

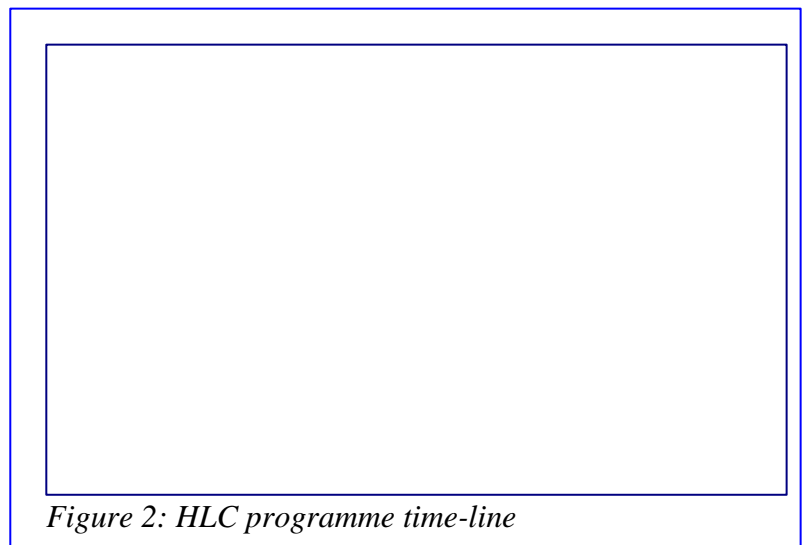
## Chapter 2 - WAVES OF DEVELOPMENT

### Introduction

The growth of the HLC programme, from the pilots that were carried out as part of a research and development project in 1993-94 (*Yesterday's World, Tomorrow's Landscape*) and from the Cornwall project, was designed to be evolutionary and experimental. Each new project was encouraged not to copy earlier methods but to improve on them, to borrow successful aspects but also to test new approaches and techniques, a process that has been hastened by the rapid development of GIS during the period acting as catalyst.

To understand this evolution, so that different aspects of methodology could be compared on a "like for like" basis taking into account their historic context, the Review arranged the HLC projects into four overlapping groups, termed 'waves'. These waves were defined mainly by chronology, which reveals each project's position within the method's evolution. The impact of one method on a later one has been varied – aspects of some projects have been emulated (ie "positive"), aspects of others have encouraged rethinking to find better ways (ie "negative") and an analysis of this helped the definition of waves.

Projects that used earlier methods without radical change were considered as part of the 'parent' project's wave. Examples of these were the Peak NP method used in the rest of Derbyshire, Cotswolds AONB in Gloucestershire, or Hertfordshire in Essex. Fig 2 shows that different waves have often run concurrently and inevitably some projects because of their timetable or history have therefore used outmoded methods, lagging behind the newest 'cutting edge' methods.



### Origins (1990 – 1994)

The idea of HLC arose initially from the 1990 White Paper, *This Common Inheritance*. This invited English Heritage to consider the desirability of a list of landscapes of special historic importance, and from EH's subsequent advice that comprehensive characterisation of all of the landscape was preferable to a Register of selected areas. EH's advice, incorporated in government

policy in PPG15, was based on the conclusions of a one year national R&D project on existing approaches to historic landscape.

The English Heritage R&D project was carried out in 1993-94, by Cobham Resource Consultants and the Oxford Archaeological Unit and several subcontractors. Its conclusions were published later as *Yesterday's World, Tomorrow's Landscape* (Fairclough et al 1999). The project concluded that it would be better to assess and understand historic landscape character everywhere, rather than selecting a few special areas for inclusion in a national register in contrast to the approach adopted in Wales. It recommended that a new, rapid and robust, approach should be identified that could deliver multiple objectives and serve multiple uses, notably it significantly raised awareness that the whole of the landscape has an historic dimension. The approach would need to be capable of use in conjunction with other types of landscape assessment.

