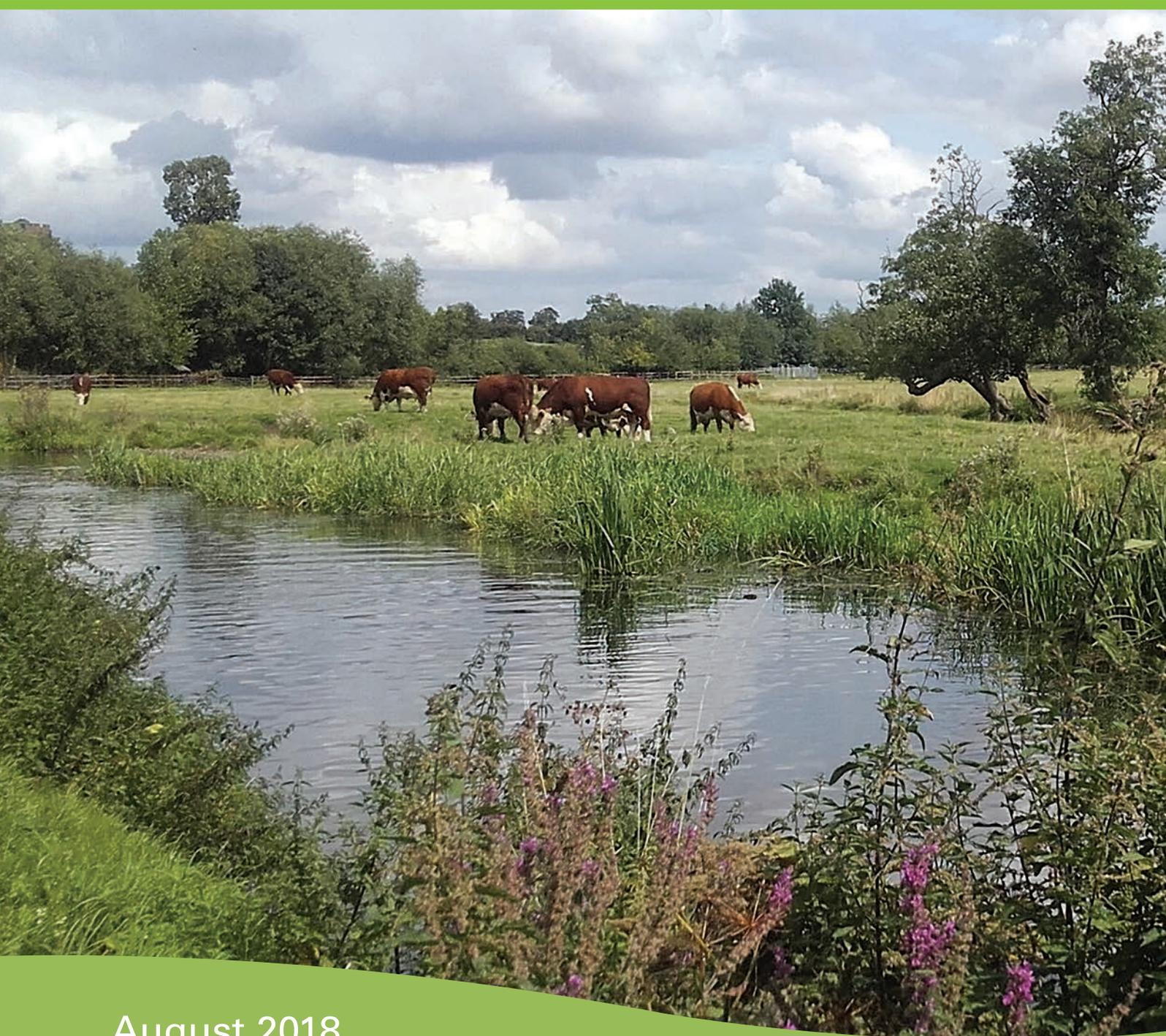




Transforming the Trent Valley Landscape Partnership Landscape Conservation Action Plan



August 2018

Transforming the Trent Valley LCAP

Executive summary

Transforming the Trent Valley is a Landscape Partnership Scheme that is bringing together an enthusiastic and diverse team of partners with a real enthusiasm for delivering landscape scale change across this part of Staffordshire and Derbyshire, uniting them through a shared vision for the Trent Valley landscape.

The middle reaches of the River Trent and its tributaries, the River Tame and the River Dove, flow through a landscape that is distinctive in character and unites communities that are facing similar challenges. This is a landscape that is defined by its rivers. The low, flat floodplains creates rich grazing meadows and arable farmland, which have attracted settlers to the area since prehistoric times. The river deposits that have been laid down over millennia provide the aggregates and raw materials that supply our construction industries and this activity has altered the features of our landscape. Industry has grown thanks to the driving force of the river powering watermills, and the deep aquifers of mineral-rich waters supplying the Burton beer industry. Habitats have changed



Cows on the river (Staffordshire Wildlife Trust)

as the intensification of agriculture has drained the traditional wet meadows and the more recent quarrying has created new lakes and wetland habitats.

Over time the river itself has transformed: its course has been altered and straightened by man and artificial weirs have been created that impeded the migration of fish. Expansion of our towns and villages has meant that the river is being more and more contained as the floodplain is developed and the natural ebb and flow is controlled. This has created conflict in the past: the river cannot be tamed for long and flooding becomes a present concern.

The purpose of this Landscape Partnership is to recognise the challenges and opportunities that are presented by this fluvial landscape. We will celebrate the waterways, industries and the communities that are the life-force of this rapidly evolving river valley landscape and which have shaped and continue to influence its form and use. Wildlife-rich rivers, waterways and wetlands will be at the heart of a revitalised, resilient and beautiful landscape that is connected and accessible for local communities and visitors to enjoy and explore as well as providing many opportunities to inspire and re-connect people to the river valley by revealing its cultural, industrial and natural heritage.

Our vision is for *“wildlife-rich waterways and wetlands at the heart of a resilient, accessible, beautiful and culturally rich landscape. Creating a brighter future for people, business and wildlife in the Trent Valley.”*

Over the next five years this partnership will deliver a series environmental, cultural, heritage, education and community-led projects that aim to

inspire communities and protect and enhance natural and cultural heritage, whilst having an outlook to the future, and securing a long-term legacy in the landscape.

This scheme is embedded in national and international strategy: The European Landscape Convention recognises landscapes as *“an essential component of people’s surroundings, an expression of the diversity of their shared cultural and natural heritage, and a foundation of their identity”* and states that there is a need to *“increase awareness among the civil society, private organisations, and public authorities of the value of landscapes,*

their role and changes to them.” Natural England has devised a number of ‘National Character Areas’ (NCA) into which this scheme slots into NCA 69: Trent Valley Washlands, and contributes to all four of the identified environmental opportunities.

We recognise that achieving landscape scale change will not happen overnight, a paradigm shift is needed that will take a generation to embed. The next five years are crucial, and the funding that will be provided by the Heritage Lottery Fund will give us the momentum we need to make the vision a reality.



River Tame at Elford (C Wilkinson)

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Part 1: The Scheme Plan



Washlands Fields (Aimee L. Booth)

1.0 Introduction



Petrichor (n)
the scent of rain on dry earth

1.1 Introducing our Scheme

Our project is defined by its landscape; a landscape that unifies the area and intrinsically shapes its communities. For some, it is linked to cultural and social identity: families born and raised within the valley for generations and taking their schooling, housing and income from within its limits. For others it is a place to visit, to take from it a variety of enjoyments that connect us with our sense of selves. It is a place with a unique history that has been scored upon the landscape, with its own stories and its own lore. But our landscape also provides us with the materials and services we need to live, grow and build; it gives us the water we drink, the food we eat and the air we breathe.

Our landscape partnership has come together in mutual acknowledgement of the importance of the Trent Valley and a common desire to help protect, manage and plan for its future development.

The Trent Valley is a distinctive landscape, but also one of contrasts. It is distinctive by its river corridor: the rivers which flow through the valley create the identity of the landscape. The canals that wend their way across the valley floor are a distinctive feature that contrasts the old, industrial past with the modern, tourist-focused present. The communities that have built up along-side this river provide its character, through place names, built heritage and the use of the floodplain. The communities that make this landscape so distinct also provide the contrast. A large town built on industry lies at the heart of this landscape and celebrates a diversity of people and opportunities. More traditional villages lie along the valley, some with quaint, chocolate box charm and others with a decidedly modern appeal.

1.1.1 Context of the Partnership

Transforming the Trent Valley is an evolution of a pre-existing partnership of Staffordshire-based organisations (known collectively as the Central Rivers Initiative) with an interest in the Trent Valley. This former Staffordshire-focused landscape has expanded to include those parts of Derbyshire with similar issues and encompass a wider partnership base. Covering 200km², the landscape focusses on the River Trent and its tributaries between Rugeley, Tamworth, Uttoxeter and Shardlow.

Transforming the Trent Valley area is a fluvial landscape, focussed on the river with a mix of pastoral farming on the floodplain and arable on the gravel terraces. Remnant riparian habitats provide sanctuary for wildlife and former sand and gravel pits provide opportunity to enhance the biodiversity of the valley. The area is both naturally and culturally rich in character and yet is under extreme industrial and developmental pressure.

Over the last 18 months, the partnership has been working closely together to better improve its understanding of the cultural and natural heritage of the landscape, the physical and perceived barriers to access, and the opportunities for visitors and local people. The partnership has gone out into the communities that live and work in the landscape, speaking to people and encouraging ideas and opinions to better understand the local need.

This knowledge base has helped to formulate a diverse range of projects that connect the cultural and natural heritage together in a way that will inspire indigenous communities, new and establishing communities and visitors to the area to explore, understand and value the landscape.

The scheme will focus on delivering sixteen projects under three themes:

Connecting Communities through Action: a selection of community focused projects that encourage participation, volunteering, education, training and well-being;

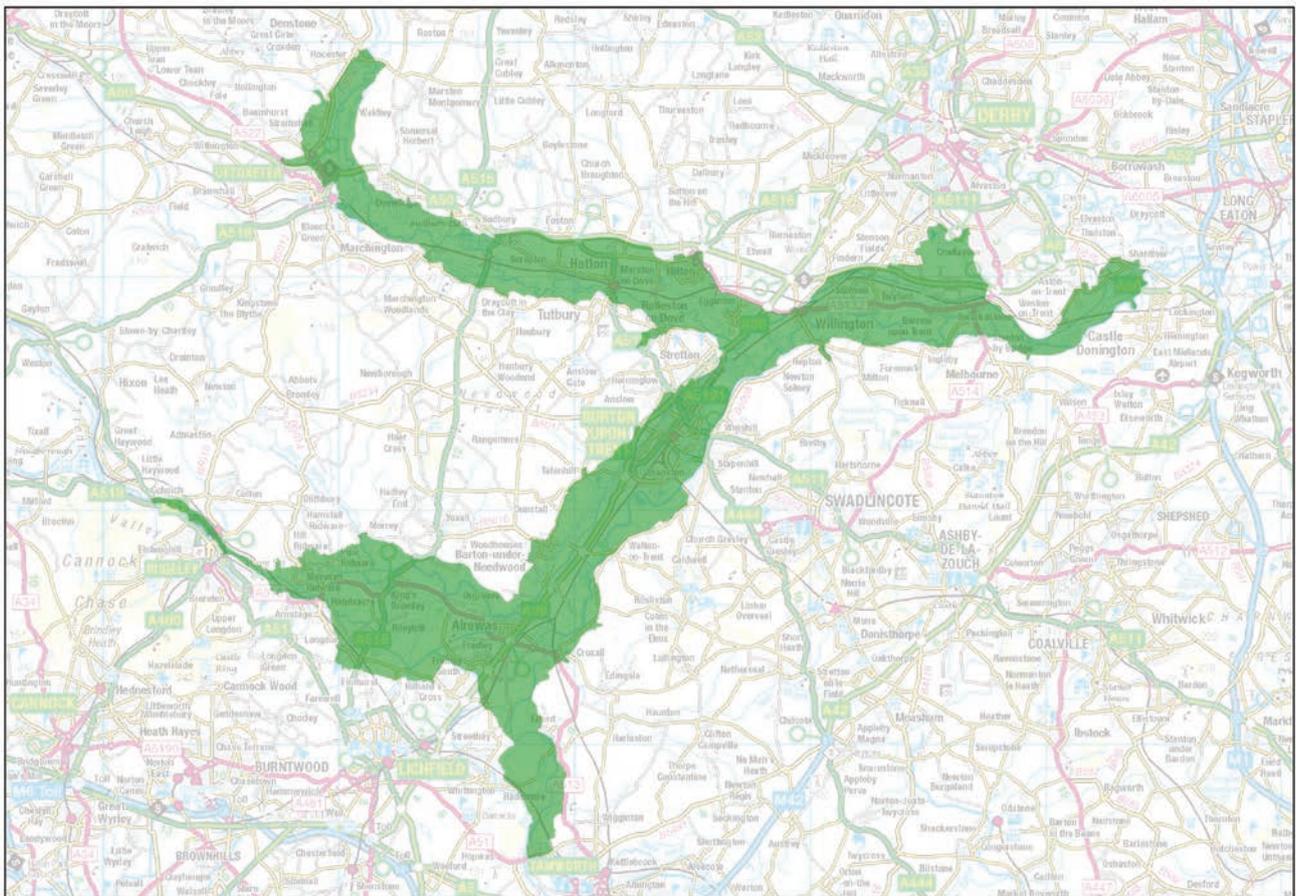
River Valley Connections: projects that focus on the physical and intellectual access to the landscape;

Transforming the Landscape: a range of projects that have the cultural and natural heritage of the landscape at their core looking to preserve and protect these assets.

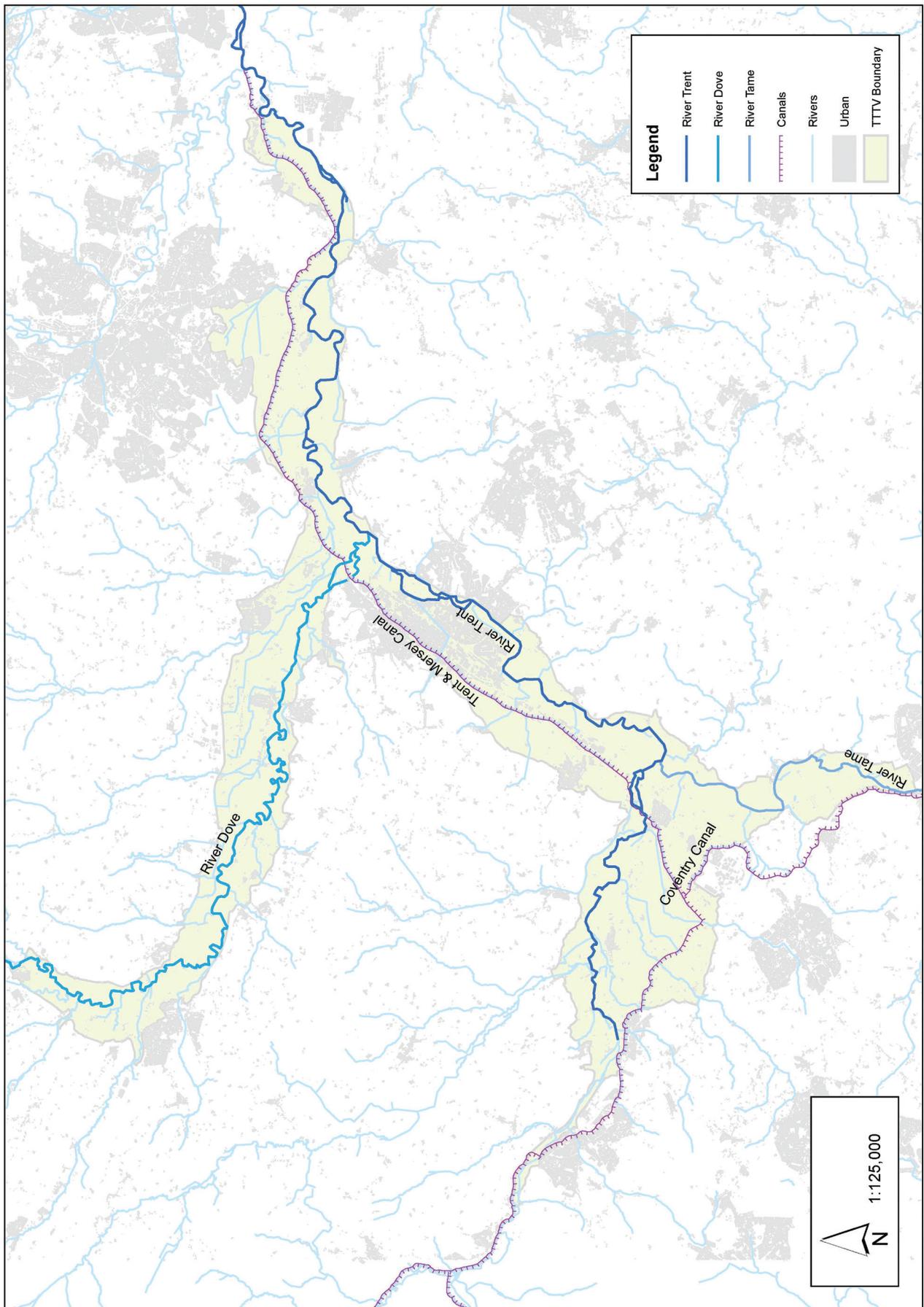


1.1.2 Scheme area

Map 1. Location map of the Transforming the Trent Valley landscape



Map 2. Location of the Transforming the Trent Valley landscape showing the principal rivers and canals



1.1.3 Brief history of the Partnership

Central Rivers Initiative

The Central Rivers Initiative (CRI) is a broad based partnership representing key interests who are working together to shape and guide the progressive restoration and revitalisation of the river valley between Burton, Lichfield and Tamworth - an area of central England that covers over 50 square km.

