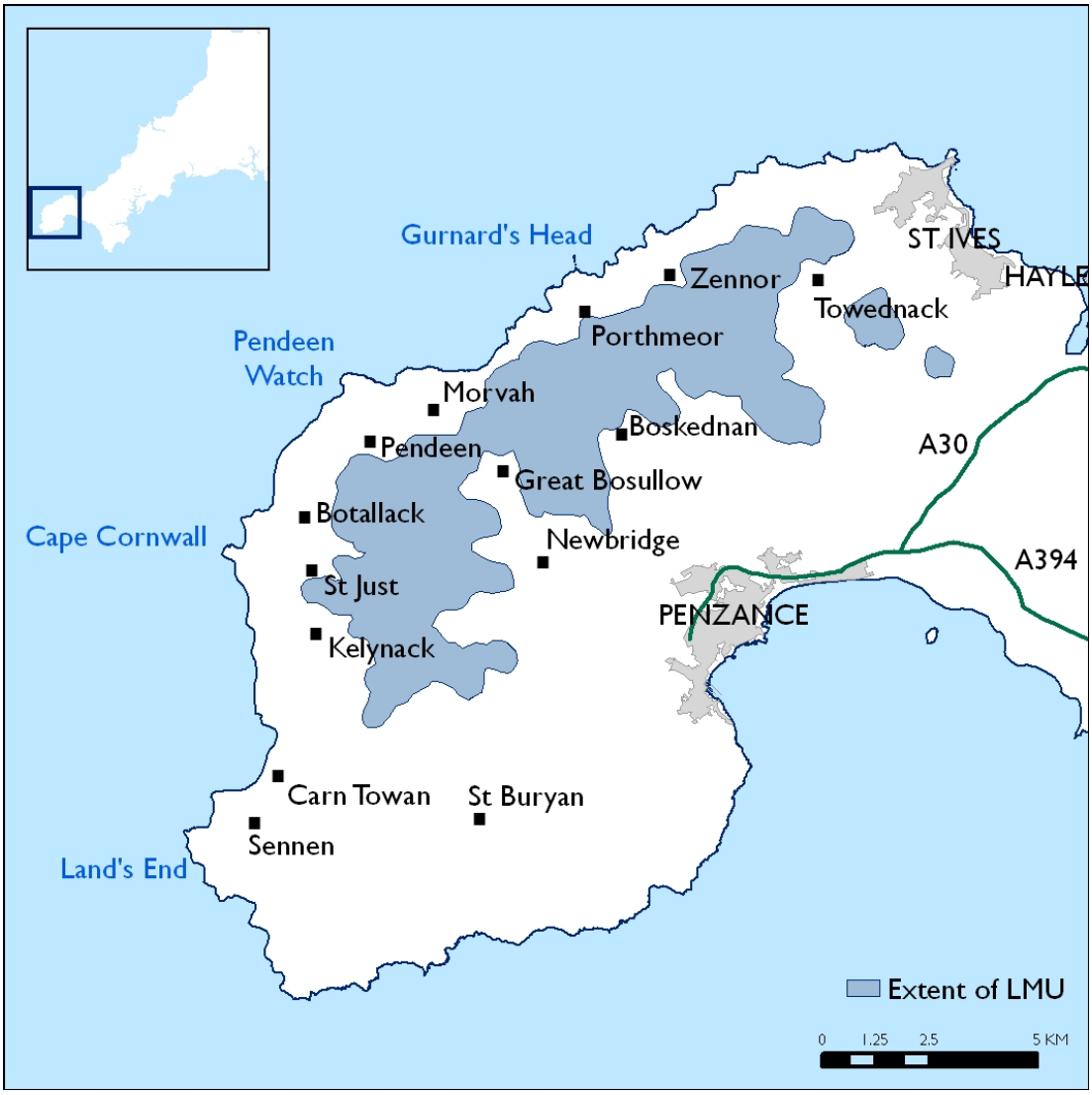
World Heritage Site condition monitoring programme

Potential future monitoring in</td><td>2013/14</td></tr>
</table>

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td></td><td></td><td></td><td>conjunction with the Historic Environment Service/Heritage at Risk Project (July 2008)</td><td></td></tr>
<tr><td>2.7: Settlement pattern</td><td>Total area of development categories:<table><tr><th>Category</th><th>Area (ha)</th><th>No. of caravans/tents</th></tr><tr><td>Permanent</td><td>13.5</td><td></td></tr><tr><td>Temp. caravans /tents</td><td>0.7</td><td>17</td></tr></table>Refer to the Arc Reader project for settlement distribution within the sample squares.</td><td>Sample squares</td><td>Cornwall aerial photographs (2005)</td><td>2010/11</td></tr>
<tr><td>2.8: Transport infrastructure</td><td>Baseline to be established through community survey</td><td>Sample squares</td><td>Community survey 2008/9</td><td>2013/14</td></tr>
<tr><td>2.9: Local vernacular building styles</td><td>Baseline to be established through community survey</td><td>Sample squares</td><td>Community survey 2008/9</td><td>2013/14</td></tr>
<tr><td>2.10: Development at sea</td><td>AONB to collect information from the Local Planning Authority on any proposals for off-shore developments.</td><td>AONB area</td><td>LPA records (2008/9)</td><td>2010</td></tr>
<tr><td>3.4: Field boundary condition and species</td><td>Baseline to be established through field survey</td><td>Sample square</td><td>Field survey 2008.</td><td>2013/14</td></tr>
<tr><td>3.6: Extent of bare mining spoil</td><td>Total area of visible spoil:
9.5 ha</td><td>Sample square</td><td>Cornwall aerial photographs (2005)</td><td></td></tr>
</table>

LMU CODE: C11

Location



Links to the Living Landscapes Character Areas

Constituent CAs: CA03

Constituent LDUs: 274, 275, 276

Table 1: Indicators selected to monitor changes in landscape character

Character statement	Indicators selected by statement
Magnificent **views** to the north and south coasts.	1.2: Levels of intrusion
Little woodland apart from small areas in the valleys. Some **hedgerow hawthorns** and **characteristic farmstead groups of pine and sycamore**.	2.1: Extent of woodland and tree cover / type 3.4: Field boundary condition and species
Rugged boulder-strewn moorland with colourful **heathland habitats** and bracken/scrub. Patches of **mire, scrubby willow carr and marshy vegetation** in the valleys.	1.5: SSSI condition 2.5: Extent of semi-natural habitats
Land use mainly **improved pasture** with **rough heathland/moorland grazing** on the hills.	2.2: Agricultural land use 2.3: Extent of biomass planting 3.3: Presence of traditional livestock types
Irregular field pattern contrasting in scale; **sinuous Cornish hedges** form a network of **ancient small-medium fields** sloping up valley heads contrasting with **large scale unenclosed moorland** and **ribbon-shaped tenements**. **Larger rectilinear fields** of recent enclosure define higher slopes. Exposed areas characterised by **drystone hedges** covered by wildflowers in early summer.	2.4: Field patterns 3.4: Field boundary condition and species
Exceptionally rich in **archaeological remains** particularly prehistoric field systems, historic settlements, stone circles and various hilltop structures including quoits. Mining remains including engine houses and old china clay pits.	2.6: Presence [and condition] of historic landscape features
Unsettled moorland aside from **scattered cottages** and **granite farmsteads**. **Hamlets** situated in sheltered valleys.	1.1: Levels of tranquillity 1.2: Levels of intrusion 1.3: Extent of dark night skies 2.7: Settlement pattern 2.9: Local vernacular building styles
Active **quarry** near Nancledra with considerable visual impact on the area	1.2: Levels of intrusion
Road network defined by the valleys with roads running along ridges or valley sides; only minor tracks/lanes cross the ridges. Area crossed by the A3071 to St Just.	2.8: Transport infrastructure

Table 2: The condition criteria for the selected indicators

Indicators selected for the LMU	Score code	Desired trajectories of change
1.1: Levels of tranquillity	AA	Positive: Maintenance or improvement in overall levels of tranquillity Negative: Decline in overall levels of tranquillity
1.2: Levels of intrusion	AA	Positive: Maintenance or improvement in current absence of intrusion Negative: Increase in overall levels of intrusion
1.3: Extent of dark night skies	A	Positive: Maintenance of or increase in overall extent of dark night skies Negative: Decline in overall extent of dark night skies
1.5: SSSI condition	AA	Positive: SSSIs are in favourable condition. Where sites are not in favourable condition, there has been an improvement in condition status from previous assessments. Negative: SSSIs are in unfavourable condition. Condition status has declined from previous assessments.
2.1: Extent of woodland and tree cover/type	S	Positive: Maintenance of or increase in the number of pine/sycamore farmstead groups. Maintenance of or increase in woodland cover in the valleys. Negative: Decrease in the number of pine/sycamore farmstead tree groups. Increase in woodland cover across LMU apart from in the valleys.
2.2: Agricultural land use	P	Positive: Maintenance or extention of the area of rough moorland grazing. No loss of areas of improved pasture. Negative: Reduction in area of rough grazing land or conversion to other land uses (including through agricultural improvement). Increase or loss in the extent of improved pasture.
2.3: Extent of biomass planting	S	Positive: No loss of permanent pasture or semi-natural habitats to biomass planting. Biomass planting incorporated within existing areas of cultivated land or woodland, respecting or enhancing characteristic field and woodland patterns. Negative: Biomass planting located within permanent pastoral farmland, outside cultivated land or on the site of semi-natural habitats identified at the time of the baseline survey. The geometric shapes of areas of biomass planting interrupt characteristic field and/or woodland patterns.
2.4: Field pattern	P	Positive: Maintenance of irregular field pattern. Maintenance of overall length of field boundaries; no increase in average field size (to account for field amalgamation). No increase in number of tenements on moorland edge. No enclosures on the open moorland. Negative: Increase in number of rectilinear enclosures and tenements. Decrease in overall length of field boundaries; increase in average field size (to account for field amalgamation). New enclosures on areas of moorland.

Indicators selected for the LMU	Score code	Desired trajectories of change
2.5: Extent of semi-natural habitats	P	Positive: Maintenance of or increase in the extent of semi-natural habitats characteristic to the LMU. Negative: Decrease in or fragmentation of the extent of semi-natural habitats characteristic to the LMU.
2.6: Presence [and condition] of historic landscape features	P	Positive: Numbers of recorded above-ground features are stable or increase from baseline numbers. No decline in the overall condition of historic features. Negative: Decrease in the number of above-ground features recorded. Decline in the overall condition of historic features.
2.7: Settlement pattern	P	Positive: No new development or expansion of existing properties/farmsteads on the open moorland. No growth in hamlets outside existing settlement curtilages. No spread of new development (residential and toursim-related) including from surrounding areas, e.g. Carbis Bay. Negative: New development and/or expansion of existing properties/farmsteads on the open moorland. Extension of development outside the curtilage of hamlets. Spread of new residential and tourism-related developments including from surrounding areas (e.g. Carbis Bay).
2.8: Transport infrastructure	S	Positive: Maintenance of or decrease in levels of road engineering works, signage and other road furniture. Negative: Increase in levels of road engineering works, signage and other road furniture. Loss of any distinctive types of signage (e.g. finger posts/milestones).
2.9: Local vernacular building styles	S	Positive: New housing/permitted development in sympathy with traditional building character as defined in the baseline surveys. Negative: New housing/permitted development detracts from traditional building character as defined in the baseline surveys.
3.3: Presence of traditional livestock types	S	Positive: Maintenance of the total number of cattle and/or ponies used for rough grazing. Increase in the overall proportion of upland, hardy livestock types used compared to commercial types. No increase in sheep numbers. Negative: Significant change in the total number of cattle and/or ponies used for rough grazing (increase or decrease). Decrease in the overall proportion of hardy upland livestock types used compared to commercial types. Increase in sheep numbers.

Indicators selected for the LMU	Score code	Desired trajectories of change
3.4: Field boundary condition and species	S	Positive: No reduction in the total length of Cornish hedgebanks (*cross refer to 2.4 Field Patterns indicator)*. Any new sections are constructed of granite in sympathy with local building styles. Hawthorn is the predominant hedgerow species. Negative: Reduction in the total length of Cornish hedgebanks (*cross refer to 2.4 Field Patterns indicator)*. New sections constructed in stone other than granite and out of sympathy with local building styles. New species planted on hedgerows (other than hawthorn).
MAXIMUM LMU SCORES	**10**	P = Primary Indicators
	6	S = Secondary Indicators

Table 3: Forces for change acting upon the landscape elements to be monitored

	Climate change					Development pressures										Land use changes												Woodland managament changes				WFD response		Industry change		Forces for change identified in exisitng landscape assessments
	Sea level rise/stormy conditions	Coastal squeeze	Increased frequency of droughts	More frequent river flooding	Increased visitor pressure	Tourism developments incl caravan sites, increased signage, car parks	Marine and beach developments (incl demand for moorings)	Housing developments (incl affordable housing due to high house prices)	Industrial and commercial developments	Demand for second homes	Increased light pollution	Deamnd for better communications (e.g aerials, masts)	Sustainable design of new builds	Increase in commuter and tourist traffic incl traffic calming measures and road improvements	Lotting up of agricultural land at sale	Wind farms (on-shore and off-shore) and other RE developments	Reservoirs/water storage	Minerals extraction(quarrying	Non-food crops e.g. bioenergy, industrial - intensification of lowland areas	Longer growing season/higher CO_2 levels for new crops	Horticultural expansion - fav. growing conditions, consumer demand	Intensification of production (particularly arable) incl associated infrastructure	Livestock farming changes (reduction in cattle, reduced grazing in uplands, reduced grazing on marginal land)	Farm diversification and hobby farming eg horseyculture	Recreational uses eg golf courses, recreational boating	Decline in local and traditional land/woodland management and building skills	New species of different provenance eg Douglas Fir to respond to climate change	Increased planting in floodplain areas eg SRC	Afforestation (incl due to favourable growing conditions or for carbon sequestration)	Increased growth rates and productivity	Reduced intensity of agriculture to meet WFD targets	Measures to reduce diffuse pollution eg buffer strips, planting next to watercourses, etc	Decline in traditional industries	Local quarry closures	
LMU C11																																				
Undulating hills with rocky granite outcrops																																				Active quarry and reservoir in the area
Magnificent views to the north and south coasts																																				Windfarms and communications masts on exposed areas identified as a pressure
Little woodland apart from small areas in the valleys.																																				Plantations of conifers identified as a pressure
Some hedgerow hawthorns and characteristic farmstead groups of pine and sycamore.																																				
moorland with colourful heathland habitats and bracken/scrub																																				Agricultural intensification a continuous threat; impacts of CROW; end of ESA; invasive species
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Sinuous Cornish hedges form a network of ancient small-medium fields sloping up valley heads																																				Agricultural intensification; end of ESA
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Area crossed by the A3071 to St Just.																																				
Unsettled moorland aside from scattered cottages and granite farmsteads. Hamlets situated in sheltered valleys.																																				Piecemeal development of dwellings; rural diversification including tourist facilities
Active quarry near Nancledra with considerable visual impact																																				

Table 4: Baseline results

<table>
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<tr><td>1.2: Levels of intrusion</td><td><u>AONB Area Results (West Penwith)</u><table><tr><th>Category of intrusion</th><th>Area (ha)</th><th>1997 area (ha)</th></tr><tr><td>Disturbed</td><td>1,020</td><td>292</td></tr><tr><td>Undisturbed</td><td>1,440</td><td>1,454</td></tr><tr><td>Urban</td><td>0.4</td><td>0</td></tr></table></td><td>AONB area</td><td>CPRE (2007)</td><td>2013/14</td></tr>
<tr><td>1.5: SSSI condition</td><td><u>AONB Area results (West Penwith)</u>
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<tr><td>2.4: Field pattern</td><td>Total length of field boundaries by sample square:
Sample square SW4235
<table>
<tr><th>Boundary / feature type</th><th>Length (m)</th></tr>
<tr><td>Cornish hedgebank</td><td>1,511</td></tr>
<tr><td>Wooded</td><td>197</td></tr>
<tr><td>Stone wall</td><td>3,679</td></tr>
</table>
Sample square SW4436
<table>
<tr><th>Boundary / feature type</th><th>Length (m)</th></tr>
<tr><td>Cornish hedgebank</td><td>3,228</td></tr>
<tr><td>Wooded</td><td>695</td></tr>
<tr><td>Stone wall</td><td>3,594</td></tr>
</table>
Field boundary pattern by sample square:
<table>
<tr><th>Sample square</th><th>Total sinuous (m)</th><th>Total straight (m)</th></tr>
<tr><td>SW4235</td><td>578</td><td>5,023</td></tr>
<tr><td>SW4436</td><td>5,243</td><td>2,317</td></tr>
</table>
Average field size by sample square:
Sample square SW4235: 1.3 ha
Sample square SW4436: 0.4 ha</td><td>Sample squares</td><td>Cornwall aerial photographs (2005)</td><td>2010/11</td></tr>
</table>

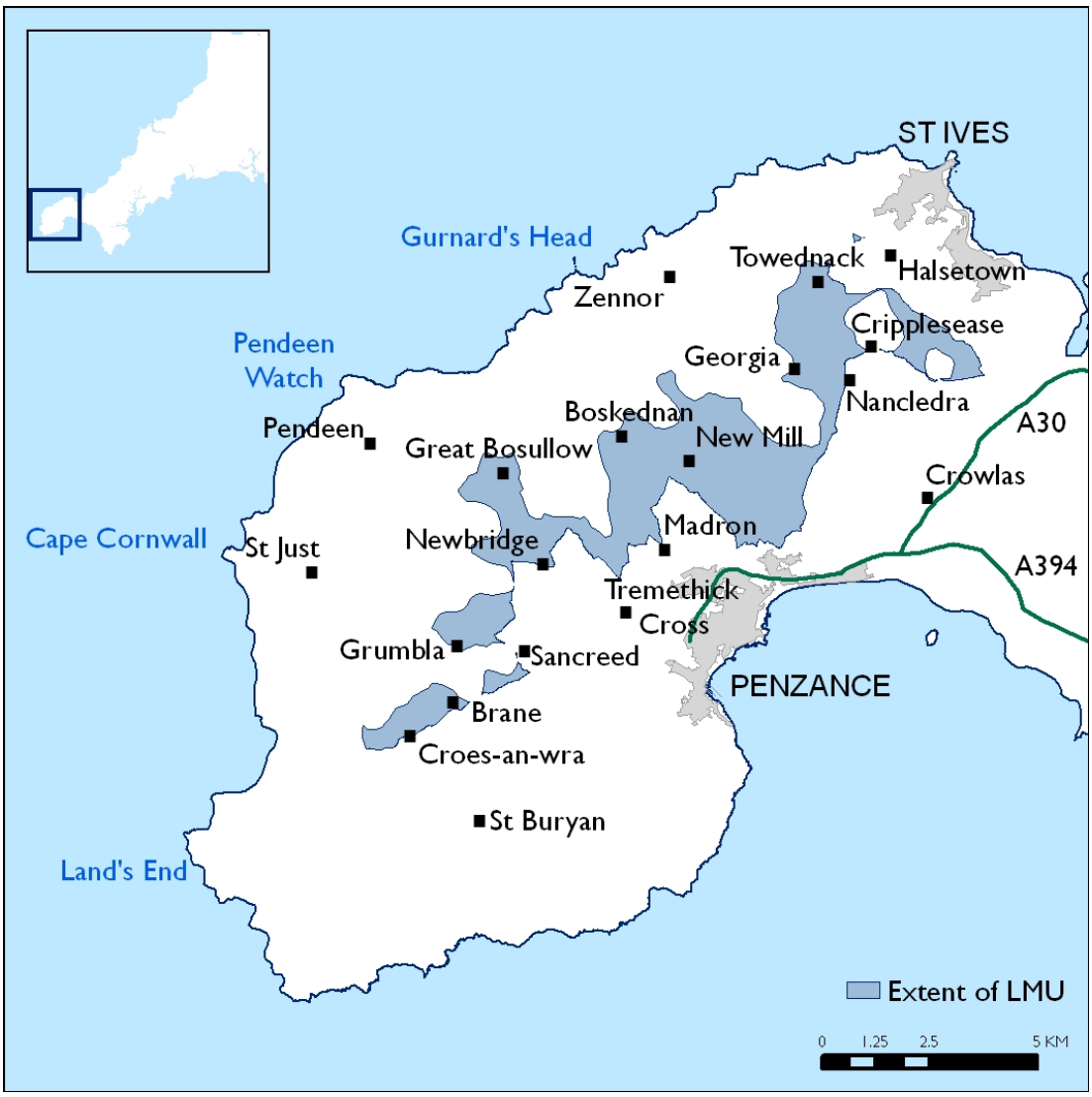
<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td>2.5: Extent of semi-natural habitats</td><td>Habitat calculations:<table><tr><th>Habitat</th><th>Area (ha)</th></tr><tr><td>Dwarf shrub heath (broad habitat)</td><td>1556.8</td></tr><tr><td>Wetland</td><td>60.8</td></tr></table>NB see the ArcReader Project and Excel spreadsheet for a further breakdown of heathland habitat types found in this LMU</td><td>LMU</td><td>Cornwall LIFE data (1995)</td><td>2013/14</td></tr>
<tr><td>2.6: Presence [and condition] of historic landscape features</td><td>Number of extant features:<table><tr><th>Age classification</th><th>Number of features in 2 sample squares</th></tr><tr><td>Prehistoric</td><td>44</td></tr><tr><td>Historic</td><td>14</td></tr><tr><td>Medieval</td><td>37</td></tr><tr><td>Post Medieval</td><td>20</td></tr><tr><td>Modern</td><td>1</td></tr><tr><td>Unknown</td><td>2</td></tr><tr><td>TOTAL</td><td>118</td></tr></table>Condition of features
Information to be obtained from the World Heritage site team for the LMU’s mining features.
Information on the condition of historic features could be obtained through the Heritage at Risk project (English Heritage).</td><td>Sample square</td><td>Cornwall CC Historic Environment Record (April 2008)

Potential future monitoring in conjunction with the Historic Environment Service/Heritage at Risk Project (July 2008)
World Heritage Site monitoring programme</td><td>2013/14</td></tr>
<tr><td>2.7: Settlement pattern</td><td>Total area of development categories:<table><tr><th>Category</th><th>Area (ha)</th><th>No. of caravans/tents</th></tr><tr><td>Permanent</td><td>0.1</td><td></td></tr></table>Refer to the Arc Reader project for settlement distribution within the sample squares.</td><td>Sample squares</td><td>Cornwall aerial photographs (2005)</td><td>2010/11</td></tr>
</table>

Indicator	Results from 2008 analysis	Scale	Source of data and date	Next date for monitoring
2.8: Transport infrastructure	Baseline to be established through community survey	Sample square	Community survey 2008/9	2013/14
2.9: Local vernacular building styles	Baseline to be established through community survey	Sample square	Community survey 2008/9	2013/14
3.3: Presence of traditional livestock types	Baseline to be established through a questionnaire survey of sample farms. There are currently 21 HLS agreements which include the 'Native Breeds at Risk Supplement' (HR2), covering 138.4 ha.	Sample square/LMU LMU	Questionnaire survey 2008/9 HLS scheme data (2008)	2009/10 (repeated annually)
3.4: Field boundary condition and species	Baseline to be established through field survey in 2008	Sample square	Field survey 2008	2013/14

LMU CODE: C12

Location



Links to the Living Landscapes Character Areas

Constituent CAs: CA03, CA04

Constituent LDUs: 139, 282, 417

Table 1: Indicators selected to monitor changes in landscape character

Character statement	Indicators selected by statement
Small areas of woodland in the deeper valleys. Some **hedgerow hawthorns** and characteristic **farmstead groups** of pine and sycamore.	2.1: Extent of woodland and tree cover / type 3.4: Field boundary condition and species
Riparian habitats and **wet woodland** in the valleys. **Cornish hedges** form localised wildlife networks.	2.5: Extent of semi-natural habitats 3.4: Field boundary condition and species
Mainly **pastoral** land use with some **arable/horticulture**.	2.2: Agricultural land use 2.3: Extent of biomass planting 3.1: Extent of covered horticultural production
Anciently enclosed land with **sinuous Cornish hedges** forming a network of **small-medium fields** sloping up the valley heads.	2.4: Field patterns 3.4: Field boundary condition and species
Rich in **historic and archaeological features** including the historic settlement at Chysauster, ancient field systems and mining remains.	2.6: Presence [and condition] of historic landscape features
Hamlets of **granite** local vernacular situated in sheltered valleys associated with **lanes** following valley bottoms. Area crossed by the A3071 to St Just.	1.1: Levels of tranquillity 1.2: Levels of intrusion 1.3: Extent of dark night skies 2.7: Settlement pattern 2.8: Transport infrastructure 2.9: Local vernacular building styles
Active **quarry** near Nancledra with considerable visual impact on the area	1.2: Levels of intrusion

Table 2: The condition criteria for the selected indicators

Indicators selected for the LMU	Score code	Desired trajectories of change
1.1: Levels of tranquillity	AA	Positive: Maintenance or improvement in overall levels of tranquillity Negative: Decline in overall levels of tranquillity
1.2: Levels of intrusion	AA	Positive: Maintenance or improvement in current absence of intrusion Negative: Increase in overall levels of intrusion
1.3: Extent of dark night skies	A	Positive: Maintenance of or increase in overall extent of dark night skies Negative: Decline in overall extent of dark night skies
2.1: Extent of woodland and tree cover/type	S	Positive: Maintenance of or increase in the number of pine/sycamore farmstead groups. Maintenance of or increase in woodland cover in the valleys. Negative: Decrease in the number of pine/sycamore farmstead tree groups. Increase in woodland cover across LMU apart from the valleys.
2.2: Agricultural land use	P	Positive: Maintenance of the mixture of land uses. No loss or an increase in land under pasture. No increase in areas under arable cultivation or intensive horticulture (*cross refer to 3.1 Extent of covered horticultural production*). Negative: Increase in the extent of arable and/or horticultural production. Decrease in the area of pastoral farmland.
2.3: Extent of biomass planting	S	Positive: No loss of permanent pasture or semi-natural habitats to biomass planting. Biomass planting incorporated within existing areas of cultivated land or woodland, respecting or enhancing characteristic field and woodland patterns. Negative: Biomass planting located within permanent pastoral farmland, outside cultivated land or on the site of semi-natural habitats identified at the time of the baseline survey. The geometric shapes of areas of biomass planting interrupt characteristic field and/or woodland patterns.
2.4: Field pattern	P	Positive: Maintenance of the ancient field pattern. No decrease in the total length of field boundaries. No increase in average field size. Restoration of any previously lost/deteriorated boundaries. Negative: Increase in average field size. Decrease in the total length of field boundaries. Increase in average field size.
2.5: Extent of semi-natural habitats	P	Positive: Maintenance of or increase in the extent of semi-natural habitats characteristic to the LMU. Negative: Decrease in or fragmentation of the extent of semi-natural habitats characteristic to the LMU.
2.6: Presence [and condition] of historic landscape	P	Positive: Numbers of recorded above-ground features are stable or increase from baseline numbers. No decline in the overall condition of historic features.

