

Type 8

Main Valleys



The characteristics of this landscape type combine linear valley landscape features with significant changes in topography and rural elements. There are 4 sub types found throughout the county reflecting these changes. They do not include every river valley in the county as many are included as elements of other landscape types.

Such landscapes are common within the county. Height and location determine many of the features, although streams, rivers, hanging woodlands, pasture, scrub and woodland are common throughout.

The orientation, scale and links to settlements vary and can affect perceptions and the experience gained.

Sub types:

8a Gorges

8b Broad Valleys

8c Valley Corridors

8d Dales

Sub type 8a

Gorges

Location

This short section of the River Eden extends from near the 'Nunnery' north of Lazonby to Wetheral.

Key Characteristics

- A deep linear sandstone gorge
- Fast flowing river with waterfalls
- Outcrops of steep rocky cliffs
- Hanging woodlands cling to the gorge sides
- Large concentrations of ancient semi-natural birch woodland and occasional coniferous
- Impressive views into the gorge from adjacent high ground

Physical character

The dramatic gorge has formed in an area of Permo Triassic sandstone and cuts through the Sandstone Ridge (type 10) and Rolling Lowland (sub type 5c). The gorge drops from around 100 – 25m AOD in a northerly direction.

Land cover and land use

The gorge has a strongly distinctive character with rocky sides and cliffs that drop steeply down to the River Eden. The gorge is lined in many parts with swathes of hanging oak and birch woodlands and remnant ancient and semi natural woodlands. These tend to give way to coniferous plantations as you move up the gorge side before joining rolling farmland. Occasional improved or semi improved fields sit between the woodlands. Above the gorge sides pasture fields slope gently upwards and are bounded by sandstone walls and wire fences. A short section near Armathwaite includes a dramatic waterfall due to changes in geology. The gorge then opens up and has a flat floodplain valley floor and pasture fields extend down to the river.

There are traditional scaled nucleated settlements around bridging points and isolated traditional farmsteads and some modern dwellings sited along the river. Buildings are often constructed in the distinctive rich red local sandstone. A railway line skirts discretely along the western edge of the gorge and does not detract from the overall character.

The Lune Gorge is not included in this sub type due to significantly different man made characteristics. It is included in sub -type 8c.

Ecology

A landscape of high ecological interest, much of which lies in the upland oak woodland which lines the steep banks and cliffs of the Eden gorge. These woods are important for birds such as pied flycatcher, redstart, wood warbler and goosander. The damp cliffs support a diverse assemblage of mosses, liverworts, ferns and species such as the river jelly lichen. The river itself is of international importance and supports otter, Atlantic salmon and lampreys.

Historic and cultural character

The Settle to Carlisle railway runs through this landscape sub-type and is regarded as the most scenic railway in England. A section of the route runs adjacent to the valley of the river Eden. Skilled engineering was required to overcome the complex landform of this area. Striking railway viaducts are a feature of this landscape.

The settlement pattern is concentrated into a few large villages which had an industrial past associated with water power. Buildings are sandstone constructed, largely dating to the eighteenth and nineteenth centuries. There are elements of ornamental designed landscapes on the river banks as at Armathwaite.

Perceptual character

The landscape is picturesque and can feel wild, natural and invigorating with its steep sides, heavily lined by swathes of woodland, looming over the fast flowing river in the gorge bottom. Changes in seasons can change the character of woodland, and weather changes can influence the flow, noise and energy of the river. Where fields interrupt the woodland they provide contrast with the dramatic hanging woodlands and provide more open views to farmland beyond. Views along the gorge are enclosed and snake along the rivers course. The lack of settlement and energy of the river give a feeling of remoteness.

Sensitive characteristics or features

Hanging woodlands in steep sided gorges and dramatic changes in geology are sensitive to changes in water management and natural forces. The distinctive sandstone vernacular and traditional scale villages are sensitive to unsympathetic expansion. Viaducts and the discretely sited Settle to Carlisle rail line could be sensitive to changes in the upkeep of the rail line. Enclosed views along a wild and remote undeveloped gorge are sensitive to valley rim development.

Vision

The picturesque qualities and ecological richness of the gorge will be conserved and enhanced. The contrasts between the hanging woodlands and cliff faces will be retained. The character of the former ancient and semi-natural woodland cover will be restored through various management practices. Development and the management of recreation will be strictly controlled.

