

Description

Steep-sided wooded valleys are distinctive features in the Borough's landscape and are located on higher ground to the north and north west of Wigan. They dissect areas of elevated farmland in a dendritic pattern and extend down to the suburban fringes of Wigan. The valleys form major linear areas of continuous woodland in the Borough, creating important wildlife corridors. They also provide areas of seclusion and shaded tranquillity.

The valleys contain generally fast flowing sinuous small streams, often creating the sound of running water – particularly from riffles and small waterfalls which emanate from spring lines on the adjacent hillsides.



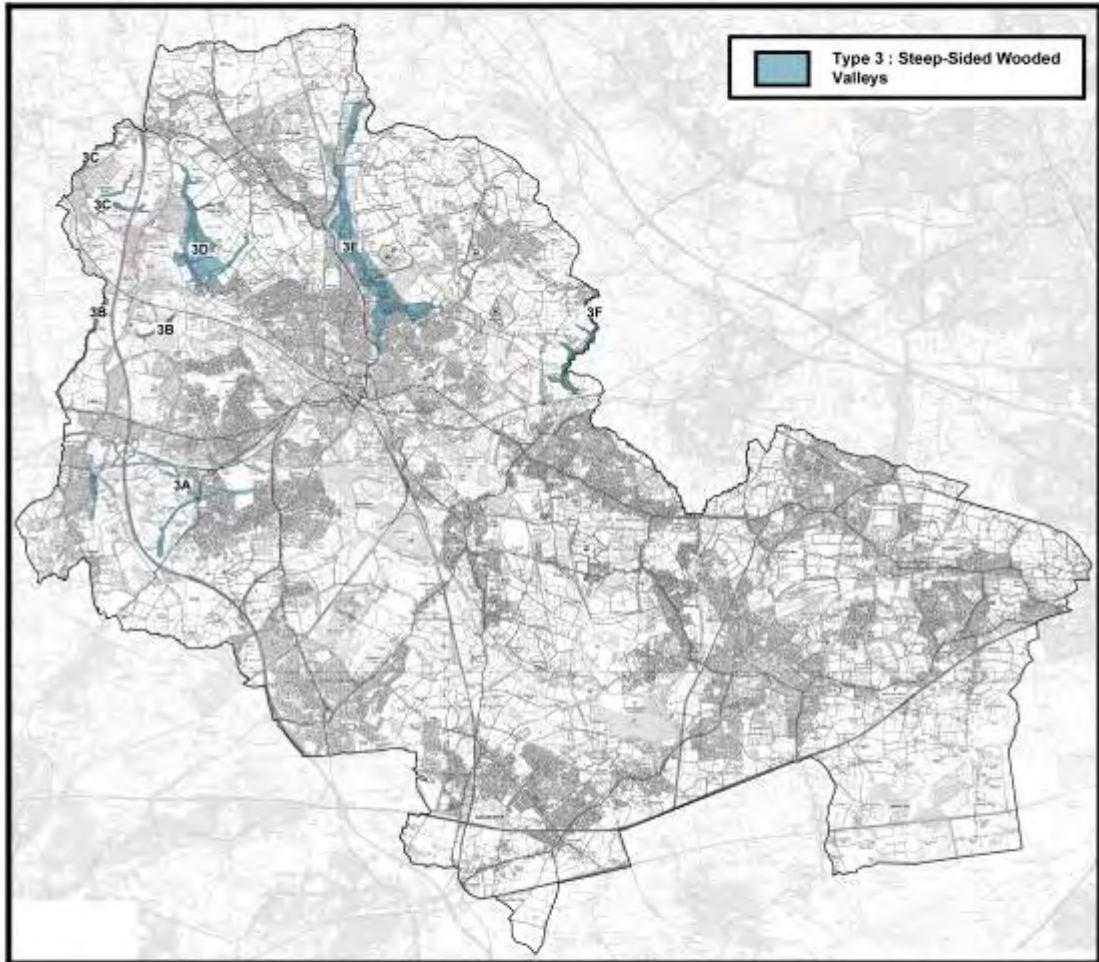
Photo. 62 Elnup Wood.

The topography of the valleys is often masked within the landscape by the presence of deciduous woodlands of mature trees, although conversely the linear nature of the woodlands readily identifies the alignment of the valley leading up to the higher land. A number of the valley woodlands have been designed as 'Ancient Woodland'. The valley profile follows a deeply incised V with a fairly sharp edge to the lip. Valley sides often expose bedrock and shales. Historically small coal seams have been exploited from within the valleys, leaving evidence such as trackways and spoil heaps, now often concealed by vegetation.

Recreationally many of the wooded valleys are used as footpath links from the suburban areas to more elevated rural landscapes and are often associated with a number of parkland estates, such as those at Haigh, Standish and Winstanley.

Key Characteristics:

- Association with densely wooded mainly deciduous trees, including Ancient Woodland
- Steep sided V-shaped valleys
- Exposed solid geology (coal measures)
- Often associated with Parkland Estate landscapes
- Fast-moving small streams, pools and falls
- Tranquil spaces with sounds of running water
- Associated recreational footpath routes
- Often ancient woodlands with associated wildflowers
- Dendritic form, often associated with a precisely delineated edge or lip to the surrounding landscape



Cultural History

Many of the steep valleys with exposed bedrock were ideal places for early coal mining activities. Adits were sunk into the bankings and in many places tramways ran through the valleys. Traces of these remain in a number of locations. In deeper valleys, dams and mill lodges were made in Victorian times, many of which survive today.



Photo. 67 Coal trucks, Elnup Wood.

As a series of linear parks or walkways, many on these valleys are a very great recreational and natural history asset for the Borough of Wigan. Even in cold, windy weather, walking along the valley floor is often extremely pleasant as the valleys are very sheltered. Many of these valleys are easily accessible from the urban areas of Wigan and are an attractive way of gaining access to open country on higher ground.

Key cultural elements in the landscape:

- Former coal mines, adits and colliery tramways
- Often designated Ancient Woodland
- Dams, reservoirs, mill lodges and mill races in the deeper valleys
- Sheltered walkways

AREA 3.A SMITHY BROOK

Description

The steep sided wooded valley of Smithy Brook extends upstream from the former Pemberton Colliery at Goose Green to the Orrell Water Park and forms an arc which encloses Winstanley Park. At the northern most edge of the arc, the valley widens to create a gap in the Billinge/Orrell ridge facilitating a communication link for the M58/M6 junction and the Wigan/St Helens railway.

Smithy Brook is also fed by a number of tributaries, passing into Winstanley Park but stopping short of the M6 motorway. These wooded tributary valleys have been utilised to create the main parkland structure, which has been added to by secondary plantations.

Footpath routes tend to be informal and discontinuous with very limited access within the private areas of Winstanley Park. A minewater remediation plant is located at Goose Green on the levelled 'plateau' of the reclaimed former colliery spoil heap. The brook runs adjacent at a lower level. This takes polluted mine water from upstream and passes it through a series of filter reed beds, returning clean water to the Brook at a lower level.