The vision is to create and connect beautiful places where people can explore and enjoy water, landscape and wildlife, and to ensure that careful extraction and restoration by the area's many sand and gravel quarries will leave a sustainable network of wildlife habitats, public amenities and agricultural land. The ambition is to inspire and encourage landowners, communities and individuals to get involved in shaping their local landscape.

CRI was established in the late 1990s in order to take a coordinated approach to

the planning issues affecting the Trent and Tame river valleys and to start developing a vision for the whole region. The partners include Staffordshire Wildlife Trust, National Forest Company, RSPB, Sport Across Staffordshire and Stoke-on-Trent, quarrying companies and local authorities.

Following an Assessment of Landscape Character and Opportunities for Landscape Enhancement report in 2014 it became clear to CRI that a number of opportunities would require a landscape approach beyond the current scope of the Central Rivers Initiative. From consultation with a wider partnership it was discovered that other parts of the Trent valley network and its tributaries are facing similar challenges and as such the landscape area was expanded to encompass an area significantly larger than the Central Rivers area. Additional partners have joined the existing members of CRI to create a new Trent Valley project board.



Newbold Quarry (Nick Mott)

Transforming the Trent Valley

Our landscape has been refined and expanded from the original Central Rivers area to ensure a landscape with a consistent character that is resulting from the action and interaction of communities, economic pressures and the environment.

Our landscape mirrors part of the Trent Valley Washlands National Character Area and is a landscape identified through Derbyshire County Council's Landscape Character Descriptions and Staffordshire County Council's Supplementary Planning Guidance.

A new Landscape Character Assessment has reviewed the distinctiveness, the topography and the cultural features

of the river valley to enable us to refine and define an area that would benefit the most from a coordinated, landscape based approach to tackling the issues and opportunities that arise in a modern, evolving landscape.

The resulting area is physically distinct as low-lying floodplain and river terraces, common in character as a worked landscape and historically and culturally significant; in medieval times it defined the north from the south; it formed the basis of early travel and trade and became the location for early settlement. Now heavily influenced by development pressures and industry the landscape is constantly changing, and as such, it can be viewed as a frequently altered palimpsest.



Wychnor Historic Water Meadows (Nick Mott)

2.0 Understanding 'Transforming the Trent Valley'



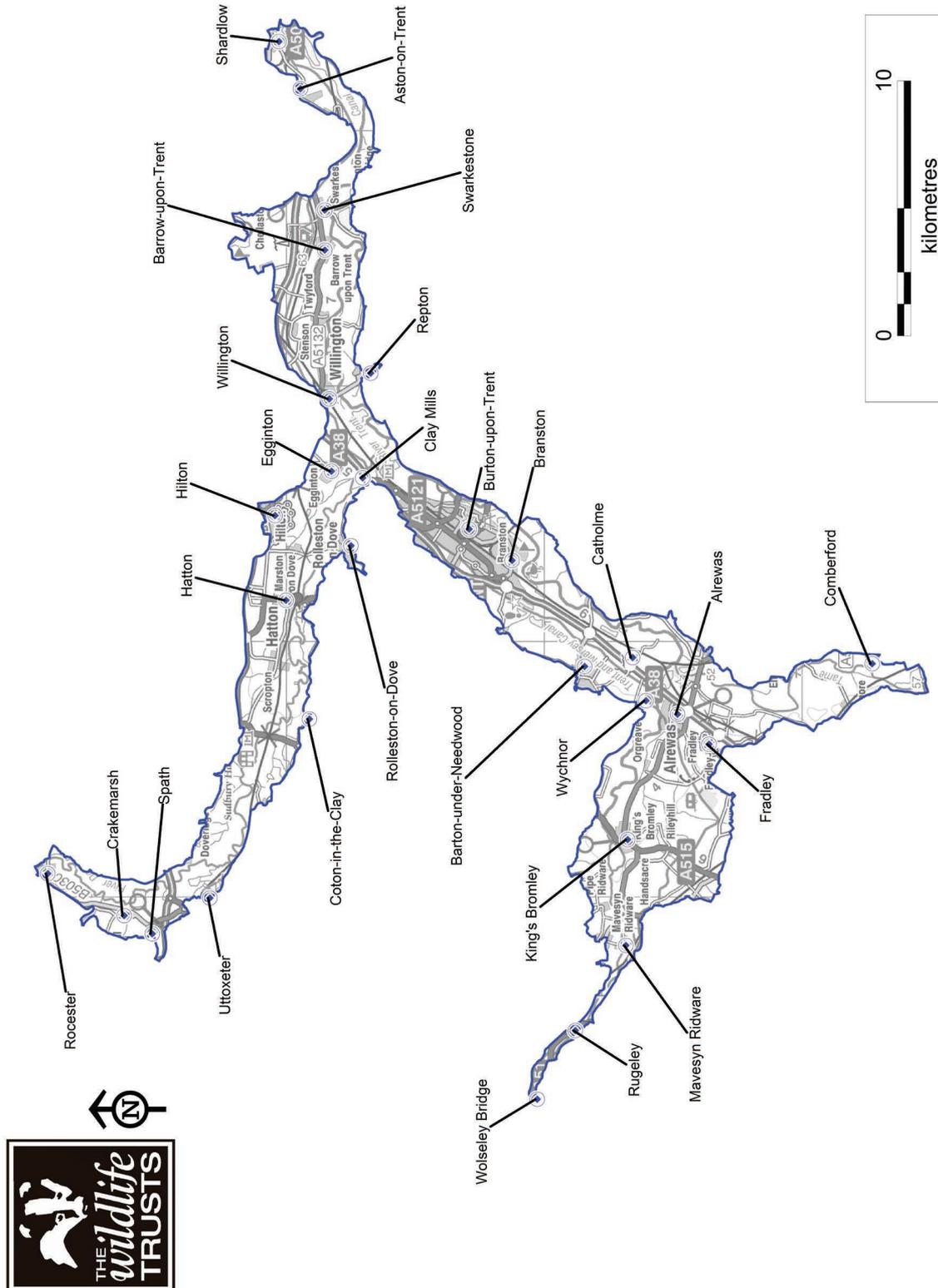
Psithurism (n)
the sound of the wind through trees

2.1 Defining our Landscape

The Transforming the Trent Valley project area at first glance may not appear to form a single, coherent landscape, characterised as it is by a mix of landscape character types and collection of communities with different needs

located at the heart of England. However, it is the corridors of the rivers Trent, Tame and Dove that forms the golden thread that ties these communities in a single, distinct landscape.

Map 3. Key settlements in the landscape.



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This landscape is a floodplain corridor, distinctly narrow and linear, defined as a riverine environment with periodic inundation. It is clearly delineated at the edges by higher ground of gently sloping valley sides, in itself being a low-lying landscape. It is largely comprised of the flat flood plains and gravel terraces of the rivers Trent, Tame and lower Dove (Natural England, 2013).

Our landscape is largely a picturesque pastoral landscape with a beguiling, timeless quality (Natural England, 2013). The river represents a place for quiet contemplation, peaceful enjoyment, or for active recreation. It is a sanctuary for both people and wildlife, flowing through rural and urban locations alike.

However, the landscape has experienced significant forces for change over recent years, which will continue to shape the landscape for many years to come. A shift in agriculture, significant mineral extraction and the growth of industry,

particularly the 'big shed' developments, have all changed the character of the landscape (Natural England, 2013). Future pressures in the form of housing development and transport infrastructure like HS2 will add further stress.

Development undertaken without a clear strategy is at risk of undermining individual efforts and destroying that which we most wish to preserve. Whilst individually there are development plans within administrative boundaries, most notably Derbyshire County Council's Trent Valley Vision, there is not to date a vision for the Trent Valley based upon its natural and cultural boundaries.

Now is the time to acknowledge these changes, accept this rapidly evolving river valley and embrace the opportunity to work with businesses, local communities and other stakeholders to help deliver on the ground improvements to create a resilient and revitalised landscape for the future.



River Dove in Hatton, adjacent to Nestle (Aimee L. Booth)

2.2 Changing Hearts and Minds

We want to change the way that people, communities and business think and act in the Trent Valley. Within a generation we want the Trent Valley to become a “Living Landscape” where people, business, farming, leisure and transport needs all co-exist sustainably and in a joined-up way where wildlife thrives. The European Landscape Convention recognises landscapes as “*an essential component of people’s surroundings, an expression of the diversity of their shared cultural and natural heritage, and a foundation of their identity*”.

The River Trent in this landscape has suffered massively since the industrial revolution. Polluted, narrowed, bypassed, drained and built on, it is only the name

of settlements such as Burton-upon-Trent and Barrow-upon-Trent that hint at how important Britain’s third longest river once was to the communities, economies and environment of central England.

But things are changing, fast. Over the last 25 years much of the river network has been cleaned up, with a notable increase in freshwater invertebrates found in the River Dove, brown trout have been found upstream of the River Trent within the city limits of Stoke, people have started to re-explore the leisure opportunities provided by the Washlands*, the economy has been boosted by the extraction of the area’s rich mineral deposits and excellent transport links, and new nature reserves are being created to welcome wildlife. The Trent Valley is bouncing back.



Washlands Fields (Aimee L. Booth)

The European Landscape Convention recognises the need to *“increase awareness among the civil society, private organisations, and public authorities of the value of landscapes, their role and changes to them.”* This scheme, delivered in this landscape, will build understanding and engender a sense of ownership and pride of the River Trent catchment based on what has been achieved and what can be achieved further to protect, preserve and enhance this fantastic asset.

Achieving landscape scale change will not happen overnight; a paradigm shift is needed that will take a generation to embed. The next five years are crucial in building momentum and directing change towards a common and sustainable vision.

This is a bold and ambitious scheme that builds on almost 20 years of partnership working, research, planning, delivery and visioning.



River Trent flowing through the washlands (Aimee L. Booth)

*What are Washlands?

Washlands are areas of land that are deliberately allowed to flood when rivers run high. Many rivers have lost their washlands due to changes in land use and development, but washlands are still very much part of our landscape.

The most significant area of washlands in our landscape are found in Burton upon Trent. Here the washlands were protected from development because of the brewing industry's need for a supply of clean water which was sourced from wells located on the Burton Washlands.

The Burton Washlands form a green oasis that runs right through the middle of the town. The washlands have always been a place for Burtonians to spend their leisure time and are also full of wildlife.

The washlands feature significantly in our projects as they are places where people and wildlife come together. Washlands are also rich in cultural heritage as a place where land and water meet.

Trent Valley Washlands

Natural England recognises the River Trent's catchment as an area with a distinct character and the region is defined within the National Character Area profile 69: Trent Valley Washlands. This scheme has closely aligned itself with the four statements of environmental opportunity that have been identified and over the coming 5 years will begin delivering a suite of projects that will help to preserve the character of the Trent Valley Washlands.

The environmental opportunities that have been identified (Natural England, 2013) are:

SEO 1: Carefully plan and manage new development within the NCA to ensure that landscape character and ecosystem services are strengthened, that heritage features, wildlife habitats, woodland and the hedgerow network are enhanced, and that opportunities for creation of multifunctional green infrastructure are realised so that this landscape is resilient to the forces of change that it is experiencing.

SEO 2: Manage and enhance the Trent Valley Washlands' river and flood plain landscape to combine its essential provision and regulation of water role with landscape enhancement, nature conservation, climate regulation, farming, recreation and a resource for understanding geodiversity.

SEO 3: Protect, manage and enhance the pastoral landscape of the Trent Valley Washlands, seeking to join up and expand areas of pasture and associated attributes and habitats, to preserve heritage features, enhance biodiversity and geodiversity, protect farmland and provide additional recreational opportunities.

SEO 4: Protect and enhance the historic environment of the Trent Valley Washlands and their characteristic historic landscape. Increase awareness of the richness of this resource, protect it from neglect and physical damage, and ensure that future development complements and enhances the sense of history of the NCA.

Amending the Boundary

Through the course of developing our scheme, we have identified a need to modify the boundary of our landscape to better reflect the character both physically and culturally.

A Landscape Character Assessment was commissioned through Ashmead Price (2018) and the boundary was refined by examining the physical and cultural factors that influence the Trent Valley and by unifying rationale to provide a consistent approach.

The refinement of the boundary has come latterly to the earlier audits and this approach has a number of pros and cons as illustrated in table 1 below.

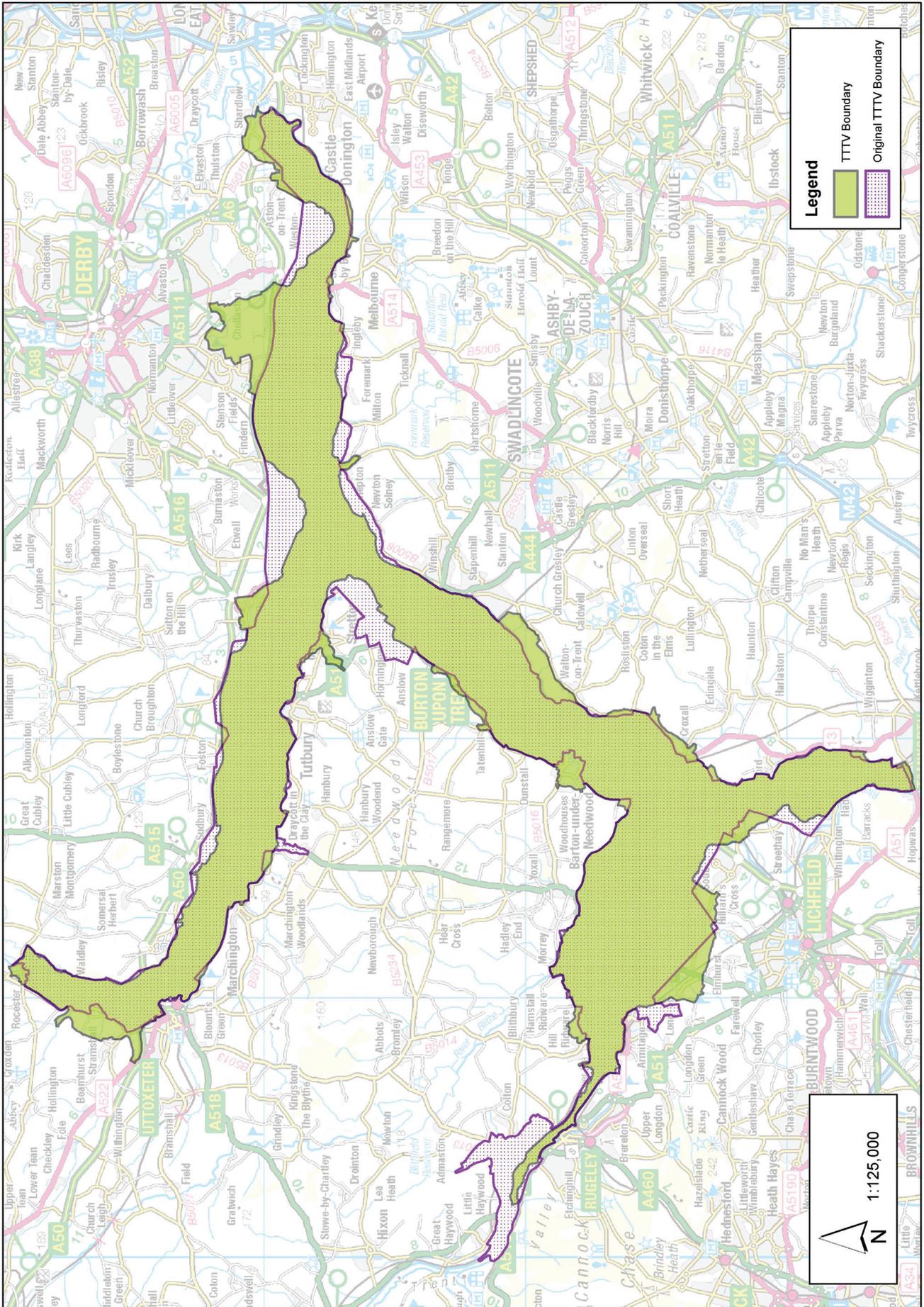
Table 1. Pros and cons of the boundary refinement for the Transforming the Trent Valley landscape

Pros	Cons
<p>The boundary of the landscape has been influenced by the findings of the audits and the projects that have arisen from those audits. Decisions to add or omit sections of the landscape based on landscape character have been further justified by the results of the report.</p>	<p>The landscape audits refer to the old landscape area and so overlook areas that have been newly included. However, many of the assessments look outside the boundary as this is an artificial boundary and so there are many external influences that have been incorporated.</p>
<p>Key statistics cited in the original audits will be inaccurate where based on the landscape area and so caveats will need to be used.</p>	<p>Key statistics cited in the original audits will be inaccurate where based on the landscape area and so caveats will need to be used.</p>

The new landscape covers 199.7km², of which 176km² were within the original boundary. Map 4 overleaf shows the new landscape overlain upon the former area. We can see by comparing the original landscape area to the new landscape area that:

- 88% remains unchanged.
- 12% (23.88km²) have been added.
- 12% (24km²) have been removed.
- 60% of the landscape lies in Staffordshire.
- 40% of the landscape lies in Derbyshire.

Map 4. The Transforming the Trent Valley Landscape overlain by the original projected area.