Changes in the Landscape

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

Climate Change

- There could be increases in flash flooding in upland areas linked to higher rainfall and extreme weather events. This could affect river courses and vegetation.

Management Practices

- The replanting of some of the ancient valley woods with further large scale coniferous planting is unlikely to happen in the future. However, sensitive management of maturing plantations is needed.
- Intensive bank side grazing, use of fertiliser and diffuse pollution could cause changes to the nature conservation value of the River Eden SSSI.

Development

- Planned or incremental village expansion and increased recreational use and ancillary tourism developments such as caravan parks could change the generally undeveloped and vernacular character of the landscape.
- There could be an increase in interest for small scale hydro electric schemes to help generate renewable energy.

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.

Guidelines

Climate Change

- Encourage flood risk management to maximise the use of natural approaches such as additional tree planting rather than the introduction of man made flood management approaches.
- Ensure the management of floodplain areas resisting development while conserving and enhancing floodplain habitats.

Natural Features

- Improve management of the established broadleaf woodlands primarily for landscape and nature conservation.
- Where appropriate, extend broadleaf woodland cover along the River Eden and tributaries linking into the adjacent pattern of hedgerows to further emphasise their legibility in landscape and increase potential for nature conservation.
- Ameliorate existing coniferous plantations through sensitive management including softening of geometric outlines, phased felling appropriate to small

scale linear landscape patterns, introduction of open spaces and restocking with appropriate broadleaf species.

- Retain and maintain existing stone walls, gate posts and other built features. Encourage new walls where wire fences have replaced them in the past.
- Ensure the conservation and enhancement of semi-natural habitats.

Development

- Ensure new development on the edges of settlements is sited and designed to reflect the traditional village form and character and maintains a rural setting. Maintain key views from villages to the River Eden.
- Ensure new development elsewhere, such as caravan parks, respects the scale and traditional form of other development. Ensure that new buildings are integrated into the landscape through careful siting, design and the use of appropriate materials.
- Ensure any small scale hydro electric schemes are sensitively sited and do not erode the generally undeveloped character of the landscape, or harm any nature conservation interests.

Access and Recreation

- Encourage new access proposals and improvements in areas that would not harm the nature conservation value of the river and woodlands.

Sub type 8b

Broad Valleys

Location

These broad valleys include parts of the rivers Liddel, Irthing, Eden, Derwent, Lune, Lyth, Kent and Winster. The sub type continues into the Lake District national park and is classified as sub types H2 Valley Floor with River Floodplain in the Lake District National Park Landscape Character Assessment. Parts of this type around the River Lune meet the criteria for National Park designation and are being considered for designation in 2010/11.

Key Characteristics

- Wide and deep valleys with open floodplains
- Rural farmland comprising significant areas of improved pasture
- Pockets of scrub, woodland and coniferous plantations
- Hedges and stone walls form a matrix of field boundaries
- Roads and railway lines often follow the linear valley contours

Physical character

These broad valleys are found on a range of rocks, but are usually overlain by fluvio glacial drift and river alluvium. The valley bottoms are often less than 50m AOD with either gentle or steep valley sides that reach to around 175m AOD. While generally broad and large in scale, the topography can vary as valleys cut through a range of landscape types including drumlin fields, limestone escarpments, and fells. Throughout this sub type the rivers have formed both open and wide floodplains and broad and deep valleys where the rivers gently meander along the valley bottoms. Occasionally narrow and faster flowing sections of river are found reflecting local geological variations.

Land cover and land use

Land cover is mixed. Fields of improved pasture dominate, but there are occasional arable fields, particularly in the Eden Valley. The farmland is broken up by pockets of scrub, deciduous woodland and small blocks of coniferous plantation.

Fields are both irregular and regular in shape and bounded by hedges or stone walls and provide a strong pattern of boundaries. Hedges tend to be thicker in southern valleys. In places fences have replaced traditional boundaries. Hedgerow trees and riverside trees are common. These contribute to the wooded character of the valleys.