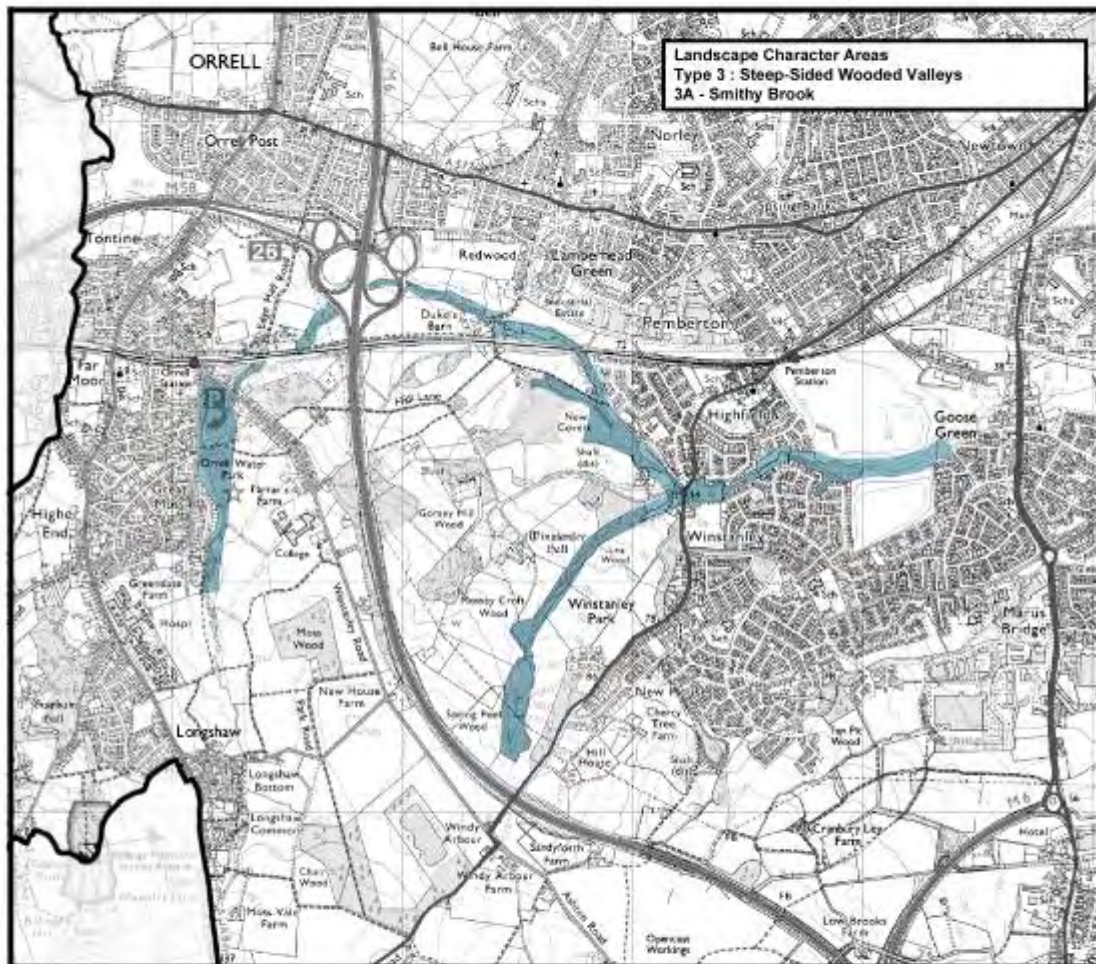
The upper part of Smith Brook has been dammed to create two bodies of water, originally for industrial use but now forming the Orrell Water Park recreation area, adjoining Orrell Water Park Local Nature Reserve.



Photo. 31a Orrell Water Park.

Key Characteristics:

- Densely wooded and steep-sided V shaped valleys
- Associated with parkland landscape
- Fast moving small streams, pools and falls
- Orrell Water Park/Orrell Water Park Local Nature Reserve
- Creation of gap through Billing/Orrell ridge
- Lack of continuous footpath routes
- Reed bed minewater remediation and treatment plant at the former Pemberton Colliery site



Cultural History

Orrell Water Park was created around a chain of small reservoirs, which were used for water power for local industry.

Smithy Brook runs around the northern and eastern sides of Winstanley Park and forms the boundary of the park. Winstanley Hall dates to 1590 and it is probable that the park is of a similar date. Many of the tributary streams and their associated valleys to Smithy Brook run through the park and have been used as part of the structural planting of the park, reinforced, particularly in Victorian times, with non-native species and used as game coverts.

The lower section of Smithy Brook was used for industrial purposes in the C19th. May Mills, a cotton mill, had a lodge or reservoir within the valley of Smithy Brook. The mill has been demolished. Where Smithy Brook ran through the Pemberton Colliery site, it was culverted. On the closure of Pemberton Colliery, the culvert was excavated and the Smithy Brook valley recreated, running between two spoil mounds. The Smithy Brook Park is a recent creation, giving access into Blundell's Wood, an area of woodland to the south.

Key cultural elements in the landscape:

- Orrell Water Park and Local Nature Reserve
- Winstanley Park and associated woodlands
- Blundell's Wood
- Smithy Brook Park

Landscape Sensitivity and Change

The character of Smithy Brook changed dramatically during the C19th and has been exploited for mill dams and coal washing at Pemberton Colliery, Goose Green. The quality of its water is still adversely affected by former mining, although this is being restored by the filter reed beds of the minewater remediation plant. The wooded nature of both Smithy Brook and its tributaries has been retained with Winstanley Park, but largely lost outside these areas, particularly in the area of the M6/M58 interchange. The motorway has tended to fragment the linear character of the main Brook, altering the valley profile and reducing its effect as a dominant feature in the landscape.

Conversely, the tributaries of Smithy Brook running through Winstanley Park have had woodland added to them as large block plantations, although this largely masks the presence of the tributaries and the location of their valleys.

Recreationally, unconnected sections of Smithy Brook are well served by informal footpaths but are also subject to mis-use by motorbikes.

Key elements of landscape sensitivity:

- Previously sensitive to both loss of woodland and to additional woodland planting adjoining the valley
- Mining, industry and communications

- Locally subject to mis-use by motorbikes
- Disjointed footpath routes and access

Key elements of landscape change:

- Construction of M6/M58 interchange
- Water quality
- Visual fragmentation of Smithy Brook
- Orrell Water Park/recreational use

Recommended Management and Landscape Objectives

The Smithy Brook valley forms a link between the urban areas of Wigan Basin to parkland and farmland on higher ground to the west. This is important both recreationally through footpath links and for wildlife. Unfortunately the continuation of a wooded valley link to the west has been severed to a large extent by the construction of the M6 and its interchange with the M58. The valley has now lost much of its associated woodland upstream of Pemberton, downstream through the former Pemberton Colliery and through Worsley Mesnes to Scotsman's Flash; part of the Wigan Flashes and gateway to Greenheart, Wigan's Regional Park. Despite the creation of Smithy Brook Park, these areas still remain undeveloped and present an opportunity to reinstate both the function and aesthetic quality of the valley through planting and the implementation of footpath connections. The provision of a footpath link would appear achievable at least from the disused railway (the line of the proposed A49 Link Road) adjacent to Scotsman's Flash along the valley through the reclaimed Pemberton Colliery site to connect with existing routes in Winstanley Park. Further existing footpath routes link over the M6 to the Orrell Water Park. Whilst it may not be practical for a footpath route to follow the line of the valley in the vicinity of the M58 interchange planting in association with the brook would be possible restoring the valley's ability to provide a continuous wildlife corridor.

Sections of the valley are already well used with a number of unsurfaced footpaths. These are often worn and muddy particularly in winter and locally misused by motorcycles. A general improvement is recommended to the existing footpath network together with a comprehensive programme of woodland management.

The valley is rich in history and has great potential to be recreationally linked with interpretive signing and services to Greenheart.

Management of the Landscape:

- Explore the possibility to create further footpath links along the valley from the Wigan Flashes and Greenheart to Winstanley Park, reinstating the valley with associated native planting en-route.
- Consider additional native woodland planting to the valley and stream course through the M58 interchange between Pemberton and Orrell Water Park
- Consider surfacing eroded footpaths and measures to prevent motorcycle abuse

- Prepare a comprehensive woodland management programme to benefit wildlife and recreation
- Encourage the removal of environmental eyesores, particularly when these are easily viewed from footpath routes.
- Explore the potential for interpretive work along the Smithy Brook valley

AREA 3.B DEAN BROOK AND ACKHURST BROOK

Description

Both valleys flow in a north to north-easterly direction joining the River Douglas at Gathurst. They create deep, steep sided, heavily wooded valleys with Dean Brook forming the Wigan Borough boundary to West Lancashire. The Dean Brook Valley is classified as Ancient Woodland and has been designated as a nature reserve with an associated diverse range of flora and fauna. It has also been subject to mining activity and contains a number of spoil heaps, tramways and rock exposures, together with a linear footpath following the lower section of the valley bottom. The footpath also connects to a series of other footpaths both inside and outside the Borough.