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2.3 The Character of our Landscape

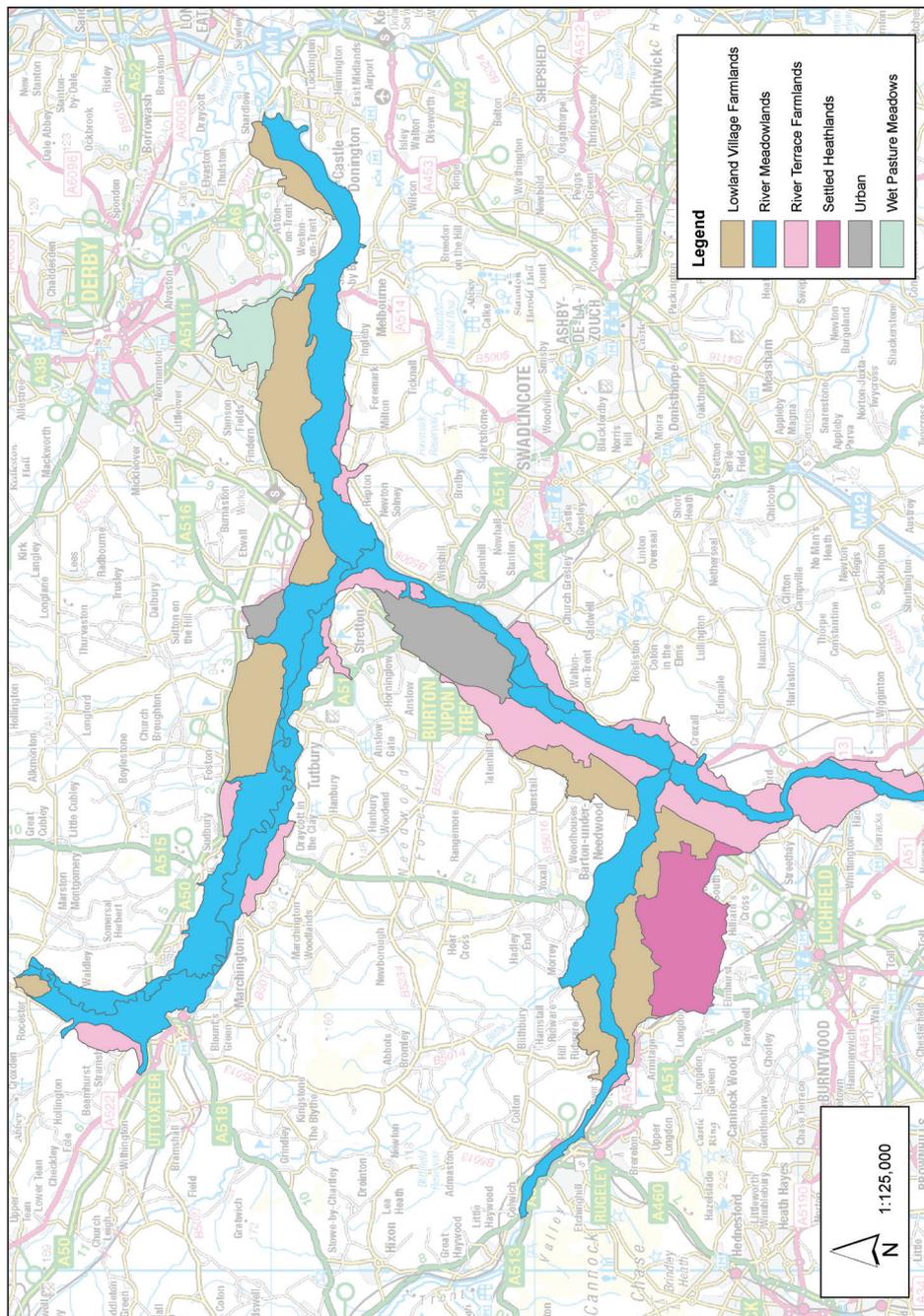
2.3.1 Assessing the Character

Our landscape is located in central England and covers the floodplains of the River Trent and its tributaries, the River Dove and the River Tame, in Staffordshire and Derbyshire.

Our landscape is characterised by five principal landscape types: main **River Meadowlands** and associated **River Terrace Farmlands**, along with the more settled **Lowland Village Farmlands** and

the **Settled Heathlands**. The latter is characterised by a planned, late enclosure pattern of square fields and straight roads, with a strong relic heathy character. A fifth landscape, **Wet Pasture Meadows**, is also associated with the low lying ground around the southern fringe of Derby and this has been incorporated into the landscape (Ashmead Price, 2018). Map 5 below shows the distribution of these landscape character types.

Map 5. Principal landscape character types that characterise the landscape.



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River Meadowlands



River Meadowlands as taken from the Staffordshire Landscape Character Assessment (*Countryside*, 2015)

A narrow, meandering river corridor landscape associated with a flat, generally well-defined alluvial floodplain. This riverine landscape type is characterised by its flat topography and trees associated with waterside planting. The wet grasslands and open water of the valleys are of particular value to breeding and over-wintering waders and wildfowl, and some of the more open arable farmland

supports the area's largest population of corn bunting. A significant feature of this landscape type is the occurrence of active and reclaimed sand and gravel extraction sites. This is a critical factor that currently limits the landscape character and quality. Other incongruous landscape features include large distribution warehouses, busy roads and modern buildings.

River Terrace Farmlands



River Terrace Farmlands as taken from the Staffordshire Landscape Character Assessment (*Countryside*, 2015)

A flat, low-lying, predominantly arable landscape that is associated with the broad river terraces of major river valleys. This is a large scale, intensively farmed landscape defined by large rectilinear fields, although there are also pockets of older, semi-regular fields. This landscape type is characterised by

villages of traditional character, the canal, small broadleaved woodland, mixed pasture and arable farming, and lush improved pasture. A critical factor which limits the quality of this landscape type is the relatively poor representation of characteristic semi-natural vegetation. Other incongruous landscape features are similar to those above.

Lowland Village Farmlands



Lowland Village Farmlands as taken from the Derbyshire Trent Valley Washlands Landscape Character Descriptions (*Derbyshire County Council*)

A well-ordered agricultural landscape associated with productive Brown soils, characterised by nucleated villages, estate farms and small game coverts. This gently rolling landform enables views towards the rising ground and the woodland edges of adjoining landscape types. The overall character of this landscape is strongly related to the planned enclosure of open fields by Parliamentary Act. Discrete nucleated villages, which have

developed around a church and manor house, are a distinctive feature in this landscape. The area is also characterised by tree lined stream corridors, large country houses and narrow country lands bounded by wide grass verges. Incongruous features of this landscape mostly stem from post-war commercial development and modern housing development.

Settled Heathlands



Settled Heathlands (*Steven Warnock*)

A flat, low-lying landscape associated with impoverished, sandy soils derived from an old river terrace creating a relic heathy character. This is a planned, mixed farming landscape, where place names reflect the former extent of commons in the area. The woodland blocks of both ancient and secondary mixed woodland and visual coalescence of hedgerow trees create a strong sense of enclosure in the

Settled Heathlands. This landscape has been shaped by the planned enclosure of heathland in the early 19th century and is characterised by a regular pattern of small and large hedged fields. This area is also characterised by dispersed settlement pattern with scattered roadside dwellings. Incongruous features include large scale industrial development and busy road networks dominated by HGV traffic.

Wet Pasture Meadows



Wet Pasture Meadows as taken from the Derbyshire Trent Valley Washlands Landscape Character Descriptions (*Derbyshire County Council*)

This is a flat, low-lying landscape, defined by irregular shaped basins and fringed by low hills and slopes. The land-use is mixed farming with an increasing move towards arable. A key characteristic of this landscape is its enclosure pattern. Much of the agricultural land, having originated from former wasteland, was enclosed as part of the Parliamentary Enclosure Acts. Few roads cross this landscape, due to its generally uninhabited nature; however, this landscape immediately

abuts the urban fringes of Derby and urban expansion, especially residential, is having a major visual impact on this landscape type. This landscape type is particularly characterised by waterlogged soils where grazing is restricted during wet periods to prevent poaching. Incongruous features of this landscape include drainage improvements and intensification of arable farming which is impoverishing the ecological value.



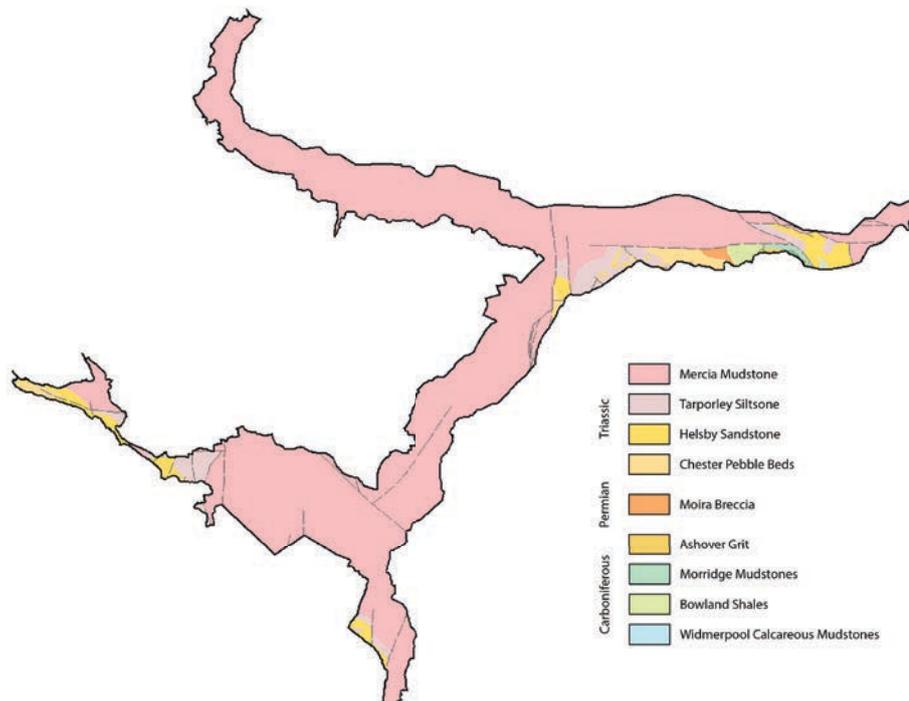
Alrewas lowland village (Aimee L. Booth)

2.3.2 Geology and its influence

The bedrock geology underlying our landscape varies from early Carboniferous (about 330 million years ago) to late Triassic (about 210 million years ago) and tells the story of a long evolving landscape. Nearly all the bedrock is covered by deposits from the last Ice Age

and younger (about the last one million years), including glacial tills, sands and muds, but mostly former river terrace deposits and modern river alluvium. It is these river deposits, both ancient and modern, that define the landscape and how it is used today.

Map 6. Bedrock geology of the area (simplified from BGS DiGMapGB)



Bedrock geology

The oldest rocks underneath our landscape belong to the **Lower Carboniferous Widmerpool Formation** (Dean *et al.* 2011). These calcareous mudstones were deposited marine conditions at a time when the area was slightly closer to the equator than we are today. Over time, the carbonate input ceased leading to the muddy marine **Bowland Shale Formation**. Muddy deltaic rocks entering this sea resulted in the **Morridge Formation** with occasional more coarse-grained deltaic sandstones such as the **Ashover Grit**.

The **Moira Formation** was formed as a fossil scree deposit and is most likely late Permian to early Triassic in age. By the Triassic the area had moved north toward desert latitudes and large rivers were

responsible for laying down the large rounded pebbles and sands of the **Chester Formation** (Ambrose *et al.* 2014).

This formation at depth is an important aquifer with many boreholes for both drinking water and the brewing industry at Burton-on-Trent. As the rivers became gentler and more meandering over time they laid down the medium to fine grained sands of the **Helsby Formation** (Ambrose *et al.* 2014). Where these sandstones are well-cemented, they produce good building stone used for many churches in the area.

The ancient river flow decline continued into the overlying **Tarporley Siltstone Formation**, with fine sands, silts and muds deposited. Eventually the landscape became very subdued with the area being covered in mudflats and shallow lakes.

These lakes accumulated windblown dust forming the **Mercia Mudstone** (Howard *et al.* 2008). It is this mudstone that underlies most of the area the low-lying and easy-to-erode rocks concentrating the flow of the major rivers away from the higher ground of more resistant, older rocks of the Peak District, Cannock Chase and the Melbourne Parklands.

Superficial deposits

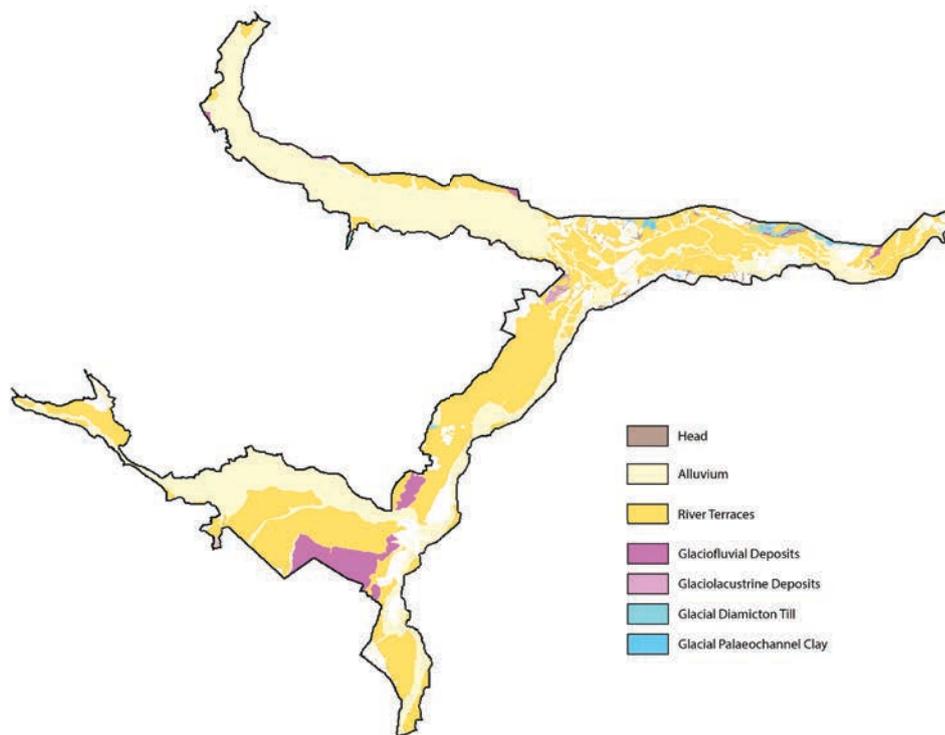
Other than towards the edges of the main river valleys, where it is closer to the surface, the bedrock geology is buried under significant deposits of clay, silt, sand and gravel, mainly deposited during “Ice Age” of the Late Quaternary, mostly in about the last million years

(the Palaeolithic in archaeological terms). During this time there were a number of cycles of cold (glacial) and warm (interglacial) climate.

There is no evidence for an ancient River Trent prior to the Anglian Glaciation (about 478,000 to 424,000 years ago).

It is thought that the ancient River Dove continued southeast between Alrewas and Burton as the “Hinkley River” forming a tributary of the main “Bytham River” between Coventry and Leicester, eventually entering the North Sea near Lowestoft. This river system was wiped out by the advance of the Anglian ice sheet around 450,000 years ago (Bridgland *et al.* 2014).

Map 7. Superficial deposits of the area (simplified from BGS DiGMapGB)



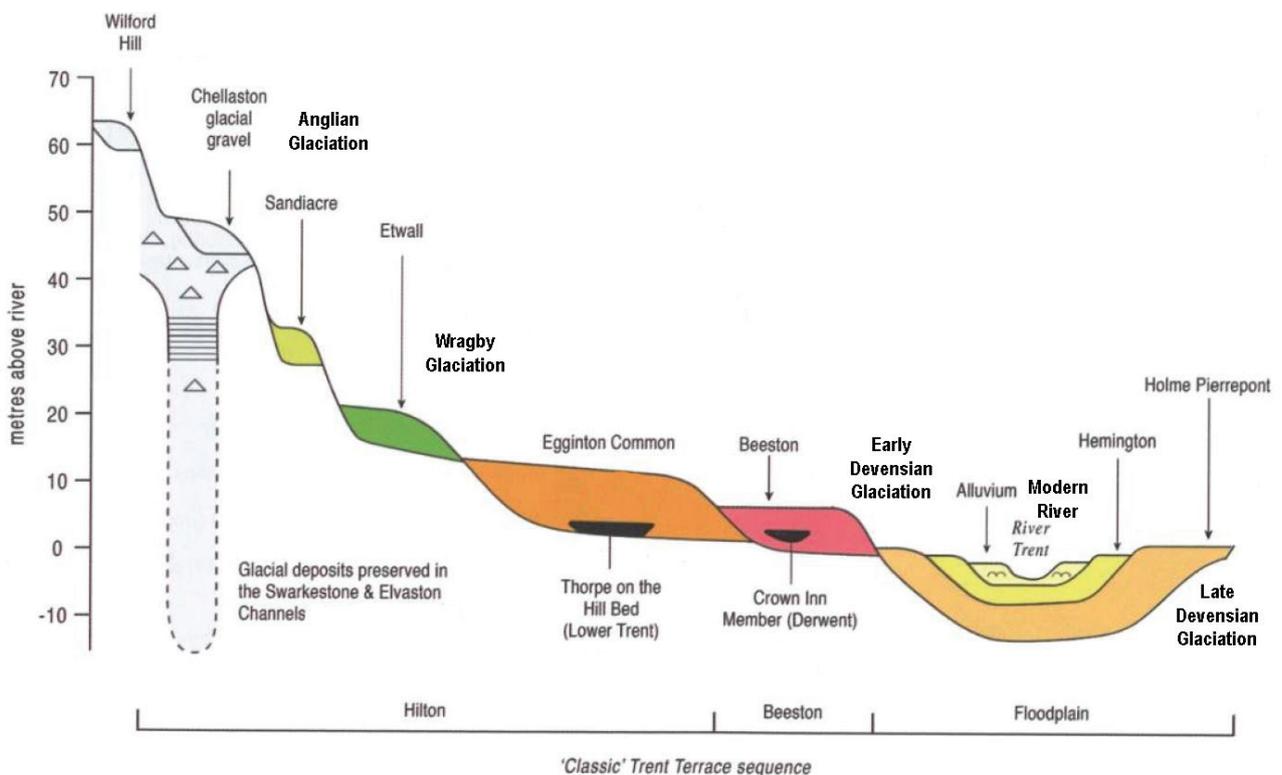
The birth of the River Trent

After the retreat of the Anglian ice sheet, the Trent river system starts to become established, but flowing east into the Wash, first via Ancaster and later via Lincoln as a consequence of the Wragby Glaciation (about 300,000 years ago), rather than north flowing into the Humber (Bridgland *et al.* 2014).