The more open sections of river usually have a flat floodplain with the river meandering gently along the valley bottom. Valley sides can be incised by small streams and tributaries. Improved pasture is dominant, particularly on the floodplain and lower valley sides. Blocks of plantations and broadleaved and coppice woodland can be found in more open areas and towards the top of the valley sides. These are often associated with estate parkland and areas that were historically deer park. Damson orchards are a distinctive feature of the Lyth Valley. Drained mosses can often be found towards the mouths of the Kent, Lyth and Winster in the south.

In the narrower deeper more gorge like valley sections the rivers are more twisting and can have short fast flowing sections with water falls. Valley sides are steeper and are often covered with wooded banks and hanging woodlands.

Small scale historic bridges cross the rivers in many places and have determined the location of many of the traditional villages. Small villages that retain a strong vernacular character are common, with buildings built mainly of local sandstone and limestone. Villages are often linear close to the river or more nucleated along

the valley top. Towns such as Kirkby Lonsdale and Sedbergh retain a traditional core but have modern characteristics where they have expanded. Farms are isolated and dispersed usually along valley sides.

Small rural roads and railway lines often follow the contours of the river valleys and are generally discrete features. More modern larger roads often cut across the valleys in a more discordant way.

Ecology

The rivers are often ecologically rich, supporting species such as otters, Atlantic salmon, bullhead, lampreys and white-clawed crayfish. Several are internationally important. The river banks are often wooded with upland oak, remnant ancient and semi natural woodland and wet woodland communities. Patches of rush pasture can also be present. Along the Lyth Valley small wooded remnants of once more extensive lowland raised bogs are present. Species-rich hedgerows frequently bound the fields of improved pasture, and these, together with the river habitats provide important habitat for bats. Species-rich roadside verges are a feature of the Lune valley east of Tebay. Earth cliffs along the river bank provide nesting sites for sand martins whilst riverside woods support nesting goosander. Some valleys also support wintering sites for whooper swans.

Historic and cultural character

The broad valleys of the area have been popular locations for artists. The Lune Valley and the upper Lune Valley in Ravenstonedale were painted by J.M.W. Turner, Norman Adams, and David Morris. The Eden Valley is the location for one of Andy Goldsworthy's sheepfold sculpture walks.

The settlement pattern is dispersed except in the Eden and Irthing valleys and part of the Lune Valley which are more nucleated. Fields are often associated with ancient enclosure and former common arable land. Planned enclosure is dominant in the Lyth Valley and along the edges of the Eden, and Black and White Lyne valleys. There are varying building styles with sandstone the primary building material in the north and limestone in the south. There are a number of historic weirs and

bridges associated with the rivers. The most frequent archaeological sites relate to water powered industries; paper, gunpowder and iron manufacturing on the River Kent and corn mills on all the river systems. Marble quarrying once took place along the banks of the River Kent south of Kendal.

There are Roman sites such as Kirkby Thore in the Eden and Lune valleys. In Irthing Valley Hadrian's Wall and forts such as Birdoswald form the most significant archaeological components. The Wall and associated earthworks follow a prominent ridge running along the northern rim. There are a number of ornamental and parkland landscapes, particularly in the Kent and southern Lune Valley.

Perceptual character

These landscapes are generally medium in scale with a lot of variety along the length of the valleys. The narrow enclosed wooded sections can feel remote and wild due to the lack of development and speed and character of the river and hanging woodlands. The character of the river can change with the seasons and weather, sometimes increasing the sense of wildness. In more open parts there is a sense of calm within a working farmland. Close to large towns and roads there is a busier feeling but the rural qualities still dominate. Low level views are often intimate, contained by the valley sides and woodland. More expansive views are possible from the top of some valley sides towards the Scottish hills, Lakeland fells and the North Pennines.

Sensitive characteristics or features

Woodlands, orchards and the matrix of hedges and hedgerow trees and open meandering undeveloped river plains are sensitive to changes in land management. The planned nature of estate parkland and historic deer parks is sensitive to changes in estate management and the expansion of estate buildings. The limestone and sandstone vernacular, traditional scale of villages and their siting that follows the grain of the valleys are sensitive to unsympathetic expansion. Traditional stone bridges and roads that follow the grain of the valleys could be sensitive to flooding events and highway improvements. Undeveloped valley rims and their

relationship with adjacent landscapes are sensitive to rim edge development. The remoteness and wildness associated with the rivers, and the sense of calm associated with the more open farmland, are sensitive to changes in land management.

