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SEA objective	Potential problem/benefit	Mitigation measures
	<p>promote non-motorised recreation within it, such as cycling and walking.</p> <p>Negative effects to landscape character could come through new or enhanced infrastructure developments.</p>	<p>should be carried out with a sympathetic approach in terms of design and materials used.</p> <p>Negative landscape character effects caused by unmonitored incremental developments should be monitored.</p> <p>LTP2 should recognise Countryside Character methodologies and particularly avoid impacts on key landscape characteristics.</p> <p>Emphasis should be placed on managing the character and appearance of landscapes and townscapes in order to maintain and strengthen their local distinctiveness and sense of place.</p>
<p>Promote waste reduction, recycling, and the protection of material assets</p>	<p>Construction waste and the usage of material assets is an inevitable part of the physical infrastructure alterations proposed by LTP2.</p>	<p>Any major schemes in the county should have their waste, recycling, and material asset use impacts tackled through project level EIA.</p> <p>Appropriate scheme-specific measures should be implemented at all levels to ensure minimal construction waste and to maximise the use of recycled materials.</p> <p>Monitoring should be undertaken to ascertain how a shift towards more sustainable forms of transport affects carriageway condition and the subsequent use of repair materials.</p>
<p>Minimise flood damage potential</p>	<p>The impact of LTP2 on this objective is largely neutral. Any expansion of the physical infrastructure may directly impact upon flood risk and any acceleration of climate change may increase incidence of flooding in the long-term.</p>	<p>Adverse impacts are most likely to result from the implementation of major schemes. Issues here should be tackled through project level EIA.</p> <p>Good transport infrastructure design to increase water storage areas and create wildlife habitat could be used as alternatives to enhancing drainage schemes or canalisation for flood management measures.</p>
<p>Contribute to national</p>	<p>The LTP2 policies geared towards</p>	<p>For public or non-motorised forms</p>

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SEA objective	Potential problem/benefit	Mitigation measures
climate change reduction aims	<p>reducing congestion, promoting public transport, encouraging the use of non-motorised forms of travel and thereby helping improve air quality, will also aid in tackling global warming through their reduction in CO₂ emissions.</p> <p>The benefits of this are partially offset by the policies, such as an increase in public transport, which could lead to increases in traffic volume and CO₂ emissions.</p>	<p>of transport use to have their net climate change reduction benefits they must be encouraged and operated in the context of being an alternative to private car use, and not run in addition to them. This could be implemented through the proposed Bus and Community Transport Strategies.</p> <p>Any highway maintenance undertaken should employ greenhouse gas pollution-minimising practices. This should be implemented through the Highway Maintenance Strategy.</p> <p>Transport infrastructure should allow for climate change effects in respect to its effects on river crossings, catchment effects and habitat creation.</p>
Improve general health and reduce health inequalities	<p>Policies aiding aspects of the environment, such as protecting and enhancing air quality and the water environment, will bring passive but direct health benefits to the county. Policies encouraging walking and cycling will bring direct physical benefits. Furthermore, adherence to policies which maintain or enhance landscape character, biodiversity and cultural heritage will have health benefits in a psychological and well-being context.</p>	<p>Adherence to the policies mentioned should be undertaken, and the general health implications from each transport activity within the county should be understood and considered.</p>
Reduce social and physical exclusion	<p>Any new road developments created specifically for the purpose of reducing physical exclusion within Cumbria could bring negative environmental consequences. Conversely, the impacts of social integration on the human environment will be largely beneficial. The positive cultural and psychological impacts of this could also led to a more collective concern for the county's environment as a whole.</p>	<p>None, other than ensuring adherence to the other SEA policies when any developments are carried out for the purpose of this one.</p>
Preserve and enhance	Positive effects on cultural heritage	All minor schemes must respect the

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SEA objective	Potential problem/benefit	Mitigation measures
cultural heritage	<p>will largely be born from the LTP2's intended reductions in traffic volume.</p> <p>Negative influences on cultural heritage will come from visual impact, noise, vibration, air pollution and climate change associated with any alterations or extensions to infrastructure developments.</p>	<p>historic character of an area. Consideration should be given to the suitable design of features and materials used. In particular the potential for cumulative impacts should be considered to avoid such issues as the urbanisation of rural areas. Useful tools may include Historic Landscape Characterisation studies and Conservation Area Appraisals.</p> <p>Adverse impacts resulting from climate change, air pollution and vibration are dealt with either through directly related policies or through policies that may result in traffic reduction.</p> <p>Adverse impacts from the implementation of major schemes should be tackled through project level EIA.</p> <p>Emphasis should be placed on preserving, managing and enhancing the state of World Heritage Sites, archaeological sites, historic buildings, historic parks and gardens, battlefields and other culturally important features and settings.</p>