The landscape of the area is currently dominated by Quaternary river terrace deposits, which have been extensively quarried for sand and gravel. As the climate oscillated between cold and warm through the Quaternary so did the deposition of river sediments. During warm, interglacial periods river discharge levels would be low, the Trent and its major tributaries would have flowed

as meandering channels across the wide floodplains much like today and localised lacustrine sediments were also deposited. However, in the cold, glacial phases, meltwater from snow and ice, and the lack of vegetation, caused higher flow rates and braided channels to form across a wide channel area depositing coarse sands and gravels. With the continued uplift of the Midlands through the Quaternary, the rivers progressively cut down to a lower relative base level with time, leading to a "staircase" of river terraces, with the oldest at higher elevations and the youngest at lower levels close to the modern rivers. Evidence of early humans are often preserved in these deposits as well as fossils such as woolly rhinoceros and hippopotamus.

Figure 1. Schematic profile of the Trent terraces (modified from Bridgland *et al.*, 2014)



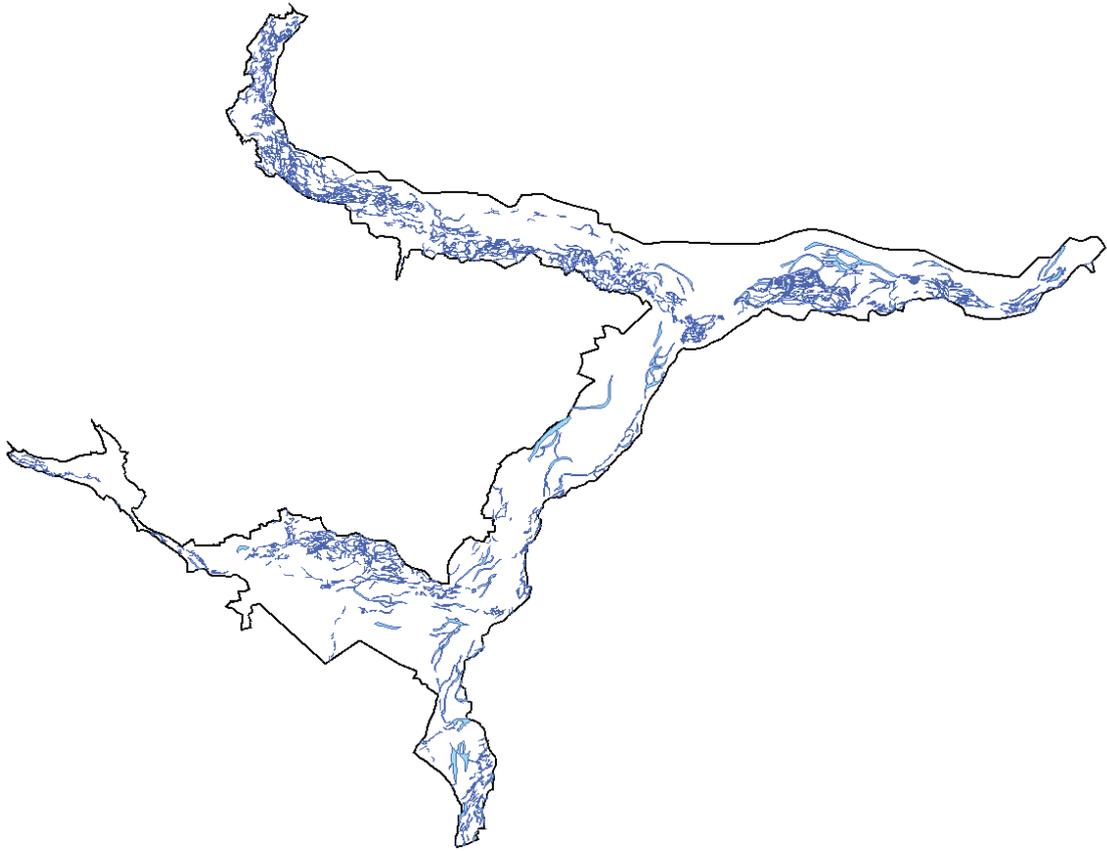
The extensive sands and gravels of the lowest, youngest terrace belong to the Devensian Glaciation around 20,000 years ago. The Devensian ice advanced down the Cheshire Plain to the west and the North Sea to the east. As the Cheshire ice started to melt it could not drain westwards into the Irish Sea because of the presence of the remaining ice sheet and large proglacial lakes formed against the margin of the high ground with Staffordshire. Eventually, the high ground was breached and massive quantities of meltwater spilled into the Trent system from the Upper Trent and Churnet Rivers. In the east, North Sea ice dammed the Humber forming another large proglacial

lake that spilled south into the Trent. This meltwater channel was then used by the Trent to flow northwards into the Humber once the ice finally retreated.

Since the Devensian, reworking of the Devensian sands and gravels has occurred and the modern Trent river system has been depositing alluvium as it meanders across the valleys widened and deepened by the Devensian meltwaters. The river terrace landforms were a major controlling factor on the pattern of settlement, with the early settlements occurring on elevated sand and gravel terraces that did not flood, and at shallow river crossing points.



Alrewas lowland village (Aimee L. Booth)



Quarrying

The pock-marked landscape of today is a legacy of the rich sands and gravels that were laid down during the Quaternary as the modern river systems were formed. The majority of aggregates currently quarried from the landscape are used for concrete and concrete products.



Whitmore Haye Quarry (Nick Mott)

Sand and gravel quarrying leads to the destruction of any archaeological remains within the footprint of the quarry, and can cause changes in the surrounding water table, impacting on the preservation of organic remains in buried deposits across a wider area. Whilst archaeological remains in upper subsoil deposits can be recorded prior to extraction, remains in deeper gravel deposits can be difficult to monitor or recover due to the mechanisation of modern quarrying methods.

Quarrying has, however, led to the discovery of some important finds in recent years. Gravels can contain the remains of stone hand axes made by earlier human ancestors. More recent deposits associated with the last ice age have revealed the remains of woolly rhinoceros, mammoths and reindeer, from a period when the landscape was covered by open tundra grassland, similar to present Arctic conditions (ArchHeritage, 2017).



Aerial view of the Trent Valley over Alrewas looking towards the National Memorial Arboretum, Croxall Lakes and Barton Quarry (*Nick Mott*)

2.3.3 Cultural Heritage

The mobility of the river has had a major impact on the landscape and the development and character of land use. Archaeology, history and geology underpin the formation of our landscapes, and help to create a sense of distinctiveness and identity for the places in which we live, and the ways that people understand and engage with them. 'Cultural heritage' includes historic buildings and structures, earthwork monuments, buried archaeology, artefacts and historic landscapes.

Evolution of Settlement

The first occupants of the valleys were mobile hunter-gatherer groups in the Palaeolithic and Mesolithic periods. So far, only one site in our landscape has definitive evidence for Palaeolithic human occupation. At Tucklesholme Quarry, a scatter of artefacts indicated a place where stone tools were manufactured around 10,000 years ago, on low-lying land

between river channels. Such sites are rare nationally.

The only clear evidence for Mesolithic occupation is at a ridge-top site at Swarkestone Lowes. The majority of Mesolithic sites within the wider Trent Valley have been found on ridge-top locations; the elevated ground may have offered longer-distance views and more convenient routes than densely-wooded valleys.

The Neolithic period marked the introduction of farming, though communities probably continued to move seasonally between resources. Evidence for post-built houses has been found at Willington; one of these sites was located on a gravel island between streams, although this settlement within the flood plain had been abandoned by the Bronze Age – this may have been due to increased flooding.

Bronze Age settlement is typified by small groups of unenclosed roundhouses, perhaps farmsteads, on gravel terraces above the flood plain. These unenclosed farmsteads were succeeded by a landscape of dispersed, enclosed farmsteads set within fields from the middle Iron Age. By the late Iron Age and Roman periods, evidence of permanent settlement is sparse, and it has been suggested that occupation moved away from the lower terraces, perhaps onto higher ground.

During the Anglo-Saxon period, small settlements of post-built houses

and sunken-floored buildings have been recorded, but by the time of the Norman conquest in 1066 the majority of settlement appears to have become focused in more nucleated villages.

In the late 18th to 19th centuries, the advent of factory-based industries and changes in agricultural practice led to increased migration to industrial centres. Burton-on-Trent increased substantially in size from the later 18th century onwards. Other settlements within our landscape have largely remained as villages, with limited modern development (ArcHeritage, 2017).



Post-medieval houses at Repton, Derbyshire (ArcHeritage, 2017)

Development of Agriculture

Farming was introduced into the area during the Neolithic period, with pastoral animal herding and arable cultivation

occurring in woodland clearings on the river terraces. Tree clearance increased over time, resulting in a largely open landscape by the Iron Age period.



Ridge and furrow earthworks at Egginton, Derbyshire, visible in Lidar data 2m DTM Lidar data (multi-angle hillshade) (*Environment Agency*)

From the later part of the Iron Age and into the Roman period, the pattern of fields suggests pastoral farming with evidence of droveways and a suggestion of temporary settlement associated with seasonal herding.

In the Anglo-Saxon period farmstead-type settlements returned to the valley with arable cultivation indicated through the widespread remains of ridge and furrow ploughing. These features have survived



Evidence of ridge and furrow ploughing on the landscape (*Nick Mott*)

in open areas where the land-use is largely pastoral.

Some of the ridge and furrow earthworks are likely to have been reused as water meadows in the post-medieval period. Water meadows comprised a system of drains, carriers and sluices used to flood fields in the winter period, keeping the ground warmer and allowing a rich growth of grass and hay for fodder in the spring. This process indicated a change from arable to pastoral farming at this time, which continued into the 19th century.

Agricultural improvements in the late 18th and early 19th centuries led to significant changes in the landscape layout. Surviving open fields and commons were enclosed and allotted to the major landowners, to enable the employment of more efficient agricultural methods. By the later 20th century, a mixed farming regime was present within the valley, and many earthwork remains of earlier agriculture have been lost to ploughing (*ArchHeritage, 2017*).

Ritual and Religion

The earliest evidence for ceremonial monuments in the Trent Valley date from the early Neolithic period, when substantial monuments of earth, stone and timber were constructed within woodland clearings. Causewayed enclosures, large oval spaces surrounded by two to three interrupted ditch circuits, are thought to have been used as meeting places for dispersed and mobile groups for a variety of social, economic and ceremonial purposes. These enclosures have been recorded at Alrewas and Mavesyn Ridware.

Later in the Neolithic period, new monument types evolved, including long linear enclosures known as cursus monuments, stone and timber circles, and circular enclosures with an outer ditch and bank known as henges. Three principal groups of these ceremonial monuments are known within the Trent Valley, at Catholme in Staffordshire, and Aston upon Trent and Twyford in Derbyshire. The complexes are all located close to river confluences, suggesting they may have been at boundaries or meeting points between territories.

By the early Bronze Age, the large monuments had largely fallen out of

use, though they are still visible in the landscape. A burial tradition involving the interment of bodies or cremations within and around circular mounds or barrows originated during this period, around 2400-1700 BC. It was associated with new pottery forms and the introduction of metalworking. Barrows have been recorded across the landscape, though only a few survive as earthwork mounds.

There is little evidence of ritual activity from the Iron Age and Roman periods, with the exception of a probable Roman shrine near the fort at Rocester. Evidence for pagan activity during the Anglo Saxon period has been found in grave goods associated with cemeteries, whilst probable Viking burials have been recovered from an overwintering camp at Repton.

A minster church and abbey were founded at Repton in the early medieval period, as well as a chapel at Burton, with churches at Kings Bromley and Alrewas also in existence at the time of the Norman Conquest. Burton Abbey was founded in 1002. Many of the churches within the landscape have medieval origins, though there have been major restorations and complete rebuilds in later periods (ArchHeritage, 2017).



All Saints, Alrewas, Staffordshire: a medieval church on a 9th-century foundation (ArchHeritage, 2017)

Transport Networks

The river valleys would have provided transport and communication routes throughout the prehistoric period.

Three Bronze Age log boats that have been found in gravel pits at Burton upon Trent and Shardlow and are the earliest examples of river transport in the area.

Prehistoric tracks and droveways crossed the area, and more substantial military roads were laid out during and after the Roman invasion. Rykniel Street Roman road ran through the Trent Valley, roughly on the current route of the A38. Medieval stone bridges survive at several river crossings such as the Swarkestone Bridge in Derbyshire.



The medieval Swarkestone Bridge, Derbyshire (*ArcHeritage, 2017*)

In the later 18th century, demand for a method of transporting large cargoes led to the creation of the canal network. The Trent and Mersey Canal was the first of the major inland waterways, linking the ports of Hull and Liverpool. It opened between Shardlow and Shugborough in June 1770 and was fully completed by

1777.

The Coventry/Birmingham and Fazeley Canal was completed around 1789, linking the Trent and Mersey to the Oxford Canal. Its junction with the Trent and Mersey at Fradley is the focus of a wharf, warehouses, inns and canal workers' cottages (*ArcHeritage, 2017*).



Trent and Mersey Canal bridge and lock at Wychnor Bridges, Staffordshire (*ArcHeritage, 2017*)

Elite Landscapes

During the medieval period, manors were the basic unit of landholding, controlled by hereditary landowners. These estates would include the primary

residence and outbuildings such as barns, breweries and mills. Some were surrounded by moats, several of which have been recorded in the valley.



Wychnor moated manor site, Staffordshire (ArchHeritage, 2017)

From the Tudor period onwards, mansion houses began to supersede the medieval manor houses. Elaborate formal gardens also flourished in this period. Changing fashions in the 18th century led to the creation of extensive parks where the landscape itself was sculpted and arranged to portray 'romantic' natural ideals. On some occasions, this involved moving villages or houses that disturbed a desired view. Parks and gardens often included feature such as summerhouses, greenhouses and banqueting halls.

Anchor Chapel at Ingleby is an unusual example of an isolated banqueting hall, adapted from artificial caves in the 18th century and associated with Foremark Hall.

Most surviving mansion houses within the landscape are of post-medieval date, with six constructed or rebuilt in the late 18th- to 19th centuries. Most are now in private hands, some used as hotels or private schools; only Sudbury Hall is open to the public (ArchHeritage, 2017).



Sudbury Hall, Derbyshire, in National Trust ownership (ArchHeritage, 2017)

Twentieth-Century Military Sites

Only one First World War feature is recorded within our landscape: a machine gun factory in Branston. In addition to its wartime significance, the factory is also the former home of Branston Pickle, having converted to food production in the 1920s.

The majority of the 20th-century defence features across the Trent Valley

are associated with Second World War activity, including Stop Line no.5, a series of anti-tank pillboxes constructed along the rivers in 1940, to counter a feared German invasion of Britain. Although the stop line was a short-lived operation, many of the pillboxes survive along the river banks, often sited close to road, canal and railway bridges.

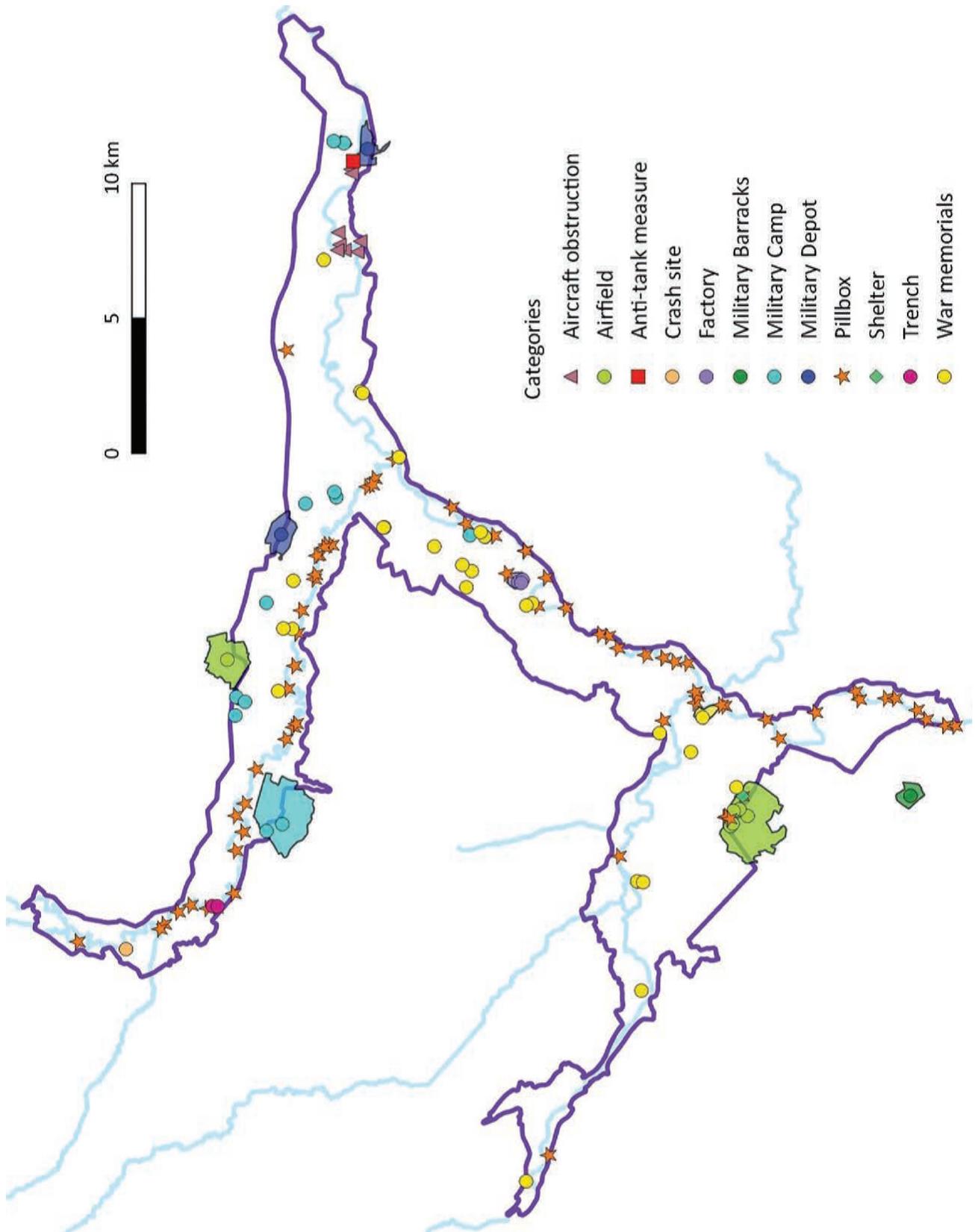


Stop Line no.5 pillbox on the Trent and Mersey Canal aqueduct at Clay Mills (*ArcHeritage, 2017*)

Identifying the features of the stop line and developing projects to preserve and protect those features, most notably the pillboxes, is an important part of the scheme. Map 9 below indicates the location of the 20th-century military and commemorative sites. To prevent neglect and decay, many of these features can be

put to alternative use through reversible conversion. Converting structures in the landscape into hibernacula, hides, walkers' refuges and other purposes will enable them to be more than simply relics of a previous era and provide them with new practical uses.