This was investigated separately in *Views from the Past – historic landscape character in the English countryside*. This discussion paper was prepared collaboratively by the Countryside Commission and EH to promote archaeologists' perspectives as a way of reaching a fuller understanding of the cultural landscape as a humanly-formed and semi-natural construct (Countryside Commission 1994; re-issued 1996).

The project reviewed existing approaches to historic landscape, and tested two new approaches. These pilots (in Oxfordshire and County Durham) taught useful

lessons, but the project as a whole showed that no suitable method for HLC yet existed.

The delayed publication of the R&D project as *Yesterday's World, Tomorrow's Landscape* in 1999 was a significant step forward to widen the debate (Fairclough et al 1999). It was the first formal presentation and promotion of the HLC programme, and was influential in defining subsequent HLC projects.

The late publication delayed the widespread adoption of HLC, but had some advantages in the long-term. It enabled the book to include accounts of successful HLC work that had been carried out since the R&D project, thus providing a summary of current best practice. This included the influential work in Cornwall (Herring 1998) and wave 1 and some wave 2 projects such as Hampshire. The late publication also enabled HLC to be placed into the context of new ideas on sustainable development, as set out for example in the English Heritage discussion paper *Sustaining the Historic Environment* (English Heritage 1997). It could also take fuller account of the links between HLC and the broader frameworks of the Countryside Character Map (Countryside Commission/Agency 1998/99) and the EH Settlement Atlas (Roberts & Wrathmell 2000).

### **Cornwall and Wave 1: an experimental phase (1994-1999)**

Towards the end of the R&D project, the Cornwall Archaeological Unit puts these emerging ideas for HLC into practice by (Herring 1998, Johnson 1999). This was as part of a landscape assessment, first on

Bodmin Moor (by Land Use Consultants for the Countryside Commission), and then applied to the whole of Cornwall (CAU and LDA).

Many parts of the pioneering methodology developed in Cornwall are found in the current HLC programme projects. All HLC projects in England and beyond descend to some extent from Cornwall's

Cornwall HLC's guiding principles (CAU and LDA 1994; Herring 1998, 12) were that the method should:

- characterise the whole landscape, in the present day;
- be straightforward, consistent, repeatable and verifiable with further assessment;
- be as far as possible objective, with areas of subjectivity made transparent;
- consider no part of the landscape to be greater in value than another;
- generalise, ie identify *dominant* historic landscape character;
- use a concept of mainly visible time-depth over long periods of time;
- use present-day 1:25000 OS maps as the primary base;
- map discrete areas of HL character within the present-day landscape;
- use a pre-defined classification;
- provide a common, easily understandable language for users and a starting point for further research;
- use an archaeological approach to the interpretation of HL character.

All HLC projects in England and many beyond descend to some extent from Cornwall's use of YWTL theory (eg Fairclough (ed) 1999, Dyson-Bruce et al 1999, ERM and ERA 2000, Dixon and Hingley 2002, Cooney et al 2002).

The rest of the first wave HLC projects - Peak District (and Derbyshire its offshoot), Avon and the Isle of Axholme - followed the successful Cornwall project but represent further experimentation using the principles of YWTL, 'Views' and the Cornwall HLC. There was consensus regarding the Cornwall method, and many aspects of it were used in the new projects, but new techniques were also developed. These exploited newly-available if primitive GIS, they used other techniques such as time-sliced historic mapping, and they reflected local identity and priorities as recommended in the national Research & Development project (Fairclough et al 1999, 55

HLC in the Peak District continued the tradition of Cornwall as a relatively simple and easily understood method with clear classifications, but it was more heavily GIS-based. It differed, however, in its reliance on historic maps (Barnatt forthcoming). While this was valuable, leading to greater objectivity, it focused less on the surviving landscape. Its characterisation was however supported by information about how characterisation decisions were made (a series of note boxes attached to each polygon to describe sources and decisions), thus starting to make HLC method more transparent. A closely similar method was extended to the rest of Derbyshire (Barnatt et al 2000).