It is important to note that there are numerous minor schemes in LTP2 that do not require project level EIA. Many of these schemes still involve considerable capital works that could impact upon the environment. At the design stage of such schemes CCC will assess them against the NATA 'key factors' for the environment. This should ensure that these impacts are considered at an early stage.

6. REMAINING STAGES OF THE SEA

6.1 Consultation on this Report and Subsequent Alterations to LTP2

This document was made available for public consultation in August 2005. It was also sent directly the following organisations:

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- Countryside Agency
- English Heritage
- English Nature
- Environment Agency

Responses to its contents are being encouraged by either e-mail or post. Responses received will be considered and will result in the necessary changes being made to LTP2.

6.2 Monitoring of LTP2's Environmental Performance

A detailed monitoring plan to measure LTP2's performance against the SEA will be devised; a possible format for which is proposed in Figure 1. Ideally, monitoring would measure performance of the Plan against each SEA objective and this would be done using the baseline data collected for each of the SEA indicators. However, limitations in the data, as listed in section 2.1, make this difficult. An alternative approach may be to develop indicators that would allow monitoring against the significant impacts identified.

Figure 1 - Possible monitoring format for CCC's LTP2 SEA

What is being monitored (indicator)	Source of data	Frequency of data production	Most recent data	Status of indicator	Action proposed

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7. REFERENCES (Web links where available)

1 - Department for Transport: The Future of Transport – a network for 2030:

http://www.dft.gov.uk/stellent/groups/dft_about/documents/page/dft_about_031286.pdf

2 – Climate Change: The UK Programme, defra:

<http://www.defra.gov.uk/environment/climatechange/cm4913/>

3 – Rural White Paper: Our Countryside: The Future – A Fair Deal for Rural England, defra:

<http://www.defra.gov.uk/rural/ruralwp/whitepaper/default.htm>

4 – National Cycling Strategy: <http://www.nationalcyclingstrategy.org.uk/>

5 – ODPM Planning Policy Guidance 13: Transport

http://www.odpm.gov.uk/stellent/groups/odpm_planning/documents/page/odpm_plan_606896.hcsp

6 – ODPM - Planning Policy Statement 1: Delivering Sustainable Development:

http://www.odpm.gov.uk/stellent/groups/odpm_planning/documents/page/odpm_plan_035506.hcsp

7 - ODPM - Planning Policy Statement 6: Planning for Town Centres

http://www.odpm.gov.uk/stellent/groups/odpm_planning/documents/page/odpm_plan_036805.pdf

8 – ODPM - Planning Policy Statement 7: Sustainable Development in Rural Areas

http://www.odpm.gov.uk/stellent/groups/odpm_planning/documents/pdf/odpm_plan_pdf_030148.pdf

9 – ODPM - Planning Policy Statement 11: Regional Spatial Strategies

http://www.odpm.gov.uk/stellent/groups/odpm_planning/documents/page/odpm_plan_030921.pdf

10 – ODPM – Planning Policy Statement 12: Local Development Frameworks

http://www.odpm.gov.uk/stellent/groups/odpm_planning/documents/pdf/odpm_plan_pdf_031155.pdf

11 – ODMP - Planning Policy Statement 23: Planning and Pollution Control

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http://www.odpm.gov.uk/stellent/groups/odpm_planning/documents/pdf/odpm_plan_pdf_032632.pdf

12 – Countryside Commission – Roads in the Countryside. Advisory Booklet, 1995.

13 - The Countryside Agency – Transport in Tomorrow’s Countryside.

14 - The Countryside Agency – Rural Routes and Networks.