Map 9. Distribution of 20th-century military and commemorative sites (ArchHeritage, 2017)



2.3.4 Our legends, our stories, our heritage

The landscape is located at the heart of the West Midlands in a region once known as Mercia, one of the kingdoms of the Anglo-Saxon Heptarchy. The capital of Mercia was Tamworth, but for many years the Royal capital was situated in Repton.

St Modwen

Christianity was introduced to the Kingdom of Mercia in 653 AD. Around this time, an Irish abbess called Modwenna passed through Burton as she made pilgrimage to Rome. Attracted by the smooth, sweet and clear spring water, she decided to stay (Whatton, undated). People soon began to believe the water had healing properties thanks to her efforts in curing the sick (Burton2000, 1999).

Modwenna founded a church dedicated to God and St Andrew on an island of the River Trent. The island was named Saint

Andrew's Isle, and is today known as Andressey Island. She stayed in Burton for seven years before continuing her pilgrimage to Rome.

Modwenna later returned to Burton where she built a second church, dedicated to St Peter, at the foot of Mount Calvus, later known as Scalpcliffe Hill, before continuing to Scotland where it is said that she died at the advanced age of 130. Her body was returned to Burton for burial and a shrine was built on Andressey Island.

Legend says that when she died her soul was carried to heaven by silver swans, which became her emblem. Saint Modwen is now the patron saint of Burton-upon-Trent (Gallagher, undated), and you can see the use of her emblem throughout the town.



A statue of St Modwen overlooks the River Trent on the Burton Washlands (Staffordshire Wildlife Trust)

'The Great Heathen Army'

The Vikings brought terror to Mercia in the 9th century as an invading force of shallow draught longships navigated up the River Trent. They were finally defeated by Alfred the Great following his exile in the fens of the lowlands.

Repton at this time was a major Mercian Kingdom with Royal burials recorded at

the Saxon crypt of St Wistan's Church (unique for a period in history that is otherwise poorly recorded). It is believed that Vikings captured the town of Repton around 873AD and overwintered there in a defended settlement. There is evidence of Viking fortifications and pre-Christian burials close to St Wistan's Church (Bivans, 2014).



Welcome to Hatton (Aimee L. Booth)

Place names

As a result of a stalemate between Anglo-Saxon and the Viking forces, a treaty was signed 886 dividing much of what we now know as England, into 'The Kingdom of the English' and the Danelaw. The boundary followed the River Dove, downstream to its confluence with the Trent and then continued along the Trent, downstream through Burton, so the eastern side and beyond was under Viking rule and the western side was the rule of the Angles or England.

There are many local clues to this old frontier, like the 'Holmes' old Scandinavian (OS) for island, for example, Catholme

near Alrewas, the Horseholme and Broadholme on the Washlands. To the East of the Trent, there is a preponderance of the suffix 'by', OS for farmstead or village, as seen in Derby, Bretby, Blackfordby, Ashby, or 'thorpe', OS for outlier, for example Donisthorpe, Oakthorpe. The old English (OE) 'ton' is comparable with the OS 'by' and is common to the west of the river and can be found in Burton, Hatton, Barton, or Stretton.

The above is not a hard and fast rule, as a genocide of local people, would mean no-one left to pay taxes, so Old English names would still continue in Danelaw (Oates, 2018).

Living on the Frontier

This is not the first or the last time the River Trent has been an important frontier, dividing as it did the pre-Roman local tribes, then becoming the boundary of the first phase of Roman conquest. More recently it represents one of the 'stop lines' during the post Dunkerque invasion scares of World War II. Recording and renovating the numerous pill box defences attesting to this is part of our heritage project (Oates, 2018).



Pillbox on Trent & Mersey canal (Staffordshire Wildlife Trust)

Beer brewing

The monks who inhabited the monastery built by St Modwen are said to have used the clear, sweet spring waters to brew beer.

The beer has a unique flavour thanks to the minerals in the spring water that have dissolved as the water seeps through the surrounding hills. As well as giving it flavour, the mineral help to preserve the beer meaning it can be traded further afield.

The brewing industry has grown since the monk's early efforts and by the early 19th Century the town was exporting to Russia. It is said that Catherine the Great was fond of Burton Beer.

The monks weren't only famous for their delicious beers. The rich meadows

surrounding the River Trent made excellent pasture for sheep and their fleeces gained a reputation for fine wool. This was traded as far south as the Florentine markets in Italy.

Today, brewing remains an important industry in the town and water is still collected from the wells on the Washlands. The rain that falls in Burton filters through a thick layer of gypsum, which gives the beers the depth of flavour and unique character for the area (Marston's, 2017). The meadows have benefited from the continued use of these wells as chemical herbicides and fertilizers are forbidden and the meadows have therefore retained much of their diversity of wetland flowers and wildlife (Burton2000, 1999).



Former Ind Coope Brewery buildings at Burton-upon-Trent (ArchHeritage, 2017)

An Industrial River

Trade in beer and other commodities grew in Burton following an Act of Parliament in 1698 making the River Trent navigable from the port of Hull all the way south to Burton (Burton2000, 1999). Improvements were made to the Trent navigation, through to Burton (the remains of the lock which by-passed the weir at Newton Mill are still visible), allowing continuous boat use. The Burton Boat Co. was set up and flourished until competition from the Trent and Mersey canal caused its closure, despite the digging of a new canal to link the two.

The river was a major economic factor in the town, providing fish and eels, power for mills, grazing on the common land as well as transport for goods. Burton at this time was a textile producer, sending woollen 'kerseys' to Hull and on to European and Baltic markets. Trade was on a barter basis so timber and iron return cargoes gave Burton diverse industries.

In 1780 Robert 'Parsley' Peel (Grandfather of Sir Robert Peel, Prime Minister and father of the modern police force) set up a cotton spinning mill at Newton Road and this was followed by a number of others along the river. These were all closed by the 1840's due to competition from Lancashire; however, by this time brewing had started to pick up due to the arrival of the railway in 1839. The mills continued to power a variety of machines, like forges, or grinding flints for the Potteries, as well as flour.

The coming of the railway reduced the importance of the river to Burton, though transport links like the A38 and the railway still follow the valley (Oates, 2018).

The Mosley Family

Rolleston Hall was the family seat of the Mosley Family. There is limited information about the estate prior to 1871 as estate papers were lost in a fire. Brook Hollows is part of that old estate and it is likely that the ornamental lakes were created in the 1780s.

The estate was extensively developed by Sir Oswald Mosley (2nd Baronet), where he encouraged wildlife in the ponds and installed the current waterfall. The lake was later modified by the 3rd and 4th Baronets to include a small island and land to the south was planted with trees to create Brook Hollows Spinney, reflecting the later Victorian hunting and shooting interests.

The estate was eventually sold in lots at auction in the 1920s. Brook Hollows remained in private hands until 1971, when it was obtained by compulsory purchase by Tutbury Rural District Council. This passed to East Staffordshire District Council in 1973 following local government reorganisation (Martin, 2011).



Waterfall at Brook Hollows (ESBC)

2.3.5 Natural Heritage

The Trent Valley landscape offers a wealth of ecological opportunities to restore natural floodplain processes and undertake habitat restoration.

The watercourses within our landscape have historically been heavily engineered and as a result have become disconnected from their floodplains.

There are opportunities to reconnect our natural heritage, particularly through the restoration of rivers, waterbodies and wetland habitats, important for so many rare, and sometimes threatened, species. Agriculture is the dominant land use across the landscape and as such, by working with farmers and landowners, offers potential for significant improvements to biodiversity through careful habitat management and conscientious farming practices.

Priority Habitats and Sites

Throughout our landscape there are a number of nature conservation designations of varying levels of European, National and Local importance and protection. The most significant of the designation types is that of



Toadflax at Tucklesholme (Nick Mott)

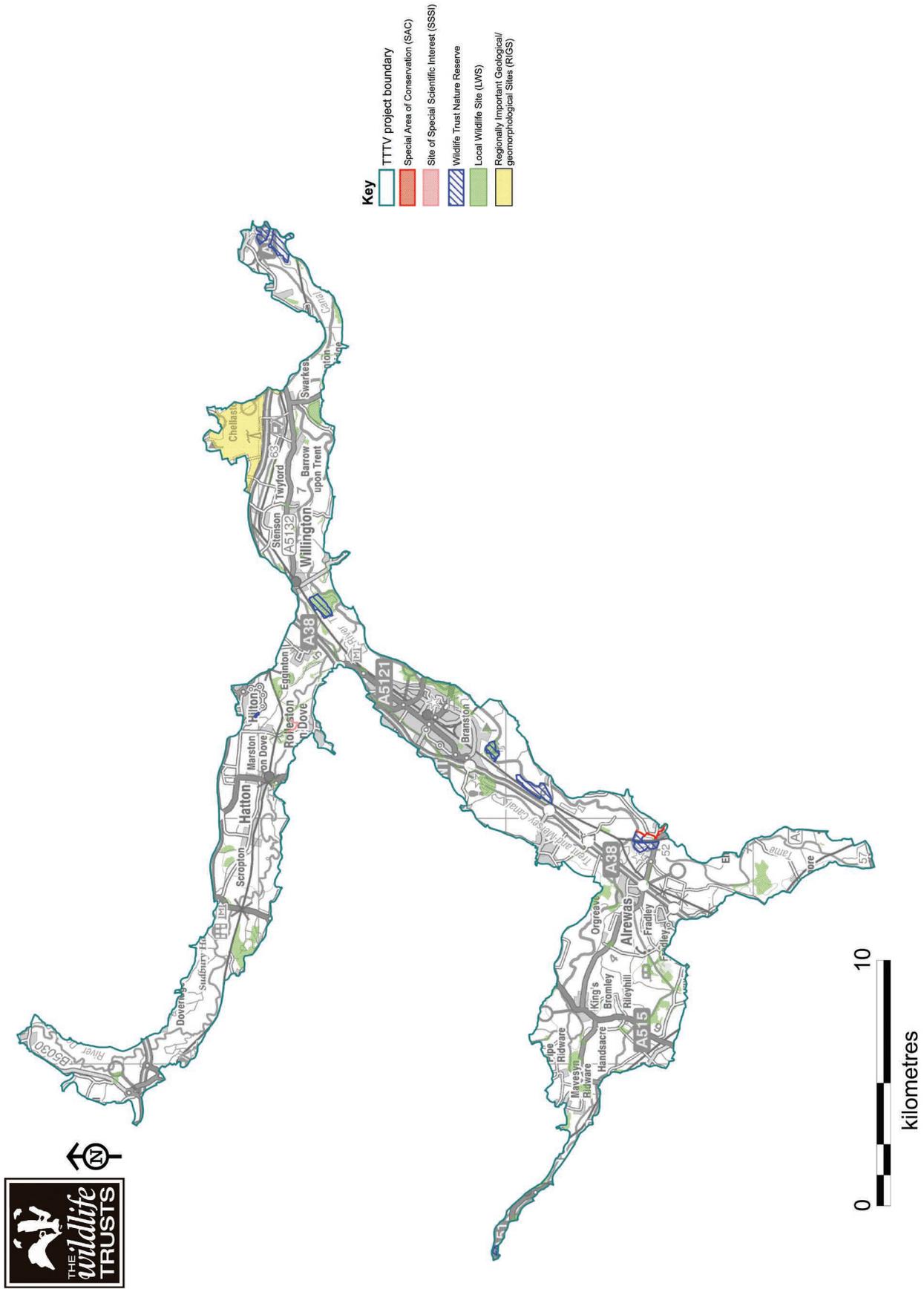
Special Area of Conservation (SAC). The River Mease SAC is 23 hectares in size and covers a number of counties including Staffordshire, Derbyshire and Leicestershire. The site is notified for a significant species assemblage that is of European importance, including such species as Otter, White-clawed Crayfish, Spined Loach and Bullhead. The site is also designated as a Site of Special Scientific Interest (SSSI).

The only other site which has been designated as being of national importance (SSSI) is the Old River Dove, Marston-on-Dove, which is situated on the Staffordshire/Derbyshire boundary. The site comprises a meander cut off from the present course of the river and is important for aquatic fauna and flora.

At the local level there are a host of Local Wildlife Sites (LWS) across the project area in both Staffordshire and Derbyshire. LWS are the best remaining examples of semi-natural habitats and species assemblages that are designated for their local importance. The sites are selected and designated following rigorous selection criteria, which ensures consistency. Whilst SACs and SSSIs receive statutory European and National levels of protection from issues such as development and inappropriate management, LWSs receive only very limited protection as part of the planning process at a local county, borough or district level.

In addition to the LWS, there are a series of Regionally Important Geological/ Geomorphological Sites (RIGS) which support locally significant examples of geology or land form and are designated by local committees. Two such sites are currently designated in our landscape: Sinfin Moor and Anchor Church, both of which are in Derbyshire. RIGS are the equivalent of LWS in terms their level of protection. Map 10 shows the current distribution of the various designated sites across the project area.

Map 10. Designated Sites across our landscape



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There are currently over 110 LWS throughout our landscape. The sites support an array of habitat types and species assemblages that are of importance including one of the largest remaining expanses of species-rich

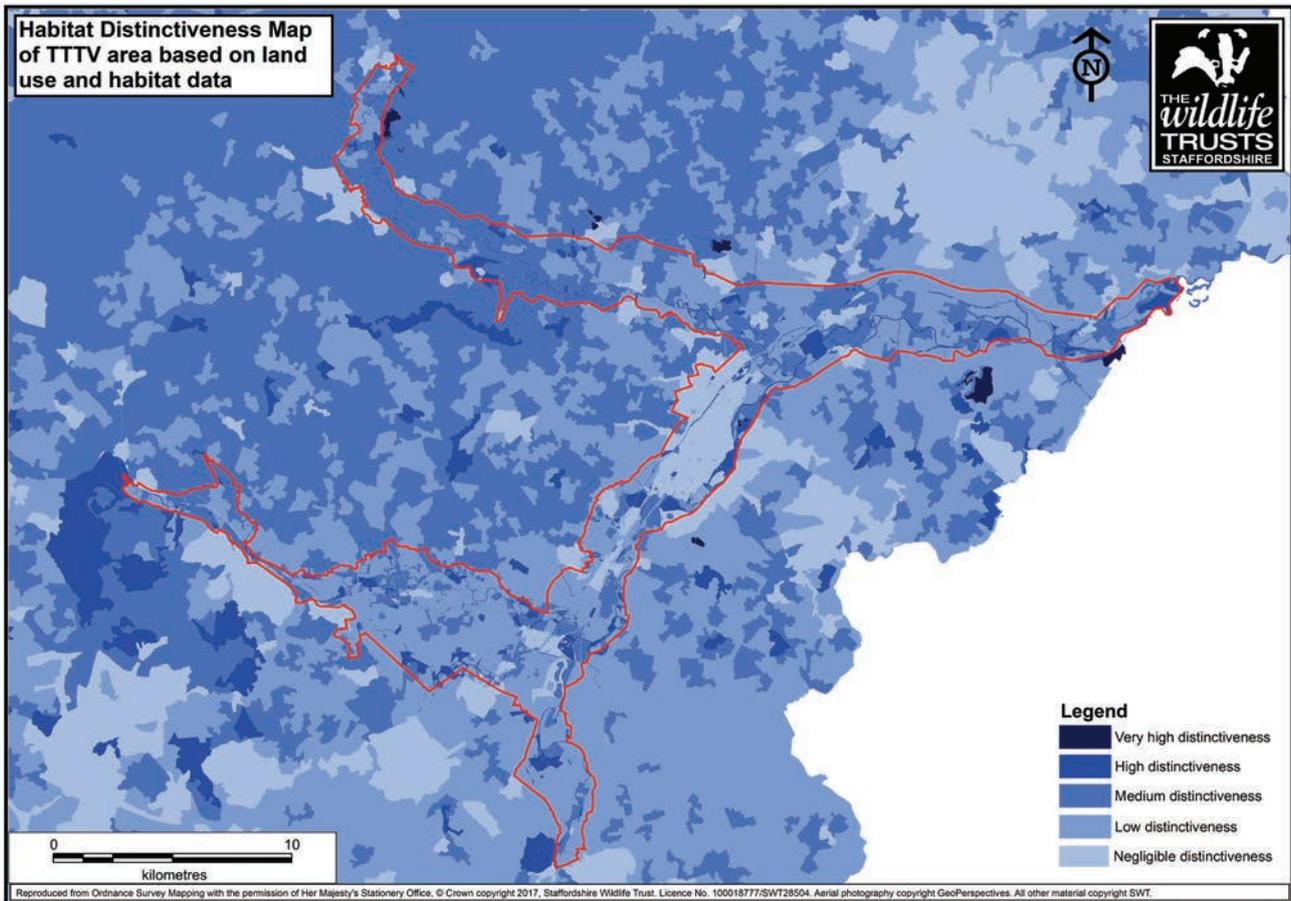
floodplain grassland in Staffordshire at Wychnor, and the continuum of wetland habitat communities that form The Washlands through the centre of Burton upon Trent.