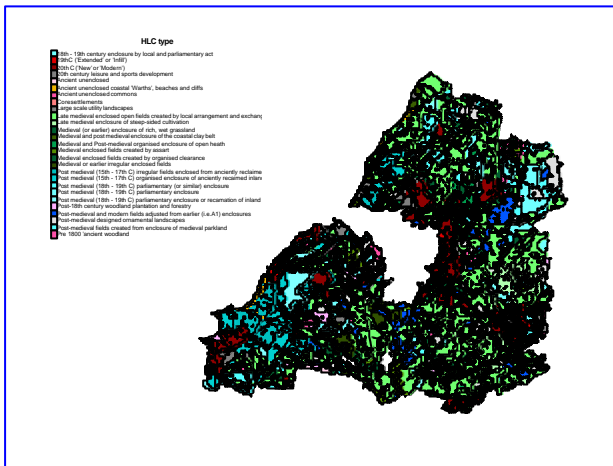


Figure 3: Avon HLC (map excluding Bath and Bristol)

Avon adopted the basics of the method used by Cornwall more or less unchanged, though importantly it increased the range of the classification through a combination of time-depth/previous land-use/enclosure process, and was the first to start using any form of GIS (Sydes 1999).

The Axholme project, carried out at sub-county level, also continued the Cornwall tradition, but included much more detail, relied on historic maps, and used the time-depth matrices that had been suggested in YWTL and used in Cornwall. It made greater use of documentary sources, and created period, phase and process maps (Miller 1997, Miller 1999).

Wave 1 represents in part an offshoot of the mainstream HLC method, but its contribution to the development of the HLC method can be summarised as follows:

- High level use of historic maps and documents to inform HL character;

- Reconstruction of historic landscape; period maps or time-slices (not time-depth *per se*);
- Increased transparency in the method (though limited in Avon and Axholme);
- Use of GIS, but mainly as a CAD-style drawing tool not query-led analysis.

## Wave 2: establishment (1997 – 2000)

Wave 2 projects developed the use of GIS and experimented with ways of introducing greater time-depth. They firmly established the approach as a practical method applicable in many different counties. They comprise Cotswolds (and thus Gloucestershire), Nottinghamshire, Hampshire (and at a later date, Kent, which borrowed its methods) and Suffolk.

The Cotswolds HLC has links to Avon, on which it built, as well as to Cornwall (Wills 1999, Hoyle 1999). The concepts used were the same, as were many practicalities. The breadth of the classifications increased to include more aspects of HL character, including previous HL character and greater time-depth. The project used GIS, but digitising from paper-based characterisation not direct-to-screen. The use of attributes attached to GIS polygons was a new element, increasing the range and scope of HLC products. Gloucestershire later used the Cotswolds method, further expanding and improving the range of types and attributes.

Nottinghamshire combined techniques from Cornwall, the Cotswolds and, indirectly, the Peak District. Part of the product was a 19<sup>th</sup> century map reconstruction of the historic landscape as well as a characterisation of the present-day historic landscape (Bishop 2000). Comparison of the 19<sup>th</sup> century and the present-day map was used to demonstrate landscape change and time-depth.

Hampshire's HLC project was carried out by Oxford Archaeology Unit, one of the consultants on the *Yesterday's World, Tomorrow's Landscape* project. This project took account of preceding projects but put more of the YWTL R&D theory into practice. It was less dependent on land-use than on easily identifiable attributes such as morphology, as well as the spatial, functional and chronological distinctions of types (Lambrick and Bramhill 1999, Fairclough et al 2002). Kent followed an almost identical method, although with the addition of confidence levels for each polygon (Croft et al 2001). Surrey, much later, broadly followed suit, but also developed in new, Wave 3 directions and is discussed later.