Vision

These landscapes will be conserved and enhanced. Hedgerows and walls will be strengthened adding striking edges to field boundaries and will help define the river valleys and the farmed valley bottoms. Settlement patterns and habitats associated with the rivers will also be conserved and enhanced while tree cover will be maintained and strengthened. Development will be sited to complement traditional settlement patterns and use vernacular materials. The historic features and continuity will be conserved and enhanced.

Changes in the Landscape

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

Climate Change

- Changes in approaches to flood risk management could provide an opportunity for some floodplain areas to become wetter in future.

Management Practices

- Changing agricultural practices have led to the neglect of landscape features and the loss or replacement of hedgerows by fences.
- There could be a tendency for coniferous forests and designed landscapes to introduce non-native trees which may bring disease.
- Lack of management to estate or other woodlands and hedgerow and riverside trees can erode the character of the area.
- Water abstraction, pollution and enrichment can affect riverside features.

Development

- Large scale farm buildings can be found in some parts and are introducing uncharacteristic development into the farmed landscape.

- There is likely to be continued pressure for expansion of villages and towns along the Derwent, Eden, Kent and Lune.
- The need to provide more renewable energy sources could result in an interest for large scale wind energy development and small scale hydro electric schemes.
- Road and rail improvements and energy infrastructure such as, large scale wind turbines could erode the rural character and affect adjacent landscapes.

Access and Recreation

- Visitor numbers could increase in areas adjacent to the Lake District and Yorkshire Dales National Parks and north pennines and from programmes encouraging people to access the countryside around where they live.
- 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.
- Additional recreation facilities such as fishing lodges, holiday accommodation and golf courses could be sought in these areas.

Guidelines

Climate Change

- Opportunities should be taken to create new areas of wetland in response to changes in flood risk management, such as is planned in the Lyth Valley.

Natural Features

- Encourage the restoration of the floodplain and catchment centered farming to protect river edges and vulnerable habitats in association with Biodiversity Action Plans (BAP).
- Conserve and enhance marginal wetland features and support the re-wetting of areas such as the Lyth Valley to provide wildlife and landscape diversity.
- Protect, enhance or restore marshes, wet meadows and pasture, off-stream ponds, reed beds, willow and alder, carr and bank side trees. This may involve for example, sensitively timed light grazing, maintenance

of water levels, protection from livestock or control of invasive vegetation.

- Ameliorate incongruous river engineering and canalisation works by softening geometric forms and creating a variety of habitats and natural features within and alongside rivers.
- Reinforce established broad-leaved and mixed woodlands through improved management and supplementary planting ensuring a balance is maintained between coniferous and deciduous plantations.
- Extend tree cover into adjacent areas by additional planting of tree groups, lines, hedgerow trees and roadside planting, encouraging use of indigenous species.
- Plant trees to enhance vistas whilst emphasising contrasts between wooded valley sides and open flood plain.
- Encourage the use of deciduous species along the river valley sides to give definition to the watercourse and encourage the development of riverside habitats.
- Introduce open areas within woodland and manage water and wetlands to increase landscape and nature conservation value.
- Ensure that the planting of designed landscapes using non-native trees does not bring disease into the surrounding landscape.
- Maintain and enhance other semi-natural habitats such as ancient woodlands and unimproved grasslands.
- Create ecological corridors to enhance nature conservation value.

Cultural Features

- Improve the management of existing hedgerows to create stronger patterns in the landscape.
- Encourage the replanting and renovation of gappy overgrown hedges.
- Renovate parkland respecting historic designed layouts and planting schemes.
- Conserve historic buildings and structures, which may include removal of trees and scrub to keep them open and viewable.
- Conserve historic earthworks through avoidance of damaging agricultural activities such as infilling or leveling, tree planting, poaching by cattle, ploughing or tipping.