Floodplain Meadows at Wychnor (*Staffordshire Wildlife Trust*)

Of the fifty-six habitats listed as priority habitat types in England, known as Habitats of Principal Importance, under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006, at least twelve are known to occur within our landscape.

These are **Coastal and Floodplain Grazing Marsh, Lowland Mixed Deciduous Woodland, Wet Woodland, Lowland Dry Acid Grassland, Lowland Fens, Ponds, Lowland Meadows, Reedbeds, Arable Field Margins, Hedgerows, Traditional Orchards and Rivers.**



Map 11 illustrates the coverage of semi-natural habitats currently mapped within our landscape. Habitats have been classified as follows: very high value habitats are found within SAC and SSSI sites and are deemed to be of international, national, or regional importance; high distinctiveness habitats are found within local wildlife sites; medium distinctiveness habitats are covered by section 41 of the NERC Act but fall outside local wildlife site designation. Low distinctiveness habitats include arable land and improved or amenity grassland and negligible distinctiveness includes buildings and infrastructure such as roads.

River channel

Rivers are the lifeblood of the valleys' wildlife. River corridors – and their linked floodplain habitats – provide a wealth of opportunities for a dazzling array of species.

Unfortunately, the majority of our main rivers have been historically engineered

into deeper and straighter channels to reduce the frequency of flooding to nearby farmland and settlements. In this way our rivers have been disconnected from their floodplains, and the habitats along the river corridor and wider valley have been impoverished or destroyed completely.

A recent change in the philosophy of flood risk management has meant that we are now in the position to restore natural function to important areas of our floodplains, rivers and catchments. This, in turn, is acting as a catalyst for practitioners to help 'rebuild' biodiversity at a landscape-scale. This is obviously great news for habitats and species, but there are also wider benefits for society. These benefits include a more attractive landscape, increased economic activity in terms of leisure pursuits and visits to the area, natural flood defence, increased water quality, replenishing of groundwater storage areas, soil protection and resilience to changes influenced by a changing climate.



The River Trent at Branston, a modified and monotonous stretch of bank (*Nick Mott*)

Wetland habitat

Wetlands are specific habitats which form where land is permanently or seasonally waterlogged, creating distinct ecosystems. Wetland habitats form in a variety of ways: along topographical depressions where water collects; along river and stream floodplains; in areas where there are springs and seepages; and in locations where drainage is impeded due to the geology. Wetland habitats are an important feature of our landscape and the majority of significant wetland habitats are associated with the floodplains of the Rivers Trent and Dove, the river network itself, and ponds, which are an important resource within the farmed environment outside of the floodplain. Wetland habitats can provide an important ecological resource for a wide range of associated species. Most wetland habitats are Habitats of Principal

Importance (HPIs) and are a priority for conservation in the UK.

The most widespread priority habitat within the landscape is Coastal and Floodplain Grazing Marsh, however there are also small areas of Lowland Meadow, Reedbed, Ponds and Wet Woodland.

Many wetlands, like the ones within our landscape, are within low lying, accessible and fertile land, which can be highly productive for agriculture. Because of this many of our wetlands have been drained to improve access for machinery and increase the season of productivity. This has resulted in widespread drying-out of wetland habitats and elevated nutrient levels associated with artificial fertiliser inputs, which has altered the ecosystem structure and reduced the biodiversity of many of our wetlands.

The river networks are also heavily engineered to speed up water flows in order to reduce localised flooding and stop bank erosion. River channels have historically been reinforced, deepened and straightened along large sections of the water course which limits the natural functioning of the river. Ponds have also disappeared from our landscape with many being filled in to increase productive

land cover and accessibility within field parcels. As a result, our wetlands no longer effectively perform the natural services that they would normally provide were they in a more natural state; services such as managing flood risk in residential areas, water quality management, providing a natural nutrient resource, storage of drinking water and carbon sequestration as well as providing a haven for wildlife.



Created backwater off lake at Elford south (Nick Mott)

Lakes and ponds

Our landscape is host to large numbers of both lakes and ponds. The vast majority of the lakes are man-made and the result of the extensive mineral quarrying in the locality. With a succession of lakes of varying size and ages of establishment, the sheer number is a huge contributing factor to the area's rich avian fauna.

Quarry restoration methods over the last two decades have moved on considerably; recent restoration has

focused on creating a functioning ecosystem rather than a large body of water attempting to link to watercourses.

As a contrast to the lakes, ponds throughout the project area have a range of differing origins. Some, like the network of ponds sited on Pulverised Fuel Ash (PFA) at Branston are man-made in recent times and now support a diverse species assemblage, while others have formed from the shallows and depressions left by marl extraction on farms. One of the major



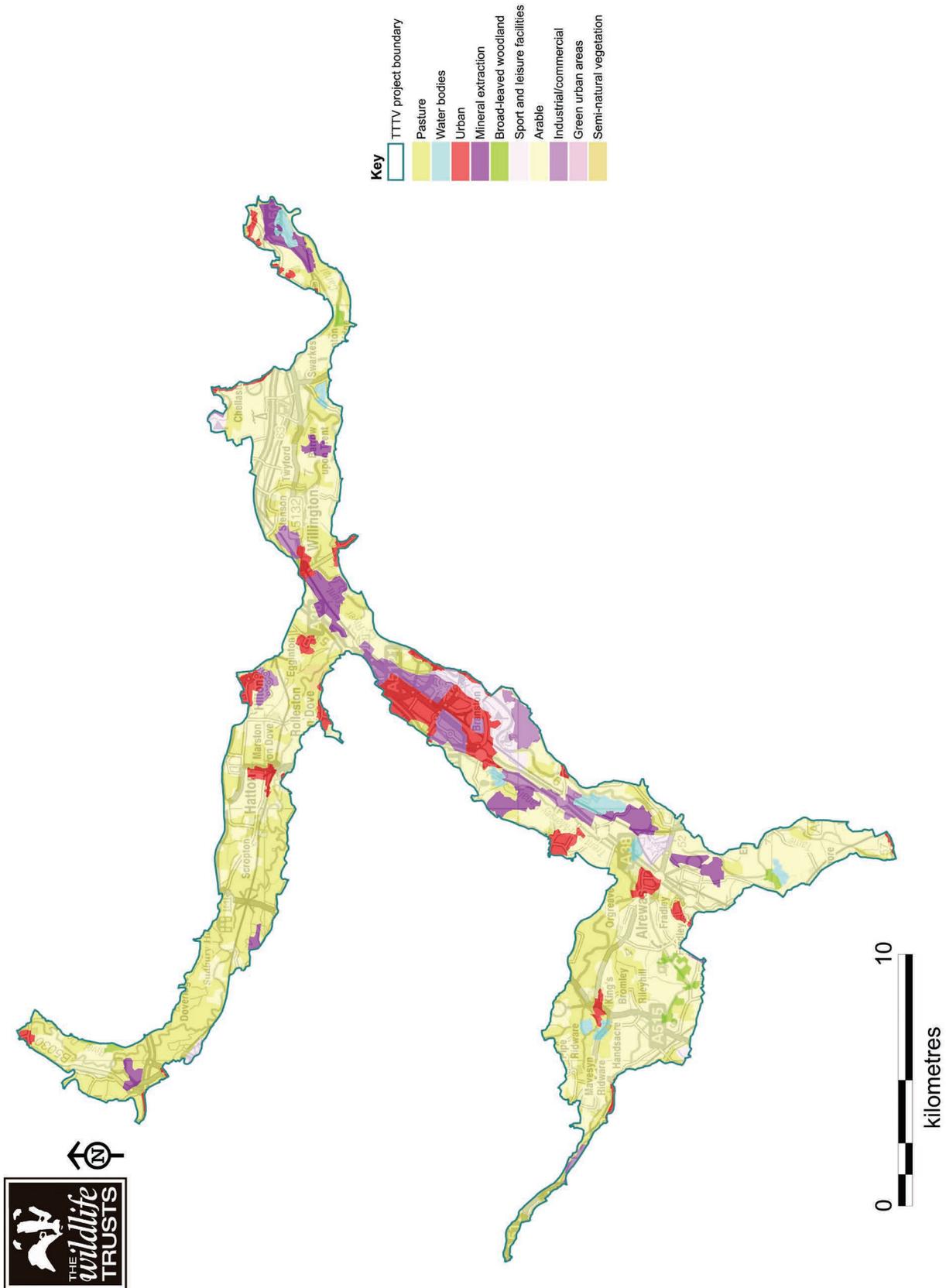
Pond at Barton Quarry (*Nick Mott*)

contributing factors to the decline in the condition of ponds has been the lack of appropriate management. Issues such as sediment build-up, leading to a decreasing quantity and quality of water, dense tree cover, leading to increasing shade and leaf litter collection adding to sediment content, starve the pond of both oxygen and light. Limited and very occasional management can prevent these issues gaining a substantial foothold.

Connected farmland

The largest portion of land use within our landscape is agricultural land, which makes up roughly 75% of the project area (see Map 12). The predominant farming type is arable (approx. 45% coverage) with pasture mainly restricted to the floodplain and the north-west of the project area (approx. 30% coverage). Much of the farmland is intensively managed, however, there are areas of agricultural land supporting less intensively managed semi-natural habitats. These have been identified around Wychnor, Rolleston-on-Dove and within the Burton Washlands, and are designated as Local Wildlife Sites.

Map 12. Land use allocations across the landscape



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The high proportion of intensively managed farmland has limited the amount of remaining semi-natural habitat, which is an important ecological resource. Intensive farming produces non-natural monocultures in large field units with high nutrient and pesticide inputs that are significantly altered from the natural environment and support relatively poor biodiversity. The fragmentation of our semi-natural habitats means that these areas become isolated “islands” of biodiversity, which are limited in their capacity to increase and disperse wildlife populations and are threatened through further encroachment, mismanagement and external influences such as pollution inputs, nutrient enrichment and climate change.

Connected farmland is the idea of developing semi-natural connections within the farmed environment to improve the free movement of species, buffer areas of existing biodiversity interest, and improve the accessibility to a food resource for wildlife. At the basic level it includes improving and increasing linear habitat infrastructure such as adding in hedgerows, buffer strips and ditches as well as retaining in-field trees, taking field corners out of management, buffering water courses and undertaking strategic tree planting.

Further improvements can be made by actively restoring and creating Habitats of Principal Importance (HPIs) which support a much wider range of species. Taking these measures to strategically connect remaining semi-natural habitat within the farmed environment will improve the resilience of many species to further losses and start to promote recovery.

Supporting the natural environment will be mutually beneficial to the land managers who benefit from the ecosystem services provided naturally

such as pollinators, biological pest control, maintenance of soil structure and fertility, nutrient cycling and hydrological services. This vision of a more connected agricultural landscape is multi-functional and looks at working to meet the needs and demands of all users of the agricultural environment in a coordinated, strategic approach looking at the landscape as a whole.

The current agricultural setup favours intensive agricultural production. There is high demand for a wide variety of produce at cheap prices, which is heavily subsidised through the Basic Payment Scheme funded through the EU. The existing system was introduced in 1962 as the Common Agricultural Policy (CAP) system of subsidies. Historically the CAP promoted a large expansion in agricultural production encouraging heavy use of fertilisers and pesticides to increase productivity which had a significant detrimental impact on the natural environment.

The CAP was revised in 2004 and now imposes environmental standards to limit the damage to the natural environment, reducing subsidies as a penalty if standards are breached. The reformed CAP, whilst advocating environmental protection measures, does not alone mitigate for previous losses, and further financial support is offered in the form of agri-environment schemes designed to implement the recovery of the natural environment. The funding for these schemes is limited and there is an application process for admission. Only around 5% of the project area is currently managed under a live stewardship scheme. As the majority land use across our landscape is agricultural, looking at how we can support and work alongside landowners and land managers to contribute to restoring key habitats and species populations is an important target.

Farmland for birds

Farmland birds are defined as species which feed on open farmland during the breeding season even though they may nest in habitats such as woods and hedges. Our landscape is particularly important for a number of farmland bird species as it contains a range habitats capable of supporting a diverse suite of species, the large swathes of arable land in the Trent and Dove valleys provide opportunity for breeding Grey Partridge and feeding opportunity for numerous other species. The large areas of seasonally inundated permanent grassland and pastures throughout the project area support breeding populations of Lapwing, Skylark and Yellow Wagtail, whilst the associated hedgerow field boundaries and scrub support populations of Goldfinch, Greenfinch, Yellowhammer, Linnet, Whitethroat, Kestrel and Tree Sparrow, species which have declined dramatically in both number and distribution in the recent past. Reedbeds and other associated riparian habitats throughout the landscape provide opportunity for multiple species such as Reed Bunting and roosting sites for Starling.

The large wetland complexes of scrapes, lakes, pools, reedbeds and wet grassland

present throughout our landscape as a result of both ongoing and previous mineral extraction as well as seasonally high water levels are an important resource for overwintering waders and wildfowl providing suitable shelter and acting as a vital feeding ground.

Farmland birds can be used as generalist indicator species of the farmed environment because they sit toward the top of the food chain. The British Trust for Ornithology (BTO) have been monitoring the population of common birds nationally since 1967 via the Common Bird Census. In 1993 the BTO categorised birds based on their dependant habitat; from this, 28 species were identified as farmland birds (those which feed in open farmland in the summer), 19 of which were considered to be suitable for monitoring.

Analysis carried out in 2007 found that the population of farmland birds have suffered dramatic declines in the past five decades, with only a handful of species showing positive trends in terms of their population size. Of all the 19 species analysed, it was found that there was an average 48% decline in population between the years 1970 and 2007; the largest declines were observed during the 1970s and 1980s



Farmland adjacent to the water course (Nick Mott)

with a gradual slowing of the decline in more recent years. Tree Sparrow was the most severely declining species with a population decline of 94% between the years 1970 and 2007 (RSPB, 2018).

The practices of farmers and land managers are vital in providing habitat for farmland birds through the sympathetic management of land to both stay productive and support breeding bird populations. Countryside Stewardship Schemes (CSS) will go some way to provide a financial incentive to manage land sensitively. In arable areas, techniques such as rotational set-aside, fenced margins and buffer strips, and conservation headlands provide a range of different options at different scales to fit in line with any current management regime.

The sowing of wild bird seed cover crops, diversification of crop types, establishment of beetle banks, refraining from the use of pesticides until later in the growing season, and abstaining from using broad spectrum pesticides until pest burden is exceeding economic thresholds will help to provide important food sources for a wide variety of farmland birds during the breeding

season when plentiful sources of food are most required. Spraying and cultivating stubbles as late as possible will also provide important winter feeding habitat.

Grassland management for the benefit of breeding farmland birds may consist of altering grazing regimes. A lower stocking density in spring will allow for ground nesting birds and avoid any unwanted nest trampling; a heavier stocking density at the end of the growing season will result in patches of tussocky and tightly grazed grassland to provide for ground nesting birds the following year. The blocking of land drains to impede drainage from fields will create water-logging and seasonally wet areas that will benefit invertebrate loads in the spring and provide food for chicks. Delaying silage cutting or considering moving to a more traditional hay meadow management will be of benefit to multiple bird species.

In terms of provision of associated breeding habitats, the reinstating of old hedgerows or creation of new hedgerows and sympathetic management of these outside of the bird breeding season will provide more opportunity for farmland bird species to colonise.



Farmland near Whitmore Haye where there are records for Grey Partridge (*Nick Mott*)

Green Infrastructure in Urban Areas

The importance of green infrastructure cannot be overstated. Access to parks, gardens and green corridors is vital to the health and wellbeing of a community in a liveable environment. In urban areas green infrastructure helps with clean air, water management and bringing wildlife into towns and cities. At a small scale green infrastructure techniques can include elements such as green roofs, Sustainable Drainage Systems (SuDS) and green networks including cycle ways.

The process of rapid intense urbanisation over the latter half of the Twentieth Century took a huge toll on the extent and availability of green space in the urban environment. Our scheme, working with partners, will aim to take sites such as The Washlands in Burton-upon-Trent and establish their full potential as multi-functional urban green space by utilising the current infrastructure and nature conservation potential while providing flood resilience.



Burton Washlands (Nick Mott)

Provision of Ecosystem Services and Natural Capital

Our natural assets such as water, soil, air, biodiversity and geology form the natural capital needed to provide many ecosystem services that we rely on. We depend on this natural capital to provide resources such as raw materials like food and water as well as providing services such as pollution regulation, flood water storage, climate regulation, pollination, education, recreation activities as well as health and well-being.

Degradation of these natural assets can lead to an under supply of ecosystem services (Hölzinger and Everard, 2014), due to high quality habitats having a higher natural capital than degraded and altered habitat types.

Our scheme will aim to calculate the monetary value of the habitat creation and restoration work undertaken. In addition to the habitat related work there will be other ecosystem services benefits in terms of water quality improvement, soil protection and flood alleviation.



Canoes on the River Trent (Nick Mott)

2.3.6 Current Management

Management across the landscape is often intensive, as in the case of farming and quarrying, and attempts to reconcile the needs of industry and wildlife can meet with conflict and concern. Some areas of land benefit from European, national or local designations, whilst historical structures and sites may have listed or protected status; but designations are not always strictly adhered to. There are large areas of our landscape that have no formal protection and it is through working with landowners and land managers that we can protect and restore some of the most valued parts of our landscape and start to reconnect important places for wildlife.

The Trent Valley is a landscape unified by its river network, with the rivers Trent, Dove and Tame at its heart. Much of the land is farmed intensively for both arable and pasture, with the latter often being the predominant management in the floodplain. Large farming enterprises such as Mercer Farming Ltd. operate in

the area. A further key industry in the area is quarrying, with sand and gravel extraction occurring across a number of active quarries, particularly along the River Trent south of Burton-upon-Trent. In the centre of the town, the Burton Washlands are mainly managed by East Staffordshire Borough Council for a mixture of amenity and pasture grassland. To the north of this area, Severn Trent Water manages pasture around the pumping station.

The Trent Valley floodplain and river network is influenced heavily by this human activity, with historical engineering changing the shape and structure of the river, which affects its functionality. The floodplain is impacted by intensive farming and quarrying which affects the natural processes that occur in the floodplain. The altered landscape is limited in its capacity to provide a rich and diverse haven for wildlife as well as limiting its economic provision such as flood alleviation and clean water supply.