15 - The Cumbria Biodiversity Action Plan – Summary:

<http://www.wildlifeincumbria.org.uk/html/index.htm>

16 – Regional Planning Guidance – England’s Northwest – a Strategy Towards 2020:

<http://www.englandsnorthwest2020.com/key-activity8.htm>

<http://www.englandsnorthwest2020.com/strategic-objective8.htm>

17 - Regional Planning Guidance for the North West (RPG13): Chapter 9 - Ensuring High Environmental Quality:

<http://www.go-nw.gov.uk/planning/rpg13/chap9.pdf>

18 - Regional Planning Guidance for the North West (RPG13): Chapter 10 – An Accessible Region with an Integrated Transport System:

<http://www.go-nw.gov.uk/planning/rpg13/chap10.pdf>

19 – Cumbria County Council Minerals and Waste Local Plan:

<http://www.cumbria.gov.uk/elibrary/view.asp?ID=7047>

20 - Cumbria and Lake District Joint Structure Plan 2001 – 2016: Deposit Plan

21 – Cumbria County Council Sustainability Strategy:

<http://www.cumbria.gov.uk/eLibrary/view.asp?ID=2884>

22 – Carlisle District Local Plan:

<http://www.carlisle.gov.uk/carlislecc/main.asp?page=252>

23 – South Lakeland District Council Local Plan 2006/01

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<http://www.southlakeland.gov.uk/dirlist.asp?subfolder=%2FLocal+Plan+2006%2F01+Main+Content>

24 – Copeland Borough Council Local Plan:

<http://www.copelandbc.gov.uk/ms/www/Local-Plan/Copeland-Local-Plan-2001-2016.htm>

25 – Barrow Local Plan

<http://www.barrowbc.gov.uk/main.asp?page=332>

26 – Eden Local Plan

27 – Allerdale Local Plan:

<http://www.allerdale.gov.uk/downloads/page523/Local%20Plan.pdf>

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APPENDICES

Appendix I – Environmental Baseline Data for Cumbria County Council’s LTP2 SEA.

Indicator	Data for Cumbria	National/regional data and targets	Trends	Notes	Sources
BIODIVERSITY					
SSSIs reaching Public Service Agreement target, i.e. favourable or recovering	71.83% (March 2005)	North West: 75.21% England: 66.53% (March 2005) English Nature has a national target of 95% by 2010.	10.56% of sites in Cumbria are in decline, 17.57% are in an unfavourable condition and are potentially in decline (March 2005).		English Nature, 2005. <i>Sites of Special Scientific Interest: Reports and Statistics</i> . Available from: http://www.english-nature.org.uk/special/ssi/reportIndex.cfm [last accessed 20/04/05].
Condition of County Wildlife Sites	Interpreted data for this indicator are currently unavailable.			There are 1,800 Sites but no condition surveys have been undertaken. The Sites are currently under review and this process is likely to continue until 2008.	
Condition of roadside verges	Interpreted data for this indicator are currently unavailable.		Recent surveys suggest that the condition of Cumbria’s roadside verges is worsening. This can be attributed to agricultural practices as well as transport.	There are 7,000 miles of roadside verges in Cumbria at most altitudes up to 600m above sea level. 400 miles of verges have been designated as ‘Special’ due to their ecology and conservation value.	Cumbria County Council, 2004. <i>Roadside verges in Cumbria</i> . Carlisle: Cumbria County Council.

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Indicator	Data for Cumbria	National/regional data and targets	Trends	Notes	Sources
Status of the woodland bird population		No single figure is available (see Trends column for further information.)	There has been a moderate rise of 24% in North West populations between 1994 and 2003, with 1997 being the only year where there was a decline. In England there has been a slight decrease between these years.	Uninterpreted raw data on individual species is held by the Cumbria Biological Data Network.	Department for Environment, Food and Rural Affairs, 2005. <i>Wild Bird Indicators for the English Regions</i> . London: Department for Environment, Food and Rural Affairs.
Status of the farmland bird population		No single figure is available, see Trends column for further information.	There has been no significant change in North West populations with a slight increase of 5% from 1994 to 2003, 1996 proving the most positive year. In England there has been a slight decline between these years.	Uninterpreted raw data on individual species is held by the Cumbria Biological Data Network.	Department for Environment, Food and Rural Affairs, 2005. <i>Wild Bird Indicators for the English Regions</i> . London: Department for Environment, Food and Rural Affairs.
Status of all native bird species population		No single figure is available, see Trends column for further information.	There has been a moderate rise of 20% in North West populations from 1994 to 2003. There has been no significant change in England.	Uninterpreted raw data on individual species is held by the Cumbria Biological Data Network.	Department for Environment, Food and Rural Affairs, 2005. <i>Wild Bird Indicators for the English Regions</i> . London: Department for Environment, Food and Rural Affairs.
HUMAN HEALTH					