Indicators selected for the LMU	Score code	Desired trajectories of change
features		Negative: Decrease in the number of above-ground features recorded. Decline in the overall condition of historic features.
2.7: Settlement pattern	P	Positive: Maintenance of the existing settlement pattern of hamlets within valleys. No new development outside settlement cartilages (including extensions to farm buildings). Negative: Increase in the settlement footprint of hamlets. New development located outside existing settlement cutilages. Increase in size of farmsteads.
2.8: Transport infrastructure	S	Positive: Maintenance of or decrease in levels of road engineering works, signage and other road furniture. Negative: Increase in levels of road engineering works, signage and other road furniture. Loss of any distinctive types of signage (e.g. finger posts/milestones).
2.9: Local vernacular building styles	S	Positive: New housing/permitted development in sympathy with traditional building character as defined in the baseline surveys. Negative: New housing/permitted development detracts from traditional building character as defined in the baseline surveys.
3.1: Extent of covered horticultural production	S	Positive: Maintenance of or an increase in area of land under traditional horticultural production. Decrease in the area of covered horticulture (e.g. polytunnels, glasshouses). Negative: Increase in area of land under covered horticultural production. Loss of areas of traditional horticulture to intensive forms of production or other land uses (including land abandonment).
3.4: Field boundary condition and species	S	Positive: No reduction in the total length of Cornish hedgebanks (*cross refer to 2.4 Field Patterns indicator)*. Any new sections are constructed of granite in sympathy with local building styles. Hawthorn is the predominant hedgerow species. Negative: Reduction in the total length of Cornish hedgebanks (*cross refer to 2.4 Field Patterns indicator)*. New sections constructed in stone other than granite and out of sympathy with local building styles. New species planted on hedgerows (other than hawthorn).
MAXIMUM LMU SCORES	**10** **6**	P = Primary Indicators S = Secondary Indicators

Table 3: Forces for change acting upon the landscape elements to be monitored

	Climate change					Development pressures										Land use changes											Woodland managament changes				WFD response		Industry change		Forces for change identified in exisitng landscape assessments
	Sea level rise/stormy conditions	Coastal squeeze	Increased frequency of droughts	More frequent river flooding	Increased visitor pressure	Tourism developments incl caravan sites, increased signage, car parks	Marine and beach developments (incl demand for moorings)	Housing developments (incl affordable housing due to high house prices)	Industrial and commercial developments	Demand for second homes	Increased light pollution	Deamnd for better communications (e.g aerials, masts)	Sustainable design of new builds	Increase in commuter and tourist traffic incl traffic calming measures and road improvements	Lotting up of agricultural land at sale	Wind farms (on-shore and off-shore) and other RE developments	Reservoirs/water storage	Minerals extraction(quarrying	Non-food crops e.g. bioenergy, industrial - intensification of lowland areas	Longer growing season/higher CO2 levels for new crops	Horticultural expansion - fav. growing conditions, consumer demand	Intensification of production (particularly arable) incl associated infrastructure	Livestock farming changes (reduction in cattle, reduced grazing in uplands, reduced grazing on marginal land)	Farm diversification and hobby farming eg horseyculture	Recreational uses eg golf courses, recreational boating	Decline in local and traditional land/woodland management and building skills	New species of different provenance eg Douglas Fir to respond to climate change	Increased planting in floodplain areas eg SRC	Afforestation (incl due to favourable growing conditions or for carbon sequestration)	Increased growth rates and productivity	Reduced intensity of agriculture to meet WFD targets	Measures to reduce diffuse pollution eg buffer strips, planting next to watercourses, etc	Decline in traditional industries	Local quarry closures	
LMU C12																																			
Slopes drained by valleys running towards Mounts Bay.																																			
Small areas of woodland in the deeper valleys																																			
Some hedgerow hawthorns and characteristic farmstead groups of pine and sycamore																																			
Riparian habitats and wet woodland in the valleys																																			
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Hamlets situated in sheltered valleys associated with lanes following valley bottoms.																																			
Area crossed by the A3071 to St Just.																																			
Highly visible active quarry near Nancledra																																			

Table 4: Baseline results

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td>1.1: Levels of tranquillity</td><td><u>AONB Area Results (West Penwith)</u>
<table><tr><th>Category of tranquillity</th><th>Score</th></tr><tr><td>Highest</td><td>42.3</td></tr><tr><td>Lowest</td><td>-31.2</td></tr><tr><td>Mean</td><td>5.3</td></tr></table></td><td>AONB area</td><td>CPRE (2007)</td><td>2013/14</td></tr>
<tr><td>1.2: Levels of intrusion</td><td><u>AONB Area Results (West Penwith)</u>
<table><tr><th>Category of intrusion</th><th>Area (ha)</th><th>1997 area (ha)</th></tr><tr><td>Disturbed</td><td>1,020</td><td>292</td></tr><tr><td>Undisturbed</td><td>1,440</td><td>1,454</td></tr><tr><td>Urban</td><td>0.4</td><td>0</td></tr></table></td><td>AONB area</td><td>CPRE (2007)</td><td>2013/14</td></tr>
<tr><td>1.3: Extent of dark night skies</td><td><u>Cornwall AONB Results</u>
<table><tr><th>Category of darkness</th><th>Area (ha)</th><th>1993 area (ha)</th></tr><tr><td>0-1.7</td><td>277</td><td>258</td></tr><tr><td>1.7-50</td><td>442</td><td>527</td></tr><tr><td>50-150</td><td>238</td><td>171</td></tr><tr><td>150-240</td><td>3</td><td>4</td></tr><tr><td>240-255</td><td>0</td><td>0</td></tr></table>
<u>Number of stars in the Orion constellation:</u> <u>The AONB is to organise a ‘star count’ to inform this indicator.</u>

<u>Fixed point photography:</u> <u>AONB to establish locations for fixed point photography to monitor this indicator</u></td><td>AONB

AONB area

LMU</td><td>CPRE (2000)

Primary data (2008/9)

2008/9</td><td>2013/14</td></tr>
</table>

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td>2.1: Extent of woodland and tree cover/type</td><td><u>Breakdown by woodland type:</u>
<table><tr><th>Woodland type</th><th>Area –ha (NIWT figure)</th></tr><tr><td>Broadleaved</td><td>165.0 (117.2)</td></tr><tr><td>Ancient semi-natural</td><td>2.8</td></tr><tr><td>PAWS</td><td>4.4</td></tr><tr><td>Mixed</td><td>0.2</td></tr><tr><td>Conifer</td><td>8.6</td></tr><tr><td>Scrub</td><td>74.2</td></tr></table></td><td>LMU</td><td>- Cornwall LIFE dataset (1995)
- Natural England’s Ancient Woodland Inventory (1999)
- National Inventory of Woodland and Trees (2000)</td><td>2013/14</td></tr>
<tr><td>2.2: Agricultural land use</td><td><u>AONB Area Results (West Penwith):</u>
<table><tr><th>Grassland categories</th><th>Hectares</th></tr><tr><td>< 5 years & permanent pasture</td><td>7,550</td></tr><tr><td>Rough grazing</td><td>2,085</td></tr><tr><td>Arable categories:</td><td></td></tr><tr><td>Cereals</td><td>626</td></tr><tr><td>Potatoes</td><td>296</td></tr><tr><td>Maize</td><td>146</td></tr><tr><td>Root crops</td><td>113</td></tr><tr><td>Other</td><td>22</td></tr><tr><td>Horticultural categories:</td><td></td></tr><tr><td>Total horticultural crops</td><td>85</td></tr><tr><td>Hardy nursery stock bulbs and flowers</td><td>18</td></tr><tr><td colspan="2">Number of holdings in different size categories:</td></tr><tr><td><5 ha:</td><td>141</td></tr><tr><td>5-10 ha:</td><td>53</td></tr><tr><td>10-20 ha:</td><td>44</td></tr><tr><td>Over 20 ha</td><td>143</td></tr></table>
<u>The AONB should collect information from a representative sample of farmers within the LMU to further pinpoint agricultural land use.</u></td><td>AONB area

LMU</td><td>Defra June Agricultural Census (2007)

2008/9 data collection</td><td>2013/14</td></tr>
</table>

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td>2.3: Extent of biomass planting</td><td>There are currently no agreements for Energy Crops planting through the Energy Crops Scheme in this LMU. The AONB should check the Defra dataset every two years to monitor this.</td><td>LMU</td><td>Defra ECS data (2008)</td><td>2010</td></tr>
<tr><td>2.4: Field pattern</td><td>Total length of field boundaries by sample square:
Sample square SW4634
<table><tr><th>Boundary / feature type</th><th>Length (m)</th></tr><tr><td>Cornish hedgebank</td><td>3,612</td></tr><tr><td>Wooded</td><td>5,208</td></tr><tr><td>Stone wall</td><td>5,132</td></tr></table>Sample square SW4837
<table><tr><th>Boundary / feature type</th><th>Length (m)</th></tr><tr><td>Cornish hedgebank</td><td>6,563</td></tr><tr><td>Wooded</td><td>7,595</td></tr><tr><td>Stone wall</td><td>3,480</td></tr><tr><td>Gate</td><td>13</td></tr></table>Field boundary pattern by sample square:
<table><tr><th>Sample square</th><th>Total sinuous (m)</th><th>Total straight (m)</th></tr><tr><td>SW4634</td><td>9,496</td><td>4,598</td></tr><tr><td>SW4837</td><td>4,794</td><td>12,978</td></tr></table>Average field size by sample square:
Sample square SW4634: 1.4 ha
Sample square SW4837: 1 ha</td><td>Sample squares</td><td>Cornwall aerial photographs (2005)</td><td>2010/11</td></tr>
<tr><td>2.5: Extent of semi-natural habitats</td><td>Habitat calculations:
<table><tr><th>Habitat</th><th>Area (ha)</th></tr><tr><td>Dwarf shrub heath (broad habitat)</td><td>27.1</td></tr><tr><td>Wetland</td><td>25.4</td></tr></table></td><td>LMU</td><td>Cornwall LIFE data (1995)</td><td>2013/14</td></tr>
</table>

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td>2.6: Presence [and condition] of historic landscape features</td><td>Number of extant features:<table><tr><th>Age classification</th><th>Number of features in 2 sample squares</th></tr><tr><td>Prehistoric</td><td>9</td></tr><tr><td>Historic</td><td>1</td></tr><tr><td>Medieval</td><td>3</td></tr><tr><td>Post Medieval</td><td>3</td></tr><tr><td>Unknown</td><td>1</td></tr><tr><td>TOTAL</td><td>17</td></tr></table>Condition of features
Information to be obtained from the World Heritage site team for the LMU's mining features.
Information on the condition of historic features could be obtained through the Heritage at Risk project (English Heritage).</td><td>Sample square</td><td>Cornwall CC Historic Environment Record (April 2008)

World Heritage Site monitoring programme

Potential future monitoring in conjunction with the Historic Environment Service/Heritage at Risk Project (July 2008)</td><td>2013/14</td></tr>
<tr><td>2.7: Settlement pattern</td><td>Total area of development categories:<table><tr><th>Category</th><th>Area (ha)</th><th>No. of caravans/tents</th></tr><tr><td>Permanent</td><td>6.0</td><td></td></tr></table>Refer to the Arc Reader project for settlement distribution within the sample squares.</td><td>Sample squares</td><td>Cornwall aerial photographs (2005)</td><td>2010/11</td></tr>
<tr><td>2.8: Transport infrastructure</td><td>Baseline to be established through community survey</td><td>Sample square</td><td>Community survey 2008/9</td><td>2013/14</td></tr>
<tr><td>2.9: Local vernacular building styles</td><td>Baseline to be established through community survey</td><td>Sample square</td><td>Community survey 2008/9</td><td>2013/14</td></tr>
</table>

Indicator	Results from 2008 analysis	Scale	Source of data and date	Next date for monitoring
3.1: Extent of covered horticultural production	Baseline to be established through field survey	Sample square	Field survey 2008	2013/14
3.4: Field boundary condition and species	Baseline to be established through field survey	Sample square	Field survey 2008	2013/14

LMU CODE: C13

Location

Links to the Living Landscapes Character Arms

Constituent CAs: CA01

Constituent LDUs: 132, 277

Table 1: Indicators selected to monitor changes in landscape character

Character statement	Indicators selected by statement
Dramatic indented coastline with **high cliffs** and **rocky headlands** interspersed by small sandy or boulder **beaches** and **rocky coves**. **Sea chasms** ('zawns') a feature of the south-west coast.	1.4: Coastal change (coastal erosion) 2.10: Development at sea
Exposed **open maritime character** – windswept and highly influenced by weather. **Scenic view** of the offshore rocks of the Longships and their **lighthouse** in the west.	2.10: Development at sea 3.7: Presence of navigation marks
Lush woodland confined to steep sided valleys and lines of **stunted trees** found along watercourses. Farms often marked out by **distinctive groups** of conifers (e.g. Monterey Pine) mixed with sycamore.	2.1: Extent of woodland and tree cover / type
Significant areas of rough ground with areas of **wet woodland, heath** and **fen**, and **scrub** around derelict quarries. **Coastal heath** and **scrub**.	1.5: SSSI condition 2.5: Extent of semi-natural habitats
Mixed agriculture with area defined by **small bulb/vegetable fields** along cliff edge with some reversion to heath. **Pasture** more common in the west but being lost to **intensive arable production**.	2.2: Agricultural land use 2.3: Extent of biomass planting 3.1: Extent of covered horticultural production
Dominant field pattern with **curving sinuous Cornish hedges** including with Tamarisk hedges defining **variable field sizes** (all small in a national context). **Tiny bulb fields** along the sheltered south and south-east cliffs particularly distinctive. Some **enlarged fields** causing marked break in pattern.	2.4: Field patterns 3.4: Field boundary condition and species
High density of **historic and archaeological features** including standing stones, cliff castles and ancient settlements. Relics of the **fishing industry**, particularly at Mousehole.	2.6: Presence [and condition] of historic landscape features 3.8: Levels of fishing industry activity
Isolated farms and **small villages of granite and slate** with **distinctive churches**, some focus on fishing coves. Main settlements at Mousehole and Lamorna.	1.1: Levels of tranquillity 1.2: Levels of intrusion 1.3: Extent of dark night skies 2.6: Presence [and condition] of historic landscape features 2.7: Settlement pattern 2.9: Local vernacular building styles
Prominent tourist development around the Lands' End complex.	3.7: Presence of navigation marks
Small slipways giving access to fishing boats e.g. at Lamorna. **Narrow winding minor roads and lanes** cross the area enclosed tightly by stone faced hedges. Some lanes are sunken into the bedrock.	2.8: Transport infrastructure

Table 2: The condition criteria for the selected indicators

Indicators selected for the LMU	Score code	Desired trajectories of change
1.1: Levels of tranquillity	AA	Positive: Maintenance or improvement in overall levels of tranquillity Negative: Decline in overall levels of tranquillity
1.2: Levels of intrusion	AA	Positive: Maintenance or improvement in current absence of intrusion Negative: Increase in overall levels of intrusion
1.3: Extent of dark night skies	A	Positive: Maintenance of or increase in overall extent of dark night skies Negative: Decline in overall extent of dark night skies
1.4: Coastal change	AA	Positive: No loss of characteristic features along the coast through erosion / sea level rise Negative: Loss of characteristic features along the coast through erosion / sea level rise
1.5: SSSI condition	AA	Positive: SSSIs are in favourable condition. Where sites are not in favourable condition, there has been an improvement in condition status from previous assessments. Negative: SSSIs are in unfavourable condition. Condition status has declined from previous assessments.
2.1: Extent of woodland and tree cover/type	P	Positive: Maintenance of or increase in the number of pine/sycamore farmstead groups. Maintenance of or increase in woodland cover in the valleys and along watercourses. Negative: Decrease in the number of pine/sycamore farmstead tree groups. Increase in woodland cover across LMU apart from the valleys and along watercourses.
2.2: Agricultural land use	P	Positive: Maintenance of or an increase in the area of actively managed bulb/vegetable fields *(link to 3.1: Extent of covered horticulture*). Decrease in the area of arable. Maintenance of or an increase in the area of pasture. Negative: Further loss of bulb/vegetable fields to other land uses (including land abandonment). Increase in the area of arable cultivation. Decrease in the total area of pasture.
2.3: Extent of biomass planting	S	Positive: No loss of permanent pasture or semi-natural habitats to biomass planting. Biomass planting incorporated within existing areas of cultivated land or woodland, respecting or enhancing characteristic field and woodland patterns. Negative: Biomass planting located within permanent pastoral farmland, outside cultivated land or on the site of semi-natural habitats identified at the time of the baseline survey. The geometric shapes of areas of biomass planting interrupt characteristic field and/or woodland patterns.

Indicators selected for the LMU	Score code	Desired trajectories of change
2.4: Field pattern	P	Positive: Maintenance of small-scale irregular field pattern. Maintenance of overall length of field boundaries; no increase in average field size (to account for field amalgamation). Restoration of previously 'lost' boundaries. Negative: Decrease in overall length of field boundaries; increase in average field size (to account for field amalgamation). Increase in total length of straight field boundaries.
2.5: Extent of semi-natural habitats	P	Positive: Maintenance of or increase in the extent of semi-natural habitats characteristic to the LMU. Negative: Decrease in or fragmentation of the extent of semi-natural habitats characteristic to the LMU.
2.6: Presence [and condition] of historic landscape features	S	Positive: Numbers of recorded above-ground features are stable or increase from baseline numbers. No decline in the overall condition of historic features. Negative: Decrease in the number of above-ground features recorded. Decline in the overall condition of historic features.
2.7: Settlement pattern	S	Positive: Maintenance of the characteristic settlement pattern of isolated farmsteads, small nucleated villages and fishing villages. No new development outside existing settlement curtilages (including caravan/camping sites). No increase in farmstead size. Negative: Spread of development outside settlement curtilages (including caravan/camp sites). Increase in farmstead size.
2.8: Transport infrastructure	S	Positive: Maintenance of or decrease in levels of road engineering works, signage and other road furniture. Negative: Increase in levels of road engineering works, signage and other road furniture. Loss of any distinctive types of signage (e.g. finger posts/ milestones).
2.9: Local vernacular building styles	S	Positive: New housing/permitted development in sympathy with traditional building character as defined in the baseline surveys. Negative: New housing/permitted development detracts from traditional building character as defined in the baseline surveys.
2.10: Development at sea	AA	Positive: No visible 'industrial scale' developments in view of the coast. Negative: Introduction of 'industrial scale' development visible from the coast.

Indicators selected for the LMU	Score code	Desired trajectories of change
3.1: Extent of covered horticultural production	S	Positive: Maintenance of or an increase in area of land under traditional horticultural production. Decrease in the area of covered horticulture (e.g. polytunnels, glasshouses). Negative: Increase in area of land under covered horticultural production. Loss of areas of traditional horticulture to intensive forms of production or other land uses (including land abandonment).
3.4: Field boundary condition and species	S	Positive: No reduction in the total length of stone walls or hedgebanks (*cross refer to 2.4 Field Patterns indicator)*. Hedgebanks and stone walls are stock proof. Any new sections are constructed of granite in sympathy with local building styles. No increase in tree cover on hedgebanks. Negative: Reduction in the total length of stone walls or hedgebanks (*cross refer to 2.4 Field Patterns indicator)*. Gappy stone walls or hedgebanks. New sections constructed in stone other than granite and out of sympathy with local building styles. Increase in tree cover on hedgebanks.
3.7: Presence of navigation marks	S	Positive: Navigation marks in active use. Negative: Navigation marks no longer in use.
3.8: Levels of fishing industry activity	S	Positive: No decline in the overall number of active fishing fleets Negative: Decline in the overall number of active fishing fleets.
MAXIMUM LMU SCORES	**10** **6**	P = Primary Indicators S = Secondary Indicators

Table 3: Forces for change acting upon the landscape elements to be monitored

	Climate change					Development pressures										Land use changes												Woodland managament changes				WFD response		Industry change		Forces for change identified in exisitng landscape assessments
	Sea level rise/stormy conditions	Coastal squeeze	Increased frequency of droughts	More frequent river flooding	Increased visitor pressure	Tourism developments incl caravan sites, increased signage, car parks	Marine and beach developments (incl demand for moorings)	Housing developments (incl affordable housing due to high house prices)	Industrial and commercial developments	Demand for second homes	Increased light pollution	Deamnd for better communications (e.g aerials, masts)	Sustainable design of new builds	Increase in commuter and tourist traffic incl traffic calming measures and road improvements	Loosing up of agricultural land at sale	Wind farms (on-shore and off-shore) and other RE developments	Reservoirs/water storage	Minerals extraction/quarrying	Non-food crops e.g. bioenergy, industrial - intensification of lowland areas	Longer growing season/higher CO_2 levels for new crops	Horticultural expansion - fav. growing conditions, consumer demand	Intensification of production (particularly arable) incl associated infrastructure	Livestock farming changes (reduction in cattle, reduced grazing in uplands, reduced grazing on marginal land)	Farm diversification and hobby farming eg horseyculture	Recreational uses eg golf courses, recreational boating	Decline in local and traditional land/woodland management and building skills	New species of different provenance eg Douglas Fir to respond to climate change	Increased planting in floodplain areas eg SRC	Afforestation (incl due to favourable growing conditions or for carbon sequestration)	Increased growth rates and productivity	Reduced intensity of agriculture to meet WFD targets	Measures to reduce diffuse pollution eg buffer strips, planting next to watercourses, etc	Decline in traditional industries	Local quarry closures	
LMU C13																																				
Dramatic indented coastline with high cliffs and rocky headlands interspersed by small sandy or boulder beaches and rocky coves																																				
Sea chasms ('zawns') a feature of the south-west coast.																																				
Coast backed by a gently undulating plateau with valleys draining towards the sea.																																				
Exposed open maritime character																																				
Scenic view of the offshore rocks of the Longships and their lighthouse in the west.																																				
Lush woodland confined to steep sided valleys and lines of stunted trees found along watercourses.																																				
Farms often marked out by distinctive groups of conifers (e.g. Monterey Pine) mixed with sycamore.																																				
areas of rough ground with areas of wet woodland, heath and fen, and scrub around derelict quarries.																																				
Coastal heath and scrub																																				
curving sinuous Cornish hedges including with Tamarisk hedges defining variable field sizes (all small in a national context).																																				Farm intensification, fragmentation, arable conversion, removal of hedges, diversification
Tiny bulb fields along the sheltered south and south-east cliffs particularly distinctive																																				Farm intensification, fragmentation, arable conversion, removal of hedges, diversification
Some enlarged fields causing marked break in pattern.																																				Farm intensification, fragmentation, arable conversion, removal of hedges, diversification
Mixed agriculture with area defined by small bulb/vegetable fields along cliff edge with some reversion to heath																																				Farm intensification, fragmentation, arable conversion, removal of hedges, diversification
Pasture more common in the west but being lost to intensive arable production.																																				Farm intensification, fragmentation, arable conversion, removal of hedges, diversification
High density of historic and archaeological features including standing stones, cliff castles and ancient settlements																																				
Relics of the fishing industry, particularly at Mousehole.																																				Resultant impact on the villages highlighted
Small slipways giving access to fishing boats e.g. at Lamorna																																				
Narrow winding minor roads and lanes cross the area enclosed tightly by stone faced hedges.																																				
Isolated farms and small villages of granite and slate with distinctive churches, some focus on fishing coves																																				vernacular design/materials; potential for energy conservation in buildings; demand for rural housing
Main settlements at Mousehole and Lamorna																																				
Prominent tourist development around the Lands' End complex																																				Summer increase in visitor numbers as well as expanding population - congestion

Table 4: Baseline results

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td>1.1: Levels of tranquillity</td><td><u>AONB Area Results (West Penwith)</u>
<table><tr><th>Category of tranquillity</th><th>Score</th></tr><tr><td>Highest</td><td>42.3</td></tr><tr><td>Lowest</td><td>-31.2</td></tr><tr><td>Mean</td><td>5.3</td></tr></table></td><td>AONB area</td><td>CPRE (2007)</td><td>2013/14</td></tr>
<tr><td>1.2: Levels of intrusion</td><td><u>AONB Area Results (West Penwith)</u>
<table><tr><th>Category of intrusion</th><th>Area (ha)</th><th>1997 area (ha)</th></tr><tr><td>Disturbed</td><td>1,020</td><td>292</td></tr><tr><td>Undisturbed</td><td>1,440</td><td>1,454</td></tr><tr><td>Urban</td><td>0.4</td><td>0</td></tr></table>Number of off-shore windfarms: 0</td><td>AONB area</td><td>CPRE (2007)

BWEA (2008)</td><td>2013/14</td></tr>
<tr><td>1.3: Extent of dark night skies</td><td><u>Cornwall AONB Results</u>
<table><tr><th>Category of darkness</th><th>Area (ha)</th><th>1993 area (ha)</th></tr><tr><td>0-1.7</td><td>277</td><td>258</td></tr><tr><td>1.7-50</td><td>442</td><td>527</td></tr><tr><td>50-150</td><td>238</td><td>171</td></tr><tr><td>150-240</td><td>3</td><td>4</td></tr><tr><td>240-255</td><td>0</td><td>0</td></tr></table><u>Number of stars in the Orion constellation:</u> <u>The AONB is to organise a ‘star count’ to inform this indicator.</u>

<u>Fixed point photography:</u> <u>AONB to establish locations for fixed point photography to monitor this indicator</u></td><td>AONB

AONB area

LMU</td><td>CPRE (2000)

Primary data (2008/9)

2008/9</td><td>2013/14</td></tr>
</table>

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td>1.4: Coastal change</td><td><u>The AONB should follow the work of the Coastal Monitoring Project and explore the possibility of sitting on the Steering Group via the Cornwall and Isles of Scilly Coastal Authorities group.</u></td><td>AONB area</td><td>South West Regional Coastal Monitoring Programme (Plymouth University)</td><td>AONB to contact the Coastal Authorities by end of 2008.</td></tr>
<tr><td>1.5: SSSI condition</td><td><u>AONB Area results (West Penwith)</u>
92% Favourable
8% Unfavourable recovering
0.3% Unfavourable declining

See ArcReader Project and Excel Spreadsheet for a breakdown of results for the SSSIs within this LMU.</td><td>AONB area</td><td>Natural England (web-based information)
See Excel Spreadsheet for a breakdown of assessment dates for SSSIs within this LMU.</td><td>2010 (every 2 years)</td></tr>
<tr><td>2.1: Extent of woodland and tree cover/type</td><td><u>Breakdown by woodland type:</u><table><tr><th>Woodland type</th><th>Area –ha (NIWT figure)</th></tr><tr><td>Broadleaved</td><td>107.1 (82.6)</td></tr><tr><td>Ancient semi-natural</td><td>0</td></tr><tr><td>PAWS</td><td>0</td></tr><tr><td>Mixed</td><td>1.3</td></tr><tr><td>Conifer</td><td>4.8</td></tr><tr><td>Scrub</td><td>73.4</td></tr></table></td><td>LMU</td><td>- Cornwall LIFE dataset (1995)
- Natural England’s Ancient Woodland Inventory (1999)
- National Inventory of Woodland and Trees (2000)</td><td>2013/14</td></tr>
</table>

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td>2.2: Agricultural land use</td><td><u>AONB Area Results (West Penwith):</u>
<table><tr><th>Grassland categories</th><th>Hectares</th></tr><tr><td>< 5 years & permanent pasture</td><td>7,550</td></tr><tr><td>Rough grazing</td><td>2,085</td></tr><tr><td>Arable categories:</td><td></td></tr><tr><td>Cereals</td><td>626</td></tr><tr><td>Potatoes</td><td>296</td></tr><tr><td>Maize</td><td>146</td></tr><tr><td>Root crops</td><td>113</td></tr><tr><td>Other</td><td>22</td></tr><tr><td>Horticultural categories:</td><td></td></tr><tr><td>Total horticultural crops</td><td>85</td></tr><tr><td>Hardy nursery stock bulbs and flowers</td><td>18</td></tr><tr><td colspan="2">Number of holdings in different size categories:</td></tr><tr><td><5 ha:</td><td>141</td></tr><tr><td>5-10 ha:</td><td>53</td></tr><tr><td>10-20 ha:</td><td>44</td></tr><tr><td>Over 20 ha</td><td>143</td></tr></table>
<u>The AONB should collect information from a representative sample of farmers within the LMU to further pinpoint agricultural land use.</u></td><td>AONB area

LMU</td><td>Defra June Agricultural Census (2007)

2008/9 data collection</td><td>2013/14</td></tr>
<tr><td>2.3: Extent of biomass planting</td><td><u>There are currently no agreements for Energy Crops planting through the Energy Crops Scheme in this LMU. The AONB should check the Defra dataset every two years to monitor this</u>.</td><td>LMU</td><td>Defra ECS data (2008)</td><td>2010</td></tr>
<tr><td>2.4: Field pattern</td><td>Total length of field boundaries by sample square:
<u>Sample square SW3923</u>
<table><tr><th>Boundary / feature type</th><th>Length (m)</th></tr><tr><td>Cornish hedgebank</td><td>9,268</td></tr><tr><td>Wooded</td><td>5,552</td></tr></table><u>Sample square SW4625</u></td><td>Sample squares</td><td>Cornwall aerial photographs (2005)</td><td>2010/11</td></tr>
</table>

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td></td><td>
<table>
<tr><th>Boundary / feature type</th><th>Length (m)</th></tr>
<tr><td>Cornish hedgebank</td><td>11,333</td></tr>
<tr><td>Wooded</td><td>280</td></tr>
<tr><td>Stone wall</td><td>86</td></tr>
</table>
Field boundary pattern by sample square:
<table>
<tr><th>Sample square</th><th>Total sinuous (m)</th><th>Total straight (m)</th></tr>
<tr><td>SW3923</td><td>7,868</td><td>7,096</td></tr>
<tr><td>SW4625</td><td>4,245</td><td>7,901</td></tr>
</table>
Average field size by sample square:
Sample square SW3923: 1.2 ha
Sample square SW4625: 1.4 ha
</td><td></td><td></td><td></td></tr>
<tr><td>2.5: Extent of semi-natural habitats</td><td>
Habitat calculations:
<table>
<tr><th>Habitat</th><th>Area (ha)</th></tr>
<tr><td>Dwarf shrub heath (broad habitat)</td><td>121.0</td></tr>
<tr><td>Wetland</td><td>10.3</td></tr>
<tr><td>Broadleaved woodland / wetland</td><td>0.8</td></tr>
<tr><td>Unimproved grassland / wetland</td><td>0.5</td></tr>
</table>
NB see the ArcReader Project and Excel spreadsheet for a further breakdown of heathland habitat types found in this LMU
</td><td>LMU</td><td>Cornwall LIFE data (1995)</td><td>2013/14</td></tr>
<tr><td>2.6: Presence [and condition] of historic landscape features</td><td>
Number of extant features:
<table>
<tr><th>Age classification</th><th>Number of features in 2 sample squares</th></tr>
<tr><td>Prehistoric</td><td>5</td></tr>
<tr><td>Historic</td><td>1</td></tr>
<tr><td>Medieval</td><td>4</td></tr>
<tr><td>Post Medieval</td><td>6</td></tr>
<tr><td>Modern</td><td>1</td></tr>
<tr><td>TOTAL</td><td>17</td></tr>
</table>
</td><td>Sample square</td><td>Cornwall CC Historic Environment Record (April 2008)</td><td>2013/14</td></tr>
</table>

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td></td><td>Condition of features
<u>Information to be obtained from the World Heritage site team for the LMU's mining features.</u>
<u>Information on the condition of historic features could be obtained through the Heritage at Risk project (English Heritage).</u></td><td></td><td>World Heritage Site monitoring programme

Potential future monitoring in conjunction with the Historic Environment Service/Heritage at Risk Project (July 2008)</td><td></td></tr>
<tr><td>2.7: Settlement pattern</td><td>Total area of development categories:<table><tr><th>Category</th><th>Area (ha)</th><th>No. of caravans/tents</th></tr><tr><td>Permanent</td><td>8.6</td><td></td></tr><tr><td>Agricultural glasshouses</td><td>0.4</td><td></td></tr></table>Refer to the Arc Reader project for settlement distribution within the sample squares.</td><td>Sample squares</td><td>Cornwall aerial photographs (2005)</td><td>2010/11</td></tr>
<tr><td>2.8: Transport infrastructure</td><td><u>Baseline to be established through community survey</u></td><td>Sample squares</td><td>Community survey 2008/9</td><td>2013/14</td></tr>
<tr><td>2.10: Development at sea</td><td><u>AONB to collect information from the Local Planning Authority on any proposals for off-shore developments.</u></td><td>AONB area</td><td>LPA records (2008/9)</td><td>2010</td></tr>
<tr><td>3.1: Extent of covered horticultural production</td><td><u>Baseline to be established through field survey</u></td><td>Sample square</td><td>Field survey 2008</td><td>2013/14</td></tr>
<tr><td>3.4: Field boundary condition and species</td><td><u>Baseline to be established through field survey</u></td><td>Sample square</td><td>Field survey 2008</td><td>2013/14</td></tr>
<tr><td>3.7: Presence of navigation marks</td><td>Number of navigation marks: 2 (lit) – Carn Bras and Tater Du</td><td>LMU</td><td>Admiralty Leisure (2007) Leisure Chart Portfolio, Falmouth to</td><td>2013/14</td></tr>
</table>

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td></td><td></td><td></td><td>Teignmouth: SC5602</td><td></td></tr>
<tr><td>3.8: Levels of fishing industry activity</td><td>Total number of active fishing fleets:<table><tr><th>Harbour</th><th>Number of active fishing vessels</th></tr><tr><td>Sennen</td><td>11</td></tr><tr><td>Penberth</td><td>7</td></tr><tr><td>Porthgwarra</td><td>1</td></tr><tr><td>Lamorna</td><td>1</td></tr><tr><td>Mousehole</td><td>9</td></tr><tr><td>TOTAL</td><td>29</td></tr></table></td><td>LMU</td><td>Cornwall Sea Fisheries Survey (December 2006)</td><td>2013/14</td></tr>
</table>

CORNWALL AONB: SOUTH COAST (WESTERN)

LMU CODE: C14

Location

Links to the Living Landscapes Character Areas

Constituent CAs: CA06, CA04

Constituent LDUs: 026, 121, 122, 123, 124, 150, 151, 153, 262, 361, 362, 363, 061, 290, 422, 067, 134

Table 1: Indicators selected to monitor changes in landscape character

Character statement	Indicators selected by statement
Strong topography of rocky **coastal cliffs** broken by **sandy bays** and backed by gently undulating plateau. Granite intrusion of **St Michael's Mount** a key focal point for the bay.	1.4: Coastal change (coastal erosion) 2.10: Development at sea
Plateau intersected by distinctive flat-bottomed valleys with **linear woodlands**.	2.1: Extent of woodland and tree cover / type
Coastal habitats include **vegetated shingle, sand dunes** and Loe Bar, behind which is the valued **freshwater wetland** habitat of Loe Pool fringed by woodland. **Lowland heath, slate/quartzite wildflower-rich hedges** and **semi-natural woodlands** valued inland.	1.5: SSSI condition 2.5: Extent of semi-natural habitats 2.1: Extent of woodland and tree cover / type 3.4: Field boundary condition and species
Mixed agriculture, mainly **improved pasture**, meadows along valleys and estate farms. Arable fields along coast including early crops of **potatoes** and **cauliflower**.	2.2: Agricultural land use 2.3: Extent of biomass planting 3.1: Extent of covered horticultural production
Varying scale of fields, mainly **medium to large** sized bounded by a mixture of straight and sinuous **Cornish hedges**, with trees around smaller fields. **Tamarisk** is characteristic hedge species.	2.4: Field patterns 3.4: Field boundary condition and species
Disused mine buildings, engine houses and waste ground along coast from **tin and copper mining. Designed landscapes and gardens** e.g. Trevarno.	2.6: Presence [and condition] of historic landscape features 3.5: Extent [and condition] of designed landscapes
Dispersed settlement with many hamlets and villages linked by **winding minor roads**; older settlements centred on a church. **Buildings of stone and slate with slate roofs**, some recent expansion of villages.	1.1: Levels of tranquillity 1.2: Levels of intrusion 1.3: Extent of dark night skies 2.6: Presence [and condition] of historic landscape features 2.7: Settlement pattern 2.8: Transport infrastructure 2.9: Local vernacular building styles
The f**ishing industry** remains a feature of some villages along the coast	3.8: Levels of fishing industry activity
Area includes main A30 and A394.	1.2: Levels of intrusion 2.8: Transport infrastructure

Table 2: The condition criteria for the selected indicators

Indicators selected for the LMU	Score code	Desired trajectories of change
1.1: Levels of tranquillity	AA	Positive: Maintenance or improvement in overall levels of tranquillity Negative: Decline in overall levels of tranquillity
1.2: Levels of intrusion	AA	Positive: Maintenance or improvement in current absence of intrusion Negative: Increase in overall levels of intrusion
1.3: Extent of dark night skies	A	Positive: Maintenance of or increase in overall extent of dark night skies Negative: Decline in overall extent of dark night skies
1.4: Coastal change	AA	Positive: No loss of characteristic features along the coast through erosion / sea level rise Negative: Loss of characteristic features along the coast through erosion / sea level rise
1.5: SSSI condition	AA	Positive: SSSIs are in favourable condition. Where sites are not in favourable condition, there has been an improvement in condition status from previous assessments. Negative: SSSIs are in unfavourable condition. Condition status has declined from previous assessments.
2.1: Extent of woodland and tree cover/type	P	Positive: Maintenance of or increase in woodland cover along valleys and semi-natural woodland cover inland, including through re-linking woodlands. No increase in woodland cover on the plateau. Negative: Increase in woodland cover on the plateau. Decrease and fragmentation of the areas of woodland in valleys and inland semi-natural woodlands.
2.2: Agricultural land use	P	Positive: Maintenance of the area of land under traditional vegetable/bulb growing *(cross refer to 3.1 Extent of covered horticultural production indicator)*. Decrease in the area of land under commercial bulb and potato growing or intensive arable. Maintenance of or an increase in the extent of pasture. Negative: Increase in the area of intensive arable production or commercial bulb/potato growing. Decrease in the area of traditional vegetable/bulb growing *(cross refer to 3.1 Extent of covered horticultural production indicator)* and/or pasture.
2.3: Extent of biomass planting	S	Positive: No loss of permanent pasture or semi-natural habitats to biomass planting. Biomass planting incorporated within existing areas of cultivated land or woodland, respecting or enhancing characteristic field and woodland patterns. Negative: Biomass planting located within permanent pastoral farmland, outside cultivated land or on the site of semi-natural habitats identified at the time of the baseline survey. The geometric shapes of areas of biomass planting interrupt characteristic field and/or woodland patterns.