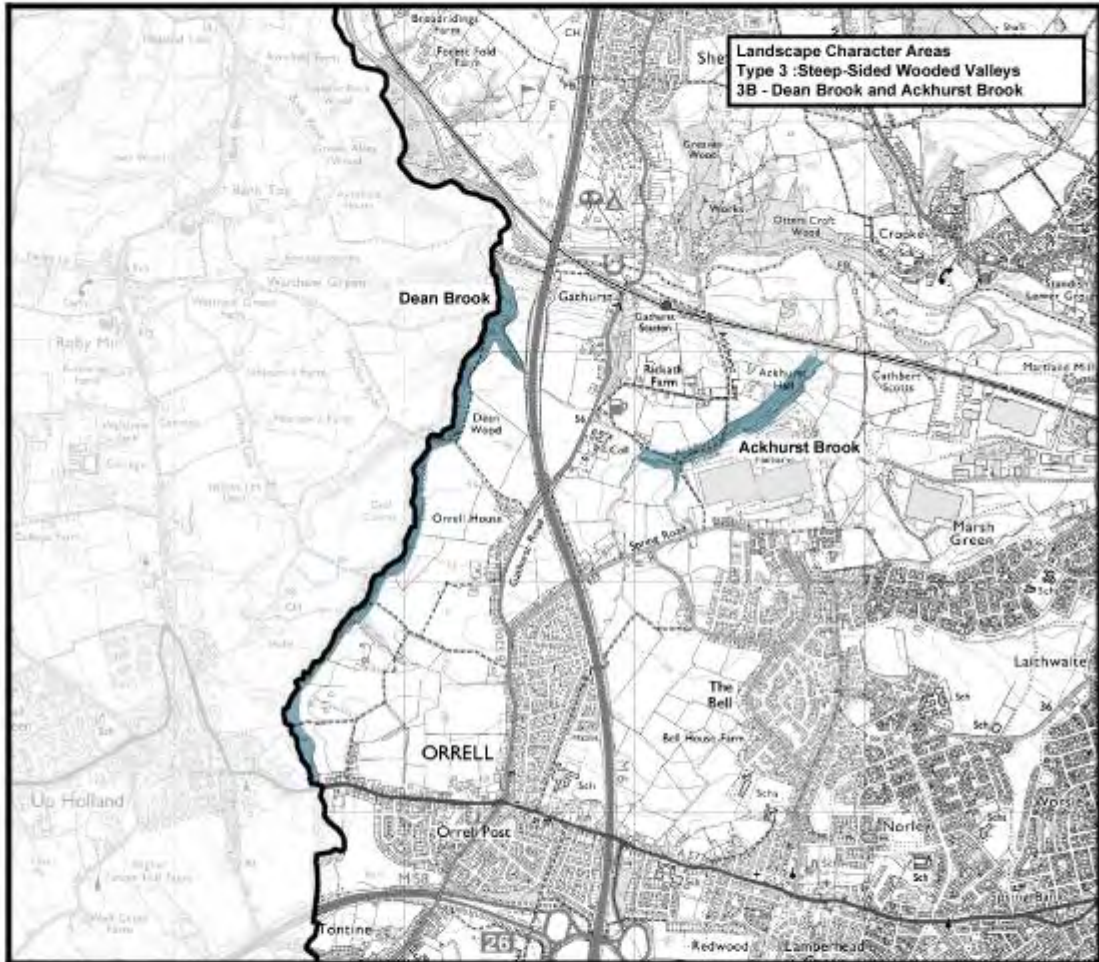
Photo. 38 Dean Wood.

Ackhurst Brook forms a much shorter valley and is largely concealed from the south by the massive building complex associated with the Heinz factory at Marsh Green. The valley also contains a footpath route, although this is mainly confined to the valley's upper reaches.

Views tend to be linear and are restricted to within the valley sides due to their wooded nature.

Key Characteristics:

- Densely wooded and very steeply sided V shaped valleys
- Ancient woodland and diverse flora
- Fast moving small streams with waterfalls
- Evidence of previous mining activity
- Linear footpaths and links to surrounding areas
- Quiet tranquil areas
- Dendritic form
- Limited views
- Nature reserve



Cultural History

Dean Wood is designated as Ancient Woodland and has a wide range of native flora and fauna. The flora present includes bluebells, wild garlic and lesser celandine. The woodland is semi-natural and contains some large specimens of beech and oak. The northern part of Dean Wood is nature reserve and managed by The Wildlife Trust for Lancashire, Manchester and North Merseyside. The Wildlife Trust has successfully controlled rhododendron infestation at the northern section of the woodland.



Photo. 37 Wild Garlic, Dean Wood.

Mining activity in the valley is of some antiquity as evidenced by the tramways running through it. It is probable that early miners were using adits into the valley sides to access shallow coal seams. There are also a number of remains of former dwellings in the valley, again possibly related to former mining activity.

Key cultural elements in the landscape:

- Ancient woodland and diverse flora
- Nature Reserve
- Historically associated with previous mining activity

Landscape Sensitivity and Change

The valley of Dean Brook in particular has been subject to the extraction of coal and its character will have changed considerably during the period of the mining operations. The effects today of this activity have been greatly reduced by the re-growth of trees and natural regeneration camouflaging the previous workings. The valley now forms a peaceful area, rich in wildlife, although occasionally subject to mis-use by motorbike scrambling.

The character of the Ackhurst Brook Valley has been irrevocably affected by the visual dominance and massive scale of the Heinz factory adjoining to the south.

No additional plantations have been added to the valley woodlands and both valleys are easily discerned in the landscape, suggesting a general lack of change.

Key elements of landscape sensitivity:

- Subject to inappropriate recreational use
- Previously sensitive to mining activity
- Dean Brook Valley wildlife habitats
- Ancient woodland

Key elements of landscape change:

- Previous mining activity
- Natural regeneration
- Development of Heinz factory close to Ackhurst Brook Valley

Recommended Management and Landscape Objectives

Both valleys are well wooded and popular for walkers. The footpath routes are unsurfaced leading to localised erosion particularly on the steep valley sides and access points are unrestricted occasionally resulting in misuse by motorbikes. Both valleys would benefit from improved footpath surfacing locally adding drainage, low key bridges and steps. Restricted access to motorbikes at certain locations should also be considered. Due to the steep nature of the terrain much of these areas are unsuitable for horse riding although this should form separate consideration and site study. Dean Brook is a Nature Reserve and would appear to receive a certain degree of woodland management. Both woodlands however would benefit from comprehensive woodland management plans and regular maintenance to footpaths.

Additional woodland planting/screening in association with Ackhurst Brook and the existing footpath (to the west of the Heinz factory) has already been discussed under Area 2B. Woodland cover to Dean Brook is relatively continuous throughout the valley although there is a notable gap between woodland blocks to Green Alley Wood as Dean Brook joins the Douglas Valley. This area however is adjoining but just outside the Wigan Borough boundary.

The woodlands are rich in birdlife and also have an interesting industrial and geological history. An interpretive trail could therefore be considered. The Dean Brook Nature Reserve

is an important designation to the woodland and should be the subject of careful conservation.

Management of the Landscape:

- Consider surfacing eroded footpaths, undertaking bridge and step repairs together with measures to prevent motorcycle abuse. Critically important is how surface water is to be allowed to discharge into the brooks without creating further erosion.
- Prepare a comprehensive woodland management plans and programmes to benefit wildlife and recreation
- Encourage the removal of eyesores such as tipped materials, refuse etc., particularly when these are easily viewed from footpath routes
- Explore the potential for additional native woodland planting at Ackhurst Brook in association with the Heinz factory and to create a link between the Dean Brook woodland and Green Alley Wood
- Explore the potential for interpretive work

AREA 3.C CALICO BROOK, HULLET HOLE BROOK AND WORTHINGTON BROOK

Description

The three brooks all flow generally to the south and west, connecting as a single tributary to the River Douglas at Appleby Bridge. They drain higher land between Wrightington and Shevington Moor and together dissect the farmland between Shevington Vale and Shevington with Calico Brook crossing to the east of the M6 motorway. Worthington Brook provides an outfall to Wrightington Pond just outside the Borough boundary to the west, running through a valley known as Fairy Glen. This contains an informal footpath route running to the reservoir. It is an extremely popular and attractive route, passing waterfalls and rock outcrops. The associated woodland displays all the key characteristics of 'Ancient Woodland', although is not designated as such.