In Suffolk's HLC project, emphasis was placed on recognising land-use types in reference to earlier map sources within a morphological basis for field patterns (Ford 1999). It was the first within a rolling

regional programme for the East of England, which was planned to use the same methodology for all of East Anglia, but changes for Hertfordshire were so great that

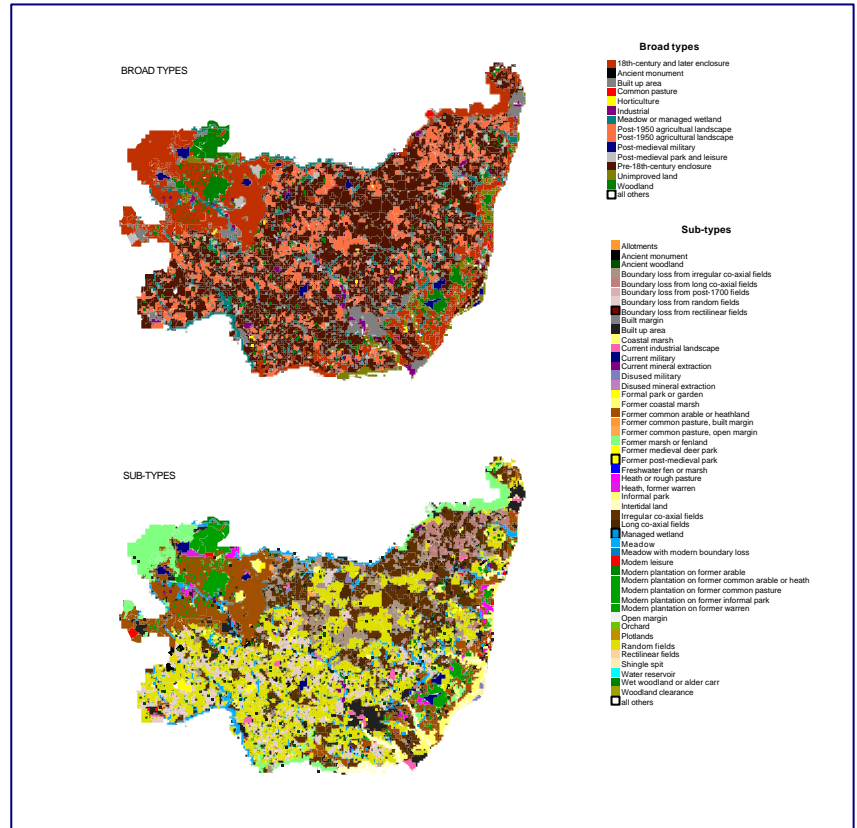


Figure 4: Suffolk HLC - Broad & Sub types

later Eastern projects are part of Wave 3.

In summary, Wave 2 projects moved slightly away from the pure form of the Cornwall method, but contained several major contributions to HLC evolution:

- Continued use of GIS as a display tool, and the first use of attribute data; these projects were the first with the fully-developed ability to interrogate their GIS to produce multiple outputs;
- Modelling time-depth, past

- HL character, change through time, via GIS; Significant development in description of HL character in terms that recognised previous HL character and analysed historic process and morphology.

### **Wave 3: development (1999–2000)**

Wave 3 developments were prompted by a number of factors, not least the experience of the ten previous successful Wave 1 and 2 projects. The promise and limitations of various aspects of the method were by now evident in a range of easily available publications and tested project designs (Fairclough et al, 1999, Herring 1999). An HLC progress review was presented in December 1998 in the first of what has become a biennial series of English Heritage HLC seminars held at the Society of Antiquaries in London. Its published papers enabled future projects to use techniques and concepts based on the same guiding principles (Fairclough (ed.) 1999). Networking between HLC practitioners was growing as well, and the potential use of GIS in characterisation and analysis was becoming more widely recognised, just as the availability of GIS in SMRs was becoming commonplace. Wave 3 projects were Lancashire, Somerset, Herefordshire, Surrey, Hertfordshire and Essex.

Lancashire took many aspects of Cornwall, Hampshire and the Cotswolds to create a system based on multiple attribute data (morphology, process, chronology and source references) for each polygon, as well as indicating past

changes by comparison between the present-day and 1<sup>st</sup> edition 6" maps. The Peak method was also influential, in terms of increasing the transparency of decision-making about character. The range and scope of HL character interpretation was greatly increased, because it was not constrained by fitting within predefined type-lists but able to generate a large number of potential types subject to GIS interrogation (Darlington 2002, Ede with Darlington 2003, DCMS 2002 p31).