Development

- Minimise the visual impact of recreational developments such as caravan sites. Careful siting, restrictions on scale and a high standard of design and landscaping may achieve this.
- Minimise the impact of infrastructure and housing development by careful siting, avoiding open valley floors, obstruction of corridor views and relating them to existing development. Set high standards of landscape treatment.
- Maximise opportunities to create/enhance semi-natural elements such as woodland and wetland in association with recreation developments such as golf courses.
- Minimise developments impact on local character through ensuring design and scale respects the local vernacular and character particularly regarding the introduction of modern large-scale farm buildings.
- Large scale wind energy schemes should avoid small enclosed valleys and valley tops where they could appear dominant.
- Hydro electric schemes should be sited and designed to be discrete elements in the landscape and not harm nature conservation interests.
- Conserve and enhance traditional farm buildings and features particularly within a historic setting.
- Encourage retention and restoration of stone gate posts, historical artefacts and features forming part of the cultural heritage.
- Reduce the impact of large scale new buildings by careful location, siting and design.
- Conserve and protect the character of historic stone built villages in their landscape settings.
- Discourage fringe development in non-traditional materials that will affect the setting of the village particularly in its relationship with the River Eden

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.
- Promote and enhance existing recreation routes by improving waymarking, providing appropriate surfacing, gates and gaps and interpretation.

Valley Corridors

Location

This sub type is found in a high section of the Lune Valley running south from Tebay to Lowgill.

Key Characteristics

- Narrow gorge between high fells
- Steep sides with pasture and woodland
- Meandering river along valley bottom
- M6 motorway, railway and pylons dominate the valley

Physical character

The underlying rocks are Silurian mudstones and sandstones overlain by till and gravel fluvial glacial deposits. The river runs through a steep deep gorge that is strongly enclosed by the Shap and Whinash Fells to the west and Howgill Fells to the east. The valley height varies from 175 - 200m AOD

Land cover and land use

The valley has a managed pastoral character that is dominated by transport infrastructure. Sloping pastures along the lower valley sides and floodplain form a patchwork of fields bounded by stone walls and hedges. These are interspersed with woodlands and copses and isolated trees. The woodland is often found along the edge of the river course. This provides contrast with the unenclosed rough grazing, bracken and rocky outcrops found on the valley sides and the enclosing fells.

At the northern end of the Lune Gorge there is the former railway village of Tebay. Otherwise settlement is sparse and limited to dispersed farmsteads that shelter in the valley bottom.

As the gorge forms a gap between the fells it has been a vital transport route over the centuries. A Roman road runs along the eastern side, and a dismantled railway and associated features can still be found. More recently a modern railway line and M6 motorway were built along the western side. Earthworks associated with this have resulted in a number of artificial cliff features of which have a high geological interest. The motorway is the dominant feature running through the gorge despite it curving along the valley contours carefully. This is largely due to its scale and the noise and movement associated with it. The railway line adds to the noise and movement in the landscape.

Ecology

The river valley supports areas of upland oak and wet woodland, scrub, rush pasture and floodplain grazing marsh and provide habitat for bats, otter, sand martin and Atlantic salmon.

Historic and cultural character

The Lune gorge is especially characterised by the route-ways going through it from a Roman road with an associated fort, through to a 19th century railway and the M6 motorway. Farmland is predominantly ancient enclosure with some former common arable land and unenclosed moorland.

Perceptual character

The Lune Gorge at Tebay is a large scale, dramatically enclosed landscape with discordance between its rough and wild texture and the presence of heavy motorway traffic. The noise of traffic detracts from the quiet enjoyment of the valley and nearby fells. Nevertheless this landscape is considered to be both invigorating and beautiful and is arguably the most dramatic section of

motorway in the country. The weather influences the experience of the area as poor weather can obscure the containing fells.

Sensitive characteristics or features

The strong undeveloped enclosures of the Tebay, Howgill Grayrigg, Lambrigg Fells and Commons are sensitive to changes in land management. The unenclosed moorland that contrasts with lower level farms and fields is sensitive to changes in land management. The strong linear transport links that curve along the lower valley sides are sensitive to unsympathetic expansion.

Vision

This valley will be enhanced where possible and development intruding on the traditional characteristics will be resisted. Enhancement will come in the form of strengthened natural features and landscape structure, contrasting wooded valley sides and open pastoral flood plains. Farmland structures will be restored and cultural or historic features will be carefully conserved and enhanced. The valley will remain a predominantly rural corridor with contained and managed road and rail infrastructure. The tourism resource in the Lune Valley for activities such as kayaking and walking will be managed and strengthened.