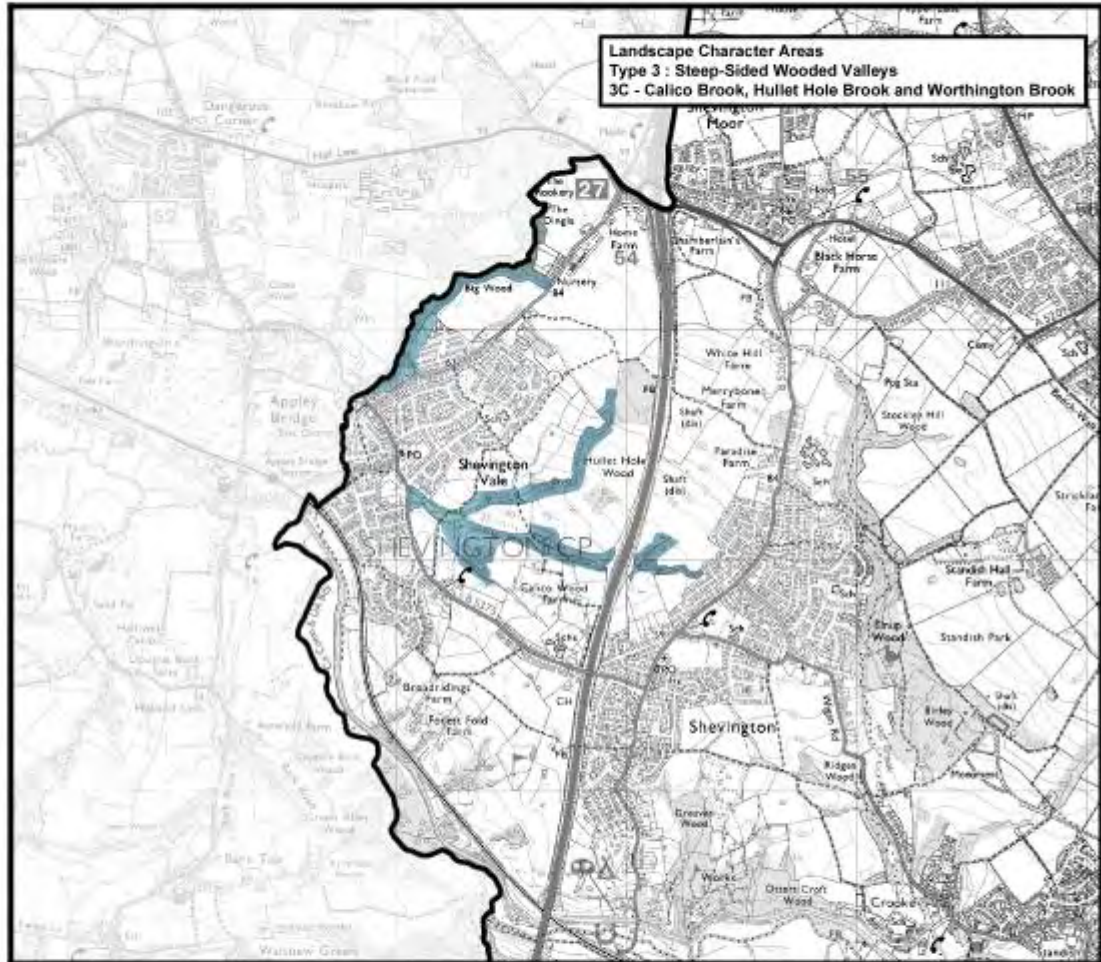


Photo. 42a View of upper Hullet Hole valley.

Access to the valleys of Hullet Hole and Calico Brook is extremely limited with no footpath routes following along the stream valleys. The presence of these woodlands in the landscape is only discerned by the occurrence of linear woodland dissecting the surrounding farmland, although each of the brooks form deeply incised V shaped valleys with characteristically small fast flowing streams. Mature deciduous and coniferous woodlands are associated with the valley sides, together with larger extensions of plantation woodland at Hullet Hole Wood, adjacent to the M6, on more even land.

Key Characteristics:

- Densely wooded and very steeply sided V shaped valleys
- Presence of mixed deciduous and coniferous woodland
- Fast-flowing small streams with waterfalls
- Quiet tranquil areas
- Dendritic form
- Associated footpaths only at Worthington Brook



Cultural History

Calico Brook and its tributaries are wooded, probably with elements of ancient woodland. This brook has flooded housing in the Douglas valley, but this is likely to be because of failures in keeping the culverts clear of debris.

Key cultural elements in the landscape:

- Possible ancient woodland.

Landscape Sensitivity and Change

All these woodland valleys are subject to some form of informal recreational use, mainly from the residential areas of Shevington Vale. Both the Calico and Worthington Brook valleys have been subsumed within housing through the later stages of their courses, before joining the River Douglas at Appley Bridge. A major change has also occurred to the Calico Brook Valley by the construction of the M6 motorway. This has severed the upper reaches of the valley, entailing culverting the brook under the motorway. A short section of the wooded Calico Valley now remains to the east of the motorway.

Further change has taken place to Hullet Hole Brook by the addition of a plantation of mixed deciduous/coniferous woodland at the head of the Brook adjacent to the M6 motorway.

Key elements of landscape sensitivity:

- Sensitive to development
- Sensitive to recreational pressure from surrounding housing

Key elements of landscape change:

- Construction of M6 motorway, cutting Calico Brook into two sections
- Addition of mixed wooded plantation to Hullet Hole Brook
- Introduction of a popular footpath through the Worthington Brook woodland (Fairy Glen)
- Construction of housing areas and culverting at Appley Bridge

Recommended Management and Landscape Objectives

The confluence of the Hullet Hole and Calico valleys is located just to the east of the housing areas of Shevington Vale. Although the upper parts of both valleys are well wooded, woodland cover has been lost below their confluence. Consideration should therefore be given to replant the short missing woodland section up to the B5375. Both valleys and their woodlands present an ideal opportunity to serve as a passive recreational resource for the Shevington Vale housing areas and although footpaths issue from the housing across the farmland no official routes follow the wooded valleys. The possibility of creating new footpaths should therefore be considered and explored, particularly along Hullet Hole Brook where at the head of the brook a footbridge link over the M6 motorway is already provided.

Woodland associated with Worthington Brook is more extensive and continuous linking with larger woodland blocks around Wrightington Pond. A well established unofficial footpath runs through the valley (known as the Dingle and Big Wood) and connects to the housing areas of Shevington to the south. The valley would benefit from an improved footpath surface locally adding drainage, low key bridges and steps. Areas of woodland to the steep west side of the valley in Big Wood have been lost and replanting in this area should be encouraged.

All three woodlands would benefit from a comprehensive programme of woodland management to ensure their long term health, value for wildlife and ability to absorb recreational use.

Management of the Landscape:

- Explore the possibility of creating new footpath routes following the Calico and Hullet Hole valleys.
- Consider surfacing eroded footpaths and undertaking bridge and step repairs
- Prepare comprehensive woodland management plans and programmes to benefit wildlife and recreation
- Encourage additional native woodland planting at the confluence of Hullet Hole and Calico Brook and to a missing woodland section at Big Wood, Worthington Brook.

AREA 3.D MILL BROOK AND FRODSHAM'S BROOK

Description

Mill Brook and Frodsham's Brook both outfall into the River Douglas at Crooke. The longer valley is formed by Mill Brook, which runs due south from Shevington Moor, merging with a large area of parkland woodland known as Elnup Wood and Birley Wood, forming part of the former Standish Park Estate. Mill Brook also forms an important wildlife habitat and has been designated as a nature reserve.