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Indicator	Data for Cumbria	National/regional data and targets	Trends	Notes	Sources
Population in 'not good' health	10% (2003)	North West: 11% England: 9% (2003)		These percentages were calculated from the following raw data: Cumbria 48,587 of 487,607 North West 737,114 of 6,729,764 England 4,435,876 of 49,138,831 (2003).	National Statistics, 2003. <i>Neighbourhood Statistics, General Health, Table UV20</i> . Available from: http://neighbourhood.statistics.gov.uk/Reports/eng/TableView/wdsview/dspviewp.asp?dsid=2848 [last accessed 21/04/05].
Population with limiting long-term illness	20% (2003)	North West: 20.7% England: 17.9% (2003)		These percentages were calculated from the following raw data: Cumbria 97,706 of 487,607 North West 1,394,609 of 6,729,764 England 8,809,194 of 49,138,831 (2003).	National Statistics, 2003. <i>Neighbourhood Statistics, Limiting Long-Term Illness, Table UV22</i> . Available from: http://neighbourhood.statistics.gov.uk/Reports/eng/TableView/wdsview/dspviewp.asp?dsid=2919 [last accessed 26/04/05].
Population sedentary/taking no exercise	Interpreted data for this indicator are currently unavailable.				
POPULATION					

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Indicator	Data for Cumbria	National/regional data and targets	Trends	Notes	Sources
Community severance	Interpreted data for this indicator are currently unavailable.				
Rural households at set distances from key services		See Figure 1.		Only hospitals fall 3% below the national average.	Countryside Agency, 2003. <i>North West State of the Countryside Report</i> . Cheltenham: Countryside Agency.
LANDSCAPE					
Rights of Way easy to use	57% (2003/04) N.B. See Notes column for important information on calculation methods.	The Countryside Agency has a national target of 95% of paths easy to use, although this is based on a different calculation method as was used to produce the data for Cumbria.	62% (1996) 76% (2001/02) 78% (2002/03) N.B. See Notes column for important information on calculation methods.	The calculation method for this indicator changed in 2003/04. The previous calculation method would have given a result of 78% for 2003/04, showing an improvement on the figure for 1996 and not a decline as the data provided here suggests.	COUNTY DATA: Cumbria County Council, 2004. <i>Local Transport Plan Annual Progress Report 2004 – Annexes</i> . Carlisle: Cumbria County Council. NATIONAL DATA: The Countryside Agency, 2000. <i>Research Notes CRN 43: Rights of Way Condition Survey 2000</i> . London: The Countryside Agency.
Area of designated land	See figure 2.				Department of Environment, Food and Rural Affairs, 2005. <i>Interactive Map – Rural Designations – Statutory – Cumbria</i> . Available from: http://www.magic.gov.uk/website/magic/ [last accessed 01/07/05].

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Indicator	Data for Cumbria	National/regional data and targets	Trends	Notes	Sources
Change in countryside character	See figure 3.				The Countryside Agency, 2005. <i>CQC Profiles and Data</i> . Available from: http://www.countryside-quality-counts.org.uk/cap/northeast/index_ne.htm [last accessed on 08/03/05].
MATERIAL ASSETTS					
Recycled and secondary aggregates as a % of all aggregates used	Interpreted data for this indicator are currently unavailable.				
Use of organic nitrogen and phosphorus fertilisers	Interpreted data for this indicator are currently unavailable.				
Soil erosion potential	Interpreted data for this indicator are currently unavailable.				
AIR QUALITY					
No. of moderate to poor air quality days	Interpreted data for this indicator are currently unavailable. With the exception of South Lakeland, no District Councils have declared an AQMA and no air pollutant monitoring is occurring.				