Mixed landownership means that sites of historical interest - palaeontological or archaeological sites, scheduled monuments and listed buildings – fall under various ownership and therefore various management and care. The same is true for rights of way. Access across private land varies in its quality and upkeep as not all landowners keep their obligation to maintain rights of way as open, and local authorities are stretched in their resources to pursue failures in meeting these obligations. It is often the case that the well-used routes are naturally open, whilst the lesser-used routes become overgrown, furniture (gates, stiles, bridges etc.) falls into disrepair, and the routes often becomes lost on the ground.

Management of the natural environment

Our landscape is subject to a number of different designations that help to protect it, but also dictate how it should be managed. The River Mease Special Area of Conservation (SAC), east of Alrewas, is designated as a site of international significance. It is also one of two Sites of Special Scientific Interest (SSSI), the second being the Old River Dove, Marston-on-Dove SSSI, south of Rolleston-on-Dove, which is monitored by Natural England and must be maintained in favourable ecological status.

There are forty Local Wildlife Sites and 26 Biodiversity Alert Sites throughout the project area in Staffordshire with fewer local designations of this type (four) within Derbyshire (LUC 2018). Local Wildlife Sites do not have legal protection, however the local planning authority is notified of all sites and it is their policy, where possible, to protect these sites from damaging development. There is no obligation on the landowner to manage a Local Wildlife Site, but this is encouraged.

For the various quarry companies there will be an agreed minerals restoration plan for biodiversity gain following completed extraction, which is undertaken and monitored under the guidance of the County Council. There is the opportunity to

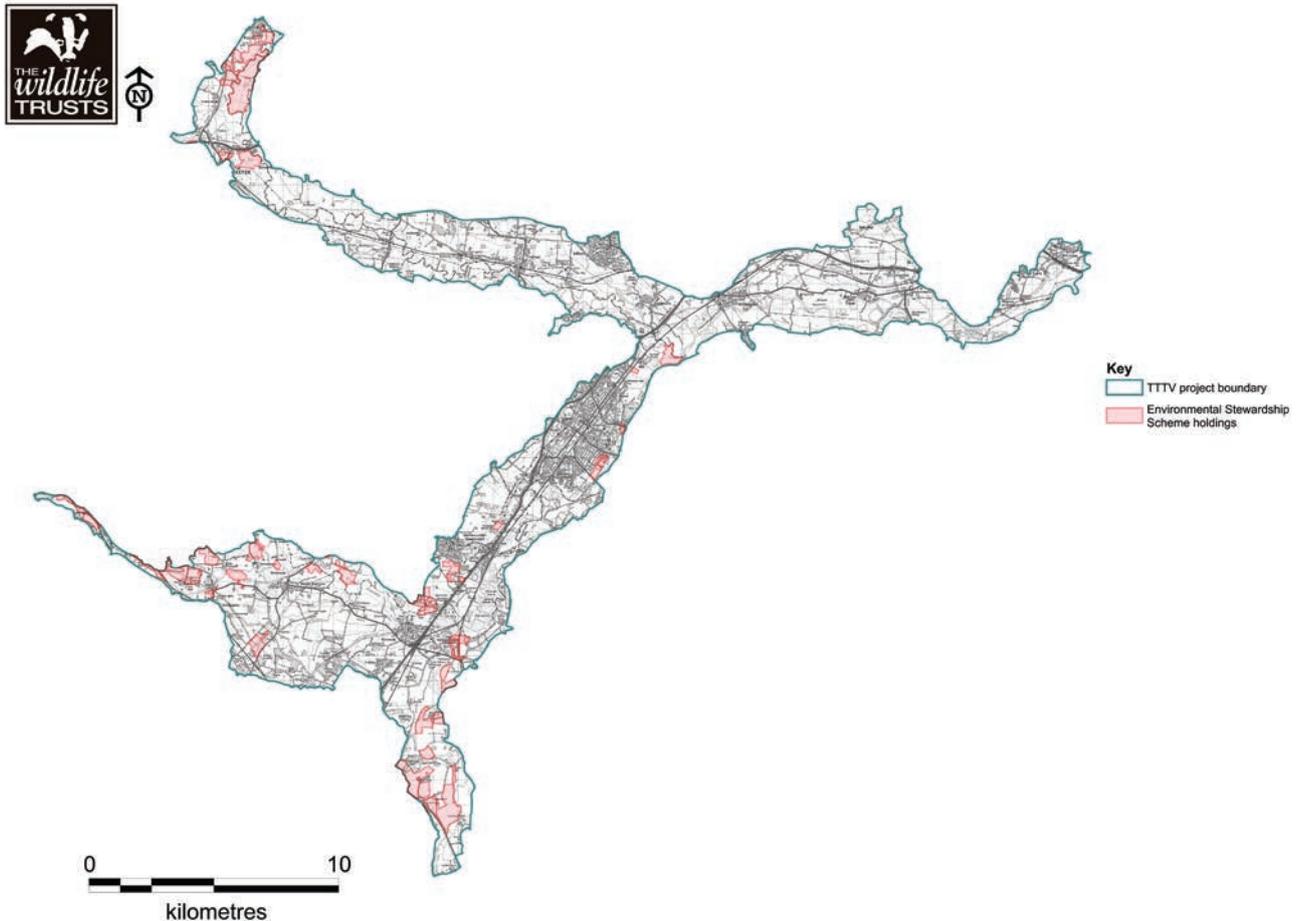


Tucklesholme Restoration Plan Nov 13

feed into the development of the minerals restoration plans and quarry companies do consider the landscape character and the biodiversity requirements of the location when restoring a site for wildlife conservation. The Tucklesholme restoration is a demonstration of this.

The proportion of land within schemes such as Environmental Stewardship, Countryside Stewardship and the Woodland Grant Scheme can act as proxy for land that is currently in active favourable management.

Within our landscape the most recent Environmental Stewardship data available (2016) shows there are 21 live schemes within the Staffordshire section. This represents coverage of just 5.7% of the area (1,133 hectares out of the 19,950-hectare landscape) and demonstrates the huge opportunities to reconnect our landscape. Map 13 shows the distribution of landholdings currently in Environmental Stewardship.



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The area itself is not identified as a priority area by Natural England for Higher-tier agreements. Mid-tier agreements, whilst available, comes with no support or guidance from Natural England. This highlights an obvious need that will be fulfilled by our scheme.

Through the Living Floodplains project, the Living Floodplains Officer will be able to work directly with landowners offering advice and support in accessing environmental stewardship grants. The officer will also be able to provide practical advice on managing farmland sustainably for wildlife and the environment, and will

be well placed to encourage and enable networks of landowners to work together, creating a coordinated approach to sustainable land management.

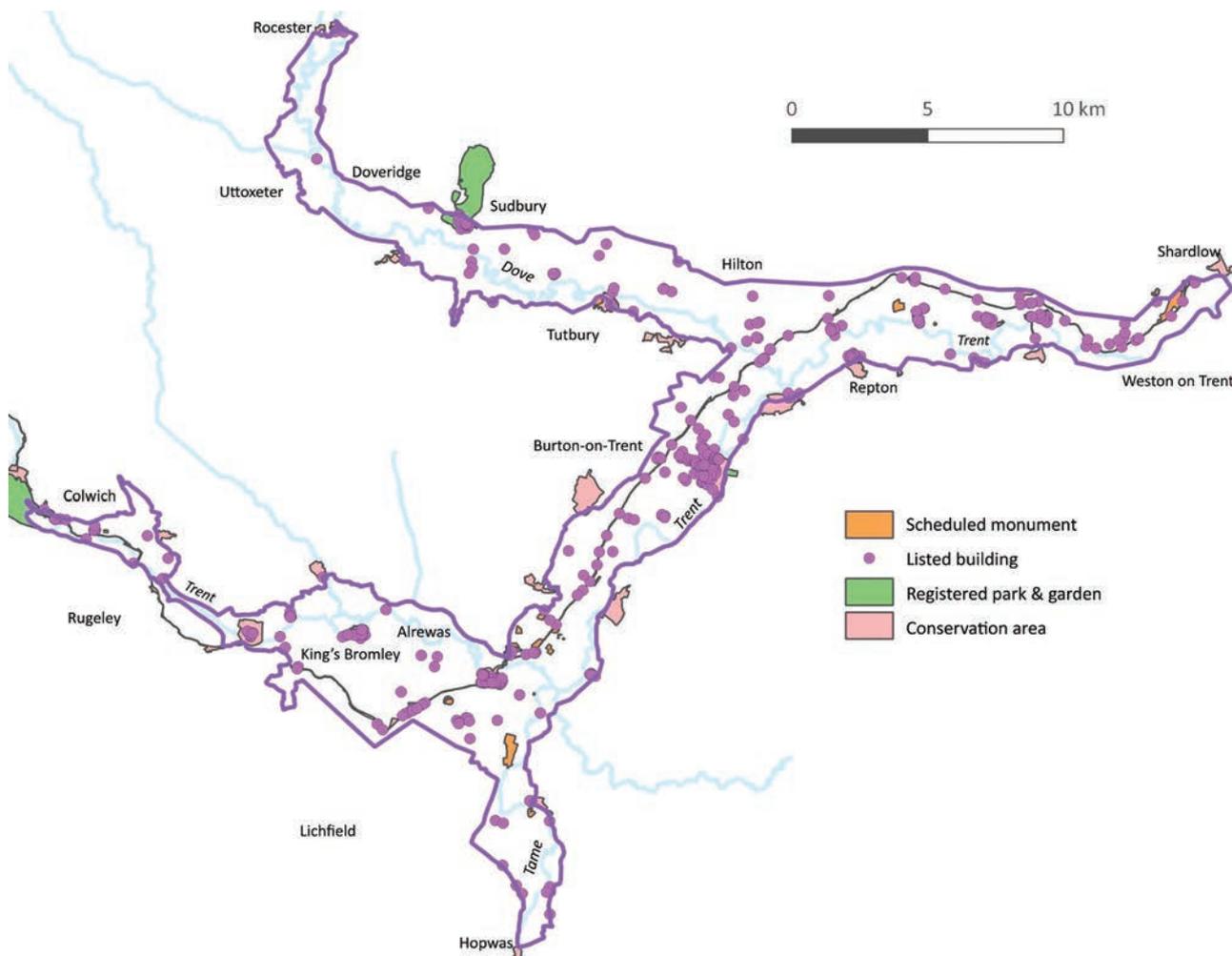
The Community Grants Scheme will open opportunity to access small grants that will benefit a large number of projects across the landscape. This small grant scheme that we will administer can be used to encourage communities and local landowners such as Parish Councils and schools to consider land use in their community and how it can be better managed for the benefit of nature or heritage conservation and protection.

Management of the cultural and historic environment

There are hundreds of known sites across the landscape of historical interest ranging from the early prehistoric through to the modern day. These are noted in broadclass types, including agriculture and subsistence (ridge and furrow, field boundary etc.), domestic (settlement,

moated sites, country house etc.) and industrial (mill, brewery, kiln etc.). These sites are categorised by condition and vulnerability and a list of priority sites has been identified. Historic England maintains a register of Heritage at Risk. Map 14 shows the distribution of designated cultural heritage sites.

Map 14. Study area map showing designated cultural heritage sites (ArchHeritage, 2017)



There are 19 sites listed within our landscape as currently at risk. Twelve of these are scheduled monuments, six are grade II listed buildings, two are grade I listed buildings and one is a registered park (some sites have multiple listings). These range in condition from deteriorating to very poor, however eight are unknown.

The risk to heritage assets is primarily related to human activity or inactivity.

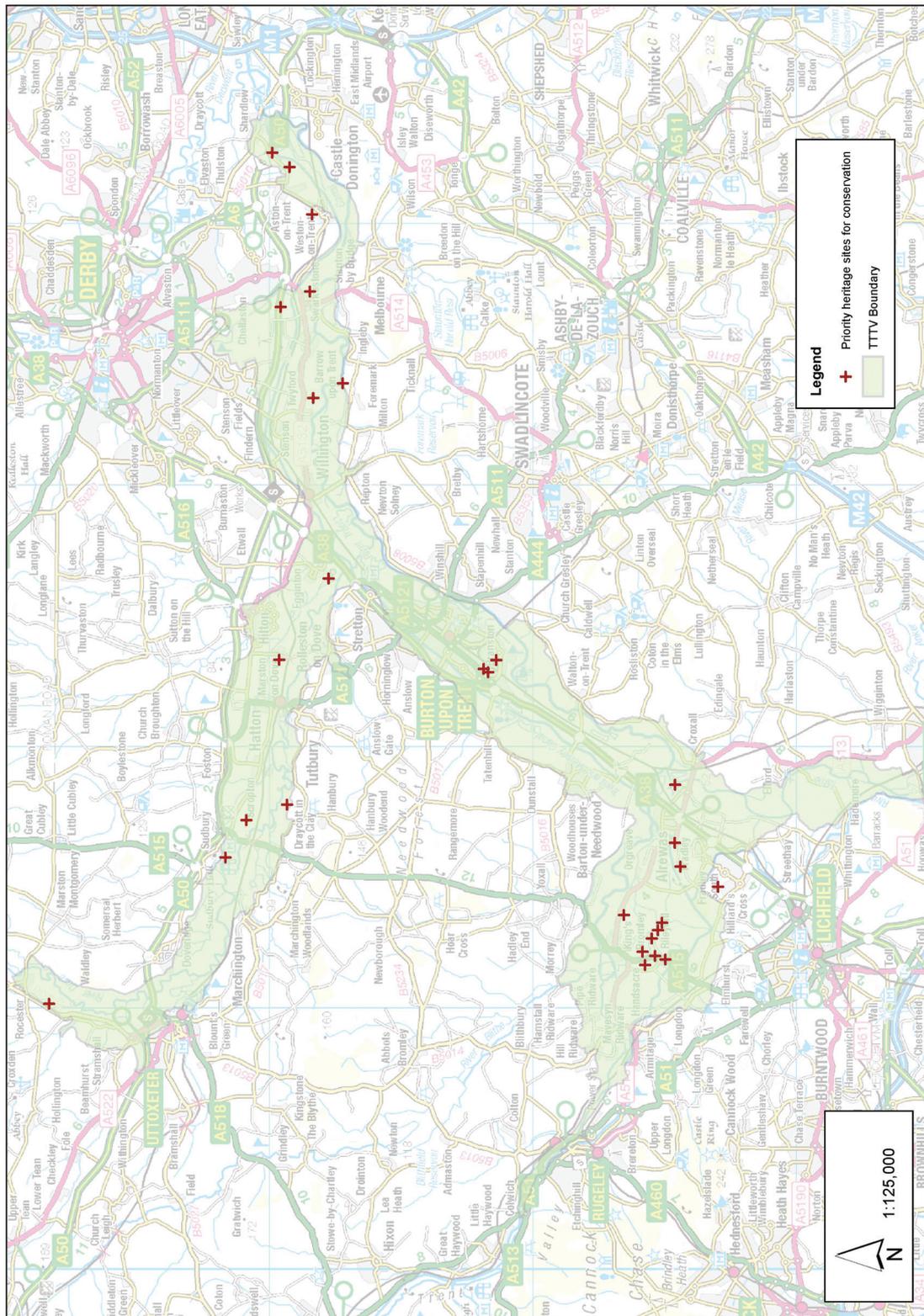
The most common risks to heritage assets within the study area comprise agricultural activity, mineral extraction, settlement expansion and urban development, and neglect of heritage assets (ArchHeritage, 2017).

The Heritage at Risk projects will work with landowners to identify management techniques that can be used to bring heritage assets into a more favourable condition. There is opportunity for

the Living Floodplains and Heritage at Risk projects to work together with landowners to protect both the natural and cultural heritage. An important threat to archaeology is from ploughing as modern techniques cut deeply into the top soil and the subsoil deposits below. Earthwork assets can be destroyed by

levelling and also tree roots, for example, and so it is important to strike a balance between economic need, cultural need and environmental need. Map 15 shows the distribution of heritage assets that have been identified in the landscape as a priority for conservation.

Map 15. Distribution of priority heritage sites for conservation



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The Community Grants Scheme will enable small grants to be accessed that can be used to protect and preserve some of the key heritage features of the landscape. These will be identified in partnership with local communities, but could be used to utilise small structures like pill boxes through reversible conversion into other uses, such as 'pop-up' museums or exhibitions. Archaeological features could be identified and interpreted to encourage communities to understand and respect these assets; similarly, new paths, or access points could be created to either improve accessibility to historical features, or to discourage people from trampling and eroding sensitive sites.

Current Training provision

There is a clearly a wealth of knowledge and understanding regarding the cultural and natural heritage of our landscape that is held within communities, but opportunities to access this knowledge are limited. Organisations such as Support Staffordshire encourage volunteering within the landscape, however opportunities for volunteers to become engaged in natural or cultural heritage projects are limited. Burton Conservation Volunteers are a group seeking to improve the environment, promote wildlife conservation and encourage community awareness and are affiliated with the national charity TCV (formerly BTCV). The group undertakes practical tasks throughout the year across a wide extent of the landscape, supporting projects in community gardens, special needs schools and public open space. Opportunities to engage in training and learn practical conservation skills are still limited.

There are a number of active local history groups across the landscape, such as the Rolleston Civic Trust, who have an interest in the preservation and conservation of local history, and a number of local

historians who hold archives covering the history of the area. These people represent local, passionate individuals with an interest in local history and heritage, but opportunities to engage a wider audience of volunteers in gaining the necessary skills in heritage surveying and conservation are limited.

There are a number of proactive walking groups in the landscape, particularly the Ramblers Association, and a number of the local Ramblers Groups have engaged in our scheme to assist in surveying rights of way. Funding cuts to local authorities will mean that certain rights of way will suffer from reduced maintenance and it will fall to local communities to maintain routes they consider significant.

We have identified a need to offer training and skills placements to young people coming into the workforce, and the training of local volunteers who will be empowered to continue a legacy of natural and cultural heritage surveying and conservation into the future.