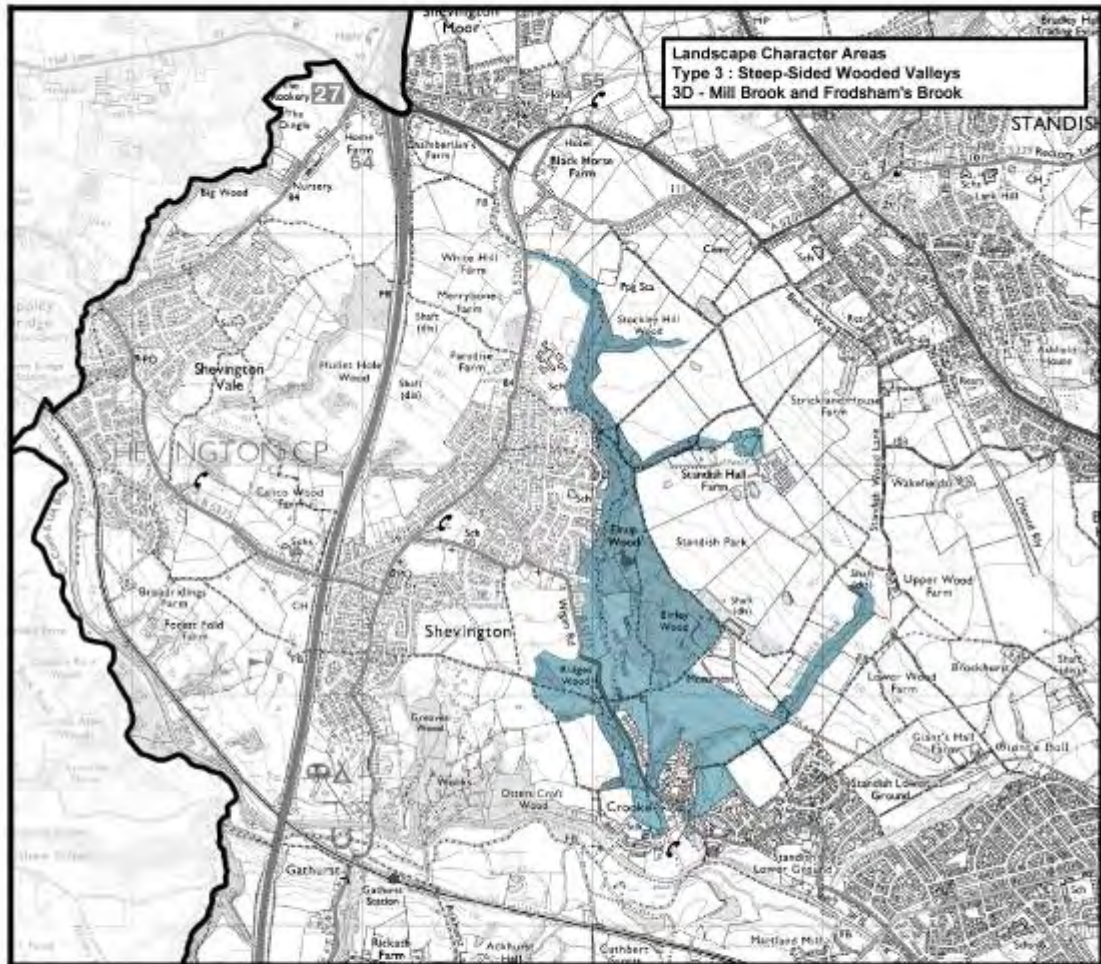
Photo. 68a Elnup Wood

The valley woodlands are particularly majestic, comprising of mature and veteran deciduous trees, notably beech, which often results in an absence of ground flora due to heavy shade. Exposed beech roots are prominent and notable features, creating characterful woodland with unusually open views through the canopy. The more open nature of the woodland also facilitates longer linear views along the valley itself. The valley of Mill Brook also contains evidence of former mine workings, tramways and a substantial stone dam structure, now no longer functioning but still largely intact.

Frodsham's Brook flows in a south-westerly direction and emanates from the base of Standish Wood Lane. Its valley is relatively shallow and straight in nature and closely associated with a linear block of woodland known as Frodsham's Wood which also forms part of the Standish Park estate. Neither of the brooks has public footpaths running along the floor of the valley, although the valley of Mill Brook is largely followed by footpaths on the valley edge to the east.

Key Characteristics:

- Dense wooded valleys
- Mill Brook valley very steeply sided and V shaped and associated with mining activity.
- Associated with plantations of the Standish Park Estate
- Quiet tranquil areas
- Fast-flowing streams and waterfalls
- Absence of linear footpaths along the length of the streams
- Majestic mature and veteran trees
- Open views through mature beech woodland and presence of large surface roots
- Mill Brook Valley nature reserve



Cultural History

Elnup Wood has been designated an Ancient Woodland by English Nature. The name 'Elnup' was first recorded in 1507, relating to a field, which may have become overgrown some time after 1838. The 1849 O.S. map refers to the woods north of Elnup as 'Mill Wood'.

The wood was originally part of the Standish Hall Estate and was clearly utilised as estate woodlands until the early C20th. In the central part of the Mill Brook valley, the woodland was reinforced with the introduction of beech trees in the mid to late C19th, most of which are now fully mature. A number of tramlines run through the eastern side of the valley, associated with a mineral line running from Giant's Hall to the east.

When the estate was broken up in 1921, the area was sold to a local landowner and acquired by the National Coal Board in the 1950s when it was used as a buffer between housing to the west of Mill Brook and opencast mining operations to the east of the wood. In 1989, the NCB sold the land to Wigan Groundwork Trust for one pound and a society, the 'Friends of Elnup', was formed to encourage community involvement in the woodland management.

The woodland was originally part of the Estate of Standish Hall and a corn mill was recorded in the Mill Brook valley in the C14th. An estate map of 1763 shows a mill and the present dam. These were also present on the 1849 O.S.map. The Mill appears to have fallen into disuse by 1871 and the west section of the mill, converted into a cottage, was demolished just after WW2. Excavations by the Wigan Archaeological Society assisted by Wigan Groundwork Trust during the early 1990's revealed some of the mill buildings.

Frodsham's Brook and the surrounding Frodsham's Wood were also part of the Standish Hall Estate and the woodland was supplemented by additional planting in the C19th. South of the woodland were a number of coal pits indicated on the 1849 O.S. map and the woodland was clearly a screen for these activities when viewed from Standish Hall.

Key cultural elements in the landscape:

- Part of the Standish Hall estate
- Mill Brook is the site of a former corn mill and an extant C18th dam
- Mill Brook is designated Ancient Woodland
- Associated with adjacent colliery and opencast operations to the east and south

Landscape Sensitivity and Change

The valley of Mill Brook in particular has been subject to notable change, involving previous mining activity and the damming of the brook to form a mill pond and race to a corn mill. Visual evidence at the Mill has mainly been lost, although the dam wall, constructed in sandstone blocks, still remains across the valley in Elnup Wood. However the dam no longer holds water and the area has naturally re-colonised with trees and understorey shrubs. The Mill Brook valley is also important for its wildlife value and will be sensitive to adverse change and disturbance.

Substantial changes have occurred to both Mill Brook and Frodsham's Brook woodlands by the addition of new plantations and the absorption of the valley woodlands into the Standish

Hall Estate. The Mill Brook Valley now also contains numerous informal footpath routes suggesting heavy wear, with localised areas of poor drainage and erosion.

Frodsham's Brook valley has remained somewhat isolated to change, although its woodlands have similarly been utilised as part of the Estate landscape.

Key elements of landscape sensitivity:

- Wildlife habitats of Mill Brook Valley
- Footpath wear and erosion

Key elements of landscape change:

- Previous mining activity in Mill Brook valley
- Mill, dam and race construction in Mill Brook valley
- Absorption of wooded valleys into 'Estate' landscape
- Addition of plantation woodlands
- Popularity for recreational use

Recommended Management and Landscape Objectives

Mill Brook is a deeply incised valley and is heavily wooded including Elnup and Birley Wood forming part of the original Standish Park Estate. Footpaths run through the main central part of the valley in association with the housing areas of Shevington but do not continue to form links either to the north (to the B5206) or to the south to the village of Crooke. Sections of woodland cover are also missing between Crooke and Elnup Wood. The continuation of footpath links along the valley should be considered together with additional woodland planting to the south.

The valley is popular with walkers and a small car park for access to the woodland has been provided from the housing areas abutting Elnup Wood to the west. The footpath routes are unsurfaced leading to localised erosion particularly on the steep valley sides and access points are unrestricted occasionally resulting in misuse by motorbikes. The valley would benefit from an improved footpath surface, locally adding drainage, low key bridges and steps. Restricted access to motorbikes at certain locations should also be considered. Due to the steep nature of the terrain much of these areas are unsuitable for horse riding although this should form a separate consideration and site study. Elnup Wood is managed by Groundwork Lancashire West and Wigan. The valley generally would benefit from a comprehensive woodland management plan and regular maintenance to footpaths.

The valley is rich in birdlife and also has an interesting industrial and geological history. Restoration and/or conservation work is strongly recommended to the remains of the dam wall in Elnup Wood. An interpretive trail could be considered possibly linking with the canal at Crooke.