Indicators selected for the LMU	Score code	Desired trajectories of change
2.4: Field pattern	P	Positive: No decrease in the total length of field boundaries. Restoration of previously 'lost' field boundaries. No increase or a decrease in average field size. Negative: Increase in areas of regular field pattern. Increase in average field size.
2.5: Extent of semi-natural habitats	P	Positive: Maintenance of or increase in the extent of semi-natural habitats characteristic to the LMU. Negative: Decrease in or fragmentation of the extent of semi-natural habitats characteristic to the LMU.
2.6: Presence [and condition] of historic landscape features	S	Positive: Numbers of recorded above-ground features are stable or increase from baseline numbers. No decline in the overall condition of historic features. Negative: Decrease in the number of above-ground features recorded. Decline in the overall condition of historic features.
2.7: Settlement pattern	S	Positive: Maintenance of the dispersed settlement pattern. No new development outside settlement curtilages (residential, commercial and tourism). No increase in the size of farms. Negative: Increase in the settlement footprint of hamlets and villages. New development outside settlement curtilages. Increase in the size of farms.
2.8: Transport infrastructure	S	Positive: Maintenance of or decrease in levels of road engineering works, signage and other road furniture. Negative: Increase in levels of road engineering works, signage and other road furniture. Loss of any distinctive types of signage (e.g. finger posts/milestones).
2.9: Local vernacular building styles	S	Positive: New housing/permitted development in sympathy with traditional building character as defined in the baseline surveys. Negative: New housing/permitted development detracts from traditional building character as defined in the baseline surveys.
2.10: Development at sea	AA	Positive: No visible 'industrial scale' developments in view of the coast. Negative: Introduction of 'industrial scale' development visible from the coast.

Indicators selected for the LMU	Score code	Desired trajectories of change
3.1: Extent of covered horticultural production	S	Positive: Maintenance of or an increase in area of land under traditional horticultural production. Decrease in the area of covered horticulture (e.g. polytunnels, glasshouses). Negative: Increase in area of land under covered horticultural production. Loss of areas of traditional horticulture to intensive forms of production or other land uses (including land abandonment).
3.4: Field boundary condition and species	S	Positive: No decrease in the total length of Cornish hedgebank or tree field boundaries *(NB cross refer to 2.4: Field patterns indicator*). Maintain levels of tree cover, particularly tamarisk. Any new lengths constructed of slate and/or quartzite in sympathy with local building styles. Negative; Decrease in the total length of Cornish hedgebank or tree field boundaries *(NB cross refer to 2.4: Field patterns indicator*). Decrease in overall tree cover. New hedges planted with uncharacteristic species (e.g. not tamarisk where it is characteristic) and constructed of stone other than slate or quartzite.
3.5: Extent [and condition] of designed landscapes	S	Positive: Maintenance of or increase in extent of designed landscapes. No change or an improvement in the overall landscape condition. Negative: Decrease in the overall extent of parklands. Decline in the overall landscape condition.
3.8: Levels of fishing industry activity	S	Positive: No decline in the overall number of active fishing fleets Negative: Decline in the overall number of active fishing fleets.
MAXIMUM LMU SCORES	**10** **9**	P = Primary Indicators S = Secondary Indicators

Table 3: Forces for change acting upon the landscape elements to be monitored

	Climate change					Development pressures										Land use changes										Woodland managament changes				WFD response		Industry change		Forces for change identified in exisitng landscape assessments
	Sea level rise/stormy conditions	Coastal squeeze	Increased frequency of droughts	More frequent river flooding	Increased visitor pressure	Tourism developments incl caravan sites, increased signage, car parks	Marine and beach developments (incl demand for moorings)	Housing developments (incl affordable housing due to high house prices)	Industrial and commercial developments	Demand for second homes	Increased light pollution	Deamnd for better communications (e.g aerials, masts)	Sustainable design of new builds	Increase in commuter and tourist traffic incl traffic calming measures and road improvements	Losting up of agricultural land at sale	Wind farms (on-shore and off-shore) and other RE developments	Reservoirs/water storage	Minerals extraction/quarrying	Non-food crops e.g. bioenergy, industrial - intensification of lowland areas	Longer growing season/higher CO2 levels for new crops	Horticultural expansion - fav. growing conditions, consumer demand	Intensification of production (particularly arable) incl associated infrastructure	Livestock farming changes (reduction in cattle, reduced grazing in uplands, reduced grazing on marginal land)	Farm diversification and hobby farming eg horseyculture	Recreational uses eg golf courses, recreational boating	Decline in local and traditional land/woodland management and building skills	New species of different provenance eg Douglas Fir to respond to climate change	Increased planting in floodplain areas eg SRC	Afforestation (incl due to favourable growing conditions or for carbon sequestration)	Increased growth rates and productivity	Reduced intensity of agriculture to meet WFD targets	Measures to reduce diffuse pollution eg buffer strips, planting next to watercourses, etc	Decline in traditional industries	Local quarry closures	
LMU C14																																		
rocky coastal cliffs broken by sandy bays and backed by gently undulating plateau																																		
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Lowland heath																																		Lack of financial incentives to manage stock on heathland
slate/quartzite wildflower-rich hedges																																		
Varying scale of fields, mainly medium to large sized bounded by a mixture of straight and sinuous Cornish hedges (often Tamarisk), with trees around smaller fields																																		
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Arable fields along coast including early crops of potatoes and cauliflower																																		Extensive use of shiny plastic mulches covering early crops
Disused mine buildings, engine houses and waste ground along coast from tin and copper mining																																		
Designed landscapes and gardens e.g. Trevarno																																		
Dispersed settlement with many hamlets and villages linked by winding minor roads, older settlements centred on a church																																		Some recent expansion of villages
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<tr><td>2.2: Agricultural land use</td><td><u>AONB Area Results (South Coast (Western)):</u>
<table>
<tr><th>Grassland categories</th><th>Hectares</th></tr>
<tr><td>< 5 years & permanent pasture</td><td>8,267</td></tr>
<tr><td>Rough grazing</td><td>1,194</td></tr>
<tr><td>Arable categories:</td><td></td></tr>
<tr><td>Cereals</td><td>1,277</td></tr>
<tr><td>Potatoes</td><td>288</td></tr>
<tr><td>Maize</td><td>387</td></tr>
<tr><td>Root crops</td><td>78</td></tr>
<tr><td>Other</td><td>46</td></tr>
<tr><td>Horticultural categories:</td><td></td></tr>
<tr><td>Orchards</td><td>9</td></tr>
<tr><td>Total horticultural crops</td><td>259</td></tr>
<tr><td>Hardy nursery stock bulbs and flowers</td><td>296</td></tr>
<tr><td colspan="2">Number of holdings in different size categories:</td></tr>
<tr><td><5 ha:</td><td>124</td></tr>
<tr><td>5-10 ha:</td><td>40</td></tr>
<tr><td>10-20 ha:</td><td>39</td></tr>
<tr><td>Over 20 ha</td><td>154</td></tr>
</table>
<u>The AONB should collect information from a representative sample of farmers within the LMU to further pinpoint agricultural land use.</u></td><td>AONB area

LMU</td><td>Defra June Agricultural Census (2007)

2008/9 data collection</td><td>2013/14</td></tr>
<tr><td>2.3: Extent of biomass planting</td><td><u>There are currently no agreements for Energy Crops planting through the Energy Crops Scheme in this LMU. The AONB should check the Defra dataset every two years to monitor this.</u></td><td>LMU</td><td>Defra ECS data (2008)</td><td>2010</td></tr>
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<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td>2.4: Field pattern</td><td>Total length of field boundaries by sample square:
Sample square SW5728
<table><tr><th>Boundary / feature type</th><th>Length (m)</th></tr><tr><td>Cornish hedgebank</td><td>11,132</td></tr><tr><td>Wooded</td><td>2,304</td></tr></table>Sample square SW6522
<table><tr><th>Boundary / feature type</th><th>Length (m)</th></tr><tr><td>Cornish hedgebank</td><td>10,509</td></tr><tr><td>Wooded</td><td>940</td></tr></table>Field boundary pattern by sample square:
<table><tr><th>Sample square</th><th>Total sinuous (m)</th><th>Total straight (m)</th></tr><tr><td>SW5728</td><td>4,311</td><td>9,621</td></tr><tr><td>SW6522</td><td>2,296</td><td>10,201</td></tr></table>Average field size by sample square:
Sample square SW4235: 1.3 ha
Sample square SW4436: 0.4 ha</td><td>Sample squares</td><td>Cornwall aerial photographs (2005)</td><td>2010/11</td></tr>
<tr><td>2.5: Extent of semi-natural habitats</td><td>Habitat calculations:
<table><tr><th>Habitat</th><th>Area (ha)</th></tr><tr><td>Dwarf shrub heath (broad habitat)</td><td>22.3</td></tr><tr><td>Wetland</td><td>43.1</td></tr><tr><td>Dunes</td><td>7.2</td></tr><tr><td>Maritime cliff</td><td>24.3</td></tr></table>NB see the ArcReader Project and Excel spreadsheet for a further breakdown of heathland habitat types found in this LMU</td><td>LMU</td><td>Cornwall LIFE data (1995)</td><td>2013/14</td></tr>
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<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td>2.6: Presence [and condition] of historic landscape features</td><td>Number of extant features:<table><tr><th>Age classification</th><th>Number of features in 2 sample squares</th></tr><tr><td>Prehistoric</td><td>1</td></tr><tr><td>Historic</td><td>1</td></tr><tr><td>Post Medieval</td><td>8</td></tr><tr><td>Modern</td><td>5</td></tr><tr><td>Unknown</td><td>1</td></tr><tr><td>TOTAL</td><td>16</td></tr></table>Condition of features
Information to be obtained from the World Heritage site team for the LMU's mining features.
Information on the condition of historic features could be obtained through the Heritage at Risk project (English Heritage).</td><td>Sample square</td><td>Cornwall CC Historic Environment Record (April 2008)

Potential future monitoring in conjunction with the Historic Environment Service/Heritage at Risk Project (July 2008)
World Heritage Site monitoring programme</td><td>2013/14</td></tr>
<tr><td>2.7: Settlement pattern</td><td>Total area of development categories:<table><tr><th>Category</th><th>Area (ha)</th><th>No. of caravans/tents</th></tr><tr><td>Permanent</td><td>14.6</td><td></td></tr><tr><td>Chalet /static caravan</td><td>5.1</td><td>151</td></tr><tr><td>Temp. caravans/tents</td><td>5.2</td><td>128</td></tr></table>Refer to the Arc Reader project for settlement distribution within the sample squares.</td><td>Sample squares</td><td>Cornwall aerial photographs (2005)</td><td>2010/11</td></tr>
<tr><td>2.8: Transport infrastructure</td><td>Baseline to be established through community survey (primary data)</td><td>Sample squares</td><td>Community survey 2008/9</td><td>2013/14</td></tr>
<tr><td>2.10: Development at sea</td><td>AONB to collect information from the Local Planning Authority on any proposals for off-shore developments.</td><td>AONB area</td><td>LPA records (2008/9)</td><td>2010</td></tr>
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<tr><td>3.1: Extent of covered horticultural production</td><td>Baseline to be established through field survey</td><td>Sample square</td><td>Field survey 2008</td><td>2013/14</td></tr>
<tr><td>3.4: Field boundary condition and species</td><td>Baseline to be established through field survey</td><td>Sample square</td><td>Field survey 2008</td><td>2013/14</td></tr>
<tr><td>3.5: Extent [and condition] of designed landscapes</td><td>Designed landscapes within and beyond the LMU:
<table><tr><th>Name of parkland</th><th>Area in LMU (ha)</th><th>Total area (ha)</th></tr><tr><td colspan="3">GRADE II</td></tr><tr><td>St Michael’s Mount</td><td>9.5</td><td>10.0</td></tr></table><u>Condition of designed landscapes:</u>
<u>The AONB should link in with English Heritage’s Landscapes at Risk project, which is due to report in July 2008.</u></td><td>LMU</td><td>Register of Parks and Gardens of Special Historic Interest (2006, English Heritage)

Potential future monitoring in conjunction with the Historic Environment Service/Landscapes at Risk Project (July 2008)</td><td>2013/14</td></tr>
<tr><td>3.8: Levels of fishing industry activity</td><td>Total number of active fishing fleets:<table><tr><th>Harbour</th><th>Number of active fishing vessels</th></tr><tr><td>St Michael’s Mount</td><td>1</td></tr><tr><td>Porthleven</td><td>18</td></tr><tr><td>Mullion</td><td>2</td></tr><tr><td>TOTAL</td><td>21</td></tr></table></td><td>LMU</td><td>Cornwall Sea Fisheries Survey (December 2006)</td><td>2013/14</td></tr>
</table>

LMU CODE: C15

Location

Links to the Living Landscapes Character Areas

Constituent CAs: CA07

Constituent LDUs: 263, 264, 291, 294, 295, 364, 261, 292, 293

Table 1: Indicators selected to monitor changes in landscape character

Character statement	Indicators selected by statement
Dominated by undulating exposed heathland plateau (downs) cut by narrow river valleys. Surrounding **rugged coastline**.	1.4: Coastal change (coastal erosion) 2.10: Development at sea
Sheltered, rolling landscape off the downs with small valleys and derelict **coastal quarries**.	1.2: Levels of intrusion 1.4: Coastal change (coastal erosion) 2.6: Presence [and condition] of historic landscape features
Recent **conifer plantations** on generally treeless plateau which affords **extensive views**. Stunted patches of **woodland cover** in the steep valleys which dissect the moorland. **Small woodlands** and **copses** in the more sheltered areas.	2.1: Extent of woodland and tree cover / type
Extensive **heathland** with heather and moorland grasses on the plateau with some patches of **cliff-top heathland**. Wildflower-filled coves along coast.	1.5: SSSI condition 2.5: Extent of semi-natural habitats
Rough grazing pasture fringing the plateau. More productive land dominated by **pasture**, with some **arable**.	2.2: Agricultural land use 2.3: Extent of biomass planting 3.3: Presence of traditional livestock types
Rectangular fields of recent enclosure of rough ground; **smaller, irregular shaped ancient fields** are enclosed by traditional **Cornish hedges** with hedgerow trees.	2.4: Field patterns
Bronze Age barrows on the downs, **ancient trackways**, and **prehistoric defended farming settlements** (rounds). Evidence of **military heritage**. Prominent **lighthouse** at Lizard Point.	2.6: Presence [and condition] of historic landscape features 3.7: Presence of navigation marks
Dispersed settlement pattern, linked by **minor lanes**, with **ancient hamlets** and **farmsteads** concentrated in the valleys and **main settlements** along the coastline.	1.1: Levels of tranquillity 1.2: Levels of intrusion 1.3: Extent of dark night skies 2.7: Settlement pattern 2.8: Transport infrastructure
Simple traditional buildings, constructed of **local stone** and **thatch**. Older buildings are **whitewashed.** Coastal/**fishing villages**.	2.9: Local vernacular building styles 3.8: Levels of fishing industry activity
Tourism-led development around the coastline. **Wind farm** and **BT Earth station** on Goonhilly Down are dominant features.	1.2: Levels of intrusion 2.7: Settlement pattern

Table 2: The condition criteria for the selected indicators

Indicators selected for the LMU	Score code	Desired trajectories of change
1.1: Levels of tranquillity	AA	Positive: Maintenance or improvement in overall levels of tranquillity Negative: Decline in overall levels of tranquillity
1.2: Levels of intrusion	AA	Positive: Maintenance or improvement in current absence of intrusion Negative: Increase in overall levels of intrusion
1.3: Extent of dark night skies	A	Positive: Maintenance of or increase in overall extent of dark night skies Negative: Decline in overall extent of dark night skies
1.4: Coastal change	AA	Positive: No loss of characteristic features along the coast through erosion / sea level rise Negative: Loss of characteristic features along the coast through erosion / sea level rise
1.5: SSSI condition	AA	Positive: SSSIs are in favourable condition. Where sites are not in favourable condition, there has been an improvement in condition status from previous assessments. Negative: SSSIs are in unfavourable condition. Condition status has declined from previous assessments.
2.1: Extent of woodland and tree cover/type	P	Positive: No further increase in the area of conifer plantation. Increase in area of conifer conversion to native woodland. Maintenance of or increase in extent of woodland on valley sides and sheltered areas. Negative: Increase in woodland cover on the plateau (particularly conifer plantation. Decrease in woodland cover on valley sides/in sheltered areas.
2.2: Agricultural land use	P	Positive: Maintenance of or increase in the extent of rough grazing land on or fringing the plateau and coastal edge. Maintain current mix of land uses surrounding the plateau. Decrease in the extent of arable; increase in the extent of pasture. Negative: Decrease in the extent of rough grazing land on the plateau or cliff tops. Increase in the extent of arable at the expense of pasture.
2.3: Extent of biomass planting	S	Positive: No loss of permanent pasture or semi-natural habitats to biomass planting. Biomass planting incorporated within existing areas of cultivated land or woodland, respecting or enhancing characteristic field and woodland patterns. Negative: Biomass planting located within permanent pastoral farmland, outside cultivated land or on the site of semi-natural habitats identified at the time of the baseline survey. The geometric shapes of areas of biomass planting interrupt characteristic field and/or woodland patterns.

Indicators selected for the LMU	Score code	Desired trajectories of change
2.4: Field pattern	P	Positive: Maintenance of the remaining ancient field pattern. Maintenance of the overall length of field boundaries. No increase or a decrease in average field size. Ancient field pattern restored in places. Negative: Increase in areas of regular field pattern. Increase in average field size.
2.5: Extent of semi-natural habitats	P	Positive: Maintenance of or increase in the extent of semi-natural habitats characteristic to the LMU. Negative: Decrease in or fragmentation of the extent of semi-natural habitats characteristic to the LMU.
2.6: Presence [and condition] of historic landscape features	S	Positive: Numbers of recorded above-ground features are stable or increase from baseline numbers. No decline in the overall condition of historic features. Negative: Decrease in the number of above-ground features recorded. Decline in the overall condition of historic features.
2.7: Settlement pattern	P	Positive: No spread of development outside settlement curtilages. No new development on the plateau. Decrease in the number and size of camping/caravan sites and other tourism developments, particularly along the coast. No increase in the size of farmsteads. Negative: New development located outside settlement boundaries. New development located on the plateau. Increase in the number and size of camping/caravan sites and other tourism developments along the coast. Increase in the size of farmsteads.
2.8: Transport infrastructure	S	Positive: Maintenance of or decrease in levels of road engineering works, signage and other road furniture. Negative: Increase in levels of road engineering works, signage and other road furniture. Loss of any distinctive types of signage (e.g. finger posts/milestones).
2.9: Local vernacular building styles	S	Positive: New housing/permitted development in sympathy with traditional building character as defined in the baseline surveys. Negative: New housing/permitted development detracts from traditional building character as defined in the baseline surveys.
2.10: Development at sea	AA	Positive: No visible 'industrial scale' developments in view of the coast. Negative: Introduction of 'industrial scale' development visible from the coast.

Indicators selected for the LMU	Score code	Desired trajectories of change
3.3: Presence of traditional livestock types	S	Positive: Maintenance of the total number of cattle and/or ponies used for rough grazing. Increase in the overall proportion of upland, hardy livestock types used compared to commercial types. No increase in sheep numbers. Negative: Significant change in the total number of cattle and/or ponies used for rough grazing (increase or decrease). Decrease in the overall proportion of hardy upland livestock types used compared to commercial types. Increase in sheep numbers.
3.7: Presence of navigation marks	S	Positive: Navigation marks in active use. Negative: Navigation marks no longer in use.
3.8: Levels of fishing industry activity	S	Positive: No decline in the overall number of active fishing fleets Negative: Decline in the overall number of active fishing fleets.
MAXIMUM LMU SCORES	**10** **7**	P = Primary Indicators S = Secondary Indicators

Table 3: Forces for change acting upon the landscape elements to be monitored

	Climate change					Development pressures									Land use changes										Woodland managament changes				WFD response		Industry change		Forces for change identified in exisitng landscape assessments
	Sea level rise/stormy conditions	Coastal squeeze	Increased frequency of droughts	More frequent river flooding	Increased visitor pressure	Tourism developments incl caravan sites, increased signage, car parks	Marine and beach developments (incl demand for moorings)	Housing developments (incl affordable housing due to high house prices)	Industrial and commercial developments	Demand for second homes	Increased light pollution	Deamnd for better communications (e.g aerials, masts)	Sustainable design of new builds	Increase in commuter and tourist traffic incl traffic calming measures and road improvements	Losing up of agricultural land at sale	Wind farms (on-shore and off-shore) and other RE developments	Reservoirs/water storage	Minerals extraction/quarrying	Non-food crops e.g. bioenergy, industrial - intensification of lowland areas	Longer growing season/higher CO2 levels for new crops	Horticultural expansion - fav. growing conditions, consumer demand	Intensification of production (particularly arable) incl associated infrastructure	Livestock farming changes (reduction in cattle, reduced grazing in uplands, reduced grazing on marginal land)	Farm diversification and hobby farming eg horseyculture	Recreational uses eg golf courses, recreational boating	Decline in local and traditional land/woodland management and building skills	New species of different provenance eg Douglas Fir to respond to climate change	Increased planting in floodplain areas eg SRC	Afforestation (incl due to favourable growing conditions or for carbon sequestration)	Increased growth rates and productivity	Reduced intensity of agriculture to meet WFD targets	Measures to reduce diffuse pollution eg buffer strips, planting next to watercourses, etc	Decline in traditional industries	Local quarry closures	
LMU C15																																	
exposed heathland plateau (downs) cut by narrow river valleys. Surrounding rugged coastline.	■	■	■		■	■	■																■		■								
Recent conifer plantations on generally treeless plateau																												■	■				Conifer plantations and increase in woodland cover identified as pressures
Stunted patches of woodland cover in the steep valleys which dissect the moorland. Small woodlands and copses in the more sheltered areas.			■	■																					■			■	■	■				
Extensive heathland with heather and moorland grasses on the plateau			■		■	■						■				■								■					■				Lack of management of marginal land and neglect of important habitats
some patches of cliff-top heathland	■	■	■		■	■													■	■	■	■	■		■								Lack of management of marginal land and neglect of important habitats; decline in cliff-top grazing identified
Wildflower-filled coves along coast	■	■	■	■	■	■	■												■	■													
Rectangular fields of recent enclosure of rough ground																			■	■	■	■											
Smaller, irregular shaped ancient fields are enclosed by traditional Cornish hedges with hedgerow trees																			■	■	■	■				■							Removal of hedges an issue
Rough grazing pasture fringing the plateau. More productive land dominated by pasture, with some arable.			■													■			■	■	■	■	■								■	■	
derelict coastal quarries.	■	■			■																												
Bronze Age barrows on the downs, ancient trackways, and prehistoric defended farming settlements (rounds). Evidence of military heritage.	■	■			■	■						■				■							■		■	■							
Dispersed settlement pattern, linked by minor lanes, with ancient hamlets and farmsteads concentrated in the valleys and main settlements/fishing villages along the coastline.	■	■			■	■		■		■				■	■																		Tourism facilities in villages identified as pressure; consolidation of farms leaving isolated dwellings in the countryside; modern road layout
Simple traditional buildings, constructed of local stone and thatch. Older buildings are whitewashed.					■	■	■	■		■			■		■										■								
Tourism-led development around the coastline					■	■	■																										Inappropriate development in south particularly around Lizard village
Wind farm and BT Earth station on Goonhilly Down are dominant features.												■			■	■																	

Table 4: Baseline results

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<u>The AONB should collect information from a representative sample of farmers within the LMU to further pinpoint agricultural land use.</u></td><td>AONB area

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<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td>2.4: Field pattern</td><td>Total length of field boundaries by sample square:
Sample square SW7114
<table><tr><th>Boundary / feature type</th><th>Length (m)</th></tr><tr><td>Cornish hedgebank</td><td>11,736</td></tr><tr><td>Wooded</td><td>4,242</td></tr></table>Sample square SW7117
<table><tr><th>Boundary / feature type</th><th>Length (m)</th></tr><tr><td>Cornish hedgebank</td><td>5,234</td></tr><tr><td>Wooded</td><td>10,451</td></tr><tr><td>Stone wall</td><td>113</td></tr></table>Field boundary pattern by sample square:
<table><tr><th>Sample square</th><th>Total sinuous (m)</th><th>Total straight (m)</th></tr><tr><td>SW7114</td><td>7,965</td><td>8,169</td></tr><tr><td>SW7117</td><td>11,450</td><td>4,402</td></tr></table>Average field size by sample square:
Sample square SW7114: 2.2 ha
Sample square SW4436: 2.2 ha</td><td>Sample squares</td><td>Cornwall aerial photographs (2005)</td><td>2010/11</td></tr>
<tr><td>2.5: Extent of semi-natural habitats</td><td>Habitat calculations:
<table><tr><th>Habitat</th><th>Area (ha)</th></tr><tr><td>Dwarf shrub heath (broad habitat)</td><td>1,008.1</td></tr><tr><td>Unimproved grassland</td><td>0.5</td></tr></table>NB see the ArcReader Project and Excel spreadsheet for a further breakdown of heathland habitat types found in this LMU</td><td>LMU</td><td>Cornwall LIFE data (1995)</td><td>2013/14</td></tr>
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<tr><td>2.6: Presence [and condition] of historic landscape features</td><td>Number of extant features:
<table><tr><th>Age classification</th><th>Number of features in 2 sample squares</th></tr><tr><td>Prehistoric</td><td>1</td></tr><tr><td>Historic</td><td>4</td></tr><tr><td>Post Medieval</td><td>5</td></tr><tr><td>TOTAL</td><td>10</td></tr></table>Condition of features
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<tr><td>2.7: Settlement pattern</td><td>Total area of development categories:
<table><tr><th>Category</th><th>Area (ha)</th><th>No. of caravans/tents</th></tr><tr><td>Permanent</td><td>13.4</td><td></td></tr><tr><td>Agricultural glasshouses</td><td>0.1</td><td></td></tr></table>Refer to the Arc Reader project for settlement distribution within the sample squares.</td><td>Sample squares</td><td>Cornwall aerial photographs (2005)</td><td>2010/11</td></tr>
<tr><td>2.8: Transport infrastructure</td><td>Baseline to be established through community survey</td><td>Sample squares</td><td>Community survey 2008/9</td><td>2010</td></tr>
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<tr><td>3.3: Presence of traditional livestock types</td><td>Baseline to be established through a questionnaire survey of sample farms.
There are currently 9 HLS agreements which include the ‘Native Breeds at Risk Supplement’ (HR2), covering 32.5 ha.</td><td>Sample square/LMU

LMU</td><td>Questionnaire survey 2008/9

HLS scheme data (2008)</td><td>2009/10 (repeated annually)</td></tr>
</table>

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td>3.7: Presence of navigation marks</td><td>Number of navigation marks: 1 (lit): Lizard Point</td><td>LMU</td><td>Admiralty Leisure (2007) Leisure Chart Portfolio, Falmouth to Teignmouth: SC5602</td><td>2013/14</td></tr>
<tr><td>3.8: Levels of fishing industry activity</td><td>Total number of active fishing fleets:<table><tr><th>Harbour</th><th>Number of active fishing vessels</th></tr><tr><td>Lizard Point</td><td>4</td></tr><tr><td>Kilcobben Cove</td><td>1</td></tr><tr><td>Cadgwith</td><td>9</td></tr><tr><td>TOTAL</td><td>14</td></tr></table></td><td>LMU</td><td>Cornwall Sea Fisheries Survey (December 2006)</td><td>2013/14</td></tr>
</table>

LMU CODE: C16

Location

Links to the Living Landscapes Character Areas

Constituent CAs: CA08, CA09, CA10, CA13

Constituent LDUs: 062, 063, 064, 065, 066, 104, 125, 156, 367, 368, 369, 105, 106, 163, 157, 259, 260, 365, 366

Table 1: Indicators selected to monitor changes in landscape character

Character statement	Indicators selected by statement
Tidal **river system**, intersected by **creeks** and fed by tributary streams.	1.4: Coastal change (coastal erosion) 2.10: Development at sea
River, creeks and streams fringed by dense woodland (mainly **ancient sessile oak**). Prominent stands of **Monterey Pine**.	2.1: Extent of woodland and tree cover / type
Low cliffs at river mouth with areas of **coastal heath** and **rough grassland**. **Intertidal mudflats** and **saltmarsh.**	1.5: SSSI condition 2.5: Extent of semi-natural habitats 3.2: Extent of traditional orchards
Rough grazing along the coast, and **wet grazing land** in the valley bottoms. Some remnant **orchards.**	2.2: Agricultural land use 2.3: Extent of biomass planting 3.1: Extent of traditional orchards
Irregular and **rectilinear pasture** and **mixed** fields enclosed by **stone-faced hedges**.	2.4: Field patterns
Small quays and **jetties** along creeks form landmarks – from medieval tin and copper export, fishing and other trade.	2.6: Presence [and condition] of historic landscape features
Designed parkland and **estate landscapes** with extensive collections of **exotic trees**, e.g Trelowarren and Trebah.	3.5: Extent [and condition] of designed landscapes 2.1: Extent of woodland and tree cover / type
Sparsely scattered villages clustered around creeks, at creek heads, or crossroads. **Isolated farmsteads**. **Fishing villages** along the east coast, including the small pilchard and crab potting village of Coverack.	1.1: Levels of tranquillity 1.2: Levels of intrusion 1.3: Extent of dark night skies 2.7: Settlement pattern 3.8: Levels of fishing industry activity
White cottages with colourful gardens.	2.9: Local vernacular building styles
Network of **narrow, winding roads** runs between high hedgebanks and walls, topped by trees	2.8: Transport infrastructure
Recreational boating mixed with **open water fishing** and **shellfishery**. **Passenger ferries** link Helford with Helford Passage and Glendurgan gardens.	3.8: Levels of fishing industry activity 3.9: Number of moorings 3.10: Presence of local car and passenger ferries

Table 2: The condition criteria for the selected indicators

Indicators selected for the LMU	Score code	Desired trajectories of change
1.1: Levels of tranquillity	AA	Positive: Maintenance or improvement in overall levels of tranquillity Negative: Decline in overall levels of tranquillity
1.2: Levels of intrusion	AA	Positive: Maintenance or improvement in current absence of intrusion Negative: Increase in overall levels of intrusion
1.3: Extent of dark night skies	A	Positive: Maintenance of or increase in overall extent of dark night skies Negative: Decline in overall extent of dark night skies
1.4: Coastal change	AA	Positive: No loss of characteristic features along the coast through erosion / sea level rise Negative: Loss of characteristic features along the coast through erosion / sea level rise
1.5: SSSI condition	AA	Positive: SSSIs are in favourable condition. Where sites are not in favourable condition, there has been an improvement in condition status from previous assessments. Negative: SSSIs are in unfavourable condition. Condition status has declined from previous assessments.
2.1: Extent of woodland and tree cover/type	P	Positive: Maintenance of or increase in woodland cover along watercourses, including through re-linking areas of ancient oak woodland. Maintenance of or increase in the number of Monterey Pine stands. Negative: Decrease in or fragmentation of woodland cover along watercourses. Decrease in the number of Monterey Pine stands.
2.2: Agricultural land use	P	Positive: Maintenance of the current mix of land uses. Maintenance of or increase in the extent of pasture and/or rough/wet grazing land. Reduction in the area of arable cultivation. Negative: Increase in the extent of arable; decrease in the area of pasture and/or rough/wet grazing land.
2.3: Extent of biomass planting	S	Positive: No loss of permanent pasture or semi-natural habitats to biomass planting. Biomass planting incorporated within existing areas of cultivated land or woodland, respecting or enhancing characteristic field and woodland patterns. Negative: Biomass planting located within permanent pastoral farmland, outside cultivated land or on the site of semi-natural habitats identified at the time of the baseline survey. The geometric shapes of areas of biomass planting interrupt characteristic field and/or woodland patterns.
2.4: Field pattern	P	Positive: No increase or a decrease in average field size. Irregular field pattern restored in areas it had been lost. Negative: Increase in the area of land with regular field patterns. Increase in average field size.