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Indicator	Data for Cumbria	National/regional data and targets	Trends	Notes	Sources
Background levels of air pollutants listed in the National Air Quality Strategy	At Lowther Street (Kendal) the annual mean value for NO ² is 90.9µg/m ³ (2000). An AQMA has been declared.	Under the National Air Quality Strategy the Government Objective level for NO ² is 40µg/m ³ .	Projections suggest that the Lowther Street AQMA will be revoked in 2010. Levels of NO ² may also lead to an AQMA being declared on Highgate and Kirkland (Kendal). Air quality is worsening in Carlisle and an AQMA is likely to be declared at Stanwix Bank. N.B. Current air quality issues in Kendal have been attributed to a trial traffic system.	The level of PM ¹⁰ has also been noted as a problem at Lowther Street (2000).	South Lakeland District Council, 2002. <i>Air Quality Action Plan 2002</i> . Kendal: South Lakeland District Council. N.B. Officers within Cumbria County Council and South Lakeland District Council have provided some information.
WATER					
Rivers with good to fair biological quality	98.59% (2003)	North West: 87.68% England: 87.69% (2003)	Cumbria has seen a minor improvement of 2.11% since 2000.	'Good to fair' includes the categories very good, good, fairly good, and fair.	Environment Agency, 2005. <i>North West General Water Quality Assessment (GQA) 2003</i> . Available from: http://www.environment-agency.gov.uk/regions/northwest/346910/347005/440418/445438/?version=1&lang=_e [last accessed 20/04/05].

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Indicator	Data for Cumbria	National/regional data and targets	Trends	Notes	Sources
Rivers with good to fair chemical quality	98.19% (2003)	North West: 90.56% England: 93.43% (2003)	Cumbria has seen a negligible decrease of 0.49% in chemical river quality since 2000.	'Good to fair' includes the categories very good, good, fairly good, and fair. Across the Districts there is little variance, only 3% between the top five. However, Barrow suffers the greatest with 77.66% of rivers having good to fair chemical quality.	Environment Agency, 2005. <i>North West General Water Quality Assessment (GQA) 2003</i> . Available from: http://www.environment-agency.gov.uk/regions/northwest/346910/347005/440418/445438/?version=1&lang=_e [last accessed 20/04/05].
Flood risk area			There has been a national increase in the incidence of flooding in recent years. Large parts of Cumbria, notably Carlisle, suffered extreme flooding in January 2005 with 3,000 properties affected.	Most of Cumbria's key service centres have some areas that are at risk of extreme flooding.	Flood risk maps for the whole of Cumbria can be viewed at: http://www.environment-agency.gov.uk/subjects/flood/?lang=_e
CLIMATIC FACTORS					
Estimated change in CO2 emissions from road traffic locally	Interpreted data for this indicator are currently unavailable.				
Mode share of journeys to work	Interpreted data for this indicator are currently unavailable.				
Mode share of journeys to school	Interpreted data for this indicator are currently unavailable.				
CULTURAL HERITAGE					

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Indicator	Data for Cumbria	National/regional data and targets	Trends	Notes	Sources
Number of historic sites in each category	7,681 listed buildings 847 scheduled monuments 19 parks and gardens 115 conservation areas (2004)	Figures for Cumbria as a % of North West figures: 29% of listed buildings 64.71% of scheduled monuments 15.57% of parks and gardens 14.23% of conservation areas	There is generally a small increase in numbers each year.	Of the region's counties/local authority areas Cumbria has the greatest number of scheduled monuments and listed buildings. Cumbria has less parks and gardens and conservation areas than the more urban areas.	English Heritage, 2004. <i>Heritage Counts 2004: The State of the North West's Historic Environment</i> . Manchester: English Heritage.
Grade I listed buildings at risk	185 buildings with 4 (2%) on the Buildings at Risk Register (2005).	North West: 481 buildings with 16 (3%) on the Buildings at Risk Register (2005).		These data were correct as of 23/06/05, the figures have been updated since the publication of <i>Heritage Counts 2004</i> . 38% of the figure for the North West refers to Cumbria.	Provided by English Heritage (North West Regional Office).
Grade II* listed buildings at risk	447 buildings with 11 (2%) on the Buildings at Risk Register (2005).	North West: 1,502 buildings with 101 (7%) on the Buildings at Risk Register (2005).		These data were correct as of 23/06/05. The figures have been updated since the publication of <i>Heritage Counts 2004</i> . 30% of the figure for the North West refers to Cumbria.	Provided by English Heritage (North West Regional Office).
Grade II listed buildings at risk	Interpreted data for this indicator are yet to be secured.				