Frodsham's Brook has a much less pronounced valley and related narrow woodland to either side of the brook. Although no footpath system is directly associated with the valley footpaths run parallel and adjacent linking Crooke with Standish. The woodland cover in association

with the valley however is not continuous and a small section of planting could be considered adjacent to the footpath at the lower part of the valley to the north east of Crooke. The woodland areas would benefit from a comprehensive woodland management plan, and, due to the narrow width of the woodland, the introduction of woodland edge planting.

Management of the Landscape:

- Consider surfacing eroded footpaths, undertaking bridge and step repairs together with measures to prevent motorcycle abuse
- Prepare comprehensive woodland management plans and programmes to benefit wildlife and recreation for both wooded valleys
- Explore the potential for additional native woodland planting to provide continuous woodland cover to the lower sections of both Mill Brook and Frodsham's Brook together with edge planting to woodland at Frodsham's Brook
- Explore the possibility of extending footpaths within the Mill Brook valley to the north and to the south
- Explore the potential for interpretive work and the conservation/restoration of the mill dam on Mill Brook

AREA 3.E RIVER DOUGLAS (ADLINGTON PARK TO BOTTLING WOOD)

Description

The River Douglas has cut a deep valley running from Adlington Park directly into the centre of Wigan to the south. From here it radically alters direction and forms a more mature valley with a meandering course flowing generally to the north west, in part through the built-up centre of Wigan. The section of the valley considered here runs from Adlington Park to Bottling Wood, before the valley becomes subsumed by development and the town centre. The western side of the valley is followed by the A49 road running from Wigan Town Centre up the valley and climbing towards Standish at Thornhill. At the northern end of the valley, Worthington Lakes have been created by the construction of two earth dams, flooding much of the valley floor. The reservoirs are used for water supply and recreation and are set within an agricultural and parkland landscape, known as Adlington Park. The dam construction is notably pitched in sandstone with associated walling adjacent. The valley sides at this point are well-clothed by plantation woodlands, creating an enclosed feel to the reservoirs.



Photo. 69b Worthington Lakes Dam.

The remaining areas of valley towards Wigan have been heavily influenced by industrial uses such as mills and mill dams; water treatment works and, more recently, new housing developments. These housing developments replaced industrial sites, but several remain, notably the Haigh Foundry complex, of great industrial archaeological interest. Also present are a number of disused former mineral tramways and related mining shafts set on the steep wooded valley sides.

At the lower end of the valley, the woodland merges with larger plantation woods (Haigh Lower Plantation and Bottling Wood) associated with Haigh Hall Country Park. An access into Haigh Lower Plantation from a classical gateway at the side of the A49 crosses the River Douglas via a substantial bridge and is a popular route. A chain of flood meadows and wet valley floor woodlands are also present adjacent to the stream.

Along the length of the valley are a number of short but steep minor tributary valleys with a more substantial stream, Yellow Brook, running through Bottling Wood joining the Douglas River at Marylebone.



Photo.164 Haigh Foundry.

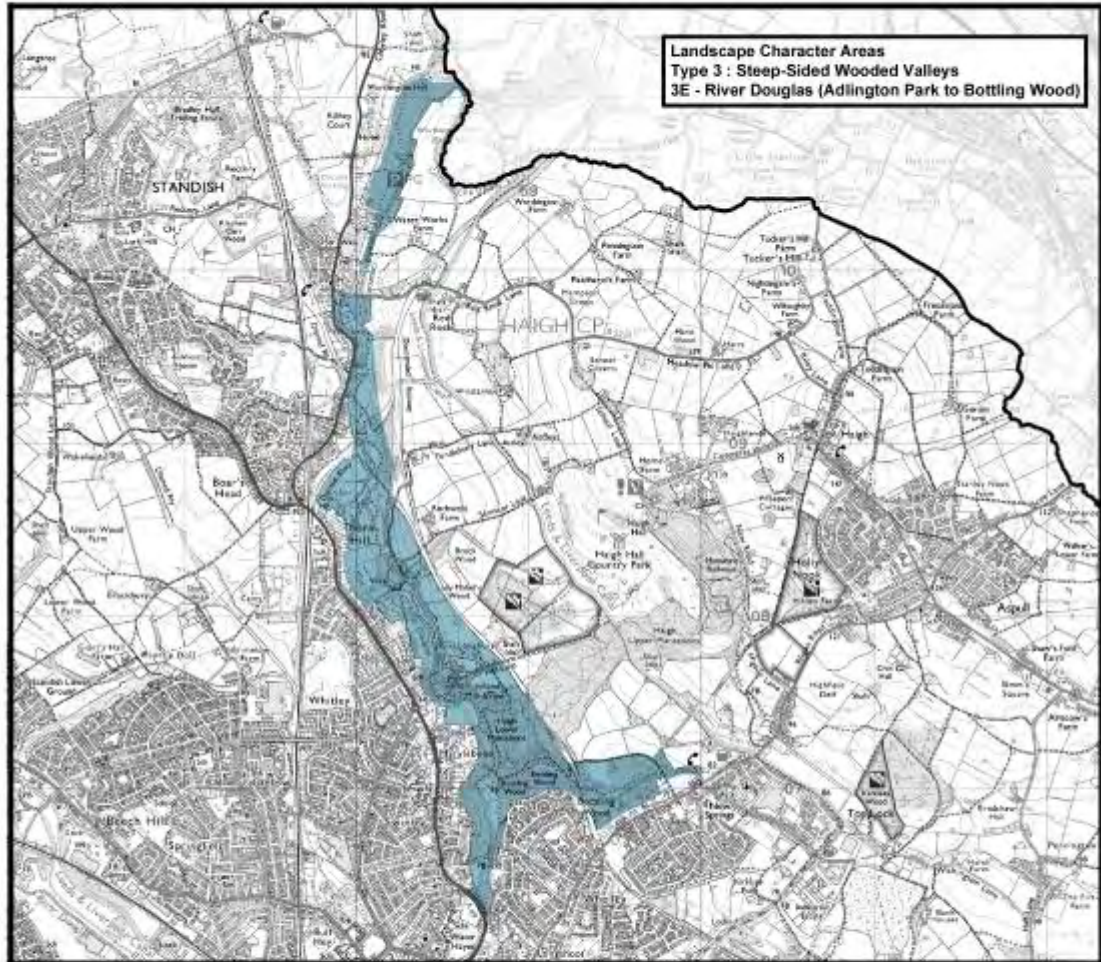
In the upper part of the valley, footpaths are notably absent from the valley floor, in part due to the steepness of the terrain, but also due to localised areas of development. Lower in the valley, there are good footpath routes into the Haigh Lower Plantations and these are clearly a valuable recreational resource. Views are restricted within the valley but open out towards the upper reaches over the Worthington Lakes, with good views to the south and north.

This valley more than any other in Wigan borough has been fragmented and greatly affected by development. This has radically reduced its previously rural character.

Key Characteristics:

- Wooded and very steeply sided V shaped valley
- Fast flowing small stream with waterfalls and mill ponds
- Worthington Lakes Reservoirs and associated sandstone walling
- Strongly influenced by former industrial uses, road and housing development

- Woodland links to Haigh Plantations/Bottling Wood
- A narrow flood plain with river meadows and wet woodland in the lower reaches of the valley.
- Localised quiet tranquil areas
- Linear footpaths absent from valley floor
- Open views restricted to the upper section of the valley notably from the dam walls of the reservoirs



Cultural History

The A49 runs along the west side of the Douglas Valley up to the junction with the A5016 Chorley Road, up the hill into Standish. Chorley Road continues up the west side of the valley and northwards out of the Borough. The Douglas Valley is crossed by the B5239 Red Rock Lane a little further north from the Chorley Road / A49 junction.

The A49 Wigan Lane was originally a Roman Road and for many centuries the main north-south link through North West England. Many armies moved along this road, from Roman troops moving up to Hadrian's Wall to Bonnie Prince Charlie's Scots army moving into Wigan and later to Manchester. Two notable actions were fought along this road, the first being Cromwell's pursuit of an invading Scots Royalist army in 1648, culminating in the Battle of the Red Bank at Wigan and the total defeat of the Scots. The Scots thoroughly plundered Wigan on their way through the town. The second was a bloodier affair of some local note, known as the Battle of Wigan Lane.