Indicators selected for the LMU	Score code	Desired trajectories of change
2.5: Extent of semi-natural habitats	P	Positive: Maintenance of or increase in the extent of semi-natural habitats characteristic to the LMU. Negative: Decrease in or fragmentation of the extent of semi-natural habitats characteristic to the LMU.
2.6: Presence [and condition] of historic landscape features	S	Positive: Numbers of recorded above-ground features are stable or increase from baseline numbers. No decline in the overall condition of historic features. Negative: Decrease in the number of above-ground features recorded. Decline in the overall condition of historic features.
2.7: Settlement pattern	P	Positive: Maintenance of the clustered settlement pattern of villages and the isolated character of farmsteads. No new development outside settlement curtilages, including tourism related developments. Negative: New development located outside settlement curtilages, including tourism/amenity developments on farms. Increase in farmstead size.
2.8: Transport infrastructure	S	Positive: Maintenance of or decrease in levels of road engineering works, signage and other road furniture. Negative: Increase in levels of road engineering works, signage and other road furniture. Loss of any distinctive types of signage (e.g. finger posts/milestones).
2.9: Local vernacular building styles	S	Positive: New housing/permitted development in sympathy with traditional building character as defined in the baseline surveys. Negative: New housing/permitted development detracts from traditional building character as defined in the baseline surveys.
2.10: Development at sea	AA	Positive: No visible 'industrial scale' developments in view of the coast. Negative: Introduction of 'industrial scale' development visible from the coast.
3.2: Extent of traditional orchards	S	Positive: No loss in the total area of traditionally managed orchards. New areas of traditional orchard planting. Negative: Loss in the total area of traditionally managed orchards.
3.5: Extent [and condition] of designed landscapes	S	Positive: Maintenance of or increase in extent of designed landscapes. No change or an improvement in the overall landscape condition. Negative: Decrease in the overall extent of parklands. Decline in the overall landscape condition.

Indicators selected for the LMU	Score code	Desired trajectories of change
3.8: Levels of fishing industry activity	S	Positive: No decline in the overall number of active fishing fleets. Negative: Decline in the overall number of active fishing fleets.
3.9: Number of moorings	S	Positive: No new locations used for moorings. No increase in the size and/or density of existing areas of moorings. Negative: Mooring areas developed in new locations. Increase in the size and/or density of existing moorings.
3.10: Presence of local car and passenger ferries	S	Positive: Continued presence of local car/passenger ferries. Negative: Removal of ferry services from previous crossing points.
MAXIMUM LMU SCORES	**10**	P = Primary Indicators
	9	S = Secondary Indicators

Table 3: Forces for change acting upon the landscape elements to be monitored

	Climate change					Development pressures										Land use changes											Woodland managament changes				WFD response		Industry change		Forces for change identified in exisitng landscape assessments
	Sea level rise/stormy conditions	Coastal squeeze	Increased frequency of droughts	More frequent river flooding	Increased visitor pressure	Tourism developments incl caravan sites, increased signage, car parks	Marine and beach developments (incl demand for moorings)	Housing developments (incl affordable housing due to high house prices)	Industrial and commercial developments	Demand for second homes	Increased light pollution	Deamnd for better communications (e.g aerials, masts)	Sustainable design of new builds	Increase in commuter and tourist traffic incl traffic calming measures and road improvements	Losting up of agricultural land at sale	Wind farms (on-shore and off-shore) and other RE developments	Reservoirs/water storage	Minerals extraction/quarrying	Non-food crops e.g. bioenergy, industrial - intensification of lowland areas	Longer growing season/higher CO2 levels for new crops	Horticultural expansion - fav. growing conditions, consumer demand	Intensification of production (particularly arable) incl associated infrastructure	Livestock farming changes (reduction in cattle, reduced grazing in uplands, reduced grazing on marginal land)	Farm diversification and hobby farming eg horseyculture	Recreational uses eg golf courses, recreational boating	Decline in local and traditional land/woodland management and building skills	New species of different provenance eg Douglas Fir to respond to climate change	Increased planting in floodplain areas eg SRC	Afforestation (incl due to favourable growing conditions or for carbon sequestration)	Increased growth rates and productivity	Reduced intensity of agriculture to meet WFD targets	Measures to reduce diffuse pollution eg buffer strips, planting next to watercourses, etc	Decline in traditional industries	Local quarry closures	
LMU C16																																			
Tidal river system, intersected by creeks and fed by tributary streams																																			In the creeks, overuse of river and its resources e.g. shell fishing
River, creeks and streams fringed by dense woodland (mainly ancient sessile oak).																																			Some woodlands poorly managed - invasion of beech/sycamore in oak woodlands
Prominent stands of Montrey Pine.																																			
Low cliffs at river mouth with areas of coastal heath and rough grassland.																			❍																
Intertidal mudflats and saltmarsh.																																			Enlarged and improved accesses to the river causing impacts
Irregular and rectilinear fields enclosed by stone-faced hedges																			❍																Some hedges suffering from lack of management
Mixed agriculture																			❍																Further conversion of pasture to arable; biofuels (identified as pressure)
Rough grazing along the coast, and wet grazing land in the valley bottoms																			❍																
Designed parkland and estate landscapes																																			
Small quays and jetties along creeks form landmarks																																			Many old quays in poor condition
Network of narrow, winding roads runs between high hedgebanks and walls																																			Widening and straightening of roads identified as a pressure
Sparsely scattered villages clustered around creeks, at creek heads, or crossroads. Isolated farmsteads. Fishing villages along the east coast																																			Demand for housing around settlements; consolidation of farms
White cottages with colourful gardens.																																			
Recreational boating mixed with open water fishing and shellfishery																																			

❍= area identified as a ‘moderately high’ opportunity location for miscanthus growing in terms of landscape considerations (Scott Wilson and Land & Landscape Management Ltd, 2004)

Table 4: Baseline results

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td>1.1: Levels of tranquillity</td><td><u>AONB Area Results (South Coast (Western))</u>
<table><tr><th>Category of tranquillity</th><th>Score</th></tr><tr><td>Highest</td><td>43.3</td></tr><tr><td>Lowest</td><td>-43.0</td></tr><tr><td>Mean</td><td>14.5</td></tr></table></td><td>AONB area</td><td>CPRE (2007)</td><td>2013/14</td></tr>
<tr><td>1.2: Levels of intrusion</td><td><u>AONB Area Results (South Coast (Western))</u>
<table><tr><th>Category of intrusion</th><th>Area (ha)</th><th>1997 area (ha)</th></tr><tr><td>Disturbed</td><td>35</td><td>0</td></tr><tr><td>Undisturbed</td><td>2,374</td><td>0</td></tr><tr><td>Urban</td><td>0</td><td>0</td></tr></table>Number of off-shore windfarms: 0</td><td>AONB area</td><td>CPRE (2007)

BWEA (2008)</td><td>2013/14</td></tr>
<tr><td>1.3: Extent of dark night skies</td><td><u>Cornwall AONB Results</u>
<table><tr><th>Category of darkness</th><th>Area (ha)</th><th>1993 area (ha)</th></tr><tr><td>0-1.7</td><td>277</td><td>258</td></tr><tr><td>1.7-50</td><td>442</td><td>527</td></tr><tr><td>50-150</td><td>238</td><td>171</td></tr><tr><td>150-240</td><td>3</td><td>4</td></tr><tr><td>240-255</td><td>0</td><td>0</td></tr></table><u>Number of stars in the Orion constellation</u>: <u>The AONB is to organise a ‘star count’ to inform this indicator.</u>

<u>Fixed point photography</u>: <u>AONB to establish locations for fixed point photography to monitor this indicator</u></td><td>AONB

AONB area

LMU</td><td>CPRE (2000)

Primary data (2008/9)

2008/9</td><td>2013/14</td></tr>
</table>

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<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td>1.4: Coastal change</td><td><u>The AONB should follow the work of the Coastal Monitoring Project and explore the possibility of sitting on the Steering Group via the Cornwall and Isles of Scilly Coastal Authorities group.</u></td><td>AONB area</td><td>South West Regional Coastal Monitoring Programme (Plymouth University)</td><td>AONB to contact the Coastal Authorities by end of 2008.</td></tr>
<tr><td>1.5: SSSI condition</td><td><u>AONB Area results (South Coast (Western))</u>
93% Favourable
3% Unfavourable recovering
3% Unfavourable declining
0.5% Part destroyed

See ArcReader Project and Excel Spreadsheet for a breakdown of results for the SSSIs within this LMU.</td><td>AONB area</td><td>Natural England (web-based information)
See Excel Spreadsheet for a breakdown of assessment dates for SSSIs within this LMU.</td><td>2010 (every 2 years)</td></tr>
<tr><td>2.1: Extent of woodland and tree cover/type</td><td><u>Breakdown by woodland type:</u>
<table><tr><th>Woodland type</th><th>Area –ha (NIWT figure)</th></tr><tr><td>Broadleaved</td><td>868.8 (816.4)</td></tr><tr><td>Ancient semi-natural</td><td>132.7</td></tr><tr><td>PAWS</td><td>58.9</td></tr><tr><td>Mixed</td><td>34.1 (74.0)</td></tr><tr><td>Conifer</td><td>107.5 (22.1)</td></tr><tr><td>Scrub</td><td>139</td></tr></table></td><td>LMU</td><td>- Cornwall LIFE dataset (1995)
- Natural England’s Ancient Woodland Inventory (1999)
- National Inventory of Woodland and Trees (2000)</td><td>2013/14</td></tr>
</table>

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<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td>2.2: Agricultural land use</td><td><u>AONB Area Results (South Coast (Western)):</u>
<table>
<tr><th>Grassland categories</th><th>Hectares</th></tr>
<tr><td>< 5 years & permanent pasture</td><td>8,267</td></tr>
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<tr><td>2.4: Field pattern</td><td>Total length of field boundaries by sample square:
Sample square SW7526
<table><tr><th>Boundary / feature type</th><th>Length (m)</th></tr><tr><td>Cornish hedgebank</td><td>2,535</td></tr><tr><td>Wooded</td><td>2,762</td></tr></table>Sample square SW7722
<table><tr><th>Boundary / feature type</th><th>Length (m)</th></tr><tr><td>Cornish hedgebank</td><td>6,981</td></tr><tr><td>Wooded</td><td>4,093</td></tr></table>Field boundary pattern by sample square:
<table><tr><th>Sample square</th><th>Total sinuous (m)</th><th>Total straight (m)</th></tr><tr><td>SW7526</td><td>1,654</td><td>4,250</td></tr><tr><td>SW7722</td><td>6,363</td><td>5,421</td></tr></table>Average field size by sample square:
Sample square SW7526: 1 ha
Sample square SW7722: 3.6 ha</td><td>Sample squares</td><td>Cornwall aerial photographs (2005)</td><td>2010/11</td></tr>
<tr><td>2.5: Extent of semi-natural habitats</td><td>Habitat calculations:
<table><tr><th>Habitat</th><th>Area (ha)</th></tr><tr><td>Dwarf shrub heath (broad habitat)</td><td>29.8</td></tr><tr><td>Wetland</td><td>33.2</td></tr><tr><td>Maritime cliff</td><td>0.5</td></tr><tr><td>Saltmarsh</td><td>0.3</td></tr></table>NB see the ArcReader Project and Excel spreadsheet for a further breakdown of heathland habitat types found in this LMU</td><td>LMU</td><td>Cornwall LIFE data (1995)</td><td>2013/14</td></tr>
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<tr><td>2.9: Local vernacular building styles</td><td><u>Baseline to be established through community survey</u></td><td>Sample squares</td><td>Community survey 2008/9</td><td>2013/14</td></tr>
<tr><td>2.10: Development at sea</td><td><u>AONB to collect information from the Local Planning Authority on any proposals for off-shore developments.</u></td><td>AONB area</td><td>LPA records (2008/9)</td><td>2010</td></tr>
</table>

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td>3.2: Extent of traditional orchards</td><td>Total area of derelict orchards:
0.3 ha</td><td>Sample square</td><td>Cornwall County Council dataset (2002)
Cornwall aerial photographs (2005)</td><td>2010/11</td></tr>
<tr><td>3.5: Extent [and condition] of designed landscapes</td><td>Designed landscapes within and beyond the LMU:
<table>
<tr><th></th><th>Area in LMU (ha)</th><th>Total area (ha)</th></tr>
<tr><td colspan="3">GRADE II</td></tr>
<tr><td>Penjerrick</td><td>9.9</td><td>9.9</td></tr>
<tr><td>Trebah</td><td>9.9</td><td>9.9</td></tr>
<tr><td>Glendurgan</td><td>14.7</td><td>14.7</td></tr>
<tr><td>Trelowarren</td><td>330.3</td><td>370.9</td></tr>
<tr><td>TOTAL</td><td>364.8</td><td></td></tr>
</table>
<u>Condition of designed landscapes:</u>
<u>The AONB should link in with English Heritage's Landscapes at Risk project, which is due to report in July 2008.</u></td><td>LMU</td><td>Register of Parks and Gardens of Special Historic Interest (2006, English Heritage)

Potential future monitoring in conjunction with the Historic Environment Service/Landscapes at Risk Project (July 2008)</td><td>2013/14</td></tr>
<tr><td>3.8: Levels of fishing industry activity</td><td>Total number of active fishing fleets:
<table>
<tr><th>Harbour</th><th>Number of active fishing vessels</th></tr>
<tr><td>Coverack</td><td>10</td></tr>
<tr><td>Porthoustock</td><td>9</td></tr>
<tr><td>Porthallow</td><td>3</td></tr>
<tr><td>Gillan</td><td>3</td></tr>
<tr><td>Helford</td><td>14</td></tr>
<tr><td>TOTAL</td><td>39</td></tr>
</table></td><td>LMU</td><td>Cornwall Sea Fisheries Survey (December 2006)</td><td>2013/14</td></tr>
</table>

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td>3.9: Number of moorings</td><td>Total number of moorings: 750 (max capacity 1,196)</td><td>AONB area</td><td>Pers comm Helford Moorings (March 2008)</td><td>2013/14</td></tr>
<tr><td>3.10: Presence of local car and passenger ferries</td><td>Breakdown by route:<table><tr><th>Route</th><th>Duration</th><th>Frequency</th></tr><tr><td>Helford to Helford Passage (passenger)</td><td>Seasonal</td><td>Daily – on demand</td></tr><tr><td>Helford – Trebah – Glendurgan (passenger)</td><td>Seasonal</td><td>Hourly</td></tr><tr><td>Helford Passage – St Mawes (car)</td><td>Summer</td><td>Daily services</td></tr></table></td><td>AONB area</td><td>Helford River Boats (http://www.helford-river-boats.co.uk/)</td><td>2013/14</td></tr>
</table>

CORNWALL AONB: SOUTH COAST (CENTRAL)

LMU CODE: C17

Location

Links to the Living Landscapes Character Areas

Constituent CAs: CA11, CA13

Constituent LDUs: 058, 102, 103, 161, 405, 415, 329, 167, 328, 416

Table 1: Indicators selected to monitor changes in landscape character

Character statement	Indicators selected by statement
Deepwater ria landscape with many small **tidal creeks** and broad bodies of water. **Long views** across ria shores.	1.4: Coastal change (coastal erosion) 2.10: Development at sea
Diverse **coastal wetland habitats** including muddy creeks, wet grassland and saltmarsh. **Heathy vegetation** on shoreline slopes providing contrast.	1.5: SSSI condition 2.5: Extent of semi-natural habitats
Predominantly **pastoral land use** with mixture **of anciently enclosed land** and **recent regular/rectilinear field patterns**. Fields bounded by **Cornish hedges** with **frequent trees**.	2.2: Agricultural land use 2.3: Extent of biomass planting 2.4: Field patterns
The land around Mylor Bridge retains a special intimate character with significant **parklands** and **woodland** including the Trelissick Estate.	3.5: Extent [and condition] of designed landscapes 2.1: Extent of woodland and tree cover / type
Extensive built development with **many villages** based on former shipbuilding, **fishing** and industrial trade, such as Flushing, Mylor Churchtown, Mylor Bridge, Restronguet Passage and Feock.	1.1: Levels of tranquillity 1.2: Levels of intrusion 1.3: Extent of dark night skies 2.6: Presence [and condition] of historic landscape features 2.7: Settlement pattern 3.8: Levels of fishing industry activity
The town and docks of Falmouth (outside the AONB) are **visually dominant**, providing a marked contrast of character to the ria landscapes. Penryn forms a northern extension to Falmouth.	1.1: Levels of tranquillity 1.2: Levels of intrusion 1.3: Extent of dark night skies 2.7: Settlement pattern
Small cottages or **terraces** with **slate roofs**, **painted** white, cream or pink.	2.9: Local vernacular building styles
The **major road corridor** of the A39 skirts the western edge of the area, off which is a connecting road through to Penryn. Away from the developed areas **small tree-lined lanes connect villages** particularly around Mylor Bridge.	2.8: Transport infrastructure
Many **boats and ships** emphasising marine character. A number of **passenger ferries** operate on the Fal Estuary.	3.9: Number of moorings 3.10: Presence of local car and passenger ferries

Table 2: The condition criteria for the selected indicators

Indicators selected for the LMU	Score code	Desired trajectories of change
1.1: Levels of tranquillity	AA	Positive: Maintenance or improvement in overall levels of tranquillity Negative: Decline in overall levels of tranquillity
1.2: Levels of intrusion	AA	Positive: Maintenance or improvement in current absence of intrusion Negative: Increase in overall levels of intrusion
1.3: Extent of dark night skies	A	Positive: Maintenance of or increase in overall extent of dark night skies Negative: Decline in overall extent of dark night skies
1.4: Coastal change	AA	Positive: No loss of characteristic features along the coast through erosion / sea level rise Negative: Loss of characteristic features along the coast through erosion / sea level rise
1.5: SSSI condition	AA	Positive: SSSIs are in favourable condition. Where sites are not in favourable condition, there has been an improvement in condition status from previous assessments. Negative: SSSIs are in unfavourable condition. Condition status has declined from previous assessments.
2.1: Extent of woodland and tree cover/type	P	Positive: Maintenance of or increase in woodland cover around Mylor Bridge and on the Trelissick Estate. Negative: Decrease in woodland cover around Mylor Bridge and on the Trelissick Estate.
2.2: Agricultural land use	P	Positive: Maintenance of or an increase in the extent of pasture. Decrease in the area of arable or bulb production. Negative: Loss of areas of pasture to other land uses, including to arable and/or bulb production.
2.3: Extent of biomass planting	S	Positive: No loss of permanent pasture or semi-natural habitats to biomass planting. Biomass planting incorporated within existing areas of cultivated land or woodland, respecting or enhancing characteristic field and woodland patterns. Negative: Biomass planting located within permanent pastoral farmland, outside cultivated land or on the site of semi-natural habitats identified at the time of the baseline survey. The geometric shapes of areas of biomass planting interrupt characteristic field and/or woodland patterns.
2.4: Field pattern	P	Positive: No decrease in total field boundary length in areas of irregular field pattern. No increase or a decrease in average field size. Irregular field pattern restored in places. Negative: Increase in the total area of land with regular field pattern. Decrease in the total length of field boundaries. Increase in average field size.
2.5: Extent of	P	Positive: Maintenance of or increase in the extent of semi-natural habitats characteristic to the LMU.

Indicators selected for the LMU	Score code	Desired trajectories of change
semi-natural habitats		Negative: Decrease in or fragmentation of the extent of semi-natural habitats characteristic to the LMU.
2.6:	S	Positive: Numbers of recorded above-ground features are stable or increase from baseline numbers. No decline in the overall condition of historic features. Negative: Decrease in the number of above-ground features recorded. Decline in the overall condition of historic features.
2.7: Settlement pattern	P	Positive: Maintenance of the intimate character of Mylor Bridge with its small villages. No further spread of development along road corridors and outside settlement curtilages. No farm conversions to other uses (e.g. industrial). Negative: New locations of non-residential development (industrial, commercial, tourism related), including on farms. Further spread of development along road corridors and outside settlement curtilages.
2.8: Transport infrastructure	S	Positive: Maintenance of or decrease in levels of road engineering works, signage and other road furniture. Negative: Increase in levels of road engineering works, signage and other road furniture. Loss of any distinctive types of signage (e.g. finger posts/milestones).
2.9: Local vernacular building styles	S	Positive: New housing/permitted development in sympathy with traditional building character as defined in the baseline surveys. Negative: New housing/permitted development detracts from traditional building character as defined in the baseline surveys.
2.10: Development at sea	AA	Positive: No visible 'industrial scale' developments in view of the coast. Negative: Introduction of 'industrial scale' development visible from the coast.
3.5: Extent [and condition] of designed landscapes	S	Positive: Maintenance of or increase in extent of designed landscapes. No change or an improvement in the overall landscape condition. Negative: Decrease in the overall extent of parklands. Decline in the overall landscape condition.
3.8: Levels of fishing industry activity	S	Positive: No decline in the overall number of active fishing fleets. Negative: Decline in the overall number of active fishing fleets.

Indicators selected for the LMU	Score code	Desired trajectories of change
3.9: Number of moorings	S	Positive: No new locations used for moorings. No increase in the size and/or density of existing areas of moorings. Negative: Mooring areas developed in new locations. Increase in the size and/or density of existing moorings.
3.10: Presence of local car and passenger ferries	S	Positive: Continued presence of local car/passenger ferries. Negative: Removal of ferry services from previous crossing points.
MAXIMUM LMU SCORES	**10**	P = Primary Indicators
	8	S = Secondary Indicators

Table 3: Forces for change acting upon the landscape elements to be monitored

	Climate change					Development pressures									Land use changes										Woodland managament changes				WFD response		Industry change		Forces for change identified in exisitng landscape assessments
	Sea level rise/stormy conditions	Coastal squeeze	Increased frequency of droughts	More frequent river flooding	Increased visitor pressure	Tourism developments incl caravan sites, increased signage, car parks	Marine and beach developments (incl demand for moorings)	Housing developments (incl affordable housing due to high house prices)	Industrial and commercial developments	Demand for second homes	Increased light pollution	Deamnd for better communications (e.g aerials, masts)	Sustainable design of new builds	Increase in commuter and tourist traffic incl traffic calming measures and road improvements	Lotting up of agricultural land at sale	Wind farms (on-shore and off-shore) and other RE developments	Reservoirs/water storage	Minerals extraction/quarrying	Non-food crops e.g. bioenergy, industrial - intensification of lowland areas	Longer growing season/higher CO2 levels for new crops	Horticultural expansion - fav. growing conditions, consumer demand	Intensification of production (particularly arable) incl associated infrastructure	Livestock farming changes (reduction in cattle, reduced grazing in uplands, reduced grazing on marginal land)	Farm diversification and hobby farming eg horseyculture	Recreational uses eg golf courses, recreational boating	Decline in local and traditional land/woodland management and building skills	New species of different provenance eg Douglas Fir to respond to climate change	Increased planting in floodplain areas eg SRC	Afforestation (incl due to favourable growing conditions or for carbon sequestration)	Increased growth rates and productivity	Reduced intensity of agriculture to meet WFD targets	Measures to reduce diffuse pollution eg buffer strips, planting next to watercourses, etc	Decline in traditional industries	Local quarry closures	
LMU C17																																	
Deepwater ria landscape with many small tidal creeks and broad bodies of water																																	Flood defences; water recreation linked infrastructure; creeks/rivers subject to siltation
Long views across ria shores																																	
parklands and woodland																																	
Diverse coastal wetland habitats including muddy creeks, wet grassland and saltmarsh																																	Flood defences; water recreation linked infrastructure; redevelopment of large waterside sites
Mixture of anciently enclosed land and recent regular/rectilinear field patterns. Fields bounded by Cornish hedges with frequent trees.																			❍														Move to intensive bulb production; poor management of field boundaries
Predominantly pastoral land use																			❍														As above along with conversion to arable
Parklands - Trelissick estate																																	
Extensive built development with many villages based on former shipbuilding, fishing and industrial trade																																	Transport network; conversion of farm buildings to industrial units
Away from the developed areas small tree-lined lanes connect villages particularly around Mylor Bridge																																	
The major road corridor of the A39 skirts the western edge of the area, off which is a connecting road through to Penryn																																	Localised impacts of minerals extraction
The town and docks of Falmouth (outside the AONB) are visually dominant. Penryn forms a northern extension to Falmouth																																	Housing creep along road corridors

❍= area identified as a 'moderately high' opportunity location for miscanthus growing in terms of landscape considerations (Scott Wilson and Land & Landscape Management Ltd, 2004)

Table 4: Baseline results

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td>1.1: Levels of tranquillity</td><td><u>AONB Area Results (South Coast (Central))</u>
<table><tr><th>Category of tranquillity</th><th>Score</th></tr><tr><td>Highest</td><td>44.2</td></tr><tr><td>Lowest</td><td>-19.0</td></tr><tr><td>Mean</td><td>17.5</td></tr></table></td><td>AONB area</td><td>CPRE (2007)</td><td>2013/14</td></tr>
<tr><td>1.2: Levels of intrusion</td><td><u>AONB Area Results (South Coast (Central))</u>
<table><tr><th>Category of intrusion</th><th>Area (ha)</th><th>1997 area (ha)</th></tr><tr><td>Disturbed</td><td>824</td><td>446</td></tr><tr><td>Undisturbed</td><td>11,017</td><td></td></tr><tr><td>Urban</td><td>0</td><td>0</td></tr></table>
Number of off-shore windfarms: 0</td><td>AONB area</td><td>CPRE (2007)

BWEA (2008)</td><td>2013/14</td></tr>
<tr><td>1.3: Extent of dark night skies</td><td><u>Cornwall AONB Results</u>
<table><tr><th>Category of darkness</th><th>Area (ha)</th><th>1993 area (ha)</th></tr><tr><td>0-1.7</td><td>277</td><td>258</td></tr><tr><td>1.7-50</td><td>442</td><td>527</td></tr><tr><td>50-150</td><td>238</td><td>171</td></tr><tr><td>150-240</td><td>3</td><td>4</td></tr><tr><td>240-255</td><td>0</td><td>0</td></tr></table>
<u>Number of stars in the Orion constellation</u><u>: The AONB is to organise a ‘star count’ to inform this indicator.</u>

<u>Fixed point photography</u><u>: AONB to establish locations for fixed point photography to monitor this indicator</u></td><td>AONB

AONB area

LMU</td><td>CPRE (2000)

Primary data (2008/9)

2008/9</td><td>2013/14</td></tr>
</table>

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td>1.4: Coastal change</td><td><u>The AONB should follow the work of the Coastal Monitoring Project and explore the possibility of sitting on the Steering Group via the Cornwall and Isles of Scilly Coastal Authorities group.</u></td><td>AONB area</td><td>South West Regional Coastal Monitoring Programme (Plymouth University)</td><td>AONB to contact the Coastal Authorities by end of 2008.</td></tr>
<tr><td>1.5: SSSI condition</td><td><u>AONB Area results (South Coast (Central))</u>
78% Favourable
21% Unfavourable declining

See ArcReader Project and Excel Spreadsheet for a breakdown of results for the SSSIs within this LMU.</td><td>AONB area</td><td>Natural England (web-based information)
See Excel Spreadsheet for a breakdown of assessment dates for SSSIs within this LMU.</td><td>2010 (every 2 years)</td></tr>
<tr><td>2.1: Extent of woodland and tree cover/type</td><td><u>Breakdown by woodland type:</u>
<table><tr><th>Woodland type</th><th>Area –ha (NIWT figure)</th></tr><tr><td>Broadleaved</td><td>352.3 (276.6)</td></tr><tr><td>Ancient semi-natural</td><td>40.2</td></tr><tr><td>PAWS</td><td>24.0</td></tr><tr><td>Mixed</td><td>19.8 (16.2)</td></tr><tr><td>Conifer</td><td>23.5 (6.2)</td></tr><tr><td>Scrub</td><td>36.3</td></tr></table></td><td>LMU</td><td>- Cornwall LIFE dataset (1995)
- Natural England’s Ancient Woodland Inventory (1999)
- National Inventory of Woodland and Trees (2000)</td><td>2013/14</td></tr>
</table>

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td>2.2: Agricultural land use</td><td><u>AONB Area Results (South Coast (Central)):</u>
<table>
<tr><th>Grassland categories</th><th>Hectares</th></tr>
<tr><td>< 5 years & permanent pasture</td><td>5,965</td></tr>
<tr><td>Rough grazing</td><td>179</td></tr>
<tr><td>Arable categories:</td><td></td></tr>
<tr><td>Cereals</td><td>2,004</td></tr>
<tr><td>Combinable crops</td><td>219</td></tr>
<tr><td>Potatoes</td><td>39</td></tr>
<tr><td>Maize</td><td>502</td></tr>
<tr><td>Root crops</td><td>94</td></tr>
<tr><td>Other</td><td>33</td></tr>
<tr><td>Horticultural categories:</td><td></td></tr>
<tr><td>Orchards</td><td>7</td></tr>
<tr><td>Total horticultural crops</td><td>63</td></tr>
<tr><td>Hardy nursery stock bulbs and flowers</td><td>79</td></tr>
<tr><td colspan="2">Number of holdings in different size categories:</td></tr>
<tr><td><5 ha:</td><td>95</td></tr>
<tr><td>5-10 ha:</td><td>23</td></tr>
<tr><td>10-20 ha:</td><td>32</td></tr>
<tr><td>Over 20 ha:</td><td>105</td></tr>
</table>
<u>The AONB should collect information from a representative sample of farmers within the LMU to further pinpoint agricultural land use.</u></td><td>AONB area

