

Rolling Lowland

Location

This sub type is found in 3 parts of the county - east of Wetheral, west of Cockermouth and north east of Barrow. The sub type continues into the Lake District national park east of Seascale and is classified as Type D2– Rolling Lowland in the Lake District National Park Landscape Character Assessment.

Key Characteristics

- Open undulating and rolling topography
- Lowland agricultural landscape dominated by pasture
- Hedges and hedgerows trees are common on lower ground and sparse on higher ground
- Some scrub woodland

Physical character

The geology of these areas varies. Carboniferous rock is found around Workington and Barrow, with Triassic mudstones or sandstones found east of Carlisle. Both are overlain by fluvial glacial drift. The topography is generally rolling with some low summits and dissected in some parts by steep sided valleys. Land rises from 25 – 125m AOD.

Land cover and land use

This is a lowland agricultural landscape dominated by pasture with some woodland, scrub and other marginal land. Field patterns are variable relating to topography and are generally regular at lower levels, but irregular around Barrow. In lower lying areas the landscape is generally undulating and fields bounded by a strong matrix of hedgerows and hedgerows trees are dominant. On higher ground land is more rolling and open and the topography is the distinctive characteristic. Hedges and other vegetation are sparse.

Parkland can be found around Greysouthen and along the River Eden. Plantations, scattered woodland and shelterbelts punctuate the pastoral fields and are found along the valley sides, such as the River Marron and Goldmire Beck. These often form linear features.

Villages are generally nucleated and some retain a strong vernacular character and are built in local stone. The traditional character of some is weakened by an increase in modern 20th century development. Farms are dispersed and large modern farm buildings near to the traditional farmsteads are common. Rural roads criss cross between villages and farmsteads. In parts quarrying, sand extraction and waste landfill sites inject a developed and industrial character.

Ecology

This is largely an agricultural landscape with only isolated areas of semi-natural vegetation. Hedgerows and small semi natural woodlands are the most widespread features of ecological interest; however a feature of note in this landscape is the presence of a number of basin mires to the south-east of Carlisle. These support a range of mire and fen communities, together with a rich invertebrate fauna and breeding sites for birds such as reed bunting, reed warbler and sedge warbler. The Rivers Eden and Cocker flow through sections of this landscape and are important for otter and aquatic plants such as water crowfoots.

Historic and cultural character

The settlement pattern is predominantly dispersed but there are some nucleations surrounded by traditional field systems including some fossilised strips. The domination of red sandstone as the main building material gives a distinctive local character to the villages. The fields are defined by the often ancient hedgerows.

There are some stately homes with surrounding parklands as at Corby Castle. Formal parkland boundaries are surrounded by stone built walls of 19th century date which form the park pale.

Eaglesfield was the birthplace of John Dalton, 1766-1844, who established the Atomic Theory in 1803 with paper on the relative weights of the ultimate particles of bodies'. In 1794, he published the first description of colour blindness. George Graham born 1673 at Kirklington was apprenticed to Thomas Tempion, and made various clocks and scientific instruments for the Royal Observatory at Greenwich.

Perceptual character

This is a typical working farmed landscape punctuated by quarrying activities. Views are limited by undulating topography.

Sensitive characteristics or features

The matrix of hedges and hedgerow trees that form and shape strong field pattern are sensitive to changes in land management. Rolling, open and undeveloped higher ground is sensitive to tall infrastructure or large scale development. Parkland and woodland in the farmland and alongside rivers are sensitive to changes in farming practices. Tranquility is greatest along rivers and is sensitive to development or farming intensification. The strong red sandstone vernacular of small nucleated villages is sensitive to changes from unsympathetic village expansion.

Vision

This working landscape will be enhanced and restored through the improved management of key features and the integration of development. A prosperous farming economy will be created and programmes will lead to the strengthening of traditional field patterns, hedgerows, trees and woodland cover. However, limited field enlargements and hedge removal could be supported and any modern farm buildings will be sited unobtrusively. Unsympathetic development edges will be softened and peripheral

development will be integrated within a stronger woodland landscape framework while the identity of existing buildings and villages will also be enhanced.

Changes in the Landscape

Over the next 10 – 20 years this landscape could be subject to the following changes or issues:

Climate Change

- An increase in short rotation coppice, biomass or other woodland planting could help mitigate against climate change and support renewable energy production.
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- An increase in rainfall and extreme weather events could result in an increase in flash flooding. Flood risk management may result in man made mitigation measures such as strengthened river defences, re-engineered bridges and access routes.