On 15th August 1651, the Royalist leader James Stanley, the Earl of Derby, collected a rather disparate force of Royalist sympathisers from the north west and advanced south from Preston along the A49. The Commonwealth Commander Colonel John Lilburne shadowed him with his regiment of horse. On the 25th August, at a point on Wigan Lane, unsuitable for cavalry because of the steep valley of the River Douglas to the east of the road, Lilburne *'...decided to trust God with the issue.'*

The ensuing battle is not well described and the Royalist preponderance in pike-armed foot must have meant that it was far from one-sided. It appears to have been a haphazard affair, which may have taken place over a considerable length of Wigan Lane. However, the Royalists were defeated and the Earl of Derby wounded and later captured (and executed). About 60 Royalists were captured and 300-400 were taken prisoner. Most prominent of the Royalist casualties was the local landowner, Sir Thomas Tyldesley, a Major General, who was unhorsed and shot. A monument to him was built in Restoration times at the place where he was shot, some distance from the valley and now surrounded by housing. The battlefield is unmarked and as descriptions are poor, it must be assumed that it would have been built over by housing around the Wigan Royal Albert Edward Hospital.

Yellow Brook, a tributary of the River Douglas, flows through Bottling Wood. When opencast workings at Alexandra Pit and Lindsay Pit were completed a section of Yellow Brook was culverted. It was named Yellow Brook because of ochre in the mine drainage water. Most importantly, it was the outfall of The Great Sough (see Area 2E) one of the greatest engineering feats of pre-industrial revolution Britain. The Haigh Sough main drainage portal at Haigh is a scheduled ancient monument.

There are a number of disused mineshafts and pipelines in the valley floor, but the spoil from these has been disposed elsewhere.

Haigh Lower Plantations, planted during the 'Cotton Famine' of the 1860s extend across the valley of the River Douglas and one of the entrances to the Haigh Country Park stands on Wigan Lane; this is listed Grade II*.



Photo. 161 Haigh Country Park entrance A49.

There are a number of mills in the valley bottom, the earliest and arguably the most famous, is Haigh Foundry. This was founded in 1788 by the Earl of Balcarres and his brother and in 1793 was known by the brother's name, James Lindsey & Co. The foundry work effectively ceased early in next century and the works concentrated on the manufacture of mining equipment. Robert Daglish was the engineer in charge in 1804 and he experimented with three steam locomotives, the first of which was built in 1812.

In 1835, the foundry was leased to another firm who produced steam locomotives on a far larger scale, making more than 100 engines between 1835 and 1856, supplying standard and broad gauge engines for various British railways and at least one engine for the Paris and St Germain Railway. The first engines produced were 0-4-0s and 2-2-0s, although engines became more sophisticated as the century progressed. In 1851 – 53 the firm produced four broad gauge 4-4-0 saddle tank locomotives for the South Devon Railway. One of the last products was a pair of 0-8-0 locomotives supplied to the War Department for use in the Crimea, where, remarkably, they were to be capable of pulling heavy guns up slopes as steep as 1 in 10.

In the 1850s the foundry reverted to the Haigh Foundry Co. who continued in the manufacture of mine equipment until 1899. After that the premises were owned by a succession of manufacturing firms. A number of railway lines ran up the Douglas valley from the Haigh Foundry, crossing the river just north of the foundry.

Towards the northern end of the Douglas valley was a water mill mentioned in the Standish family deeds of the C14th. The mill is also mentioned in 1690 and it is shown on a map of 1786. At the end of the C18th it was converted to a paper mill by one Robert Crompton, whose family was already making paper nearby. In 1840, the Crompton family tried to sell the mill with an advert which described as having 7 paper engines, three water powered and

three steam powered. The iron water wheel was also for sale. Paper making stopped in 1883.

In 1884, the mill was converted to a bleach works and in 1899 dyeing was introduced. Courtaulds owned the site prior to selling it for housing, which is nearing completion in 2008.

At the upper end of the valley are the Worthington Reservoirs, built to provide drinking water for Wigan in the 1850s when the town's population had risen to 30,000. The River Douglas, which originally turned east around the present Arley Golf Course, was diverted under the Golf Course via a large tunnel, completed in 1858. This enabled the construction of two earth dams in the cut-off section of the river valley, both stone pitched. Downstream of the dams a treatment plant and a pumping station were installed. Because of fears in respect of a fault line which ran across the valley, a further dam was constructed, the Adlington Dam. The Douglas tunnel was extended to provide greater capacity and the Worthington Dam was built. The whole complex was fully operational by 1867.

The Worthington Reservoirs are now operated by United Utilities. Farming within the catchment area of the reservoirs is restricted to pastoral activities to minimise pollution potential. The area of woodland to the west of Worthington Dam contains an environmental education centre and is a nature reserve.

Key cultural elements in the landscape:

- The A49 Wigan Lane, a Roman Road to the west of the valley.
- The Crompton paper mill – later bleach works and dye works.
- The Battle of Wigan Lane.
- The Great Sough outfall.
- Disused mine shafts, pipelines etc on the valley floor.
- Haigh Lower Plantations.
- Wigan Lane entrance gates to Haigh Country Park.
- The Haigh Foundry locomotive works.
- Mineral railway lines and lines serving the Haigh Foundry
- The Worthington Reservoirs.
- Arley Golf Course.

Landscape Sensitivity and Change

This valley has undergone a great deal of change. It is heavily developed for residential use to the west, and more recently within the valley itself, in close association with the river. The construction of the Worthington reservoirs have fundamentally altered the valley profile to the north, whilst to the south the construction of sewage works, disused railway links, viaducts, bridges and their various abutments and especially mill complexes have radically altered the valley's former character. However, as with the other steep-sided wooded valleys, woodland remains a constant theme throughout the length of the valley. This has been augmented by

the C19th plantations, forming part of the Haigh Estate to the south-east and around the edges of the Worthington Reservoirs. Woodland areas in the valley are fragmented and locally narrow. Redevelopment of previous industrial sites as housing has introduced an element of discontinuity to the valley floor.

Key elements of landscape sensitivity:

- Sensitive to loss of any further woodland cover
- Areas above the Worthington Reservoirs open to wider views
- Affected by development
- Loss of continuous footpath routes

Key elements of landscape change:

- Industrial development on and close to the valley floor.
- Housing development around and within the valley.
- Construction of Worthington Reservoirs
- Loss of valley woodland cover
- Previous mining activity
- Addition of plantation woodlands to the south and around the Worthington Reservoir.

Recommended Management and Landscape Objectives

The Douglas valley has been badly affected by development and has lost a lot of its woodland cover. Large blocks of planting still remain however to the lower areas of the valley connecting with Bottling Wood and the Lower Haigh Plantations. Similar sizeable plantations occur to the valley's upper reaches above the Worthington Lakes. The valley's central section however between Leyland Mill Brow and the reservoirs retains only disjointed sections of woodland. A proposal to remedy this situation by providing continuous linear woodland within and to the east of the valley was discussed under Area 1D.

Existing and proposed blocks of woodland associated with valley will require a coordinated woodland management plan taking into account the needs for both recreation and habitat diversity.

Small linear flood meadows still remain in association with the river along its lower course in the Marylebone area. These form an important part of the river's character and serve a useful function at times of flood. It is recommended that these are conserved and protected from further development.

One of the most characteristic features of the valley is the presence of early industrial sites. These are of considerable historic interest and in some cases include listed structures. It is considered important that these sites should be retained and conserved. Further development within these sites clearly needs to be carefully controlled and a limited pallet of

building materials used. Of particular interest are the leats and channels with disused railway lines and bridges associated with them.

Development within the valley should be discouraged as it would break up an important element of green structure, both visually and physically. Where development is unavoidable, it should be in a form visually compatible with the early Victorian architecture and mills of the area and not of a modern domestic character. Much of the recent housing in the area is exceptionally alien to the landscape. Traditionally housing would not be located on the valley floor in danger of flooding.

Footpaths along the river valley are notably absent probably due to the numerous breaks of development along the valley floor. An alternative footpath route following the valley floor to the east along a disused railway line was also discussed under Area 1D.

The Douglas valley is a continuous feature in the landscape which at a number of locations has been broken by development some of which is of a recent nature. If additional planting can be achieved on the eastern side of the valley then some of this damage can be mitigated. Any further development within the valley upstream of Water Hayes should however be firmly discouraged.