Changes in the Landscape

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

Climate Change

- Changes in approaches to flood risk management could provide an opportunity for some floodplain areas to become wetter in future.

Management Practices

- Hedges and walls could be damaged by increased run off from the enclosing fells due to an increase in rainfall and extreme weather events.
- Intensive farming practices could affect the condition and extent of wetter areas associated with the

floodplain and lower valley sides.

- Older hedges and hedgerow trees could be susceptible to disease as they age.

Development

- The M6 corridor as an element in the landscape could have the potential to attract new large scale commercial development, particularly around Tebay. Improvements to surfacing, lighting and information systems along the motorway could affect its appearance and people's awareness of it in the landscape.
- The need to provide more renewable energy sources could result in an interest for large scale wind energy development and small scale hydro electric schemes.
- Rail, road and other infrastructure improvements, including pipelines and pylons could be routed along the valley.
- Extensions to farmsteads with modern farm buildings could affect the pastoral character of the valley.

Access and Recreation

- Visitor numbers could increase in areas adjacent to the Lake District and Yorkshire Dales National Parks and from programmes encouraging people to access the countryside around where they live.
- 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

- Opportunities should be taken to create new areas of wetland in response to changes in flood risk management.

Management Practices

- Encourage catchment sensitive farming and reductions in diffuse pollution from fertilisers and other agricultural treatments.

Natural Features

- Reinforce and extend existing broad-leaved and mixed woods on valley sides by appropriate management and new planting.
- Conserve important riverside trees.
- Protect and enhance marshes, wet meadows and pasture, off-stream ponds, reed beds, willow and alder, carr and bank side trees. This may involve for example, sensitively timed light grazing, maintenance of water levels, protection from livestock or control of invasive vegetation.

Cultural Features

- Restore hedgerows involving replanting and renovation of gappy overgrown hedges.
- Manage hedgerows in a traditional way involving a cycle of hand laying and trimming.
- Plant new hedgerow trees to replace maturing stock using indigenous species, or tagging selected saplings.
- Conserve historic earthworks through avoidance of damaging agricultural activities such as disturbance and removal of stones, leveling and excavation, tree planting, poaching by cattle, ploughing and tipping.
- Repair and maintain historic buildings which may include removal of trees and scrub to keep views of them open from the riverside.

Development

- Minimise the impact of infrastructure development by careful siting avoiding open valley floors, obstruction of corridor views and relating them to existing structures. Seek high standards of landscape treatment including restoration of semi-natural components.
- Large scale wind energy schemes should avoid enclosed valleys where they could appear dominant.
- Hydro electric schemes should be sited and designed to be discrete elements in the landscape and not harm nature conservation interests.
- Retain the rural character of the M6 corridor by resisting large scale commercial development and ensuring new motorway infrastructure such as information signs and necessary lighting is sited to minimise adverse effects on open parts of the landscape. Noise pollution should be mitigated against through careful selection of surface materials.
- Reduce the impact of new farm buildings by careful siting, breaking down mass, choice of sympathetic colours and non reflective finishes, and appropriate planting.

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 character of this sub type.
- Seek opportunities to enhance access to farmland through farm stewardship or other schemes.
- Promote and enhance existing recreation routes and riverside footpaths and bridleways by improving waymarking, providing appropriate surfacing, gates and gaps and interpretation.
- Protect neighbouring farmland and sensitive habitats by careful routing and maintenance of boundaries.

Location

The dales sub type is found around Alston in the North Pennines Area of Outstanding Natural Beauty and at Mallerstang and Low Dovengill near the Yorkshire Dales National Park. This type meets the criteria for National Park designation at Mallerstang and Low Dovengill and is being considered for designation in 2010/11.

Key Characteristics

- Distinctive, wide V-form upland valley
- Angular limestone scarps and steep slopes
- Dominated by rough pasture bounded by stone walls
- Steeper slopes are covered in bracken and scrub
- Woodlands are found along river banks
- Dispersed farms, small traditional villages and rural roads are the main built features

Physical character

The geology of these areas is varied. At Alston Moor a stepped profile has formed along the valley sides from alternating bands of mudstone, sandstone and limestone of the Yoredale series with drumlin features along the valley bottoms. Elsewhere Carboniferous Limestone is overlain by glacial till. These river dales are located in fells and scarps landscapes ranging from 225m up to 400m high.