Somerset at the same time developed a system using the same distinctions, but more explicitly and with greater reliance on morphological attributes held within discrete data fields (Aldred 2001). This further increased the range and scope of types, and made interpretation more transparent. Previous landscape change was also assessed.

Herefordshire, like Lancashire and Somerset, further developed the attribute-based approach. It was, however, set within a broader analysis and a quite different scale of characterisation than previously used. It explored stratigraphic principles of landscape analysis at a very high level of generalisation, and brought a new level of theoretical clarification to the process (White with Ray forthcoming).

The Surrey HLC used the Hampshire method, but improved it with new ideas. More sophisticated use of GIS, the addition of several new categories, increased time-depth, and further levels of transparency brought its approach

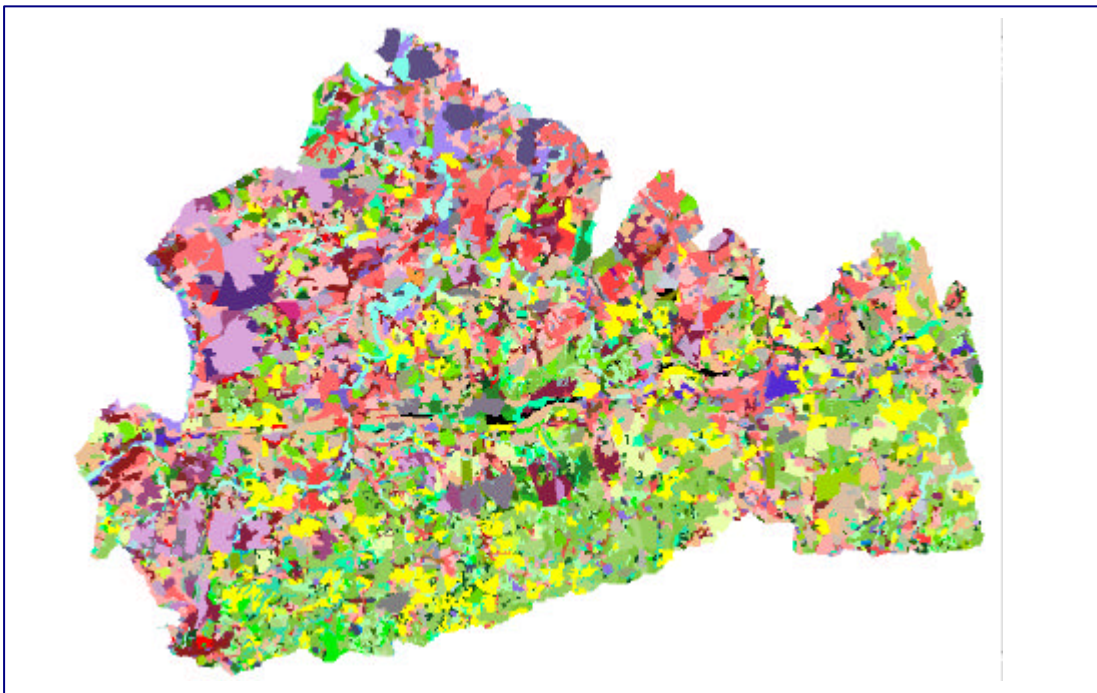


Figure 5: Surrey HLC

very close to the other Wave 3 projects (Bannister 2001).

Hertfordshire, the second East of England project (and Essex, the third), departed from their predecessor in Suffolk by adding assessment of the depth of historic character for each polygon using a variety of sources, all referenced through multi-tiered attribute data fields (Dyson Bruce 2002). The Eastern HLC project officer also added experience gained in Scotland, where HLA had evolved from the Cornwall starting point, by-passing some English evolutionary paths (Dyson Bruce et al 1999).