LMU</td><td>Defra June Agricultural Census (2007)

2008/9 data collection</td><td>2013/14</td></tr>
<tr><td>2.3: Extent of biomass planting</td><td><u>There are currently no agreements for Energy Crops planting through the Energy Crops Scheme in this LMU. The AONB should check the Defra dataset every two years to monitor this.</u></td><td>LMU</td><td>Defra ECS data (2008)</td><td>2010</td></tr>
</table>

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td>2.4: Field pattern</td><td>Total length of field boundaries by sample square:
Sample square SW8037
<table><tr><th>Boundary / feature type</th><th>Length (m)</th></tr><tr><td>Cornish hedgebank</td><td>7,644</td></tr><tr><td>Wooded</td><td>9,578</td></tr></table>Sample square SW8134
<table><tr><th>Boundary / feature type</th><th>Length (m)</th></tr><tr><td>Cornish hedgebank</td><td>5,171</td></tr><tr><td>Wooded</td><td>5,451</td></tr></table>Field boundary pattern by sample square:
<table><tr><th>Sample square</th><th>Total sinuous (m)</th><th>Total straight (m)</th></tr><tr><td>SW8037</td><td>2,804</td><td>14,874</td></tr><tr><td>SW8134</td><td>2,182</td><td>8,794</td></tr></table>Average field size by sample square:
Sample square SW8037: 1.7 ha
Sample square SW8134: 3.6 ha</td><td>Sample squares</td><td>Cornwall aerial photographs (2005)</td><td>2010/11</td></tr>
<tr><td>2.5: Extent of semi-natural habitats</td><td>Habitat calculations:
<table><tr><th>Habitat</th><th>Area (ha)</th></tr><tr><td>Wetland</td><td>1.6</td></tr><tr><td>Saltmarsh</td><td>10.8</td></tr></table></td><td>LMU</td><td>Cornwall LIFE data (1995)</td><td>2013/14</td></tr>
<tr><td>2.6: Presence [and condition] of historic landscape features</td><td>Number of extant features:
<table><tr><th>Age classification</th><th>Number of features in 2 sample squares</th></tr><tr><td>Prehistoric</td><td>4</td></tr><tr><td>Post Medieval</td><td>1</td></tr><tr><td>Modern</td><td>1</td></tr><tr><td>TOTAL</td><td>6</td></tr></table>Condition of features:
Information on the condition of historic features could be obtained through the Heritage at Risk project (English Heritage).</td><td>Sample square</td><td>Cornwall CC Historic Environment Record (April 2008)

Potential future monitoring in conjunction with the Historic Environment Service/Heritage at Risk Project (July 2008)</td><td>2013/14</td></tr>
</table>

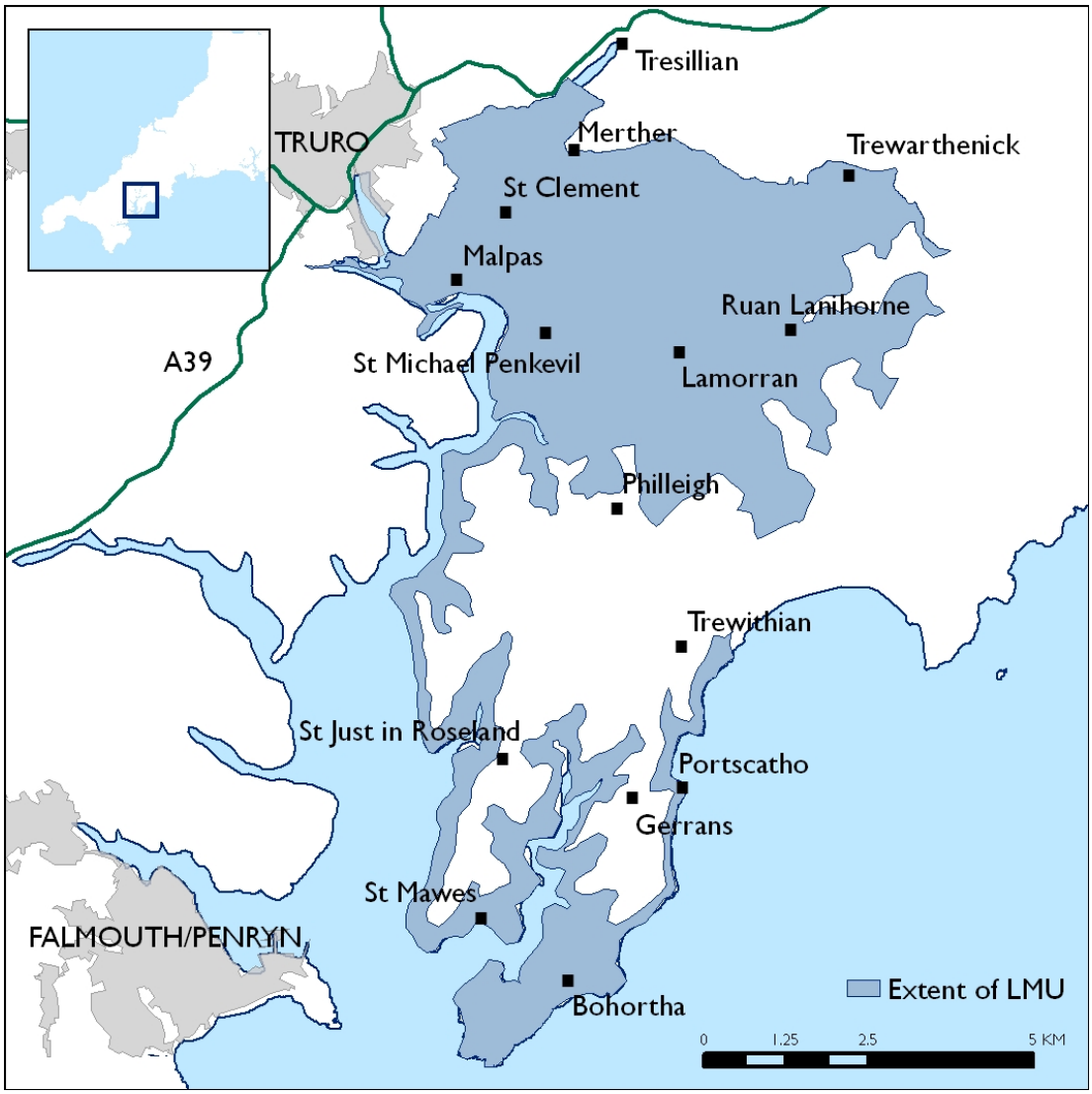
<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td>2.7: Settlement pattern</td><td>Total area of development categories:<table><tr><th>Category</th><th>Area (ha)</th><th>No. of caravans/tents</th></tr><tr><td>Permanent</td><td>10.1</td><td></td></tr></table>Refer to the Arc Reader project for settlement distribution within the sample squares.</td><td>Sample squares</td><td>Cornwall aerial photographs (2005)</td><td>2010/11</td></tr>
<tr><td>2.8: Transport infrastructure</td><td>Baseline to be established through community survey</td><td>Sample squares</td><td>Community survey 2008/9</td><td>2013/14</td></tr>
<tr><td>2.9: Local vernacular building styles</td><td>Baseline to be established through community survey</td><td>Sample squares</td><td>Community survey 2008/9</td><td>2013/14</td></tr>
<tr><td>2.10: Development at sea</td><td>AONB to collect information from the Local Planning Authority on any proposals for off-shore developments.</td><td>AONB area</td><td>LPA records (2008/9)</td><td>2010</td></tr>
<tr><td>3.5: Extent [and condition] of designed landscapes</td><td>Designed landscapes within and beyond the LMU:<table><tr><th>Parkland</th><th>Area in LMU (ha)</th><th>Total area (ha)</th></tr><tr><td colspan="3">GRADE II*</td></tr><tr><td>Trelissick</td><td>100.0</td><td>106.3</td></tr><tr><td>TOTAL</td><td>100.0</td><td></td></tr><tr><td colspan="3">GRADE II</td></tr><tr><td>Enys</td><td>6.5</td><td>85.5</td></tr><tr><td>Carclew</td><td>157.3</td><td>157.3</td></tr><tr><td>TOTAL</td><td>163.8</td><td></td></tr></table>Condition of designed landscapes:
The AONB should link in with English Heritage's Landscapes at Risk project, which is due to report in July 2008.</td><td>LMU</td><td>Register of Parks and Gardens of Special Historic Interest (2006, English Heritage)

Potential future monitoring in conjunction with the Historic Environment Service/Landscapes at Risk Project (July 2008)</td><td>2013/14</td></tr>
</table>

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td>3.8: Levels of fishing industry activity</td><td>Total number of active fishing fleets:<table><tr><th>Harbour</th><th>Number of active fishing vessels</th></tr><tr><td>Flushing</td><td>2</td></tr><tr><td>Mylor</td><td>11</td></tr><tr><td>Feock (region)</td><td>5</td></tr><tr><td>TOTAL</td><td>18</td></tr></table></td><td>LMU</td><td>Cornwall Sea Fisheries Survey (December 2006)</td><td>2013/14</td></tr>
<tr><td>3.9: Number of moorings</td><td>Total number of moorings: 1,369
River section: 195
Carrick Roads and adjoining creeks: 1,174</td><td>AONB area</td><td>Inventory of facilities (February 2006) – part of the Ports of Truro and Penryn Masterplan (2007)</td><td>2013/14</td></tr>
<tr><td>3.10: Presence of local car and passenger ferries</td><td>Breakdown by route:<table><tr><th>Route</th><th>Duration</th><th>Frequency</th></tr><tr><td>Falmouth- Flushing (passenger)</td><td>All year</td><td>Every 30 mins Mon-Sat (Sundays in summer); hourly winter service</td></tr><tr><td>Feock – Philleigh (car – King Harry)</td><td>All year</td><td>20 minutes (reduced on Sun and in winter)</td></tr><tr><td>Truro-Falmouth (one ferry stops at Trelissick, Tolverne and Malpas) (car)</td><td>Summer (2 ferries)</td><td>Daily (5 times a day May-Sep)</td></tr><tr><td>Falmouth – Mylor (car)</td><td>All year</td><td>Daily services</td></tr><tr><td>St Mawes – Truro (stopping at Trelissick, Tolverne, Malpas) (car)</td><td>Summer</td><td>Daily (regular)</td></tr><tr><td>St Mawes – Mylor Harbour (car)</td><td>Summer (+ weekends at end of Sep)</td><td>Daily services</td></tr></table></td><td>AONB area</td><td>Fal River Links: http://www.falriverlinks.co.uk/</td><td>2013/14</td></tr>
</table>

LMU CODE: C18

Location



Links to the Living Landscapes Character Areas

Constituent CAs: CA13, CA16

Constituent LDUs: 023, 024, 068, 069, 158, 235, 247, 338, 342, 371, 391, 373, 393

Table 1: Indicators selected to monitor changes in landscape character

Character statement	Indicators selected by statement
Deepwater ria landscape with many small **tidal creeks** and broad bodies of water. **Long views** across ria shores.	1.4: Coastal change (coastal erosion) 2.10: Development at sea
Diverse **coastal wetland habitats** including muddy creeks, **wet grassland** and **saltmarsh. Heathy vegetation** on shoreline slopes providing contrast.	1.5: SSSI condition 2.5: Extent of semi-natural habitats
Steep, **wooded valley slopes**, predominantly oak and beech (including **ancient woodland**) and **ornamental planting**. Some **forestry**.	2.1: Extent of woodland and tree cover / type 3.5: Extent [and condition] of designed landscapes
Predominantly **pastoral land use** with mixture of **anciently enclosed land** and recent **regular/rectilinear field patterns**. Fields bounded by **Cornish hedges** with **frequent trees.**	2.2: Agricultural land use 2.3: Extent of biomass planting 2.4: Field patterns
Wooded parkland and estates including Tregothnan lining creeks. King Harry **vehicle ferry** a well-known and characterful feature of the river. Military battery, **lighthouse** and castle at St Anthony Head.	3.5: Extent [and condition] of designed landscapes 2.6: Presence [and condition] of historic landscape features 3.7: Presence of navigation marks 3.10: Presence of local car and passenger ferries
Scattered farms, fishing villages and **creek-head settlements**, with prominent **medieval stone churches**.	1.1: Levels of tranquillity 1.2: Levels of intrusion 1.3: Extent of dark night skies 2.7: Settlement pattern 2.6: Presence [and condition] of historic landscape features 3.8: Levels of fishing industry activity
Small cottages or **terraces** with **slate roofs**, **painted** white, cream or pink. Linked by **winding, tree-lined minor roads**. A3078 is main road in east of area.	2.8: Transport infrastructure 2.9: Local vernacular building styles
Many **boats and ships** emphasising marine character.	3.9: Number of moorings

Table 2: The condition criteria for the selected indicators

Indicators selected for the LMU	Score code	Desired trajectories of change
1.1: Levels of tranquillity	AA	Positive: Maintenance or improvement in overall levels of tranquillity Negative: Decline in overall levels of tranquillity
1.2: Levels of intrusion	AA	Positive: Maintenance or improvement in current absence of intrusion Negative: Increase in overall levels of intrusion
1.3: Extent of dark night skies	A	Positive: Maintenance of or increase in overall extent of dark night skies Negative: Decline in overall extent of dark night skies
1.4: Coastal change	AA	Positive: No loss of characteristic features along the coast through erosion / sea level rise Negative: Loss of characteristic features along the coast through erosion / sea level rise
1.5: SSSI condition	AA	Positive: SSSIs are in favourable condition. Where sites are not in favourable condition, there has been an improvement in condition status from previous assessments. Negative: SSSIs are in unfavourable condition. Condition status has declined from previous assessments.
2.1: Extent of woodland and tree cover/type	P	Positive: Maintenance of or increase in woodland cover on valley slopes and creek-sides, including through re-linking woodlands. Decrease in area of forestry plantations including through conversion to native woodland NB combined with 'woodland type' indicator. Negative: Increase in the extent of forestry plantations. Decrease in woodland cover on valley slopes (including ancient semi-natural woodlands).
2.2: Agricultural land use	P	Positive: Maintenance of or an increase in the extent of pasture. Decrease in the area of arable or bulb production. Negative: Loss of areas of pasture to other land uses, including to arable and/or bulb production.
2.3: Extent of biomass planting	S	Positive: No loss of permanent pasture or semi-natural habitats to biomass planting. Biomass planting incorporated within existing areas of cultivated land or woodland, respecting or enhancing characteristic field and woodland patterns. Negative: Biomass planting located within permanent pastoral farmland, outside cultivated land or on the site of semi-natural habitats identified at the time of the baseline survey. The geometric shapes of areas of biomass planting interrupt characteristic field and/or woodland patterns.

Indicators selected for the LMU	Score code	Desired trajectories of change
2.4: Field pattern	P	Positive: No decrease in total field boundary length in areas of irregular field pattern. No increase or a decrease in average field size. Irregular field pattern restored in places. Negative: Increase in the total area of land with regular field pattern. Decrease in the total length of field boundaries. Increase in average field size. Positive: No decrease in the total length of field boundaries. No increase or a decrease in average field size. Irregular field pattern restored in places. Negative: Increase in the total length of straight field boundaries; loss of lengths of sinuous boundaries. Increase in average field size.
2.5: Extent of semi-natural habitats	P	Positive: Maintenance of or increase in the extent of semi-natural habitats characteristic to the LMU. Negative: Decrease in or fragmentation of the extent of semi-natural habitats characteristic to the LMU.
2.6: Presence [and condition] of historic landscape features	S	Positive: Numbers of recorded above-ground features are stable or increase from baseline numbers. No decline in the overall condition of historic features. Negative: Decrease in the number of above-ground features recorded. Decline in the overall condition of historic features.
2.7: Settlement pattern	P	Positive: Maintenance of the scattered settlement pattern of farms, fishing villages and creek-head settlements. No new development located outside settlement curtilages. No farm conversions to other uses (e.g. industrial). Negative: New locations of non-residential development (industrial, commercial, tourism related) outside settlement curtilages, including farm conversions.
2.8: Transport infrastructure	S	Positive: Maintenance of or decrease in levels of road engineering works, signage and other road furniture. Negative: Increase in levels of road engineering works, signage and other road furniture. Loss of any distinctive types of signage (e.g. finger posts/milestones).
2.9: Local vernacular building styles	S	Positive: New housing/permitted development in sympathy with traditional building character as defined in the baseline surveys. Negative: New housing/permitted development detracts from traditional building character as defined in the baseline surveys.
2.10: Development at sea	AA	Positive: No visible 'industrial scale' developments in view of the coast. Negative: Introduction of 'industrial scale' development visible from the coast.

Indicators selected for the LMU	Score code	Desired trajectories of change
3.5: Extent [and condition] of designed landscapes	S	Positive: Maintenance of or increase in extent of designed landscapes. No change or an improvement in the overall landscape condition. Negative: Decrease in the overall extent of parklands. Decline in the overall landscape condition.
3.7: Presence of navigation marks	S	Positive: Navigation marks in active use. Negative: Navigation marks no longer in use.
3.8: Levels of fishing industry activity	S	Positive: No decline in the overall number of active fishing fleets Negative: Decline in the overall number of active fishing fleets.
3.9: Number of moorings	S	Positive: No new locations used for moorings. No increase in the size and/or density of existing areas of moorings. Negative: Mooring areas developed in new locations. Increase in the size and/or density of existing moorings.
3.10: Presence of local car and passenger ferries	S	Positive: Continued presence of local car/passenger ferries. Negative: Removal of ferry services from previous crossing points.
MAXIMUM LMU SCORES	**10** **6**	P = Primary Indicators S = Secondary Indicators

Table 3: Forces for change acting upon the landscape elements to be monitored

	Climate change					Development pressures										Land use changes											Woodland managament changes				WFD response		Industry change		Forces for change identified in exisitng landscape assessments
	Sea level rise/stormy conditions	Coastal squeeze	Increased frequency of droughts	More frequent river flooding	Increased visitor pressure	Tourism developments incl caravan sites, increased signage, car parks	Marine and beach developments (incl demand for moorings)	Housing developments (incl affordable housing due to high house prices)	Industrial and commercial developments	Demand for second homes	Increased light pollution	Deamnd for better communications (e.g aerials, masts)	Sustainable design of new builds	Increase in commuter and tourist traffic incl traffic calming measures and road improvements	Losting up of agricultural land at sale	Wind farms (on-shore and off-shore) and other RE developments	Reservoirs/water storage	Minerals extraction(quarrying	Non-food crops e.g. bioenergy, industrial - intensification of lowland areas	Longer growing season/higher CO2 levels for new crops	Horticultural expansion - fav. growing conditions, consumer demand	Intensification of production (particularly arable) incl associated infrastructure	Livestock farming changes (reduction in cattle, reduced grazing in uplands, reduced grazing on marginal land)	Farm diversification and hobby farming eg horseyculture	Recreational uses eg golf courses, recreational boating	Decline in local and traditional land/woodland management and building skills	New species of different provenance eg Douglas Fir to respond to climate change	Increased planting in floodplain areas eg SRC	Afforestation (incl due to favourable growing conditions or for carbon sequestration)	Increased growth rates and productivity	Reduced intensity of agriculture to meet WFD targets	Measures to reduce diffuse pollution eg buffer strips, planting next to watercourses, etc	Decline in traditional industries	Local quarry closures	
LMU C18																																		
Deepwater ria landscape with many small tidal creeks and broad bodies of water	■	■			■	■	■																		■									Flood defences; water recreation linked infrastructure; creeks/rivers subject to siltation
Long views across ria shores.							■	■	■	■		■																						
Steep, wooded valley slopes, predominantly oak and beech and some ornamental planting		■	■		■																				■	■	■	■		■				
Some forestry			■		■																				■		■	■						
Diverse coastal wetland habitats including muddy creeks, wet grassland and saltmarsh	■	■	■		■	■	■		■																									Flood defences; water recreation linked infrastructure; redevelopment of large waterside sites
Heathy vegetation on shoreline slopes	■	■	■		■																													
Mixture of anciently enclosed land and recent regular/rectilinear field patterns. Fields bounded by Cornish hedges with frequent trees.								■	■						■				●❍	■	■	■		■	■	■								Move to intensive build production; poor management of field boundaries
Predominantly pastoral land use			■												■				●❍	■	■	■	■								■	■			As above along with conversion to arable
Wooded parkland and estates including Trelissick lining creeks	■		■	■	■		■							■												■	■		■		■			
King Harry vehicle ferry a well-known and characterful feature of the river	■				■									■																				
Military battery, lighthouse and castle at St Antony Head.	■	■			■		■																		■									
Small cottages or terraces with slate roofs, painted white, cream or pink								■					■																					
Linked by winding, tree-lined minor roads					■			■		■				■																				
A3078 is main road in east of area					■			■	■					■																				
Scattered farms, fishing villages and creek-head settlements, with prominent medieval stone churches	■	■						■	■						■									■										Transport network; conversion of farm buildings to industrial units
Many boats and ships emphasising marine character					■	■	■		■																■									

●= area identified as a 'high' opportunity location for miscanthus growing in terms of landscape considerations (Scott Wilson and Land & Landscape Management Ltd, 2004)
❍= area identified as a 'moderately high' opportunity location for miscanthus growing in terms of landscape considerations (Scott Wilson and Land & Landscape Management Ltd, 2004)

Table 4: Baseline results

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td>1.1: Levels of tranquillity</td><td><u>AONB Area Results (South Coast (Central))</u>
<table><tr><th>Category of tranquillity</th><th>Score</th></tr><tr><td>Highest</td><td>44.2</td></tr><tr><td>Lowest</td><td>-19.0</td></tr><tr><td>Mean</td><td>17.5</td></tr></table></td><td>AONB area</td><td>CPRE (2007)</td><td>2013/14</td></tr>
<tr><td>1.2: Levels of intrusion</td><td><u>AONB Area Results (South Coast (Central))</u>
<table><tr><th>Category of intrusion</th><th>Area (ha)</th><th>1997 area (ha)</th></tr><tr><td>Disturbed</td><td>824</td><td>446</td></tr><tr><td>Undisturbed</td><td>11,017</td><td>0</td></tr><tr><td>Urban</td><td>0</td><td>0</td></tr></table>Number of off-shore windfarms: 0</td><td>AONB area</td><td>CPRE (2007)

BWEA (2008)</td><td>2013/14</td></tr>
<tr><td>1.3: Extent of dark night skies</td><td><u>Cornwall AONB Results</u>
<table><tr><th>Category of darkness</th><th>Area (ha)</th><th>1993 area (ha)</th></tr><tr><td>0-1.7</td><td>277</td><td>258</td></tr><tr><td>1.7-50</td><td>442</td><td>527</td></tr><tr><td>50-150</td><td>238</td><td>171</td></tr><tr><td>150-240</td><td>3</td><td>4</td></tr><tr><td>240-255</td><td>0</td><td>0</td></tr></table><u>Number of stars in the Orion constellation</u>: <u>The AONB is to organise a ‘star count’ to inform this indicator.</u>

<u>Fixed point photography</u>: <u>AONB to establish locations for fixed point photography to monitor this indicator</u></td><td>AONB

AONB area

LMU</td><td>CPRE (2000)

Primary data (2008/9)

2008/9</td><td>2013/14</td></tr>
</table>

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td>1.4: Coastal change</td><td><u>The AONB should follow the work of the Coastal Monitoring Project and explore the possibility of sitting on the Steering Group via the Cornwall and Isles of Scilly Coastal Authorities group.</u></td><td>AONB area</td><td>South West Regional Coastal Monitoring Programme (Plymouth University)</td><td>AONB to contact the Coastal Authorities by end of 2008.</td></tr>
<tr><td>1.5: SSSI condition</td><td><u>AONB Area results (South Coast (Central))</u>
78% Favourable
21% Unfavourable declining

See ArcReader Project and Excel Spreadsheet for a breakdown of results for the SSSIs within this LMU.</td><td>AONB area</td><td>Natural England (web-based information)
See Excel Spreadsheet for a breakdown of assessment dates for SSSIs within this LMU.</td><td>2010 (every 2 years)</td></tr>
<tr><td>2.1: Extent of woodland and tree cover/type</td><td><u>Breakdown by woodland type:</u>
<table><tr><th>Woodland type</th><th>Area –ha (NIWT figure)</th></tr><tr><td>Broadleaved</td><td>766.0 (736.9)</td></tr><tr><td>Ancient semi-natural</td><td>277.8</td></tr><tr><td>PAWS</td><td>15.7</td></tr><tr><td>Mixed</td><td>42.6 (24.7)</td></tr><tr><td>Conifer</td><td>74.2 (55.2)</td></tr><tr><td>Scrub</td><td>104.4</td></tr></table></td><td>LMU</td><td>- Cornwall LIFE dataset (1995)
- Natural England’s Ancient Woodland Inventory (1999)
- National Inventory of Woodland and Trees (2000)</td><td>2013/14</td></tr>
<tr><td>2.2: Agricultural land use</td><td><u>AONB Area Results (South Coast (Central)):</u>
<table><tr><th>Grassland categories</th><th>Hectares</th></tr><tr><td>< 5 years & permanent pasture</td><td>5,965</td></tr><tr><td>Rough grazing</td><td>179</td></tr><tr><td>Arable categories:</td><td></td></tr><tr><td>Cereals</td><td>2,004</td></tr><tr><td>Combinable crops</td><td>219</td></tr><tr><td>Potatoes</td><td>39</td></tr><tr><td>Maize</td><td>502</td></tr><tr><td>Root crops</td><td>94</td></tr><tr><td>Other</td><td>33</td></tr></table></td><td>AONB area</td><td>Defra June Agricultural Census (2007)</td><td>2013/14</td></tr>
</table>

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td></td><td>
<table>
<tr><th colspan="2">Horticultural categories:</th></tr>
<tr><td>Orchards</td><td>7</td></tr>
<tr><td>Total horticultural crops</td><td>63</td></tr>
<tr><td>Hardy nursery stock bulbs and flowers</td><td>79</td></tr>
<tr><th colspan="2">Number of holdings in different size categories:</th></tr>
<tr><td><5 ha:</td><td>95</td></tr>
<tr><td>5-10 ha:</td><td>23</td></tr>
<tr><td>10-20 ha:</td><td>32</td></tr>
<tr><td>Over 20 ha:</td><td>105</td></tr>
</table>
<u>The AONB should collect information from a representative sample of farmers within the LMU to further pinpoint agricultural land use.</u></td><td>LMU</td><td>2008/9 data collection</td><td></td></tr>
<tr><td>2.3: Extent of biomass planting</td><td><u>There are currently no agreements for Energy Crops planting through the Energy Crops Scheme in this LMU. The AONB should check the Defra dataset every two years to monitor this</u>.</td><td>LMU</td><td>Defra ECS data (2008)</td><td>2010</td></tr>
<tr><td>2.4: Field pattern</td><td>Total length of field boundaries by sample square:
<u>Sample square SW8632</u>
<table>
<tr><th>Boundary / feature type</th><th>Length (m)</th></tr>
<tr><td>Cornish hedgebank</td><td>8,982</td></tr>
<tr><td>Wooded</td><td>3,572</td></tr>
<tr><td>Gap</td><td>37</td></tr>
</table>
<u>Sample square SW8843</u>
<table>
<tr><th>Boundary / feature type</th><th>Length (m)</th></tr>
<tr><td>Cornish hedgebank</td><td>8,714</td></tr>
<tr><td>Wooded</td><td>4,506</td></tr>
</table>
Field boundary pattern by sample square:
<table>
<tr><th>Sample square</th><th>Total sinuous (m)</th><th>Total straight (m)</th></tr>
<tr><td>SW8632</td><td>8,376</td><td>5,589</td></tr>
<tr><td>SW8843</td><td>7,309</td><td>5,411</td></tr>
</table>
Average field size by sample square:
<u>Sample square SW8632:</u> 2.9 ha</td><td>Sample squares</td><td>Cornwall aerial photographs (2005)</td><td>2010/11</td></tr>
</table>

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td></td><td>Sample square SW8843: 4.5 ha</td><td></td><td></td><td></td></tr>
<tr><td>2.5: Extent of semi-natural habitats</td><td>Habitat calculations:<table><tr><th>Habitat</th><th>Area (ha)</th></tr><tr><td>Dwarf shrub heath (broad habitat)</td><td>0.05</td></tr><tr><td>Wetland</td><td>1.6</td></tr><tr><td>Saltmarsh</td><td>30.0</td></tr></table></td><td>LMU</td><td>Cornwall LIFE data (1995)</td><td>2013/14</td></tr>
<tr><td>2.6: Presence [and condition] of historic landscape features</td><td>Number of extant features:<table><tr><th>Age classification</th><th>Number of features in 2 sample squares</th></tr><tr><td>Prehistoric</td><td>10</td></tr><tr><td>Post Medieval</td><td>1</td></tr><tr><td>Modern</td><td>3</td></tr><tr><td>TOTAL</td><td>14</td></tr></table>Condition of features
Information on the condition of other historic features could be obtained through the Heritage at Risk project (English Heritage).</td><td>Sample square</td><td>Cornwall CC Historic Environment Record (April 2008)

Potential future monitoring in conjunction with the Historic Environment Service/Heritage at Risk Project (July 2008)</td><td>2013/14</td></tr>
<tr><td>2.7: Settlement pattern</td><td>Total area of development categories:<table><tr><th>Category</th><th>Area (ha)</th><th>No. of caravans/tents</th></tr><tr><td>Permanent</td><td>5.1</td><td></td></tr></table>Refer to the Arc Reader project for settlement distribution within the sample squares.</td><td>Sample squares</td><td>Cornwall aerial photographs (2005)</td><td>2010/11</td></tr>
<tr><td>2.8: Transport infrastructure</td><td>Baseline to be established through community survey</td><td>Sample squares</td><td>Community survey 2008/9</td><td>2013/14</td></tr>
<tr><td>2.9: Local vernacular building styles</td><td>Baseline to be established through community survey</td><td>Sample squares</td><td>Community survey 2008/9</td><td>2013/14</td></tr>
<tr><td>2.10: Development at sea</td><td>AONB to collect information from the Local Planning Authority on any proposals for off-shore developments.</td><td>AONB area</td><td>LPA records (2008/9)</td><td>2010</td></tr>
</table>

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td>3.5: Extent [and condition] of designed landscapes</td><td>Designed landscapes within and beyond the LMU:<table><tr><th>Parkland</th><th>Area in LMU (ha)</th><th>Total area (ha)</th></tr><tr><td colspan="3">GRADE II*</td></tr><tr><td>Tregothnan</td><td>156.1</td><td>157.0</td></tr><tr><td>TOTAL</td><td>156.1</td><td></td></tr><tr><td colspan="3">GRADE II</td></tr><tr><td>Trewarthenick</td><td>59.5</td><td>86.0</td></tr><tr><td>TOTAL</td><td>59.5</td><td></td></tr></table><u>Condition of designed landscapes:</u>
<u>The AONB should link in with English Heritage's Landscapes at Risk project, which is due to report in July 2008.</u></td><td>LMU</td><td>Register of Parks and Gardens of Special Historic Interest (2006, English Heritage)