The upland valleys generally have a distinctive wide V-form, defined by steep slopes from adjacent fells. These culminate in open skylines. In some places there are angular limestone scarps, narrow gorge features and small terraces forming a stepped profile along the slope sides. In other places the valleys widen and open out. The main rivers or becks are fed by numerous side ghylls which are often deeply incised.

International and regionally important geological sites are found around Nenthead.

Land cover and land use

Land cover is dominated by rough pasture, with many of the steeper slopes being covered with bracken and scrub. Tree cover is mainly confined to small woodlands along riverbanks, stream sides and ghylls. However there are some small copses and small plantations elsewhere. Large-scale afforestation is limited to the higher valley sides near Alston.

The grazing land covering the valley bottom is usually divided into small square fields by stone walls. In places the fields are more elongated and divided by a long series of walls separating the lower fields from the higher rougher grazing commons. Hay meadows are common in the lower areas. The fields often increase in size up the valley sides with some isolated 'intakes' found even higher still. Stone field barns are dotted about the valley. Old trees stand alone, follow walls or are clustered near buildings.

Settlements are generally only found in the dales at Alston Moor, where they are sited close to bridging points along the rivers. These are mostly associated with early mines or mining and small tips and mine buildings are distinctive features that have modified the dales valleys. Dispersed farmsteads in limestone vernacular are found along the valley bottoms, with isolated barns (often derelict) dotted about the fields.

Roads are rural in character and tend to hug the valley bottom or lower sides. In Mallerstang the Settle to Carlisle railway forms an unexpected but discrete feature.

Ecology

These high river valleys support narrow bands of upland oak woodland and occasional areas of wet woodland, together with rush pastures, hay meadows and calamarian grassland linked to the lead mines. The

roadside verges provide an important wildlife habitat in these dales, supporting broad swathes of species-rich grassland and tall herb vegetation, characterised by meadowsweet, wood crane's-bill and around Alston, melancholy thistle. The rivers support otter, dipper and in the Alston area are noted for the flora and invertebrate fauna of their shingle banks which include rare helleborines and water voles. This mosaic of habitats in the Tyne and Nent valleys provides the main black grouse stronghold in Cumbria. Statutory designations include Alston Shingle Banks SSSI.

Historic and cultural character

The dales are generally characterised by a dispersed settlement pattern with irregular fields featuring surviving ring garths and evidence of intacks as well as isolated field barns. The fields are generally enclosed with dry stone walls and the buildings are limestone built. Alston has medieval origins and there are many traditional buildings of seventeenth and 18th century date. Outside of Alston bastles are a characteristic feature of the rural buildings. Archaeological features include medieval defensible structures such as Pendragon Castle, evidence of quarrying, lime burning and coal and lead mining including surviving binsteads. The increased industrialisation linked with the exploitation of minerals and the traditional farming heritage has led to farmer/miner landscapes. Culturally the landscape was developed as small holdings with mining being carried out as a part-time activity.

Nenthead is rich in mining heritage, regarded as the most important single site associated with the lead mining in the north Pennines. The mining dates back from Roman times where lead was smelted to extract silver content. The Quaker London Lead Company built the village of Nenthead in the 1830's.

Perceptual character

In higher parts there is a large landscape feel with wide expansive views over the adjacent moorland. In the lower parts a smaller scale valley landscape prevails. This landscape can provide a feeling of enclosure, openness or remoteness depending on height and location. At higher levels changes in the seasons and weather can

accentuate the remote feeling. The lower parts of the valley are tranquil due to a lack of modern development and a sense of naturalness from the hay meadows, birdlife and river. Relics of former mining activity provide a link to history and expose the geology of the area. Stone walls provide a strong unifying element. Seasonal changes bring colourful additions to the low lying pasture and hay meadows and the higher bracken covered slopes.