The key contributions of Wave 3 projects to the development of the HLC method were:

- Use of GIS not just as a display tool but for analysis, to provide a platform for query-led HL character types, as well as providing increased flexibility and transparency

in the method which was easily replicable;

- Use of *metadata* on the digital and other data used in HLC;
- Increased functionality in the outputs to produce both detailed and amalgamated forms of the data, especially combinations of interpretation and description;
- Development of the HLC *model* concept for spatial and temporal analysis;
- Greater consistency in classification; data structures with separate attributes.

#### Wave 4: higher evolution and consolidation (2001-02)

Wave 4 projects are the most methodologically consistent set of projects. They have clear antecedents in earlier waves and combine all the best elements of preceding methods. They have greater emphasis on assessing

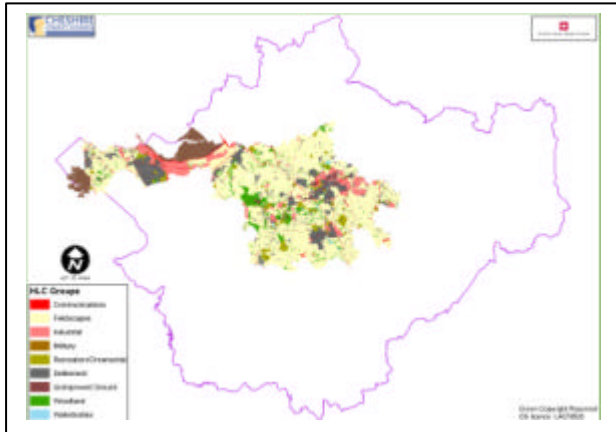


Figure 6: Cheshire HLC: broad summary types (in progress, Dec 2002)

changes in the past with direct comments for individual polygons, in a similar way to Hertfordshire and Essex but with Lancashire-type use of attribute recording. GIS was even more central in this wave, and continued to influence techniques and the method, being more than simply a tool for displaying results. There is an increased concern for flexibility and transparency.

One tendency of Wave 4 projects is towards smaller polygons and finer grained characterisations, which at county scale risks losing sight of broad patterns and strategic overview. Perhaps some degree of legibility, although sophisticated use of GIS should normally be able to avoid this pitfall by use of appropriate levels of amalgamation (Fairclough 2002). This tendency also implies a high degree of resolution that may not be reflected in the accuracy of available data, which relate to the scale and confidence of the HLC.

Wave 4 projects were Devon, Cumbria & the Lakes, Shropshire and Cheshire, and almost identical methods are used in projects starting

or being planned in 2002, for example Buckinghamshire, Isle of Wight, Northamptonshire and Dorset. During the review, these were all at an early stage, and are therefore not fully described here.

The contribution of Wave 4 projects to HLC's methodological evolution can be summarised as mainly:

- An important level of consolidation;
- Increased standardisation, providing a basis for a template Project Design;
- Increased complexity in attribute recording, thus strengthened interpretation;
- More emphasis on previous HL character that better reflects time-depth;
- Highly sophisticated and flexible use of GIS, coupled with greater transparency;
- Better digital map bases (notably 'MasterMap'), therefore avoiding new digitising or scanning etc;
- Increased use of geo-referenced vertical APs and other pre-existing digital data.

### Further development of HLC – using HLC

At the time of publication of this report, a second national HLC review was in full swing, reviewing the uses and applications to which HLC was being put. The results will be available towards the end of 2003. It will look at applications in many fields, notably spatial planning, landscape management, agri-



environmental programmes, and research frameworks and agendas, and provide exemplars and case studies.

Apart from all the varied applications of individual HLC, the HLC technique is also being used in a range of follow-up ways, which will in turn extend the methodology and introduce it to new scales, whether at more local level or higher, regional levels.

Several HLC projects are using the HLC method in other contexts: for example. Cornwall CC has carried out a more detailed HLC using GIS and incorporating additional data for the Lynher Valley and for areas around a mining World Heritage Site bid. Lancashire CC is developing and testing part of its HLC at a local level in Bowland and the Lune Valley within the *European Pathways to Cultural Landscapes* Culture 2000 programme (Darlington 2002, Nord Paulsson and Fairclough 2002). Both Cornwall and Lancashire county councils are also carrying out urban characterisation based on the ideas and philosophy laid down by HLC (Ede with Darlington 2003).