Potential future monitoring in conjunction with the Historic Environment Service/Landscapes at Risk Project (July 2008)</td><td>2013/14</td></tr>
<tr><td>3.7: Presence of navigation marks</td><td>Number of navigation marks: 4 (lit): St Anthony Head (1), Black Rock (2), St Mawes Harbour (1).</td><td>LMU</td><td>Admiralty Leisure (2007) Leisure Chart Portfolio, Falmouth to Teignmouth: SC5602</td><td>2013/14</td></tr>
<tr><td>3.8: Levels of fishing industry activity</td><td>Total number of active fishing fleets:<table><tr><th>Harbour</th><th>Number of active fishing vessels</th></tr><tr><td>St Mawes</td><td>8</td></tr><tr><td>TOTAL</td><td>8</td></tr></table></td><td>LMU</td><td>Cornwall Sea Fisheries Survey (December 2006)</td><td>2013/14</td></tr>
<tr><td>3.9: Number of moorings</td><td>Total number of moorings: 1,369
River section: 195
Carrick Roads and adjoining creeks: 1,174</td><td>AONB area</td><td>Inventory of facilities (February 2006) – part of the Ports of Truro and Penryn Masterplan (2007)</td><td>2013/14</td></tr>
</table>

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td>3.10: Presence of local car and passenger ferries</td><td>Breakdown by route:<table><tr><th>Route</th><th>Duration</th><th>Frequency</th></tr><tr><td>Feock – Philleigh (car – King Harry)</td><td>All year</td><td>20 minutes (reduced on Sun and in winter)</td></tr><tr><td>Falmouth-St Mawes (passenger)</td><td>All year</td><td>30 mins (Mon-Sat in summer, reduced to hourly in winter), Sundays (July-Aug)</td></tr><tr><td>St Mawes – Place (passenger)</td><td>Summer</td><td>30 minutes (approx)</td></tr><tr><td>St Mawes – Truro (car)</td><td>Summer</td><td>Daily (regular)</td></tr><tr><td>St Mawes – Mylor Harbour (car)</td><td>Summer (+ weekends at end of Sep)</td><td>Daily</td></tr><tr><td>St Mawes – Helford Passage (car)</td><td>Summer</td><td>Daily</td></tr></table></td><td>AONB area</td><td>Fal River Links: http://www.falriverlinks.co.uk/</td><td>2013/14</td></tr>
</table>

LMU CODE: C19

Location

Links to the Living Landscapes Character Areas

Constituent CAs: CA40

Constituent LDUs: 081, 082, 083, 094, 095, 096, 097, 098, 099, 100, 101, 337, 339, 340, 341, 372, 198, 200, 370

Table 1: Indicators selected to monitor changes in landscape character

Character statement	Indicators selected by statement
Varied coastline with **cliffs**, **rocky shores** and many **bays**, **small beaches** and **coves**. Dominated by the three sweeping bays of Veryan, Gerrans and Mevagissey, punctuated by the hard rock promontory headlands of Nare Head, Dodman Point and Black Head.	1.4: Coastal change (coastal erosion) 2.10: Development at sea
Land rising to an elevated south-sloping plateau dissected by streams**. Panoramic views** from the coastal headlands.	1.2: Levels of intrusion 2.10: Development at sea
Open plateau with occasional **conifer plantations** and **small tree groups** marking farm buildings and within hedges (esp elm and sycamore). Stream valleys lined by **woodland**, dominated by oak and beech. **Ornamental parkland** a feature of the area.	2.1: Extent of woodland and tree cover / type 3.5: Extent [and condition] of designed landscapes
Extensive **coastal heathland**, often with large areas of **gorse/bracken scrub**. **Vegetated shingle, saline lagoons** and patches of **fen** form important habitats.	1.5: SSSI condition 2.5: Extent of semi-natural habitats
Mixed farmland with some **horsiculture** (LDU 198). **Rough grazing** along the cliff edge.	2.2: Agricultural land use 2.3: Extent of biomass planting
Predominantly **medieval field pattern** (the **small scale coastal fields** give the area a distinctive sense of place) with **sinuous low stone hedges** without shrubby vegetation along the coast and on the plateau, contrasting with **broad overgrown hedges** on valley sides. Modern **concrete walls** bound fields around Gorran High Lanes. Some **regular fields** on former heath/down.	2.4: Field patterns 3.4: Field boundary condition and species
Significant remains of **Bronze Age barrows** and **Iron Age Cliff Castles** and fortifications and characteristic **industrial remains** such as tidemills. 18th century **watch-house and daymark** on Dodman Point.	2.6: Presence [and condition] of historic landscape features 3.7: Presence of navigation marks
Ornamental gardens at Heligan and Caerhays Castle.	3.5: Extent [and condition] of designed landscapes
Coastal villages often at mouth of streams, some with extensive **harbour development** in local stone (e.g. Mevagissey). Scattered farms and hamlets of slate in wooded valleys. Isolated farms, quiet hamlets. Some expanded **medieval churchtowns** inland.	1.1: Levels of tranquillity 1.2: Levels of intrusion 1.3: Extent of dark night skies 2.7: Settlement pattern 2.9: Local vernacular building styles 3.8: Levels of fishing industry activity
Very distinctive transport pattern of **straight roads** following the ridgelines which plunge into the steep valleys, becoming **narrow and winding**.	2.8: Transport infrastructure

Table 2: The condition criteria for the selected indicators

Indicators selected for the LMU	Score code	Desired trajectories of change
1.1: Levels of tranquillity	AA	Positive: Maintenance or improvement in overall levels of tranquillity Negative: Decline in overall levels of tranquillity
1.2: Levels of intrusion	AA	Positive: Maintenance or improvement in current absence of intrusion Negative: Increase in overall levels of intrusion
1.3: Extent of dark night skies	A	Positive: Maintenance of or increase in overall extent of dark night skies Negative: Decline in overall extent of dark night skies
1.4: Coastal change	AA	Positive: No loss of characteristic features along the coast through erosion / sea level rise Negative: Loss of characteristic features along the coast through erosion / sea level rise
1.5: SSSI condition	AA	Positive: SSSIs are in favourable condition. Where sites are not in favourable condition, there has been an improvement in condition status from previous assessments. Negative: SSSIs are in unfavourable condition. Condition status has declined from previous assessments.
2.1: Extent of woodland and tree cover/type	P	Positive: No further increase in the area of conifer plantation or tree cover on the plateau. Increase in area of conifer conversion to native woodland. Maintenance of or increase in woodland cover in stream valleys and within ornamental parklands. Maintenance of or increase in number of trees marking buildings. Negative: Increase in woodland cover on the plateau (particularly conifer plantations). Decrease in woodland cover in stream valleys or within parklands. Decrease in number of trees marking buildings.
2.2: Agricultural land use	P	Positive: Maintenance or an increase in the extent of rough grazing along the cliff edge. Increase in the overall extent of pasture; decrease in arable and horsiculture. No decrease in average farm size (to account for small-holdings). Negative: Reduction in the extent of rough grazing along the cliff edge (including through conversion to other land uses/ abandonment). Increase in the extent of arable and/or horsiculture. Increase in the area of horsiculture.
2.3: Extent of biomass planting	S	Positive: No loss of permanent pasture or semi-natural habitats to biomass planting. Biomass planting incorporated within existing areas of cultivated land or woodland, respecting or enhancing characteristic field and woodland patterns. Negative: Biomass planting located within permanent pastoral farmland, outside cultivated land or on the site of semi-natural habitats identified at the time of the baseline survey. The geometric shapes of areas of biomass planting interrupt characteristic field and/or woodland patterns.

Indicators selected for the LMU	Score code	Desired trajectories of change
2.4: Field pattern	P	Positive: Maintenance of the small-scale pattern of fields along the coast. No decrease in total field boundary length in areas of irregular field pattern. No increase in average field size through intensification. No subdivision of fields for horsiculture. Negative: Field enlargement along the coast. Increase in the total area of land with regular field pattern. Subdivision of fields for horsiculture.
2.5: Extent of semi-natural habitats	P	Positive: Maintenance of or increase in the extent of semi-natural habitats characteristic to the LMU. Negative: Decrease in or fragmentation of the extent of semi-natural habitats characteristic to the LMU.
2.6: Presence [and condition] of historic landscape features	S	Positive: Numbers of recorded above-ground features are stable or increase from baseline numbers. No decline in the overall condition of historic features. Negative: Decrease in the number of above-ground features recorded. Decline in the overall condition of historic features.
2.7: Settlement pattern	P	Positive: Maintenance of the scattered settlement pattern on the plateau, with no new development. No increase in the size of settlements or farms, including growth along road corridors. Decrease in the size and/or number of caravan/camping sites and car parks, particularly along the coast. Negative: New development located on the plateau or outside settlement curtilages (including farm expansion or conversion; expansion along roads). Increase in the size and/or number of caravan/camping sites and car parks, particularly along the coast.
2.8: Transport infrastructure	S	Positive: Maintenance of or decrease in levels of road engineering works, signage and other road furniture. Negative: Increase in levels of road engineering works, signage and other road furniture. Loss of any distinctive types of signage (e.g. finger posts/milestones).
2.9: Local vernacular building styles	S	Positive: New housing/permitted development in sympathy with traditional building character as defined in the baseline surveys. Negative: New housing/permitted development detracts from traditional building character as defined in the baseline surveys.
2.10: Development at sea	AA	Positive: No visible 'industrial scale' developments in view of the coast. Negative: Introduction of 'industrial scale' development visible from the coast.

Indicators selected for the LMU	Score code	Desired trajectories of change
3.4: Field boundary condition and species	S	Positive: Maintenance of or an increase in the total length of Cornish hedge field boundaries (e.g. through restoration of any 'lost' boundaries) *(link to 2.4: Field patterns indicator*. Maintain tree cover on hedges on valley sides, with a predominance of elm and sycamore. No increase in vegetation over on hedges on the plateau and along the coast. No loss of walls around Gorran High Lanes. Negative: Reduction in the total length of Cornish hedge field boundaries. Reduction in the total length of sinuous field boundaries. Reduction in tree cover on hedges in the valleys; loss of characteristic elm and sycamore species. Increase in vegetation cover on hedges on the plateau or along the coastal edge. Loss of walls around Gorran High Lanes.
3.5: Extent [and condition] of designed landscapes	S	Positive: Maintenance of or increase in extent of designed landscapes. No change or an improvement in the overall landscape condition. Negative: Decrease in the overall extent of parklands. Decline in the overall landscape condition.
3.7: Presence of navigation marks	S	Positive: Navigation marks in active use. Negative: Navigation marks no longer in use.
3.8: Levels of fishing industry activity	S	Positive: No decline in the overall number of active fishing fleets Negative: Decline in the overall number of active fishing fleets.
MAXIMUM LMU SCORES	**10** **8**	P = Primary Indicators S = Secondary Indicators

Table 3: Forces for change acting upon the landscape elements to be monitored

	Climate change					Development pressures										Land use changes											Woodland managament changes				WFD response		Industry change		Forces for change identified in exisitng landscape assessments
	Sea level rise/stormy conditions	Coastal squeeze	Increased frequency of droughts	More frequent river flooding	Increased visitor pressure	Tourism developments incl caravan sites, increased signage, car parks	Marine and beach developments (incl demand for mooring)	Housing developments (incl affordable housing due to high house prices)	Industrial and commercial developments	Demand for second homes	Increased light pollution	Deamnd for better communications (e.g aerials, masts)	Sustainable design of new builds	Increase in commuter and tourist traffic incl traffic calming measures and road improvements	Lotting up of agricultural land at sale	Wind farms (on-shore and off-shore) and other RE developments	Reservoirs/water storage	Minerals extraction/quarrying	Non-food crops e.g. bioenergy, industrial - intensification of lowland areas	Longer growing season/higher CO2 levels for new crops	Horticultural expansion - fav. growing conditions, consumer demand	Intensification of production (particularly arable) incl associated infrastructure	Livestock farming changes (reduction in cattle, reduced grazing in uplands, reduced grazing on marginal land)	Farm diversification and hobby farming eg horseyculture	Recreational uses eg golf courses, recreational boating	Decline in local and traditional land/woodland management and building skills	New species of different provenance eg Douglas Fir to respond to climate change	Increased planting in floodplain areas eg SRC	Afforestation (incl due to favourable growing conditions or for carbon sequestration)	Increased growth rates and productivity	Reduced intensity of agriculture to meet WFD targets	Measures to reduce diffuse pollution eg buffer strips, planting next to watercourses, etc	Decline in traditional industries	Local quarry closures	
LMU C19																																			
Varied coastline with cliffs, rocky shores and many bays																																			
Land rising to an elevated south-sloping plateau dissected by streams																																			
Panoramic views from the coastal headlands.																																			
Open plateau with occasional conifer plantations and small tree groups marking farm buildings and within hedges																																			
Stream valleys lined by woodland, dominated by oak and beech.																																			
Ornamental parkland																																			Some change from parkland to amenity uses
Extensive coastal heathland, often with large areas of gorse/bracken scrub																			●																Lack of grazing identified as an issue
Vegetated shingle, saline lagoons and patches of fen																			●																
Predominantly medieval field pattern with sinuous low stone hedges without shrubby vegetation along the coast and on the plateau, contrasting with broad overgrown																			●																Over intensive hedge maintenance; some replacement by fencing
Modern concrete walls bound fields around Gorran High Lanes																			●																
Some regular fields on former heath/down																			●																
Mixed farmland with some horsiculture																			●																Woodland - move to bulb growing, polytunnels and potatoes; associated large sprawling buildings
Rough grazing along the cliff edge.																			●																Lack of grazing
Significant remains of Bronze Age barrows and Iron Age Cliff Castles and fortifications and characteristic industrial remains																			●																
18th century watch-house and daymark on Dodman Point.																																			
Ornamental gardens at Heligan and Caerhays Castle																																			Loss of parkland to amenity uses
Coastal villages often at mouth of streams, some with extensive harbour development in local stone																																			Impact of recent development on village fringes (non-vernacular); need for affordable housing
Scattered farms and hamlets in wooded valleys.																																			Extension of linear development along transport routes
Isolated farms and quiet hamlets on plateau																																			
distinctive transport pattern of straight roads following the ridgelines which plunge into the steep valleys, becoming narrow and winding.																																			Character weakened by transport corridor improvements

●= area identified as a 'high' opportunity location for miscanthus growing in terms of landscape considerations (Scott Wilson and Land & Landscape Management Ltd, 2004)

Table 4: Baseline results

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td>1.1: Levels of tranquillity</td><td><u>AONB Area Results (South Coast (Central))</u>
<table><tr><th>Category of tranquillity</th><th>Score</th></tr><tr><td>Highest</td><td>44.2</td></tr><tr><td>Lowest</td><td>-19.0</td></tr><tr><td>Mean</td><td>17.5</td></tr></table></td><td>AONB area</td><td>CPRE (2007)</td><td>2013/14</td></tr>
<tr><td>1.2: Levels of intrusion</td><td><u>AONB Area Results (South Coast (Central))</u>
<table><tr><th>Category of intrusion</th><th>Area (ha)</th><th>1997 area (ha)</th></tr><tr><td>Disturbed</td><td>824</td><td>446</td></tr><tr><td>Undisturbed</td><td>11,017</td><td></td></tr><tr><td>Urban</td><td>0</td><td>0</td></tr></table>
Number of off-shore windfarms: 0</td><td>AONB area</td><td>CPRE (2007)

BWEA (2008)</td><td>2013/14</td></tr>
<tr><td>1.3: Extent of dark night skies</td><td><u>Cornwall AONB Results</u>
<table><tr><th>Category of darkness</th><th>Area (ha)</th><th>1993 area (ha)</th></tr><tr><td>0-1.7</td><td>277</td><td>258</td></tr><tr><td>1.7-50</td><td>442</td><td>527</td></tr><tr><td>50-150</td><td>238</td><td>171</td></tr><tr><td>150-240</td><td>3</td><td>4</td></tr><tr><td>240-255</td><td>0</td><td>0</td></tr></table>
<u>Number of stars in the Orion constellation:</u> <u>The AONB is to organise a ‘star count’ to inform this indicator.</u>

<u>Fixed point photography:</u> <u>AONB to establish locations for fixed point photography to monitor this indicator</u></td><td>AONB

AONB area

LMU</td><td>CPRE (2000)

Primary data (2008/9)

2008/9</td><td>2013/14</td></tr>
</table>

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td>1.4: Coastal change</td><td><u>The AONB should follow the work of the Coastal Monitoring Project and explore the possibility of sitting on the Steering Group via the Cornwall and Isles of Scilly Coastal Authorities group.</u></td><td>AONB area</td><td>South West Regional Coastal Monitoring Programme (Plymouth University)</td><td>AONB to contact the Coastal Authorities by end of 2008.</td></tr>
<tr><td>1.5: SSSI condition</td><td><u>AONB Area results (South Coast (Central))</u>
78% Favourable
21% Unfavourable declining

See ArcReader Project and Excel Spreadsheet for a breakdown of results for the SSSIs within this LMU.</td><td>AONB area</td><td>Natural England (web-based information)
See Excel Spreadsheet for a breakdown of assessment dates for SSSIs within this LMU.</td><td>2010 (every 2 years)</td></tr>
<tr><td>2.1: Extent of woodland and tree cover/type</td><td><u>Breakdown by woodland type:</u><table><tr><th>Woodland type</th><th>Area –ha (NIWT figure)</th></tr><tr><td>Broadleaved</td><td>495.1 (441.9)</td></tr><tr><td>Ancient semi-natural</td><td>59.4</td></tr><tr><td>PAWS</td><td>86.4</td></tr><tr><td>Mixed</td><td>77.5 (92.9)</td></tr><tr><td>Conifer</td><td>30.7 (3.2)</td></tr><tr><td>Scrub</td><td>134.1</td></tr></table></td><td>LMU</td><td>- Cornwall LIFE dataset (1995)
- Natural England’s Ancient Woodland Inventory (1999)
- National Inventory of Woodland and Trees (2000)</td><td>2013/14</td></tr>
</table>

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td>2.2: Agricultural land use</td><td><u>AONB Area Results (South Coast (Central)):</u>
<table>
<tr><th>Grassland categories</th><th>Hectares</th></tr>
<tr><td>< 5 years & permanent pasture</td><td>5,965</td></tr>
<tr><td>Rough grazing</td><td>179</td></tr>
<tr><td>Arable categories:</td><td></td></tr>
<tr><td>Cereals</td><td>2,004</td></tr>
<tr><td>Combinable crops</td><td>219</td></tr>
<tr><td>Potatoes</td><td>39</td></tr>
<tr><td>Maize</td><td>502</td></tr>
<tr><td>Root crops</td><td>94</td></tr>
<tr><td>Other</td><td>33</td></tr>
<tr><td>Horticultural categories:</td><td></td></tr>
<tr><td>Orchards</td><td>7</td></tr>
<tr><td>Total horticultural crops</td><td>63</td></tr>
<tr><td>Hardy nursery stock bulbs and flowers</td><td>79</td></tr>
<tr><td colspan="2">Number of holdings in different size categories:</td></tr>
<tr><td><5 ha:</td><td>95</td></tr>
<tr><td>5-10 ha:</td><td>23</td></tr>
<tr><td>10-20 ha:</td><td>32</td></tr>
<tr><td>Over 20 ha:</td><td>105</td></tr>
</table>
<u>The AONB should collect information from a representative sample of farmers within the LMU to further pinpoint agricultural land use.</u></td><td>AONB area

LMU</td><td>Defra June Agricultural Census (2007)

2008/9 data collection</td><td>2013/14</td></tr>
<tr><td>2.3: Extent of biomass planting</td><td>There are currently no agreements for Energy Crops planting through the Energy Crops Scheme in this LMU. The AONB should check the Defra dataset every two years to monitor this.</td><td>LMU</td><td>Defra ECS data (2008)</td><td>2010</td></tr>
</table>

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td>2.4: Field pattern</td><td>Total length of field boundaries by sample square:
Sample square SW9340
<table><tr><th>Boundary / feature type</th><th>Length (m)</th></tr><tr><td>Cornish hedgebank</td><td>1,3379</td></tr><tr><td>Wooded</td><td>1,484</td></tr></table>Sample square SX0145
<table><tr><th>Boundary / feature type</th><th>Length (m)</th></tr><tr><td>Cornish hedgebank</td><td>6,577</td></tr><tr><td>Wooded</td><td>3,403</td></tr></table>Field boundary pattern by sample square:
<table><tr><th>Sample square</th><th>Total sinuous (m)</th><th>Total straight (m)</th></tr><tr><td>SW9340</td><td>4,594</td><td>11,073</td></tr><tr><td>SX0145</td><td>6,499</td><td>5,165</td></tr></table>Average field size by sample square:
Sample square SW9340: 2 ha
Sample square SX0145: 1.3 ha</td><td>Sample squares</td><td>Cornwall aerial photographs (2005)</td><td>2010/11</td></tr>
<tr><td>2.5: Extent of semi-natural habitats</td><td>Habitat calculations:
<table><tr><th>Habitat</th><th>Area (ha)</th></tr><tr><td>Dwarf shrub heath (broad habitat)</td><td>2.3</td></tr><tr><td>Unimproved grassland / wetland</td><td>7.7</td></tr><tr><td>Wetland</td><td>6.6</td></tr></table>NB see the ArcReader Project and Excel spreadsheet for a further breakdown of heathland habitat types found in this LMU</td><td>LMU</td><td>Cornwall LIFE data (1995)</td><td>2013/14</td></tr>
<tr><td>2.6: Presence [and condition] of historic landscape features</td><td>Number of extant features:
<table><tr><th>Age classification</th><th>Number of features in 2 sample squares</th></tr><tr><td>Prehistoric</td><td>7</td></tr><tr><td>Medieval</td><td>2</td></tr><tr><td>TOTAL</td><td>9</td></tr></table></td><td>Sample square</td><td>Cornwall CC Historic Environment Record (April 2008)

Potential future</td><td>2013/14</td></tr>
</table>

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td></td><td>Condition of features
<u>Information on the condition of historic features could be obtained through the Heritage at Risk project (English Heritage).</u></td><td></td><td>monitoring in conjunction with the Historic Environment Service/Heritage at Risk Project (July 2008)</td><td></td></tr>
<tr><td>2.7: Settlement pattern</td><td>Total area of development categories:
<table>
<tr><th>Category</th><th>Area (ha)</th><th>No. of caravans/tents</th></tr>
<tr><td>Permanent</td><td>32.4</td><td></td></tr>
<tr><td>Temp. caravans/tents</td><td>0.4</td><td>15</td></tr>
</table>
Refer to the Arc Reader project for settlement distribution within the sample squares.</td><td>Sample squares</td><td>Cornwall aerial photographs (2005)</td><td>2010/11</td></tr>
<tr><td>2.8: Transport infrastructure</td><td><u>Baseline to be established through community survey</u></td><td>Sample squares</td><td>Community survey 2008/9</td><td>2013/14</td></tr>
<tr><td>2.9: Local vernacular building styles</td><td><u>Baseline to be established through community survey</u></td><td>Sample squares</td><td>Community survey 2008/9</td><td>2013/14</td></tr>
<tr><td>2.10: Development at sea</td><td><u>AONB to collect information from the Local Planning Authority on any proposals for off-shore developments.</u></td><td>AONB area</td><td>LPA records (2008/9)</td><td>2010</td></tr>
<tr><td>3.4: Field boundary condition and species</td><td><u>Baseline to be established through field survey in 2008.</u></td><td>Sample square</td><td>Field survey 2008.</td><td>2013/14</td></tr>
<tr><td>3.5: Extent [and condition] of designed landscapes</td><td>Designed landscapes within and beyond the LMU:
<table>
<tr><th>Parkland</th><th>Area in LMU (ha)</th><th>Total area (ha)</th></tr>
<tr><td colspan="3">GRADE II*</td></tr>
<tr><td>Caerhays Castle</td><td>133.0</td><td>133.0</td></tr>
<tr><td>TOTAL</td><td>133.0</td><td></td></tr>
<tr><td colspan="3">GRADE II</td></tr>
<tr><td>Heligan</td><td>79.3</td><td>110.1</td></tr>
<tr><td>TOTAL</td><td>79.3</td><td></td></tr>
</table></td><td>LMU</td><td>Register of Parks and Gardens of Special Historic Interest (2006, English Heritage)

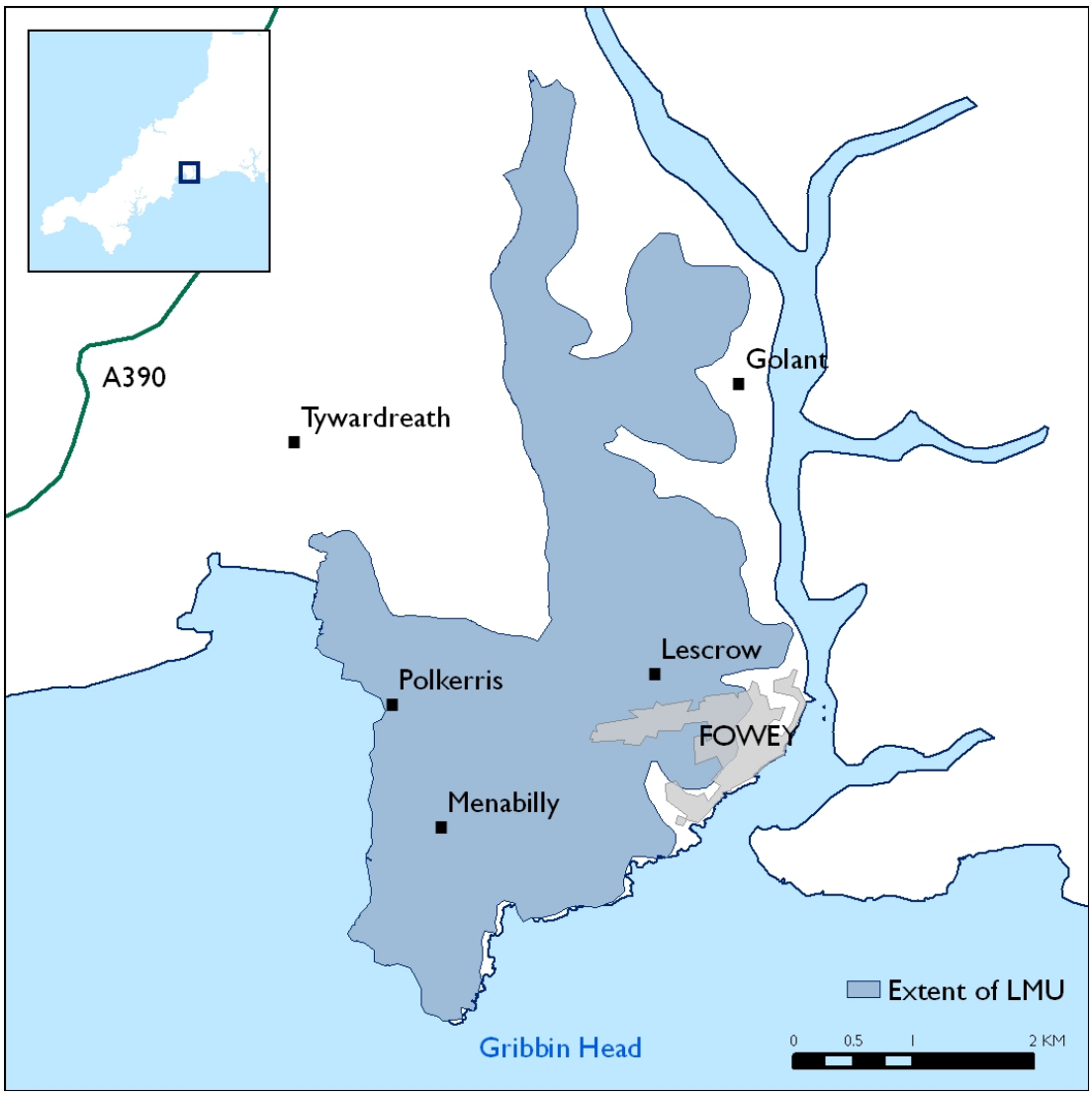
Potential future monitoring in conjunction with the</td><td>2013/14</td></tr>
</table>

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td></td><td><u>Condition of designed landscapes:</u>
The AONB should link in with English Heritage's Landscapes at Risk project, which is due to report in July 2008.</td><td></td><td>Historic Environment Service/Landscapes at Risk Project (July 2008)</td><td></td></tr>
<tr><td>3.7: Presence of navigation marks</td><td>Number of navigation marks: 1 (lit): Mevagissey; 1 (unlit): Dodman Point.</td><td>LMU</td><td>Admiralty Leisure (2007) Leisure Chart Portfolio, Falmouth to Teignmouth: SC5602</td><td>2013/14</td></tr>
<tr><td>3.8: Levels of fishing industry activity</td><td>Total number of active fishing fleets:
<table>
<tr><th>Harbour</th><th>Number of active fishing vessels</th></tr>
<tr><td>Porthscatho</td><td>3</td></tr>
<tr><td>Portloe</td><td>4</td></tr>
<tr><td>Gorran Haven</td><td>6</td></tr>
<tr><td>Mevagissey</td><td>56</td></tr>
<tr><td>TOTAL</td><td>18</td></tr>
</table></td><td>LMU</td><td>Cornwall Sea Fisheries Survey (December 2006)</td><td>2013/14</td></tr>
</table>

CORNWALL AONB: SOUTH COAST (EASTERN)

LMU CODE: C20

Location



Links to the Living Landscapes Character Areas

Constituent CAs: CA39

Constituent LDUs: 001, 088, 380

Table 1: Indicators selected to monitor changes in landscape character

Character statement	Indicators selected by statement
Rolling landscape cut by narrow, incised valleys. **Rocky cliffs** along Gribbin Head projecting into the sea. **Sheltered cove** at Polkerris.	1.4: Coastal change (coastal erosion) 2.10: Development at sea
Magnificent views from Gribbin Head eastward to Pencarrow Head and beyond.	1.2: Levels of intrusion 2.10: Development at sea
Mixed woodland lining stream valleys, with extensive **sheltered woodland** in the valley at Menabilly. Small farm woodlands.	2.1: Extent of woodland and tree cover / type
Pastoral landscape with trees and small woods. Some **remnant orchards.**	2.2: Agricultural land use 2.3: Extent of biomass planting 3.2: Extent of traditional orchards
Fields run straight to cliff edge. **Planned field pattern** of **varying sizes** with **straight boundaries** of Cornish hedges with trees.	2.4: Field patterns 3.4: Field boundary condition and species
Daymark at Gribbin Head built by Trinity House in 1834 to guide ships entering St Austell Bay and Fowey Estuary.	2.6: Presence [and condition] of historic landscape features 3.7: Presence of navigation marks
Former home of the writer Catherine du Maurier in valley at Menabilly with sheltered **woodland** and **parkland**.	2.1: Extent of woodland and tree cover / type 3.5: Extent [and condition] of designed landscapes
Sparse settlement pattern, with the coastal settlement of Polkerris being the main settlement within the area. Local vernacular of **granite** and **slate**, with **white-painted houses** a feature.	1.1: Levels of tranquillity 1.2: Levels of intrusion 1.3: Extent of dark night skies 2.7: Settlement pattern 2.9: Local vernacular building styles
The busy A3082 crosses the northern edge of the area. **Minor roads** end at Menabilly and Polkerris.	2.8: Transport infrastructure

Table 2: The condition criteria for the selected indicators

Indicators selected for the LMU	Score code	Desired trajectories of change
1.1: Levels of tranquillity	AA	Positive: Maintenance or improvement in overall levels of tranquillity Negative: Decline in overall levels of tranquillity
1.2: Levels of intrusion	AA	Positive: Maintenance or improvement in current absence of intrusion Negative: Increase in overall levels of intrusion
1.3: Extent of dark night skies	A	Positive: Maintenance of or increase in overall extent of dark night skies Negative: Decline in overall extent of dark night skies
1.4: Coastal change	AA	Positive: No loss of characteristic features along the coast through erosion / sea level rise Negative: Loss of characteristic features along the coast through erosion / sea level rise
2.1: Extent of woodland and tree cover/type	P	Positive: Maintenance of or increase in woodland cover in valleys. Maintenance of or increase in the number and area of farm woodlands. Negative: Decrease in woodland cover in valleys. Decrease in the number and extent of farm woodlands. Increase in woodland cover on higher ground.
2.2: Agricultural land use	P	Positive: Maintenance of or an increase in the extent of pasture. No increase or a decrease in other farming types, particularly arable. Negative: Decrease in the extent of pasture. Increase in other agricultural land uses, particularly intensive arable production.
2.3: Extent of biomass planting	S	Positive: No loss of permanent pasture or semi-natural habitats to biomass planting. Biomass planting incorporated within existing areas of cultivated land or woodland, respecting or enhancing characteristic field and woodland patterns. Negative: Biomass planting located within permanent pastoral farmland, outside cultivated land or on the site of semi-natural habitats identified at the time of the baseline survey. The geometric shapes of areas of biomass planting interrupt characteristic field and/or woodland patterns.
2.4: Field pattern	P	Positive: Maintenance of planned field pattern. Maintenance of overall length of field boundaries; no increase in average field size. Negative: Decrease in overall length of field boundaries; increase in average field size.