Sensitive characteristics or features

Open and expansive uninterrupted views along the valley bottoms and rims are sensitive to unsympathetically sited and scaled development. Undeveloped skylines are sensitive to large scale infrastructure development. The deciduous ghyll woodlands, the tight matrix of stone walls that contain lower level pasture and the contrasting open moor are sensitive to changes in land management. The small scale vernacular towns, villages, farms and field barns are sensitive to expansion and redevelopment to non agricultural uses. The open moorlands and more enclosed valley bottoms are sensitive to additional large scale plantations. Discrete rural roads curve along valley sides and over moorland tops and are sensitive to urban style highway improvements and safety measures. The rich mining heritage and archaeological features are sensitive to changes in land management.

Vision

Conservation and restoration will be the priority in these dales which are designated and/or highly valued landscapes.

The well managed and traditional landscape pattern will be fostered and features such as stone walls, barns, trees, woods and hay meadows will be retained and kept in good condition. Farming support schemes will be targeted towards these aims and some forms of farm diversification will be accepted to aid in maintaining this traditional landscape pattern; in addition, small-scale farm based tourism developments supplementing farm incomes will be encouraged. However, new farm buildings will be strictly controlled, carefully and sited and sympathetically designed to avoid intrusion into the landscape. Small-scale broadleaved or mixed plantation will be introduced to make a positive

contribution to the landscape and in the northern Pennines a strategy will be developed for the conservation of landscapes modified by early mining remains.

Changes in the Landscape

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

Climate Change

- Changes in approaches to flood risk management could provide an opportunity for some floodplain areas to become wetter in future.

Management Practices

- Agricultural intensification including grassland improvement, loss of traditional hay meadows and new farm sheds.
- Symptoms of neglect including derelict walls and field barns, replacement of walls and hedges by fences, old woodlands and trees.
- The need to provide more renewable energy sources could result in an interest for large scale wind energy development and small scale hydro electric schemes.
- Diversification to tourism and forestry.
- Environmentally sensitive farming initiatives (Pennine Dales ESA) are beginning to have an effect in these areas.
- Small scale potential for further mineral working in the Pennine dales.

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

- Opportunities should be taken to create new areas of wetland in response to changes in flood risk management.

Natural Features

- Manage, conserve or recreate species rich hay meadows. This may involve sensitively timed light grazing and late cutting to allow seeding, prevention of ploughing, cultivation, herbicide and fertiliser applications and re-seeding with an appropriate diverse mixture.
- Conserve the pattern of small woods and scattered trees by appropriate management, natural regeneration, restocking and exclusion of stock.
- Plant new field boundary trees to replace maturing stock using indigenous species.
- Protect gill sides from livestock to encourage development of diverse ground flora and beck-side trees by natural regeneration or restocking.
- Avoid new tree planting in areas of hay meadow.
- Conserve and enhance semi-natural habitats in relation to Biodiversity Action Plans (BAP).
- Protect and enhance marshes, wet meadows and pasture, off-stream ponds, reedbeds, willow and alder, carr and bank side trees. This may involve for example, sensitively timed light grazing, maintenance of water levels, protection from livestock or control of invasive vegetation.

Cultural Features

- Conserve and maintain the historic field pattern which is a key element in the dales.
- Encourage the restoration of gappy hedgerows using traditional methods.
- Restore stone walls and replace wire fences where possible.
- Conserve and maintain historic structures such as field barns, farmhouses, mining structures and lime kilns. This may include protection from stock, removal of trees or scrub and carrying out structural repairs with archaeological advice.
- Conserve important spoil heaps and other earthworks.

Development

- Ameliorate existing daleside coniferous plantations including softening geometric outlines, introduction of open spaces and greater diversity of species.
- Ensure that new farm buildings and all other developments are carefully integrated into the landscape.
- Resist the proliferation of minor intrusions such as fences, enlarged vehicular access points and

tracks. Where these are absolutely necessary encourage locally distinctive constructions and use of materials that harmonise with the local landscape characteristics.

- Large scale wind energy schemes will be strongly resisted in national landscape designations as they would cause significant harm to the landscape character and the purposes of designation.
- Hydro electric schemes should be sited and designed to be discrete elements in the landscape and not harm nature conservation interests.
- Minimise surface scarring, clutter and dereliction of existing mineral workings.

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 rural character of this sub type.
- Seek opportunities to enhance access to farmland through farm stewardship or other schemes.