Management of the Landscape:

- Prepare comprehensive woodland management plans and programmes to benefit wildlife and recreation for both wooded valleys
- Explore the feasibility of providing additional linking native planting to the eastern side of the valley in association with a 'valley length' footpath following the line of the adjacent disused railway. See also Area 1D)
- Prepare a landscape management plan for the historic landscape of the valley, considering how pedestrian access links to all these features might be safely achieved.
- Encourage the removal of eyesores such as tipped materials, refuse etc., particularly when these are easily viewed from footpath routes.
- Retain remaining flood meadows
- Discourage any further development within the valley upstream of Water Hayes

AREA 3.F BORSDANE BROOK

Description

The steep-sided V-shaped valley of Borsdane Brook runs in a southerly direction along the Borough boundary to the east of Pennington Green. The Brook has a number of short tributary streams dissecting surrounding farmland with the main valley cutting deeply into the rising ground. Beyond the crest of the ridge (to the north of Bolton Road) the Brook continues to form the Borough boundary, although it forms a much smaller valley without woodland.



Photo. 171 America Wood, Borsdane.

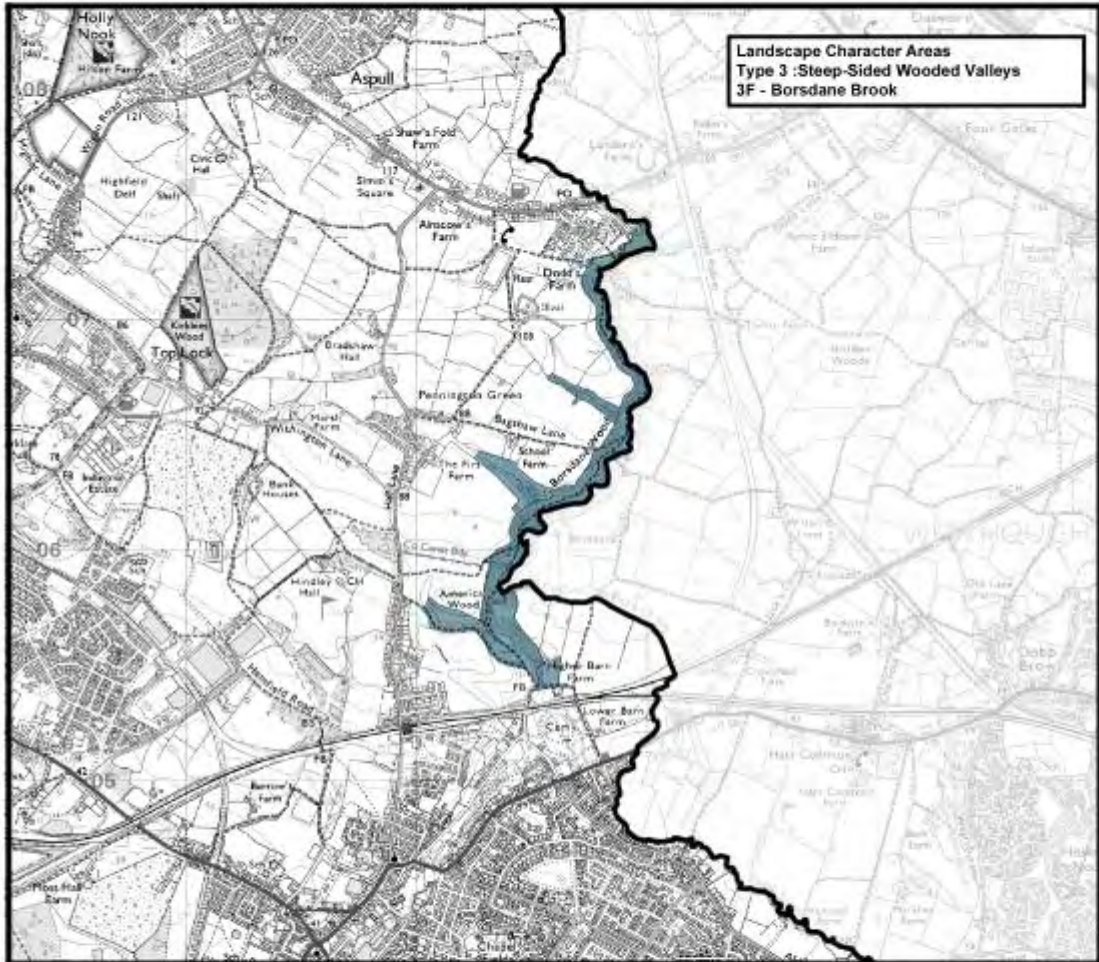
The southern part of the valley, from a point near where Borsdane Brook is joined by a path from Bagshaw Lane there is a narrow flood plain, which is itself heavily wooded with many willows.

All other parts of the valley system are heavily wooded with deciduous trees, with the lower part of the valley originally integrated with parkland associated with Hindley Hall. The valley and its woodlands become lost within the urban areas of Hindley to the south of the railway line adjacent to Hindley railway station.

A footpath route runs along the entire length of the valley with numerous connections to the east and west. There are a number of areas suffering from erosion of the footpaths running through them, particularly the branch path the America Wood. Views within the valley are limited and in the summer, with foliage on the trees, especially restricted.

Key Characteristics:

- Steep sided V shaped valley
- Heavily wooded
- Fast moving small streams, pools and falls
- Quiet tranquil areas
- Linear footpath
- Dendritic form
- Limited views



Cultural History

This valley is closely associated with Hindley Hall and Park and as with other similar valleys, much of the parkland structure was based on the mature woodland in the valley and supplemented and reinforced with additional planting.

America Wood was planted to form a parkland plantation in one of the short tributaries to the Borsdane Brook. The remnants of the C19th planting are mainly beech, but sections of the valley in America Wood are devoid of trees, while others are being colonised by oak. Possibly the bare areas of ground reflect the firing of localised bracken patches, some of which are extensive.

The footpaths through the woodland appear to be long-established and in many areas the paths have been pitched with basic slag – possibly from the Kirkless Foundry to the west.

An area of 37 ha of Borsdane Wood is designated as a Local Nature Reserve.

Key cultural elements in the landscape:

- Part of the Hindley Hall Park.
- Borsdane Wood Nature Reserve.
- Long-established footpaths

Landscape Sensitivity and Change

In contrast with the previous valley section of the River Douglas, the upper Borsdane Brook Valley appears to be unaffected by mining activity or any form of development. It remains relatively secluded and surrounded by agricultural land to its point of crossing the railway line at Higher Barn Farm. America Wood Plantation was joined to the valley woodland as part of the Hindley Park Estate.

Downstream from this point, the valley is immediately enveloped in industrial and residential development in the areas of Hindley and Platt Bridge. The valley length considered has therefore been little changed and retained a character of rural wooded tranquillity. A recreational footpath however follows the valley floor with numerous branches out into open farmland to the east and west.

Key elements of landscape sensitivity:

- Potential footpath wear and erosion

Key elements of landscape change:

- Development to lower sections of the valley
- America Wood Plantations

Recommended Management and Landscape Objectives

The Borsdane valley forms a link between the urban areas of the Makerfield Basin to farmland on higher ground to the west. This is important both recreationally through footpath links and for wildlife.

The valley is heavily wooded between Higher Barn Farm and the B5239 Dicconson Lane and contains a footpath running in association with the valley floor. Downstream from Higher Barn Farm the Brook passes through more heavily developed areas of Hindley but may offer opportunities for a narrow but 'green' open space and footpath link to Low Hall Park. Upstream from Dicconson Lane the valley loses its deeper 'V' shaped profile and depth and follows the Boroughs northern boundary with little or no associated trees or woodland. Proposals for this section of the brook are covered in Area 2E Aspull Ridge.

The valley is well used with a number of footpaths, some surfaced with slag from the former steelworks to the west. Footpaths generally are often worn and muddy particularly in winter and locally misused by motorbikes. There is a distinct lack of drainage to the paths. A general improvement is recommended to the existing footpath network together with a comprehensive programme of woodland management.

Management of the Landscape:

- Prepare a comprehensive woodland management plan and programmes to benefit wildlife and recreation.
- Explore the feasibility of providing a linking footpath and open space system between Higher Barn Farm and Low Hall Park
- Consider surfacing eroded footpaths, undertaking bridge and step repairs together with measures to prevent motorcycle abuse