Management Practices

- These areas have been subjected to agricultural intensification and there has been a neglect of traditional boundary features and particularly the loss of hedgerow trees from modern hedge pruning and flailing techniques.

Development

- These areas are subject to pressures for urban development due to their proximity to key towns and cities in Cumbria. Without careful management planned and incremental expansion could erode the landscape character. The Green Infrastructure approach provides an opportunity to seek landscape and biodiversity enhancements as new development is planned on the edges of settlement. Green infrastructure and the development of green corridors can help connect the settlements with the wider countryside and other settlements.
- Upgrades to the national grid to provide energy security and support new power generation could result in larger pylons and sub stations.
- The continued need to support renewable energy schemes could likely result in an increase in large scale wind energy schemes. Wind energy schemes have

already changed the character of the adjacent Ridge and Valley sub type and without careful control this could be replicated here.

- Farm diversification could lead to an increase in the use of farm land for horse grazing and equestrian uses could result in changes to field patterns and boundaries. An introduction of stables and ménages could cause incremental change the character of the farmed areas.
- New roads, housing, recreational facilities and quarrying have led to loss of landscape features.

Access and Recreation

- Public rights of way provide a network of routes that enable quiet appreciation and enjoyment of the countryside. Ongoing maintenance is needed to support this network in the future.
- Current farm stewardship grants provide the opportunity to develop more public access in the countryside. Future grant or other programmes may continue to support this.

Guidelines

Climate Change

- Encourage biomass, short rotation coppice and energy crops that avoid areas of sensitive habitat, such as grazing marsh habitat and that seek to enhance hedge boundaries around fields. Planting should respect the scale of the local landscape features. The edges of short rotation forestry should be soft and follow the grain of the topography.
- Encourage appropriate woodland or other planting in landscapes higher up the river catchment areas to help provide natural alleviation to extreme weather events and reduce the amount of hard engineered solutions needed alongside rivers and close to settlements.

Natural Features

- Planting of mixed shelterbelts in the more exposed areas with tree groups, woodlands and feature trees throughout the landscape and particularly along watercourses.
- Plant small mixed woodlands to enrich landscape pattern and to visually contain village expansion, existing quarries and recreational facilities.
- Improve the management, maintenance of existing

mature woodlands and carry out supplementary planting of woodlands, tree groups and copses within this area.

- Encourage management and enhancement of parklands to include programmes of amenity management and replacement planting in sympathy with the historic significance.

Cultural Features

- Encourage retention, restoration and traditional management of hedgerows.
- Increase planting of deciduous trees as feature trees, within hedgerows.
- Ensure where possible that 'linked networks' of vegetation are created using native trees and shrubs to enhance their nature conservation value and their use as 'ecological corridors'.
- Encourage retention and restoration of stone walls, traditional gate posts and features on a whole farm basis.

Development

- When new development takes place consider opportunities to enhance and strengthen green infrastructure to provide a link between urban areas and the wider countryside. Reinforcing woodland belts, enhancing water and soil quality and the provision of green corridors from and between settlements could all help reinforce landscape and biodiversity features.
- Energy infrastructure including large scale wind energy generation, pylons and substations should be carefully sited and designed to prevent this sub type becoming a wind energy landscape. Prominent locations should be avoided and appropriate mitigation should be included to minimise adverse affects.
- Encourage retention of existing traditional stone buildings, gate posts, planting on garths, around buildings, along farm access roads and main entrances.
- Reduce the impact of any large scale new farm buildings by sensitive siting, breaking down mass, choice of sympathetic colours and non-reflective finishes and landscaping using traditional hedgerows and woodland screen planting.
- Encourage horse grazing and equestrian uses to respect field boundaries and field patterns. Stables and other facilities should be sited sensitively with appropriate landscape mitigation to prevent the

erosion of the pastoral farmland character.

- Encourage environmental improvements within settlements including traffic calming measures that reflect the character of the rural roads. Use planting to strengthen the definition of 'gateways' and enhance the identity.
- Soften the impact of unsympathetic development edges and integrate peripheral development within a stronger landscape framework.
- Integrate new recreation development such as golf courses into the countryside by careful siting, appropriate ground modelling and planting and exploit opportunities these developments provide to improve visual and wildlife diversity.
- Ensure mineral extraction is carried out in a manner that does minimal damage to distinctive landscape features.

Access and Recreation

- Public rights of way should be well maintained and quiet recreational areas and facilities should be improved and developed to be compatible with the pastoral character of this sub type.
- Seek opportunities to enhance access to farmland through farm stewardship or other schemes.