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Indicator	Data for Cumbria	National/regional data and targets	Trends	Notes	Sources
Scheduled monuments at risk	912 monuments with 29 (3%) on the Buildings at Risk Register (2005).	North West: 1,369 monuments with 52 (4%) on the Buildings at Risk Register (2005).		These data were correct as of 23/06/05. The figures have been updated since the publication of <i>Heritage Counts 2004</i> . 66% of the figure for the North West refers to Cumbria.	Provided by English Heritage (North West Regional Office).
Registered parks and gardens at risk	Interpreted data for this indicator are yet to be secured.				
Total number of conservation areas in local authority area (BVPI 219)	Interpreted data for this indicator are yet to be secured.				
Percentage of conservation areas in local authority area with an up-to-date character appraisal (BVPI 219)	Interpreted data for this indicator are yet to be secured.				
Percentage of conservation areas with published management proposals (BVPI 219)	Interpreted data for this indicator are yet to be secured.				

Figure I. Percentage of rural households at set distances from key services

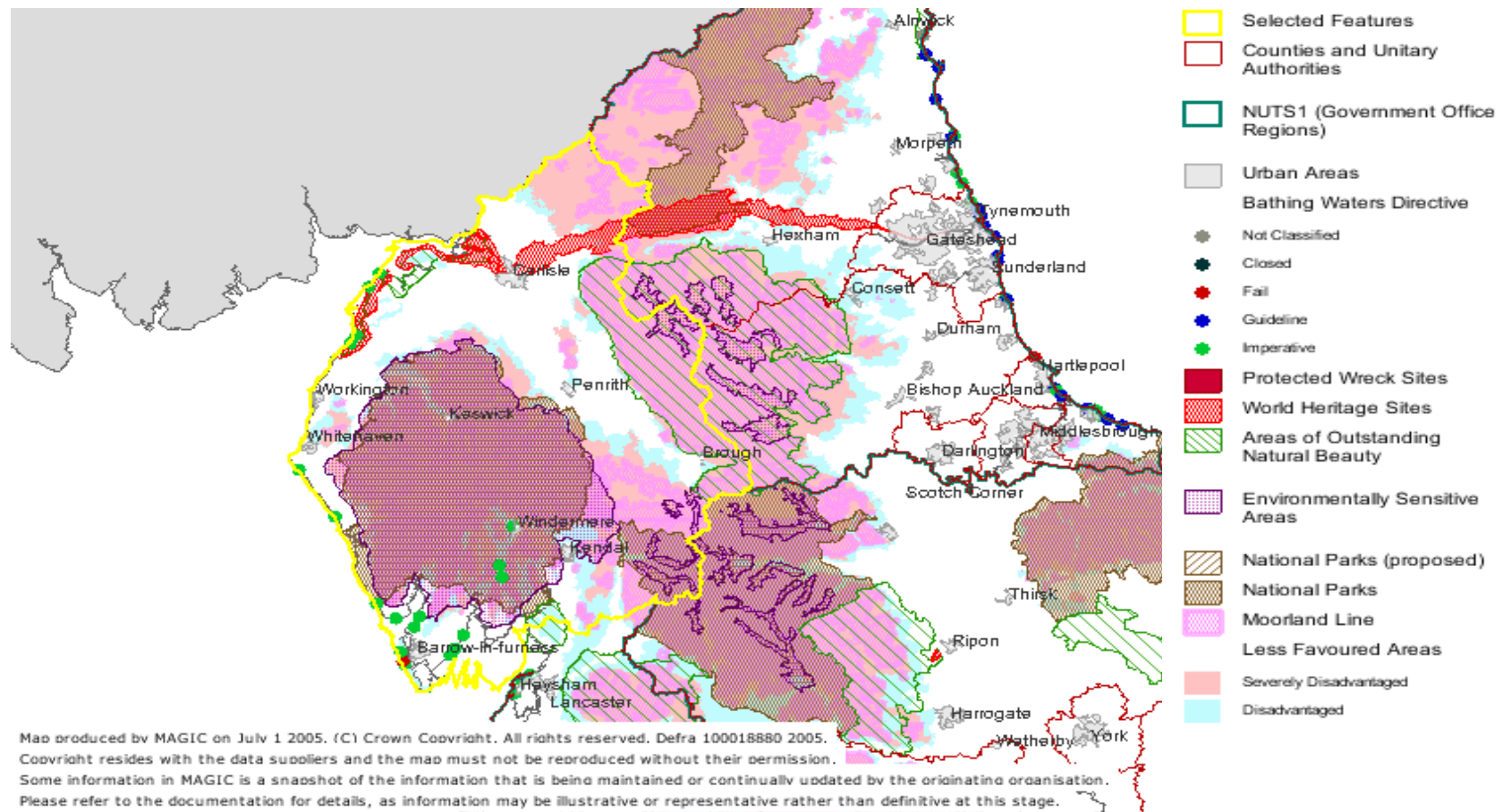
Service	ATMs	Banks	Dental	Doctors	Hospitals	Petrol	Secondary	Super-	Primary	Post	Pubs
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		and building societies	surgeries	surgeries		stations	schools	markets	schools	offices	
Distance in KM	<4	<4	<4	<4	<4	<4	<4	<4	<2	<2	<2
North West	93.7	87.2	90.0	91.8	26.2	96.3	87.0	87.8	95.3	93.9	96.3
England	90.5	76.2	81.3	86.8	29	93.6	75.8	79.2	92	90.5	95.7