Other projects have followed up HLC at more local level, either as part of an application of the data, to include further detailing, or used as contextual information. The New Forest DC local assessment built on the Oxford Archaeological Unit's HLC work in Hampshire, as did Hampshire CC's urban hinterland landscape assessments for Winchester and Basingstoke. The East Anglian Historic Fields Project is using the East of England HLC as part of a more advanced study of the character of historic field patterns

and regional identity (Dyson-Bruce 2002).

A planned second stage of the HLC programme is to produce regional HLC maps drawn from county level work and absorbing other landscape-scale work such as EUS and NMP. A draft regional overview of this type has been undertaken by the Cornwall Archaeology Unit within the South West, linked to English Heritage's *A Strategy for the Historic Environment in the South-West*. It used county-scale HLC where it was available, but filled gaps in HLC coverage (Dorset and Wiltshire) by rapid top-down interpretation in discussion with the relevant county archaeologist or

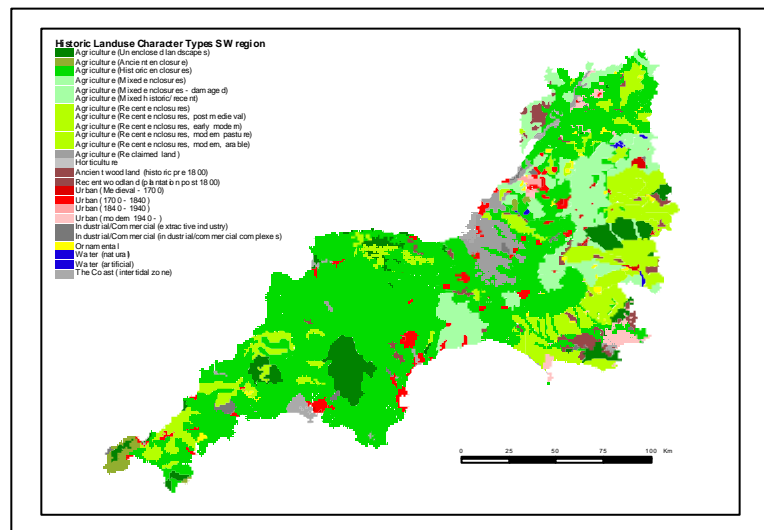


Figure 7: SW Regional Character Map. Produced as part of *A Strategy for the Historic Environment in the South-west for SW Region EH*. (Cornwall, Somerset, Avon and Gloucestershire are derived from completed HLCs)

HLC officers. The success of this trial (particularly given that South West HLCs represent all four waves) demonstrates that regional

HLC overviews will be feasible even if individual county HLCs used different methods. If it is possible in a context of such methodological diversity, it will be easy elsewhere.

First stage county coverage of HLC is nearing completion in several government regions, notably in the NW, and the next step of regional synthesis and overview will be able to begin soon.

## Summary of Chapter 2

From this overview of the evolution of HLC, some principal milestones can be identified:

1. The R&D project (*Yesterday's World, Tomorrow's Landscape*), and *Views from the Past* – these established the guiding principles of HLC.
2. Cornwall (CAU) – this pioneering project definitively put these ideas into practice, and introduced the main aspects of

the HLC method (Herring 1998).

3. Hampshire (OAU) - the principal YWTL consultants testing their own interpretation of its findings. Very influential on subsequent projects.
4. Lancashire (along with others, notably Somerset) - the further development of the Cornwall and Hampshire projects, using GIS to transform the method, changing direction from classification-led methods to attribute-based ones.
5. Current Wave 4 projects (Cumbria, Shropshire, Devon and Cheshire) – mature attribute-based methods, incorporating the Lancashire, Somerset and Hertfordshire methods, with increased flexibility, greater transparency, more time-depth potential and fuller characterisation of past changes to the historic landscape. This provided the springboard for the best-practice consolidated methodology that is set out in the accompanying Template PD.