Indicators selected for the LMU	Score code	Desired trajectories of change
2.6: Presence [and condition] of historic landscape features	S	Positive: Numbers of recorded above-ground features are stable or increase from baseline numbers. No decline in the overall condition of historic features. Negative: Decrease in the number of above-ground features recorded. Decline in the overall condition of historic features.
2.7: Settlement pattern	P	Positive: Maintenance of the sparse settlement pattern. No expansion of settlements (e.g. along transport routes) or development outside curtilages. No expansion of farmsteads or diversification to other uses. Negative: Increase in the footprint of settlements. Spread of development along road corridors. New development outside settlement curtilages. Farm diversification and/or expansion.
2.8: Transport infrastructure	S	Positive: Maintenance of or decrease in levels of road engineering works, signage and other road furniture. Negative: Increase in levels of road engineering works, signage and other road furniture. Loss of any distinctive types of signage (e.g. finger posts/milestones).
2.9: Local vernacular building styles	S	Positive: New housing/permitted development in sympathy with traditional building character as defined in the baseline surveys. Negative: New housing/permitted development detracts from traditional building character as defined in the baseline surveys.
2.10: Development at sea	AA	Positive: No visible 'industrial scale' developments in view of the coast. Negative: Introduction of 'industrial scale' development visible from the coast.
3.2: Extent of traditional orchards	S	Positive: No loss in the total area of traditionally managed orchards. New areas of traditional orchard planting. Negative: Loss in the total area of traditionally managed orchards.
3.5: Extent [and condition] of designed landscapes	P	Positive: Maintenance of or increase in extent of designed landscapes. No change or an improvement in the overall landscape condition. Negative: Decrease in the overall extent of parklands. Decline in the overall landscape condition.
3.7: Presence of navigation marks	S	Positive: Navigation marks in active use. Negative: Navigation marks no longer in use.
MAXIMUM LMU SCORES	**10** **6**	P = Primary Indicators S = Secondary Indicators

Table 3: Forces for change acting upon the landscape elements to be monitored

	Climate change					Development pressures										Land use changes											Woodland managament changes				WFD response		Industry change		Forces for change identified in exisitng landscape assessments
	Sea level rise/stormy conditions	Coastal squeeze	Increased frequency of droughts	More frequent river flooding	Increased visitor pressure	Tourism developments incl caravan sites, increased signage, car parks	Marine and beach developments (incl demand for moorings)	Housing developments (incl affordable housing due to high house prices)	Industrial and commercial developments	Demand for second homes	Increased light pollution	Deamnd for better communications (e.g aerials, masts)	Sustainable design of new builds	Increase in commuter and tourist traffic incl traffic calming measures and road improvements	Loss/ing up of agricultural land at sale	Wind farms (on-shore and off-shore) and other RE developments	Reservoirs/water storage	Minerals extraction(quarrying	Non-food crops e.g. bioenergy, industrial - intensification of lowland areas	Longer growing season/higher CO2 levels for new crops	Horticultural expansion - fav. growing conditions, consumer demand	Intensification of production (particularly arable) incl associated infrastructure	Livestock farming changes (reduction in cattle, reduced grazing in uplands, reduced grazing on marginal land)	Farm diversification and hobby farming eg horseyculture	Recreational uses eg golf courses, recreational boating	Decline in local and traditional land/woodland management and building skills	New species of different provenance eg Douglas Fir to respond to climate change	Increased planting in floodplain areas eg SRC	Afforestation (incl due to favourable growing conditions or for carbon sequestration)	Increased growth rates and productivity	Reduced intensity of agriculture to meet WFD targets	Measures to reduce diffuse pollution eg buffer strips, planting next to watercourses, etc	Decline in traditional industries	Local quarry closures	
LMU C20																																			
Rolling landscape cut by narrow, incised valleys																																			
Rocky cliffs along Gribbin Head projecting into the sea. Sheltered cove at Polkerris.																																			
Magnificent views from Gribbin Head eastward																																			
Mixed woodland lining stream valleys, with extensive sheltered woodland in the valley at Menabilly																																			Luxulyan Valley highlighted as location to manage and enhance recreational use
Small farm woodlands.																																			Potential spread of pressure from St Austell Bay and Par
Pastoral landscape																			❍																farm diversification an issue; arable intensification
Fields run straight to cliff edge.																																			
Planned field pattern of varying sizes with straight boundaries of Cornish hedges with trees																																			farm diversification an issue; arable intensification; large-scale hedge removal
Daymark at Gribbin Head																																			
Former home of the writer Catherine du Maurier in valley at Menabilly with sheltered woodland and parkland.																																			
Sparse settlement pattern																																			infrastrusture; urban expansion along major routes; expansion of rural villages; changes in industrial pattern
coastal settlement of Polkerris being the main settlement																																			
Minor roads end at Menabilly and Polkerris.																																			
The busy A3082 crosses the northern edge of the area																																			

❍= area identified as a 'moderately high' opportunity location for miscanthus growing in terms of landscape considerations (Scott Wilson and Land & Landscape Management Ltd, 2004)

Table 4: Baseline results

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The AONB should collect information from a representative sample of farmers within the LMU to further pinpoint agricultural land use.</td><td>AONB area

LMU</td><td>Defra June Agricultural Census (2007)

2008/9 data collection</td><td>2013/14</td></tr>
<tr><td>2.3: Extent of biomass planting</td><td>There are currently no agreements for Energy Crops planting through the Energy Crops Scheme in this LMU. The AONB should check the Defra dataset every two years to monitor this.</td><td>LMU</td><td>Defra ECS data (2008)</td><td>2010</td></tr>
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Sample square SX0950
<table><tr><th>Boundary / feature type</th><th>Length (m)</th></tr><tr><td>Cornish hedgebank</td><td>5,248</td></tr><tr><td>Wooded</td><td>1,779</td></tr><tr><td>Stone wall</td><td>3,679</td></tr></table>Sample square SX1152
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<table><tr><th>Sample square</th><th>Total sinuous (m)</th><th>Total straight (m)</th></tr><tr><td>SX0950</td><td>524</td><td>7,837</td></tr><tr><td>SX1152</td><td>4,367</td><td>10,519</td></tr></table>Average field size by sample square:
Sample square SX0950: 5.4 ha
Sample square SX1152: 2.2 ha</td><td>Sample squares</td><td>Cornwall aerial photographs (2005)</td><td>2010/11</td></tr>
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<table><tr><th>Age classification</th><th>Number of features in 2 sample squares</th></tr><tr><td>Prehistoric</td><td>1</td></tr><tr><td>Historic</td><td>1</td></tr><tr><td>Medieval</td><td>2</td></tr><tr><td>Post Medieval</td><td>1</td></tr><tr><td>TOTAL</td><td>5</td></tr></table>Condition of features
Information on the condition of historic features could be obtained through the Heritage at Risk project (English Heritage).</td><td>Sample square</td><td>Cornwall CC Historic Environment Record (April 2008)

Potential future monitoring in conjunction with the Historic Environment Service/Heritage at Risk Project (July 2008)</td><td>2013/14</td></tr>
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<tr><td>2.8: Transport infrastructure</td><td>Baseline to be established through community survey</td><td>Sample squares</td><td>Community survey 2008/9</td><td>2013/14</td></tr>
<tr><td>2.9: Local vernacular building styles</td><td>Baseline to be established through community survey</td><td>Sample squares</td><td>Community survey 2008/9</td><td>2013/14</td></tr>
<tr><td>2.10: Development at sea</td><td>AONB to collect information from the Local Planning Authority on any proposals for off-shore developments.</td><td>AONB area</td><td>LPA records (2008/9)</td><td>2010</td></tr>
<tr><td>3.2: Extent of traditional orchards</td><td>Total area of traditionally managed orchards:
0.2 ha</td><td>Sample square</td><td>Cornwall County Council dataset (2002)
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<tr><td>3.5: Extent [and condition] of designed landscapes</td><td>Designed landscapes within and beyond the LMU:<table><tr><th>Parkland</th><th>Area in LMU (ha)</th><th>Total area (ha)</th></tr><tr><td colspan="3">GRADE II</td></tr><tr><td>Menabilly</td><td>70.7</td><td>70.7</td></tr><tr><td>TOTAL</td><td>70.7</td><td></td></tr></table><u>Condition of designed landscapes:</u>
<u>The AONB should link in with English Heritage's Landscapes at Risk project, which is due to report in July 2008.</u></td><td>LMU</td><td>Register of Parks and Gardens of Special Historic Interest (2006, English Heritage)

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<tr><td>3.7: Presence of navigation marks</td><td>Number of navigation marks: 1 (lit): St Catherine's Point; 1 (unlit): Gribbin Head</td><td>AONB area</td><td>Admiralty Leisure (2007) Leisure Chart Portfolio, Falmouth to Teignmouth: SC5602</td><td>2013/14</td></tr>
</table>

LMU CODE: C21

Location

Links to the Living Landscapes Character Areas

Constituent CAs: CA21

Constituent LDUs: 382, 383, 386

Table 1: Indicators selected to monitor changes in landscape character

Character statement	Indicators selected by statement
Rolling landform with steep sides descending to the river. Creeks penetrate inland, between which are rounded land masses.	1.4: Coastal change (coastal erosion) 2.10: Development at sea
Landscape dominated by **ancient oak woodlands**, with alder, willow, oak, sycamore, beech and sweet chestnut, fringing valley sides and creeks, many of which are unmanaged. Some patches of **mixed forestry plantation** (e.g. LDU 384). Higher land has limited tree cover.	2.1: Extent of woodland and tree cover / type
Silt and muddy banks form important **wetland habitats** particularly when exposed at low tide.	1.5: SSSI condition 2.5: Extent of semi-natural habitats
Mixed agriculture with **pasture** and **arable**. **Vineyards** at Golant.	2.2: Agricultural land use 2.3: Extent of biomass planting
Mixture of **medieval** and **post-medieval** arable and pasture fields enclosed by **sinuous Cornish hedges** with frequent hedgerow trees. Some **larger fields** of more recent enclosure.	2.4: Field patterns
Fortifications at St Catherine's Castle and 15th century blockhouses reflect the area's long-standing role as a strategic port. **Relic quays** along the riverside linked to export of china clay.	2.6: Presence [and condition] of historic landscape features
Larger settlements clustered on steep ria slopes, with **white-painted houses** in a tiered and random orientation. **Villages** located in the valleys. Fowey town nestling on steep slopes around harbour.	1.1: Levels of tranquillity 1.2: Levels of intrusion 1.3: Extent of dark night skies 2.7: Settlement pattern 2.9: Local vernacular building styles
Steep, narrow roads plunge down to the ria shores forming dead-ends. Elsewhere, roads cross valleys at bridging points.	2.8: Transport infrastructure
Car ferry from Bodinnick to Fowey. Another **passenger ferry** links Polruan with Fowey.	3.10: Presence of local car and passenger ferries
Much **water-based recreational** activity and **shipping**, including large ships loading china clay from the quays above Fowey.	1.1: Levels of tranquillity 3.9: Number of moorings

Table 2: The condition criteria for the selected indicators

Indicators selected for the LMU	Score code	Desired trajectories of change
1.1: Levels of tranquillity	AA	Positive: Maintenance or improvement in overall levels of tranquillity Negative: Decline in overall levels of tranquillity
1.2: Levels of intrusion	AA	Positive: Maintenance or improvement in current absence of intrusion Negative: Increase in overall levels of intrusion
1.3: Extent of dark night skies	A	Positive: Maintenance of or increase in overall extent of dark night skies Negative: Decline in overall extent of dark night skies
1.4: Coastal change	AA	Positive: No loss of characteristic features along the coast through erosion / sea level rise Negative: Loss of characteristic features along the coast through erosion / sea level rise
1.5: SSSI condition	AA	Positive: SSSIs are in favourable condition. Where sites are not in favourable condition, there has been an improvement in condition status from previous assessments. Negative: SSSIs are in unfavourable condition. Condition status has declined from previous assessments.
2.1: Extent of woodland and tree cover/type	P	Positive: Maintenance of or increase in woodland cover on valley and creek sides, particularly ancient oak woodlands. Decrease in extent of forestry plantations (including through conversion to native woodland). Negative: Increase in tree/woodland cover on higher land. Decrease in woodland cover on valley and creek sides. Increase in extent of forestry plantation.
2.2: Agricultural land use	P	Positive: Maintenance of or an increase in the extent of pasture. No increase or a decrease in other farming types, particularly arable. Negative: Decrease in the extent of pasture. Increase in other agricultural land uses, particularly intensive arable production.
2.3: Extent of biomass planting	S	Positive: No loss of permanent pasture or semi-natural habitats to biomass planting. Biomass planting incorporated within existing areas of cultivated land or woodland, respecting or enhancing characteristic field and woodland patterns. Negative: Biomass planting located within permanent pastoral farmland, outside cultivated land or on the site of semi-natural habitats identified at the time of the baseline survey. The geometric shapes of areas of biomass planting interrupt characteristic field and/or woodland patterns.

Indicators selected for the LMU	Score code	Desired trajectories of change
2.4: Field pattern	P	Positive: Maintenance/restoration of the medieval field pattern. No decrease in total field boundary length in areas of irregular field pattern Negative: Increase in average field size. Increase in the total area of land with regular field pattern (and loss of irregular field patterns). Decrease in the total length of field boundaries. Increase in average field size.
2.5: Extent of semi-natural habitats	P	Positive: Maintenance of or increase in the extent of semi-natural habitats characteristic to the LMU. Negative: Decrease in or fragmentation of the extent of semi-natural habitats characteristic to the LMU.
2.6: Presence [and condition] of historic landscape features	S	Positive: Numbers of recorded above-ground features are stable or increase from baseline numbers. No decline in the overall condition of historic features. Negative: Decrease in the number of above-ground features recorded. Decline in the overall condition of historic features.
2.7: Settlement pattern	P	Positive: No further spread of development up valley/creek sides. No expansion of the settlement footprint of Fowey. Negative: New development located outside settlement curtilages, including spreading up valley and creek slopes. Expansion of Fowey town.
2.8: Transport infrastructure	S	Positive: Maintenance of or decrease in levels of road engineering works, signage and other road furniture. Negative: Increase in levels of road engineering works, signage and other road furniture. Loss of any distinctive types of signage (e.g. finger posts/milestones).
2.9: Local vernacular building styles	S	Positive: New housing/permitted development in sympathy with traditional building character as defined in the baseline surveys. Negative: New housing/permitted development detracts from traditional building character as defined in the baseline surveys.
2.10: Development at sea	AA	Positive: No visible 'industrial scale' developments in view of the coast. Negative: Introduction of 'industrial scale' development visible from the coast.

Indicators selected for the LMU	Score code	Desired trajectories of change
3.9: Number of moorings	S	Positive: No new locations used for moorings. No increase in the size and/or density of existing areas of moorings. Negative: Mooring areas developed in new locations. Increase in the size and/or density of existing moorings.
3.10: Presence of local car and passenger ferries	S	Positive: Continued presence of local car/passenger ferries. Negative: Removal of ferry services from previous crossing points.
MAXIMUM LMU SCORES	**10**	P = Primary Indicators
	6	S = Secondary Indicators

Table 3: Forces for change acting upon the landscape elements to be monitored

	Climate change					Development pressures									Land use changes										Woodland managament changes				WFD response		Industry change		Forces for change identified in exisitng landscape assessments
	Sea level rise/stormy conditions	Coastal squeeze	Increased frequency of droughts	More frequent river flooding	Increased visitor pressure	Tourism developments incl caravan sites, increased signage, car parks	Marine and beach developments (incl demand for moorings)	Housing developments (incl affordable housing due to high house prices)	Industrial and commercial developments	Demand for second homes	Increased light pollution	Deamnd for better communications (e.g aerials, masts)	Sustainable design of new builds	Increase in commuter and tourist traffic incl traffic calming measures and road improvements	Losting up of agricultural land at sale	Wind farms (on-shore and off-shore) and other RE developments	Reservoirs/water storage	Minerals extraction/quarrying	Non-food crops e.g. bioenergy, industrial - intensification of lowland areas	Longer growing season/higher CO2 levels for new crops	Horticultural expansion - fav. growing conditions, consumer demand	Intensification of production (particularly arable) incl associated infrastructure	Livestock farming changes (reduction in cattle, reduced grazing in uplands, reduced grazing on marginal land)	Farm diversification and hobby farming eg horseyculture	Recreational uses eg golf courses, recreational boating	Decline in local and traditional land/woodland management and building skills	New species of different provenance eg Douglas Fir to respond to climate change	Increased planting in floodplain areas eg SRC	Afforestation (incl due to favourable growing conditions or for carbon sequestration	Increased growth rates and productivity	Reduced intensity of agriculture to meet WFD targets	Measures to reduce diffuse pollution eg buffer strips, planting next to watercourses, etc	Decline in traditional industries	Local quarry closures	
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Much water-based recreational activity and shipping																																	Significant recreational pressure on waterways

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68% Favourable
23% Unfavourable recovering
9% Unfavourable no change

See ArcReader Project and Excel Spreadsheet for a breakdown of results for the SSSIs within this LMU.</td><td>AONB area</td><td>Natural England (web-based information)
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<u>The AONB should collect information from a representative sample of farmers within the LMU to further pinpoint agricultural land use.</u></td><td>AONB area

LMU</td><td>Defra June Agricultural Census (2007)

2008/9 data collection</td><td>2013/14</td></tr>
<tr><td>2.3: Extent of biomass planting</td><td>There are currently no agreements for Energy Crops planting through the Energy Crops Scheme in this LMU. The AONB should check the Defra dataset every two years to monitor this.</td><td>LMU</td><td>Defra ECS data (2008)</td><td>2010</td></tr>
<tr><td>2.4: Field pattern</td><td>Total length of field boundaries by sample square:
<u>Sample square SX1156</u>
<table>
<tr><th>Boundary / feature type</th><th>Length (m)</th></tr>
<tr><td>Cornish hedgebank</td><td>275</td></tr>
<tr><td>Wooded</td><td>3,459</td></tr>
</table>
<u>Sample square SX1254</u>
<table>
<tr><th>Boundary / feature type</th><th>Length (m)</th></tr>
<tr><td>Cornish hedgebank</td><td>658</td></tr>
<tr><td>Wooded</td><td>3,304</td></tr>
</table>
Field boundary pattern by sample square:
<table>
<tr><th>Sample square</th><th>Total sinuous (m)</th><th>Total straight (m)</th></tr>
<tr><td>SX1156</td><td>3,738</td><td>314</td></tr>
<tr><td>SX1254</td><td>2,952</td><td>1,020</td></tr>
</table>
Average field size by sample square:</td><td>Sample squares</td><td>Cornwall aerial photographs (2005)</td><td>2010/11</td></tr>
</table>

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td></td><td>Sample square SX1156: 1.7 ha
Sample square SX1254: 0.5 ha</td><td></td><td></td><td></td></tr>
<tr><td>2.5: Extent of semi-natural habitats</td><td>Habitat calculations:<table><tr><th>Habitat</th><th>Area (ha)</th></tr><tr><td>Saltmarsh</td><td>0.1</td></tr></table></td><td>LMU</td><td>Cornwall LIFE data (1995)</td><td>2013/14</td></tr>
<tr><td>2.6: Presence [and condition] of historic landscape features</td><td>Number of extant features:<table><tr><th>Age classification</th><th>Number of features in 2 sample squares</th></tr><tr><td>Post Medieval</td><td>4</td></tr><tr><td>Unknown</td><td>1</td></tr><tr><td>TOTAL</td><td>5</td></tr></table>Condition of features
Information on the condition of historic features could be obtained through the Heritage at Risk project (English Heritage).</td><td>Sample square</td><td>Cornwall CC Historic Environment Record (April 2008)

Potential future monitoring in conjunction with the Historic Environment Service/Heritage at Risk Project (July 2008)</td><td>2013/14</td></tr>
<tr><td>2.7: Settlement pattern</td><td>Total area of development categories:<table><tr><th>Category</th><th>Area (ha)</th><th>No. of caravans/tents</th></tr><tr><td>Permanent</td><td>8.2</td><td></td></tr></table>Refer to the Arc Reader project for settlement distribution within the sample squares.</td><td>Sample squares</td><td>Cornwall aerial photographs (2005)</td><td>2010/11</td></tr>
<tr><td>2.8: Transport infrastructure</td><td>Baseline to be established through community survey</td><td>Sample squares</td><td>Community survey 2008/9</td><td>2013/14</td></tr>
<tr><td>2.9: Local vernacular building styles</td><td>Baseline to be established through community survey</td><td>Sample squares</td><td>Community survey 2008/9</td><td>2013/14</td></tr>
<tr><td>2.10: Development at sea</td><td>AONB to collect information from the Local Planning Authority on any proposals for off-shore developments.</td><td>AONB area</td><td>LPA records (2008/9)</td><td>2010</td></tr>
</table>

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td>3.9: Number of moorings</td><td>Total number of moorings (Fowey): 1,392</td><td>AONB area</td><td>Fowey Harbour Commission (2007)</td><td>2013/14</td></tr>
<tr><td>3.10: Presence of local car and passenger ferries</td><td>Breakdown by route:<table><tr><th>Route</th><th>Duration</th><th>Frequency</th></tr><tr><td>Fowey – Polruan (passenger)</td><td>All year</td><td>Daily (continuous) – reduced frequency in winter</td></tr><tr><td>Fowey – Bodinnick (car)</td><td>All year</td><td>Daily (frequent) – reduced frequency in winter</td></tr><tr><td>Fowey - Mevagissey</td><td>Summer</td><td>3-6 return trips</td></tr></table></td><td>AONB area</td><td>Fowey Tourist Information: http://www.fowey.co.uk</td><td>2013/14</td></tr>
</table>

LMU CODE: C22

Location

Links to the Living Landscapes Character Areas

Constituent CAs: CA22

Constituent LDUs: 057, 084, 085, 257, 381, 384, 385, 387

Table 1: Indicators selected to monitor changes in landscape character

Character statement	Indicators selected by statement
Irregular coastal strip with rolling landform and **chambered cliffs**, broken by spectacular **sandy bays**. Landform intersected by small, incised stream valleys crossing plateau ridges.	1.4: Coastal change (coastal erosion) 2.10: Development at sea
Valley from Polperro to Crumplehorn supporting areas of **mixed/deciduous woodland**. Otherwise **few trees**.	2.1: Extent of woodland and tree cover / type
Cliffs supporting extensive **rough vegetation** (downs) with a variety of wildflowers and grasses. **Improved pasture** and some **arable** elsewhere. Some **orchards**.	1.5: SSSI condition 2.5: Extent of semi-natural habitats 2.2: Agricultural land use 2.3: Extent of biomass planting 3.2: Extent of traditional orchards
Mixture of **medieval** and **recent** enclosures, with the former being smaller and more irregular, bounded by **Cornish hedges**.	2.4: Field patterns
Inner **drying harbour** at Polperro protected by double piers.	2.6: Presence [and condition] of historic landscape features
Many **small farmsteads, hamlets** and **churchtowns** linked by **small, quiet lanes** enclosed by high Cornish hedgebanks. Local vernacular of **stone** and **slate**, with **cob/thatch** near coast.	1.1: Levels of tranquillity 1.2: Levels of intrusion 1.3: Extent of dark night skies 2.7: Settlement pattern 2.8: Transport infrastructure 2.9: Local vernacular building styles
Picturesque **fishing village** of Polperro with **closely-built slate cottages**, a popular tourist destination.	2.9: Local vernacular building styles 3.8: Levels of fishing industry activity

Table 2: The condition criteria for the selected indicators

Indicators selected for the LMU	Score code	Desired trajectories of change
1.1: Levels of tranquillity	AA	Positive: Maintenance or improvement in overall levels of tranquillity Negative: Decline in overall levels of tranquillity
1.2: Levels of intrusion	AA	Positive: Maintenance or improvement in current absence of intrusion Negative: Increase in overall levels of intrusion
1.3: Extent of dark night skies	A	Positive: Maintenance of or increase in overall extent of dark night skies Negative: Decline in overall extent of dark night skies
1.4: Coastal change	AA	Positive: No loss of characteristic features along the coast through erosion / sea level rise Negative: Loss of characteristic features along the coast through erosion / sea level rise
1.5: SSSI condition	AA	Positive: SSSIs are in favourable condition. Where sites are not in favourable condition, there has been an improvement in condition status from previous assessments. Negative: SSSIs are in unfavourable condition. Condition status has declined from previous assessments.
2.1: Extent of woodland and tree cover/type	P	Positive: Maintenance of or increase in woodland cover in the valley from Polperro to Crumplehorn. No increase in woodland/tree cover elsewhere. Negative: Decrease in woodland cover in the valley from Polperro to Crumplehorn. Increase in woodland/tree cover elsewhere.
2.2: Agricultural land use	P	Positive: Maintenance of or an increase in the extent of rough grazing on the downs. Maintenance of the existing extent of pastoral land use. No increase in the extent of arable. Negative: Decrease in the extent of rough grazing on the downs, including through abandonment of agricultural improvement. Increase in the area of land under arable cultivation. Decrease in the extent of pasture.
2.3: Extent of biomass planting	S	Positive: No loss of permanent pasture or semi-natural habitats to biomass planting. Biomass planting incorporated within existing areas of cultivated land or woodland, respecting or enhancing characteristic field and woodland patterns. Negative: Biomass planting located within permanent pastoral farmland, outside cultivated land or on the site of semi-natural habitats identified at the time of the baseline survey. The geometric shapes of areas of biomass planting interrupt characteristic field and/or woodland patterns.

Indicators selected for the LMU	Score code	Desired trajectories of change
2.4: Field pattern	P	Positive: Maintenance/restoration of the medieval field pattern. No decrease in total field boundary length in areas of irregular field pattern Negative: Increase in average field size. Increase in the total area of land with regular field pattern (and loss of irregular field patterns). Decrease in the total length of field boundaries. Increase in average field size.
2.5: Extent of semi-natural habitats	P	Positive: Maintenance of or increase in the extent of semi-natural habitats characteristic to the LMU. Negative: Decrease in or fragmentation of the extent of semi-natural habitats characteristic to the LMU.
2.6: Presence [and condition] of historic landscape features	S	Positive: Numbers of recorded above-ground features are stable or increase from baseline numbers. No decline in the overall condition of historic features. Negative: Decrease in the number of above-ground features recorded. Decline in the overall condition of historic features.
2.7: Settlement pattern	P	Positive: Maintenance of the existing settlement pattern of farmsteads, hamlets and churchtowns. No increase in the average size of farmsteads. Decrease in the size and/or number of holiday parks, chalets and caravans behind Polperro and/or along the coast. Negative: New development located outside settlement curtilages. Increase in the size of farmsteads. New locations of or an expansion in the size of holiday parks, chalets and caravans, particularly on higher ground or along the coast.
2.8: Transport infrastructure	S	Positive: Maintenance of or decrease in levels of road engineering works, signage and other road furniture. Negative: Increase in levels of road engineering works, signage and other road furniture. Loss of any distinctive types of signage (e.g. finger posts/milestones).
2.9: Local vernacular building styles	S	Positive: New housing/permitted development in sympathy with traditional building character as defined in the baseline surveys. Negative: New housing/permitted development detracts from traditional building character as defined in the baseline surveys.
2.10: Development at sea	AA	Positive: No visible 'industrial scale' developments in view of the coast. Negative: Introduction of 'industrial scale' development visible from the coast.