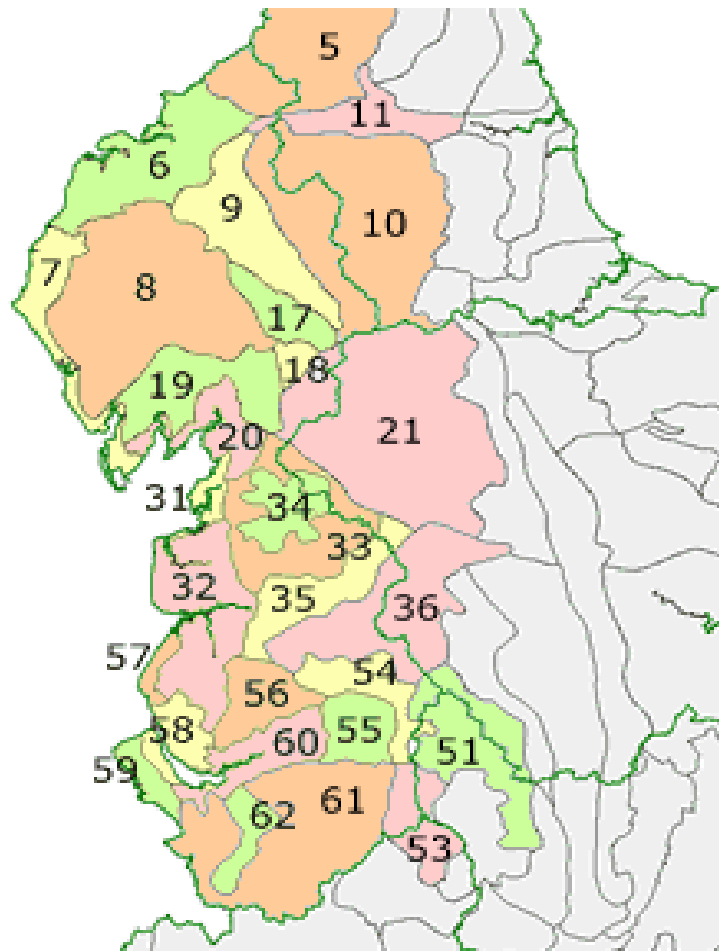
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Figure 2. Land designations in Cumbria



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Figure 3. Changes in countryside character 1990-1998



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Countryside character area 5: Border Moors and Forests

Limited or small changes consistent with character.

Countryside character area 6: Solway Basin

There have been some changes inconsistent with character. Key implications for LTP2 include hedgerow neglect and removal. Changing agricultural practices have had an impact on plant communities, on the habitats of nesting birds and on the visual character of the Solway farmland. New road bypasses have altered the rural road system and reduced the remoteness of the Solway Basin. There is increasing pressure from recreation on the Solway Coast, damage to the dune system from the misuse of four-wheel drive vehicles and unrestrained parking is particularly evident.

Countryside character area 7: West Cumbria Coastal Plain

Limited or small changes consistent with character.

Countryside character area 8: Cumbria High Fells

Limited or small changes consistent with character.

Countryside character area 9: Eden Valley

Limited or small changes consistent with character.

Countryside character area 10: North Pennines

Limited or small changes consistent with character.

Countryside character area 17: Orton Fells

Limited or small changes consistent with character.

Countryside character area 18: Howgill Fells

Limited or small changes consistent with character.

Countryside character area 19: South Cumbria Low Fells

Limited or small changes consistent with character.