Indicators selected for the LMU	Score code	Desired trajectories of change
3.2: Extent of traditional orchards	S	Positive: No loss in the total area of traditionally managed orchards. New areas of traditional orchard planting. Negative: Loss in the total area of traditionally managed orchards.
3.8: Levels of fishing industry activity	S	Positive: No decline in the overall number of active fishing fleets Negative: Decline in the overall number of active fishing fleets.
MAXIMUM LMU SCORES	**10**	P = Primary Indicators
	6	S = Secondary Indicators

Table 3: Forces for change acting upon the landscape elements to be monitored

	Climate change					Development pressures										Land use changes											Woodland management changes				WFD response		Industry change		Forces for change identified in exisitng landscape assessments
	Sea level rise/stormy conditions	Coastal squeeze	Increased frequency of droughts	More frequent river flooding	Increased visitor pressure	Tourism developments incl caravan sites, increased signage, car parks	Marine and beach developments (incl demand for moorings)	Housing developments (incl affordable housing due to high house prices)	Industrial and commercial developments	Demand for second homes	Increased light pollution	Deamnd for better communications (e.g aerials, masts)	Sustainable design of new builds	Increase in commuter and tourist traffic incl traffic calming measures and road improvements	Losting up of agricultural land at sale	Wind farms (on-shore and off-shore) and other RE developments	Reservoirs/water storage	Minerals extraction(quarrying	Non-food crops e.g. bioenergy, industrial - intensification of lowland areas	Longer growing season/higher CO2 levels for new crops	Horticultural expansion - fav. growing conditions, consumer demand	Intensification of production (particularly arable) incl associated infrastructure	Livestock farming changes (reduction in cattle, reduced grazing in uplands, reduced grazing on marginal land)	Farm diversification and hobby farming eg horseyculture	Recreational uses eg golf courses, recreational boating	Decline in local and traditional land/woodland management and building skills	New species of different provenance eg Douglas Fir to respond to climate change	Increased planting in floodplain areas eg SRC	Afforestation (incl due to favourable growing conditions or for carbon sequestration)	Increased growth rates and productivity	Reduced intensity of agriculture to meet WFD targets	Measures to reduce diffuse pollution eg buffer strips, planting next to watercourses, etc	Decline in traditional industries	Local quarry closures	
LMU C22: Polperro Coast																																		
ACROSS LMU																																		
Irregular coastal strip with rolling landform and chambered cliffs, broken by spectacular sandy bays.																																		Tourism and recreational pressure along coast
Landform intersected by small, incised stream valleys crossing plateau ridges.																																		
Valley from Polperro to Crumplehorn supporting areas of mixed/deciduous woodland																																		
Otherwise few trees																																		
Cliffs supporting extensive rough vegetation (downs) with a variety of wildflowers and grasses																			●															Tourism and recreational pressure along coast
Mixture of medieval and recent enclosures, with the former being smaller and more irregular, bounded by Cornish hedges																			●															Widespread removal of Cornish hedges and degraded management
Improved pasture and some arable. Rough grazing on cliffs																			●															
Many small farmsteads, hamlets and churchtowns linked by small, quiet lanes enclosed by high Cornish hedgebanks.																																		Demand for rural housing and expansion of adjoining settlements
Inner drying harbour at Polperro protected by double piers.																																		
Picturesque fishing village of Polperro with closely-built slate cottages, a popular tourist destination.																																		Tourism and recreational pressure along coast

● = area identified as a 'high' opportunity location for miscanthus growing in terms of landscape considerations (Scott Wilson and Land & Landscape Management Ltd, 2004)

Table 4: Baseline results

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td>1.1: Levels of tranquillity</td><td><u>AONB Area Results (South Coast (Eastern))</u>
<table><tr><th>Category of tranquillity</th><th>Score</th></tr><tr><td>Highest</td><td>130.7</td></tr><tr><td>Lowest</td><td>-14.6</td></tr><tr><td>Mean</td><td>22.0</td></tr></table></td><td>AONB area</td><td>CPRE (2007)</td><td>2013/14</td></tr>
<tr><td>1.2: Levels of intrusion</td><td><u>AONB Area Results (South Coast (Eastern))</u>
<table><tr><th>Category of intrusion</th><th>Area (ha)</th><th>1997 area (ha)</th></tr><tr><td>Disturbed</td><td>3,200</td><td>3,219</td></tr><tr><td>Undisturbed</td><td>17,677</td><td>17,659</td></tr><tr><td>Urban</td><td>0</td><td>0</td></tr></table>Number of off-shore windfarms: 0</td><td>AONB area</td><td>CPRE (2007)

BWEA (2008)</td><td>2013/14</td></tr>
<tr><td>1.3: Extent of dark night skies</td><td><u>Cornwall AONB Results</u>
<table><tr><th>Category of darkness</th><th>Area (ha)</th><th>1993 area (ha)</th></tr><tr><td>0-1.7</td><td>277</td><td>258</td></tr><tr><td>1.7-50</td><td>442</td><td>527</td></tr><tr><td>50-150</td><td>238</td><td>171</td></tr><tr><td>150-240</td><td>3</td><td>4</td></tr><tr><td>240-255</td><td>0</td><td>0</td></tr></table><u>Number of stars in the Orion constellation:</u> <u>The AONB is to organise a ‘star count’ to inform this indicator.</u>

<u>Fixed point photography:</u> <u>AONB to establish locations for fixed point photography to monitor this indicator</u></td><td>AONB

AONB area

LMU</td><td>CPRE (2000)

Primary data (2008/9)

2008/9</td><td>2013/14</td></tr>
</table>

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td>1.4: Coastal change</td><td><u>The AONB should follow the work of the Coastal Monitoring Project and explore the possibility of sitting on the Steering Group via the Cornwall and Isles of Scilly Coastal Authorities group.</u></td><td>AONB area</td><td>South West Regional Coastal Monitoring Programme (Plymouth University)</td><td>AONB to contact the Coastal Authorities by end of 2008.</td></tr>
<tr><td>1.5: SSSI condition</td><td><u>AONB Area results (South Coast (Eastern))</u>
68% Favourable
23% Unfavourable recovering
9% Unfavourable no change

See ArcReader Project and Excel Spreadsheet for a breakdown of results for the SSSIs within this LMU.</td><td>AONB area</td><td>Natural England (web-based information)
See Excel Spreadsheet for a breakdown of assessment dates for SSSIs within this LMU.</td><td>2010 (every 2 years)</td></tr>
<tr><td>2.1: Extent of woodland and tree cover/type</td><td><u>Breakdown by woodland type:</u><table><tr><th>Woodland type</th><th>Area –ha (NIWT figure)</th></tr><tr><td>Broadleaved</td><td>84.5 (46.3)</td></tr><tr><td>Ancient semi-natural</td><td>4.3</td></tr><tr><td>PAWS</td><td>8.4</td></tr><tr><td>Mixed</td><td>2.3 (0.1)</td></tr><tr><td>Conifer</td><td>9.1 (5.2)</td></tr><tr><td>Scrub</td><td>77.2</td></tr></table></td><td>LMU</td><td>- Cornwall LIFE dataset (1995)
- Natural England’s Ancient Woodland Inventory (1999)
- National Inventory of Woodland and Trees (2000)</td><td>2013/14</td></tr>
</table>

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td>2.2: Agricultural land use</td><td><u>AONB Area Results (South Coast (Eastern)):</u>
<table><tr><th>Grassland categories</th><th>Hectares</th></tr><tr><td>< 5 years & permanent pasture</td><td>2,319</td></tr><tr><td>Rough grazing</td><td>57</td></tr><tr><td>Arable categories:</td><td></td></tr><tr><td>Cereals</td><td>532</td></tr><tr><td>Number of holdings in different size categories:</td><td></td></tr><tr><td><5 ha:</td><td>30</td></tr><tr><td>5-10 ha:</td><td>5</td></tr><tr><td>10-20 ha:</td><td>9</td></tr><tr><td>Over 20 ha:</td><td>34</td></tr></table>
<u>The AONB should collect information from a representative sample of farmers within the LMU to further pinpoint agricultural land use.</u></td><td>AONB area

LMU</td><td>Defra June Agricultural Census (2007)

2008/9 data collection</td><td>2013/14</td></tr>
<tr><td>2.3: Extent of biomass planting</td><td>There are currently no agreements for Energy Crops planting through the Energy Crops Scheme in this LMU. The AONB should check the Defra dataset every two years to monitor this.</td><td>LMU</td><td>Defra ECS data (2008)</td><td>2010</td></tr>
</table>

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td>2.4: Field pattern</td><td>Total length of field boundaries by sample square:
Sample square SX1350
<table><tr><th>Boundary / feature type</th><th>Length (m)</th></tr><tr><td>Cornish hedgebank</td><td>4,129</td></tr><tr><td>Wooded</td><td>434</td></tr><tr><td>Gate</td><td>11</td></tr></table>Sample square SX1551
<table><tr><th>Boundary / feature type</th><th>Length (m)</th></tr><tr><td>Cornish hedgebank</td><td>8,060</td></tr><tr><td>Wooded</td><td>1,018</td></tr><tr><td>Gate</td><td>14.6</td></tr><tr><td>Gap</td><td>148</td></tr></table>Sample square SX2252
<table><tr><th>Boundary / feature type</th><th>Length (m)</th></tr><tr><td>Cornish hedgebank</td><td>8,688</td></tr><tr><td>Wooded</td><td>5,126</td></tr></table>Field boundary pattern by sample square:
<table><tr><th>Sample square</th><th>Total sinuous (m)</th><th>Total straight (m)</th></tr><tr><td>SX1350</td><td>545</td><td>4,321</td></tr><tr><td>SX1551</td><td>3,117</td><td>6,315</td></tr><tr><td>SX2252</td><td>6,335</td><td>7,881</td></tr></table>Average field size by sample square:
Sample square SX1350: 3.4 ha
Sample square SX1551: 2.6 ha
Sample square SX2252: 2.4 ha</td><td>Sample squares</td><td>Cornwall aerial photographs (2005)</td><td>2010/11</td></tr>
<tr><td>2.5: Extent of semi-natural habitats</td><td>Habitat calculations:
<table><tr><th>Habitat</th><th>Area (ha)</th></tr><tr><td>Maritime cliff</td><td>3.1</td></tr></table></td><td>LMU</td><td>Cornwall LIFE data (1995)</td><td>2013/14</td></tr>
</table>

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td>2.6: Presence [and condition] of historic landscape features</td><td>Number of extant features:<table><tr><th>Age classification</th><th>Number of features in 2 sample squares</th></tr><tr><td>Prehistoric</td><td>1</td></tr><tr><td>Medieval</td><td>1</td></tr><tr><td>Post Medieval</td><td>5</td></tr><tr><td>TOTAL</td><td>7</td></tr></table>Condition of features
Information on the condition of historic features could be obtained through the Heritage at Risk project (English Heritage).</td><td>Sample square</td><td>Cornwall CC Historic Environment Record (April 2008)

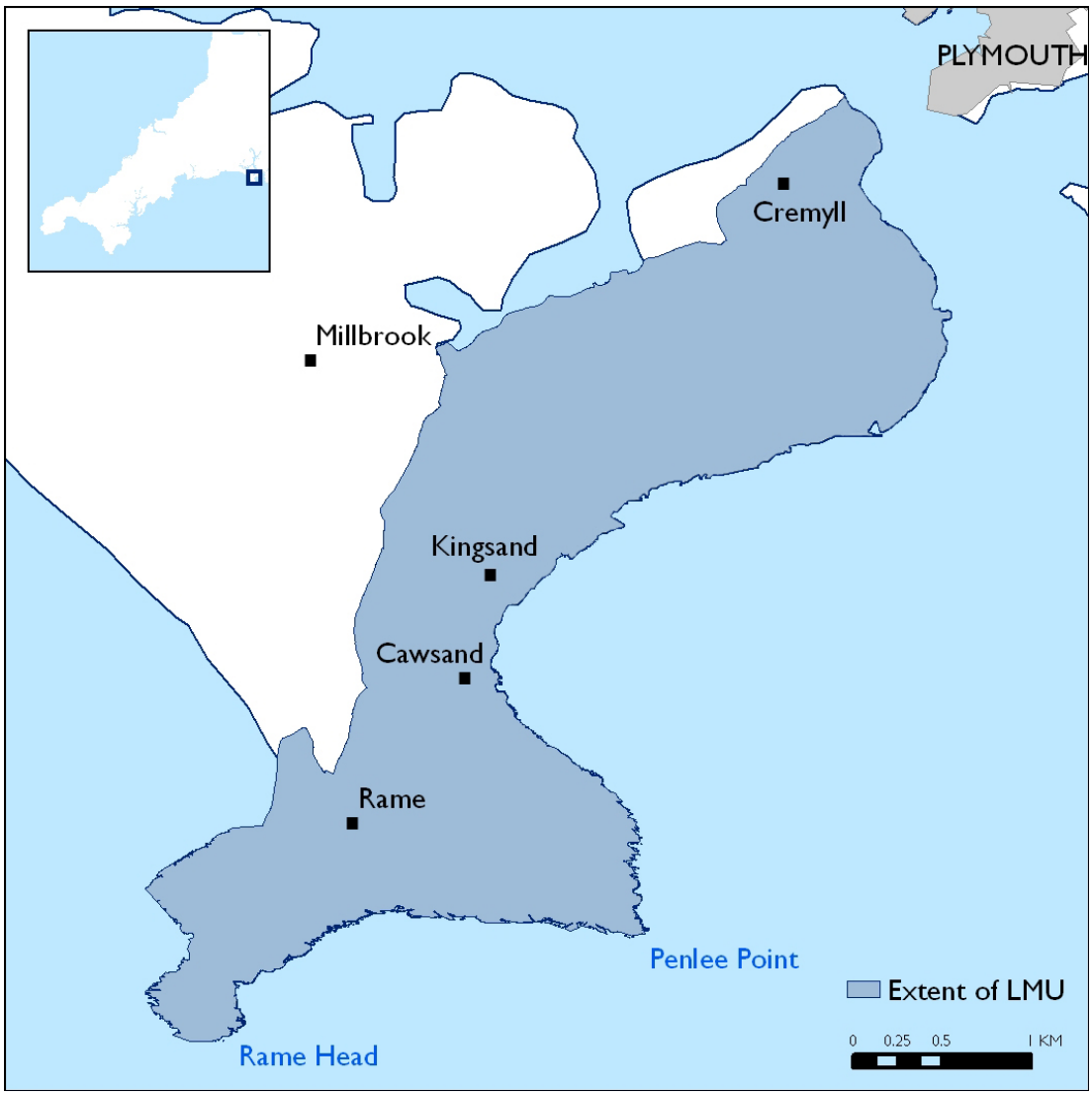
Potential future monitoring in conjunction with the Historic Environment Service/Heritage at Risk Project (July 2008)</td><td>2013/14</td></tr>
<tr><td>2.7: Settlement pattern</td><td>Total area of development categories:<table><tr><th>Category</th><th>Area (ha)</th><th>No. of caravans/tents</th></tr><tr><td>Permanent</td><td>5.9</td><td></td></tr><tr><td>Chalet /static caravan</td><td>0.4</td><td>11</td></tr></table>Refer to the Arc Reader project for settlement distribution within the sample squares.</td><td>Sample squares</td><td>Cornwall aerial photographs (2005)</td><td>2010/11</td></tr>
<tr><td>2.8: Transport infrastructure</td><td>Baseline to be established through community survey</td><td>Sample squares</td><td>Community survey 2008/9</td><td>2013/14</td></tr>
<tr><td>2.9: Local vernacular building styles</td><td>Baseline to be established through community survey</td><td>Sample squares</td><td>Community survey 2008/9</td><td>2013/14</td></tr>
<tr><td>2.10: Development at sea</td><td>AONB to collect information from the Local Planning Authority on any proposals for off-shore developments.</td><td>AONB area</td><td>LPA records (2008/9)</td><td>2010</td></tr>
<tr><td>3.2: Extent of traditional orchards</td><td>Total area of traditionally managed orchards:
0.2 ha</td><td>Sample square</td><td>Cornwall County Council dataset (2002)
Cornwall aerial</td><td>2010/11</td></tr>
</table>

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td></td><td></td><td></td><td>photographs (2005)</td><td></td></tr>
<tr><td>3.8: Levels of fishing industry activity</td><td>Total number of active fishing fleets:<table><tr><th>Harbour</th><th>Number of active fishing vessels</th></tr><tr><td>Polperro</td><td>11</td></tr><tr><td>TOTAL</td><td>11</td></tr></table></td><td>LMU</td><td>Cornwall Sea Fisheries Survey (December 2006)</td><td>2013/14</td></tr>
</table>

CORNWALL AONB: RAME HEAD

LMU CODE: C23

Location



Links to the Living Landscapes Character Arms

Constituent CAs: CA22, CA25

Constituent LDUs: 332, 334, 390, 388

Table 1: Indicators selected to monitor changes in landscape character

Character statement	Indicators selected by statement
Varied **coastal landscape** with conical headland and inland ridge. **Panoramic views** from ridge across Plymouth Sound, Cawsand Bay and north up the Tamar River.	1.4: Coastal change (coastal erosion) 2.10: Development at sea 1.2: Levels of intrusion
Steep cliffs backed by **coastal heath**; beyond which is a treeless ridge. Sheltered land in the east contains **woodlands**.	1.5: SSSI condition 2.1: Extent of woodland and tree cover / type 2.5: Extent of semi-natural habitats
Deer park at Mount Edgcumbe. Patches of **heathland**, **scrub** and **mixed agriculture**.	1.5: SSSI condition 2.2: Agricultural land use 2.3: Extent of biomass planting 2.5: Extent of semi-natural habitats 3.5: Extent [and condition] of designed landscapes
Mixed field sizes and shapes; **small irregular medieval fields** and **larger, more recent regular enclosures**. **Cornish hedges** form boundaries.	2.4: Field patterns
Ornamental parkland and **woodland** at Mount Edgcumbe estate. 18th, 19th and 20th **fortifications**. Rame Head Chapel (14th century) is prominent, formerly acting as a **lighthouse**.	2.1: Extent of woodland and tree cover / type 2.6: Presence [and condition] of historic landscape features 3.5: Extent [and condition] of designed landscapes 3.7: Presence of navigation marks
Scattered compact **seaside villages** clinging to cliffs	1.1: Levels of tranquillity 1.2: Levels of intrusion 1.3: Extent of dark night skies 2.7: Settlement pattern 3.8: Levels of fishing industry activity
The local vernacular is a mixture of **stone and slate**, and **cob and thatch**.	2.9: Local vernacular building styles
Narrow streets at Cawsand and Kingsand tumbling to the coast.	2.8: Transport infrastructure

Table 2: The condition criteria for the selected indicators

Indicators selected for the LMU	Score code	Desired trajectories of change
1.1: Levels of tranquillity	AA	Positive: Maintenance or improvement in overall levels of tranquillity Negative: Decline in overall levels of tranquillity
1.2: Levels of intrusion	AA	Positive: Maintenance or improvement in current absence of intrusion Negative: Increase in overall levels of intrusion
1.3: Extent of dark night skies	A	Positive: Maintenance of or increase in overall extent of dark night skies Negative: Decline in overall extent of dark night skies
1.4: Coastal change	AA	Positive: No loss of characteristic features along the coast through erosion / sea level rise Negative: Loss of characteristic features along the coast through erosion / sea level rise
1.5: SSSI condition	AA	Positive: SSSIs are in favourable condition. Where sites are not in favourable condition, there has been an improvement in condition status from previous assessments. Negative: SSSIs are in unfavourable condition. Condition status has declined from previous assessments.
2.1: Extent of woodland and tree cover/type	P	Positive: Maintenance of or increase in woodland cover in the east of the LMU. No tree or woodland cover on the inland ridge. Negative: Decrease in woodland cover in the east of the LMU. Presence of trees/woodland on the inland ridge.
2.2: Agricultural land use	P	Positive: Maintenance of the mixed agricultural character of the LMU. No increase in arable. No decrease in the overall area of agricultural land (e.g. no loss to amenity uses). Negative: Increase in the extent of land under arable cultivation. Decrease in the area of grazed deer pasture. Loss of agricultural land to other land uses (e.g. amenity).
2.3: Extent of biomass planting	S	Positive: No loss of permanent pasture or semi-natural habitats to biomass planting. Biomass planting incorporated within existing areas of cultivated land or woodland, respecting or enhancing characteristic field and woodland patterns. Negative: Biomass planting located within permanent pastoral farmland, outside cultivated land or on the site of semi-natural habitats identified at the time of the baseline survey. The geometric shapes of areas of biomass planting interrupt characteristic field and/or woodland patterns.
2.4: Field pattern	P	Positive: Retention or restoration of the remaining irregular medieval field pattern. No increase in average field size. No increase in the total length of field boundaries. Negative: Loss of areas of medieval field pattern to new, regular enclosures. Increase in average field size.

Indicators selected for the LMU	Score code	Desired trajectories of change
2.5: Extent of semi-natural habitats	P	Positive: Maintenance of or increase in the extent of semi-natural habitats characteristic to the LMU. Negative: Decrease in or fragmentation of the extent of semi-natural habitats characteristic to the LMU.
2.6: Presence [and condition] of historic landscape features	S	Positive: Numbers of recorded above-ground features are stable or increase from baseline numbers. No decline in the overall condition of historic features. Negative: Decrease in the number of above-ground features recorded. Decline in the overall condition of historic features.
2.7: Settlement pattern	P	Positive: Maintenance of the compact nature of coastal villages. No new development outside settlement curtilages, including camping/caravan/chalet sites. Negative: Expansion of coastal villages. New development on the ridgeline and/or outside settlement curtilages, including camping/caravan/chalet sites.
2.8: Transport infrastructure	S	Positive: Maintenance of or decrease in levels of road engineering works, signage and other road furniture. Negative: Increase in levels of road engineering works, signage and other road furniture. Loss of any distinctive types of signage (e.g. finger posts/milestones).
2.9: Local vernacular building styles	S	Positive: New housing/permitted development in sympathy with traditional building character as defined in the baseline surveys. Negative: New housing/permitted development detracts from traditional building character as defined in the baseline surveys.
2.10: Development at sea	AA	Positive: No visible 'industrial scale' developments in view of the coast. Negative: Introduction of 'industrial scale' development visible from the coast.
3.5: Extent [and condition] of designed landscapes	S	Positive: Maintenance of or increase in extent of designed landscapes. No change or an improvement in the overall landscape condition. Negative: Decrease in the overall extent of parklands. Decline in the overall landscape condition.

Indicators selected for the LMU	Score code	Desired trajectories of change
3.7: Presence of navigation marks	S	Positive: Navigation marks in active use. Negative: Navigation marks no longer in use.
3.8: Levels of fishing industry activity	S	Positive: No decline in the overall number of active fishing fleets Negative: Decline in the overall number of active fishing fleets.
MAXIMUM LMU SCORES	**10** **7**	P = Primary Indicators S = Secondary Indicators

Table 3: Forces for change acting upon the landscape elements to be monitored

	Climate change					Development pressures										Land use changes												Woodland managament changes				WFD response		Industry change		Forces for change identified in exisitng landscape assessments
	Sea level rise/stormy conditions	Coastal squeeze	Increased frequency of droughts	More frequent river flooding	Increased visitor pressure	Tourism developments incl caravan sites, increased signage, car parks	Marine and beach developments (incl demand for moorings)	Housing developments (incl affordable housing due to high house prices)	Industrial and commercial developments	Demand for second homes	Increased light pollution	Deamnd for better communications (e.g aerials, masts)	Sustainable design of new builds	Increase in commuter and tourist traffic incl traffic calming measures and road improvements	Lotting up of agricultural land at sale	Wind farms (on-shore and off-shore) and other RE developments	Reservoirs/water storage	Minerals extraction(quarrying	Non-food crops e.g. bioenergy, industrial - intensification of lowland areas	Longer growing season/higher CO_2 levels for new crops	Horticultural expansion - fav. growing conditions, consumer demand	Intensification of production (particularly arable) incl associated infrastructure	Livestock farming changes (reduction in cattle, reduced grazing in uplands, reduced grazing on marginal land)	Farm diversification and hobby farming eg horseyculture	Recreational uses eg golf courses, recreational boating	Decline in local and traditional land/woodland management and building skills	New species of different provenance eg Douglas Fir to respond to climate change	Increased planting in floodplain areas eg SRC	Afforestation (incl due to favourable growing conditions or for carbon sequestration	Increased growth rates and productivity	Reduced intensity of agriculture to meet WFD targets	Measures to reduce diffuse pollution eg buffer strips, planting next to watercourses, etc	Decline in traditional industries	Local quarry closures	
LMU C23: Rame Head																																			
Varied coastal landscape with conical headland and inland ridge																																			
Panoramic views from ridge across Plymouth Sound, Cawsand Bay and north up the Tamar River																																			Visual influence of Plymouth on horizon
Steep cliffs backed by coastal heath																																			Some abandonment/lack of management leading to scrub encroachment
treeless ridge																																			
Sheltered land in the east contains woodlands.																																			
Mixed field sizes and shapes; small irregular medieval fields and larger, more recent regular enclosures																																			Intensification of former heathland
Cornish hedges form boundaries																																			
Deer park at Mount Edgcumbe																																			
Patches of heathland, scrub and mixed agriculture.																																			
Ornamental parkland and woodland at Mount Edgcumbe																																			
18th, 19th and 20th fortifications																																			
Rame Head Chapel (14th century) is prominent, formerly acting as a lighthouse.																																			
local vernacular is a mixture of stone and slate, and cob and thatch																																			
Scattered compact seaside villages clinging to cliffs																																			
Narrow streets at Cawsand and Kingsand tumbling to the coast.																																			

Table 4: Baseline results

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td>1.1: Levels of tranquillity</td><td><u>AONB Area Results (Rame Head))</u>
<table><tr><th>Category of tranquillity</th><th>Score</th></tr><tr><td>Highest</td><td>34.7</td></tr><tr><td>Lowest</td><td>-33.9</td></tr><tr><td>Mean</td><td>4.8</td></tr></table></td><td>AONB area</td><td>CPRE (2007)</td><td>2013/14</td></tr>
<tr><td>1.2: Levels of intrusion</td><td><u>AONB Area Results (Rame Head)</u>
<table><tr><th>Category of intrusion</th><th>Area (ha)</th><th>1997 area (ha)</th></tr><tr><td>Disturbed</td><td>214</td><td>250</td></tr><tr><td>Undisturbed</td><td>560</td><td>284</td></tr><tr><td>Urban</td><td>0</td><td>0</td></tr></table>Number of off-shore windfarms: 0</td><td>AONB area</td><td>CPRE (2007)

BWEA (2008)</td><td>2013/14</td></tr>
<tr><td>1.3: Extent of dark night skies</td><td><u>Cornwall AONB Results</u>
<table><tr><th>Category of darkness</th><th>Area (ha)</th><th>1993 area (ha)</th></tr><tr><td>0-1.7</td><td>277</td><td>258</td></tr><tr><td>1.7-50</td><td>442</td><td>527</td></tr><tr><td>50-150</td><td>238</td><td>171</td></tr><tr><td>150-240</td><td>3</td><td>4</td></tr><tr><td>240-255</td><td>0</td><td>0</td></tr></table><u>Number of stars in the Orion constellation</u>: <u>The AONB is to organise a ‘star count’ to inform this indicator.</u>

<u>Fixed point photography</u>: <u>AONB to establish locations for fixed point photography to monitor this indicator</u></td><td>AONB

AONB area

LMU</td><td>CPRE (2000)

Primary data (2008/9)

2008/9</td><td>2013/14</td></tr>
<tr><td>1.4: Coastal change</td><td><u>The AONB should follow the work of the Coastal Monitoring Project and explore the possibility of sitting on the Steering</u></td><td>AONB area</td><td>South West Regional Coastal Monitoring</td><td>AONB to contact the</td></tr>
</table>

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td></td><td>Group via the Cornwall and Isles of Scilly Coastal Authorities group.</td><td></td><td>Programme (Plymouth University)</td><td>Coastal Authorities by end of 2008.</td></tr>
<tr><td>1.5: SSSI condition</td><td>AONB Area results (South Coast (Eastern))
68% Favourable
23% Unfavourable recovering
9% Unfavourable no change

See ArcReader Project and Excel Spreadsheet for a breakdown of results for the SSSIs within this LMU.</td><td>AONB area</td><td>Natural England (web-based information)
See Excel Spreadsheet for a breakdown of assessment dates for SSSIs within this LMU.</td><td>2010 (every 2 years)</td></tr>
<tr><td>2.1: Extent of woodland and tree cover/type</td><td>Breakdown by woodland type:<table><tr><th>Woodland type</th><th>Area –ha (NIWT figure)</th></tr><tr><td>Broadleaved</td><td>111.0 (108.6)</td></tr><tr><td>Ancient semi-natural</td><td>15.9</td></tr><tr><td>PAWS</td><td>3.0</td></tr><tr><td>Mixed</td><td>19.2</td></tr><tr><td>Conifer</td><td>3.1 (8.7)</td></tr><tr><td>Scrub</td><td>43.7</td></tr></table></td><td>LMU</td><td>- Cornwall LIFE dataset (1995)
- Natural England’s Ancient Woodland Inventory (1999)
- National Inventory of Woodland and Trees (2000)</td><td>2013/14</td></tr>
<tr><td>2.2: Agricultural land use</td><td>AONB Area Results (Rame Head):
No statistics are available from Defra for this AONB area due to data protection issues. The AONB should collect information through questionnaire surveys with a representative sample of farmers within the LMU.</td><td>AONB area
Sample squares</td><td>Defra June Agricultural Census (2007)</td><td>2013/14</td></tr>
<tr><td>2.3: Extent of biomass planting</td><td>There are currently no agreements for Energy Crops planting through the Energy Crops Scheme in this LMU. The AONB should check the Defra dataset every two years to monitor this.</td><td>LMU</td><td>Defra ECS data (2008)</td><td>2010</td></tr>
<tr><td>2.4: Field pattern</td><td>Total length of field boundaries by sample square:
Sample square SX4351<table><tr><th>Boundary / feature type</th><th>Length (m)</th></tr></table></td><td>Sample squares</td><td>Cornwall aerial photographs (2005)</td><td>2010/11</td></tr>
</table>

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td></td><td>
<table>
<tr><td>Cornish hedgebank</td><td>3,355</td></tr>
<tr><td>Wooded</td><td>2,951</td></tr>
<tr><td>Devon hedgebank</td><td>161</td></tr>
</table>
Field boundary pattern by sample square:
<table>
<tr><th>Sample square</th><th>Total sinuous (m)</th><th>Total straight (m)</th></tr>
<tr><td>SX4351</td><td>4,679</td><td>2,864</td></tr>
</table>
Average field size by sample square:
Sample square SX4351: 6.9 ha
</td><td></td><td></td><td></td></tr>
<tr><td>2.5: Extent of semi-natural habitats</td><td>
Habitat breakdown:
<table>
<tr><th>Habitat</th><th>Area (ha0</th></tr>
<tr><td>Maritime cliff</td><td>1.8</td></tr>
<tr><td>Scattered bracken on maritime cliff</td><td>6.2</td></tr>
<tr><td>Scattered scrub on maritime cliff</td><td>14.6</td></tr>
</table>
</td><td>LMU</td><td>Cornwall LIFE data (1995)</td><td>2013/14</td></tr>
<tr><td>2.6: Presence [and condition] of historic landscape features</td><td>
Number of extant features:
<table>
<tr><th>Age classification</th><th>Number of features in 2 sample squares</th></tr>
<tr><td>Prehistoric</td><td>1</td></tr>
<tr><td>Historic</td><td>2</td></tr>
<tr><td>Post Medieval</td><td>17</td></tr>
<tr><td>Modern</td><td>5</td></tr>
<tr><td>TOTAL</td><td>25</td></tr>
</table>
Condition of features
Information on the condition of historic features could be obtained through the Heritage at Risk project (English Heritage).
</td><td>Sample square</td><td>Cornwall CC Historic Environment Record (April 2008)

Potential future monitoring in conjunction with the Historic Environment Service/Heritage at Risk Project (July 2008)</td><td>2013/14</td></tr>
<tr><td>2.7: Settlement pattern</td><td>
Total area of development categories:
<table>
<tr><th>Category</th><th>Area (ha)</th><th>No. of caravans/tents</th></tr>
<tr><td>Permanent</td><td>3.5</td><td></td></tr>
</table>
</td><td>Sample squares</td><td>Cornwall aerial photographs (2005)</td><td>2010/11</td></tr>
</table>

<table>
<tr><th>Indicator</th><th>Results from 2008 analysis</th><th>Scale</th><th>Source of data and date</th><th>Next date for monitoring</th></tr>
<tr><td></td><td>Refer to the Arc Reader project for settlement distribution within the sample squares.</td><td></td><td></td><td></td></tr>
<tr><td>2.8: Transport infrastructure</td><td>Baseline to be established through community survey</td><td>Sample squares</td><td>Community survey 2008/9</td><td>2013/14</td></tr>
<tr><td>2.9: Local vernacular building styles</td><td>Baseline to be established through community survey</td><td>Sample squares</td><td>Community survey 2008/9</td><td>2013/14</td></tr>
<tr><td>2.10: Development at sea</td><td>AONB to collect information from the Local Planning Authority on any proposals for off-shore developments.</td><td>AONB area</td><td>LPA records (2008/9)</td><td>2010</td></tr>
<tr><td>3.5: Extent [and condition] of designed landscapes</td><td>Designed landscapes within and beyond the LMU:<table><tr><th>Parkland</th><th>Area in LMU (ha)</th><th>Total area (ha)</th></tr><tr><td colspan="3">GRADE I</td></tr><tr><td>Mount Edgcumbe</td><td>221.8</td><td>227.3</td></tr><tr><td>TOTAL</td><td>221.8</td><td></td></tr></table>Condition of designed landscapes:
The AONB should link in with English Heritage's Landscapes at Risk project, which is due to report in July 2008.</td><td>LMU</td><td>Register of Parks and Gardens of Special Historic Interest (2006, English Heritage)

Potential future monitoring in conjunction with the Historic Environment Service/Landscapes at Risk Project (July 2008)</td><td>2013/14</td></tr>
<tr><td>3.7: Presence of navigation marks</td><td>Number of navigation marks: 1 (unlit): Rame Head; 2 (lit): Penlee Point and Queens Ground.</td><td>AONB area</td><td>Admiralty Leisure (2007) Leisure Chart Portfolio, Falmouth to Teignmouth: SC5602</td><td>2013/14</td></tr>
<tr><td>3.8: Levels of fishing industry activity</td><td>Total number of active fishing fleets:<table><tr><th>Harbour</th><th>Number of active fishing vessels</th></tr><tr><td>Cawsand</td><td>0</td></tr><tr><td>TOTAL</td><td>0</td></tr></table></td><td>LMU</td><td>Cornwall Sea Fisheries Survey (December 2006)</td><td>2013/14</td></tr>
</table>