Stakeholder interest and potential concerns

Loss of income is a primary concern for landowners looking to take their land out of intensive farming management. This can be addressed through a variety of incentives including Countryside Stewardship, Environmental Stewardship and other grants. The Living Floodplains project can also provide access to biodiversity offsetting and other capital funds if agreements are put in place to alter the way land is managed.

Grants for managing historical assets are available through Historic England and our cultural heritage projects will enable landowners to protect their assets by providing advice and practical support, for example undertake reversible conversions of pillboxes.

2.3.7 Key sites in the Landscape

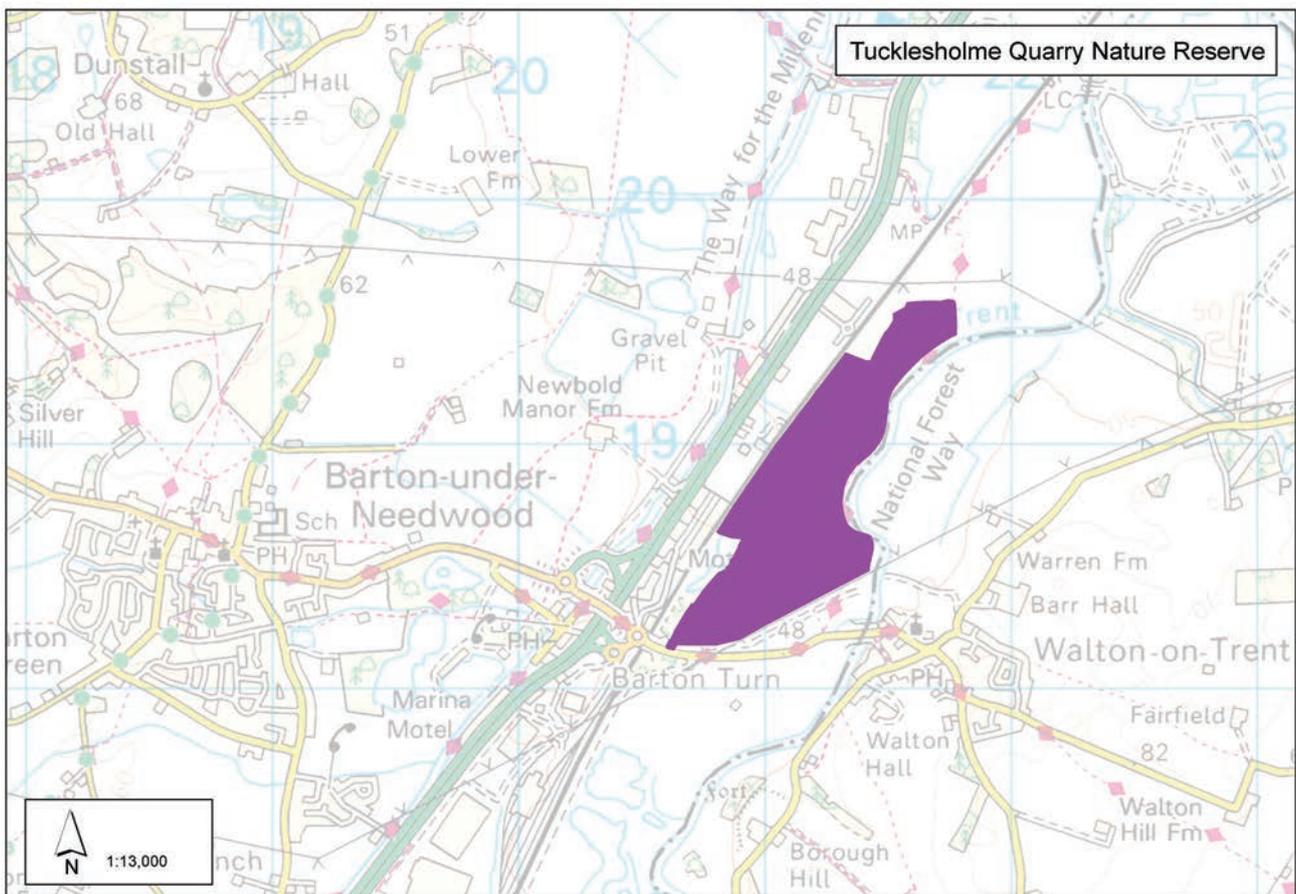
Our landscape offers a wealth of opportunity through its variety of land uses. It is a mosaic of urban, meadow, farmland and water which is under mixed and diverse ownership and as such has varied management. Our Landscape Partnership is working across an assortment of sites and locations to deliver on a series of short-term aspirations to improve natural habitat, access and historic features. These projects enable us to have influence and positive impact in the short-term and provide a crucial starting point for long-term aspirations that will enable us to realise our vision for this landscape. We recognise a number of sites across our landscape that are important due to the diverse range of opportunities they represent.



Wychnor Washland looking towards Alrewas and Lichfield (Nick Mott)

Tucklesholme Quarry Nature Reserve

Map 16 Location map of Tucklesholme Quarry Nature Reserve



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Tucklesholme, just outside Burton, was a vast agricultural monoculture that will soon be transformed into the county's biggest reed bed, with aspirations to attract species that have not bred in the area for almost 100 years. Partnership working by the quarry company, developers, economists, public sector and the wildlife trust has led to a unique situation where the working quarry is actually owned by Staffordshire Wildlife Trust. Rather than simply extracting as much gravel as possible and leaving a big hole to be filled with water, the restoration approach is based on purposefully removing material in a way that will leave features that are essential for biodiversity. There is just as much focus on creating a nature reserve as there is on minerals extraction.

When the site opens to the public in spring 2019 it will arguably be the largest purpose built nature reserve in the UK at over 50 hectares. Not only will this be important for wildlife, it will also provide greenspace for one of the fastest growing populations outside London with over 11,000 houses planned in the coming years. The site is already linked to new housing developments by a new 82-acre woodland that has been planted up with over 21,000 trees through a partnership between developers St Modwen, Staffordshire Wildlife Trust and the National Forest Company.

Our partnership will build on this work by uniting the wildlife with the local community through a number of well-considered access and interpretation improvements. Understanding where the most sensitive natural areas lie, we can channel visitor footfall to locations where people can appreciate and engage directly with nature and can enjoy peaceful reflection without a detrimental impact on those habitats and species we most wish to conserve.

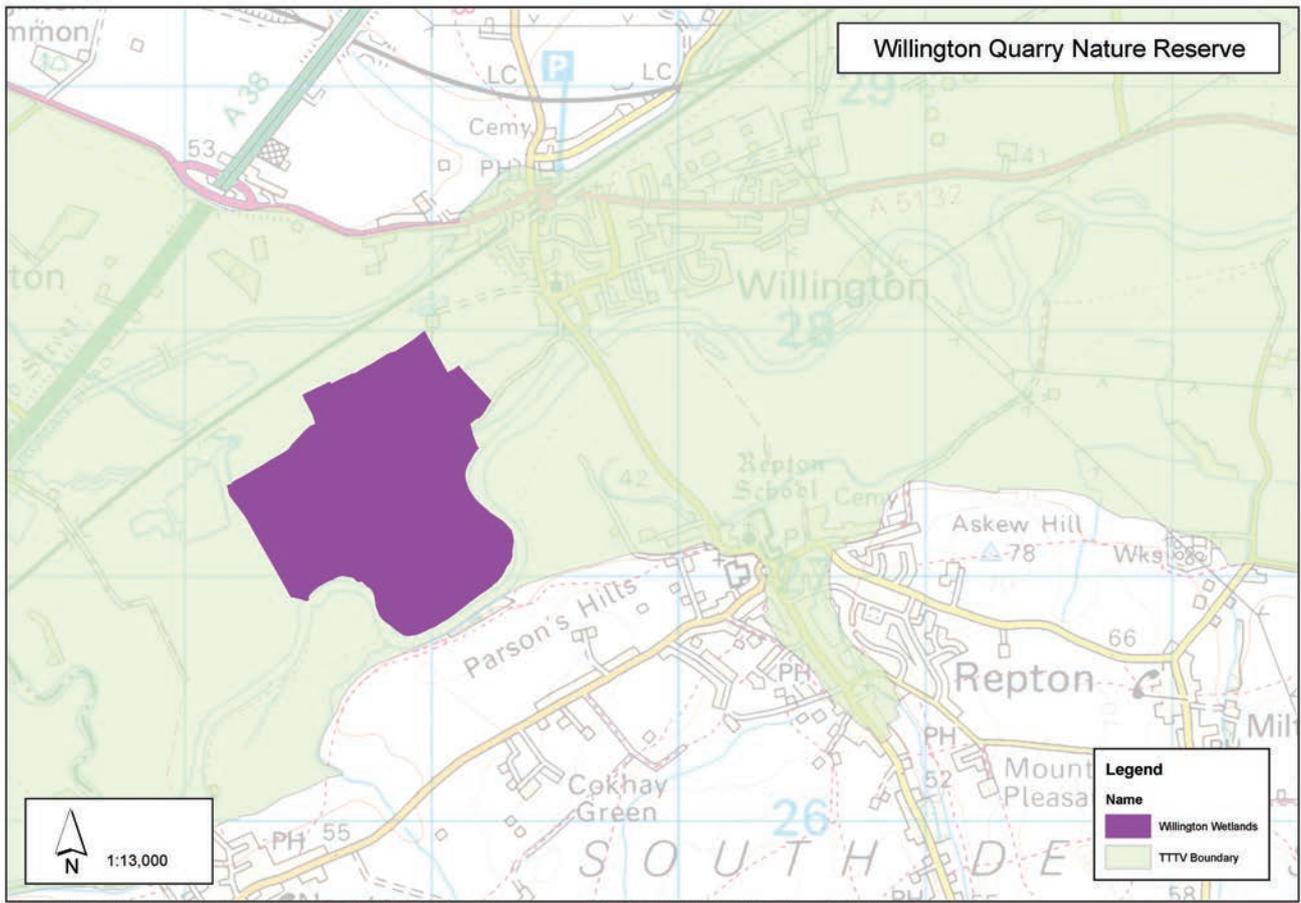
As well as being a site of important natural heritage value, a number of finds of archaeological significance were found during the excavation of the site. Here, a scatter of flints were uncovered demonstrating toolmaking activities on low-lying land between braided river channels. The rarity of this site makes it very significant for studies of the Palaeolithic in the region (ArcHeritage, 2017). Other finds that have emerged on this site thanks to mineral excavation include evidence of Roman temporary settlements for stock rearing, a small-scale kiln from the late 2nd Century, and evidence of Anglo-Saxon pottery (ArcHeritage, 2017). Its proximity to the water course and its prime location in the valley means that Tucklesholme has seen various degrees of settlement since early history.



View across Tucklesholme Quarry Nature Reserve
(Staffordshire Wildlife Trust)

Willington Quarry Nature Reserve

Map 17 Location map of Willington Quarry Nature Reserve.



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View across Willington gravel pits (George Bird)

Willington Quarry Nature Reserve is a former sand and gravel quarry that has been transformed as a haven for wildlife in the Trent Valley. The gravel pits have been flooded to provide important wetland habitat that attracts many rare birds in addition to a variety of more common species.

The site presents an assortment of habitats from open water to reed beds, from sheltered islands to open grassland. The shingle and grass islands provide a refuge for birds and are ideal for breeding waders. There are a number of pools, a silt lagoon and marshland that provide rich feeding for many species.

In early spring, curlew gather on the wet grassland before they head north to their breeding grounds. During spring and autumn up to 20 species of wader pass through with large flocks of wildfowl gathering in the winter including wigeon, teal, pochard and shoveler. In recent winters, bittern has been seen at the reserve. Among the birds that breed at Willington are sand martins, lapwings and common tern. Birds of prey also visit

the reserve including peregrine, kestrel, hobby and sparrowhawk, as well as the very occasional marsh harrier.

Birds are not the only species that benefit from the reserve, the wetland also attracts several species of dragonfly and damselfly as well as otters. The conditions suit water plants such as short-leaved water starwort (Derbyshire Wildlife Trust, 2017).

The site is open to the public but access is currently limited to the lane and the viewing platforms provided. The site is hidden and so known only to local residents as there is no indication of a reserve to passing traffic. The short term aspiration is to provide a balance between nature conservation and visitor access so that people are able to appreciate and learn about nature without having a negative impact on the species that feed, breed and pass through the reserve.

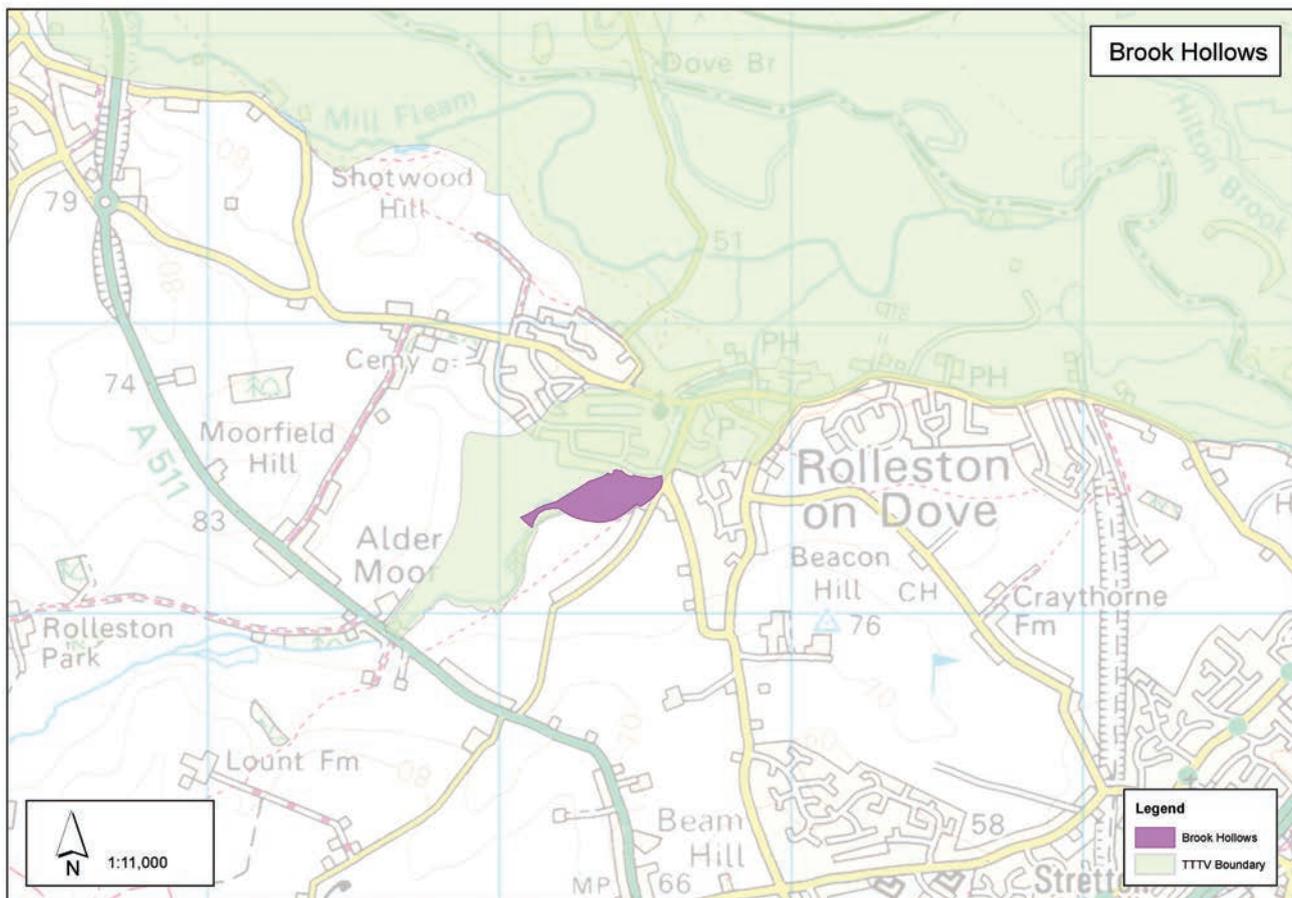
A longer term aspiration is to look into options for rewilding and have large natural spaces that benefit from a hands-off management approach.



Bittern (David Tipling/2020VISION)

Brook Hollows Spinney (Rolleston-on-Dove)

Map 18 Location map of Rolleston Brook Hollows



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Brook Hollows is a site of important cultural heritage at the heart of the village of Rolleston-on-Dove. Once part of a large estate, the site now comprises a formerly ornamental woodland edging a series of lakes with a formal waterfall above a lower pool which flows into the Alderbook, a tributary of the River Dove.

The site is well-loved by the local inhabitants with a passionate and active community group which has championed the maintenance and preservation of the site and which holds a number of historical records, including photographs and the 1920s brochure from when the site was sold in lots at auction. It is now managed as a community asset by East Staffordshire Borough Council.

Brook Hollows represents valuable local green space and a link in the local footpath network that connects the



Views across the lake and the waterfall in Brook Hollows (East Staffordshire Borough Council)

landscape with the valley sides and local settlements, from Tutbury to the Burton suburbs. It has become a magical woodland dell for local people, much used by dog-walkers and anglers (The Landscape Partnership, 2018).

Over recent years the lake has become silted up to the point where something

must be done to prevent losing these assets for the future. Previous excavations of the lakes in the 1970s removed a large volume of silt and created extensive islands but has proven to be insufficient as a long-term solution.

An engineering solution is required to prevent further silting up of the lakes and the short-term aspiration is to dredge part of the lake to reinstate some of the original depth, but to create a by-pass channel to direct the majority of flow, and therefore the silt, to the Alderbrook. Reed bed creation at the inflow of the lakes will filter water and help to reduce sediment accumulation, as well as providing new habitat. The longer term aspiration will be to work with landowners upstream along the Alderbrook and the Dove to address the issue of sediment wash from adjacent fields. This aspiration will take time as relationships need to be built and solutions need to be agreed and the first

steps will be taken through the Living Floodplains project.

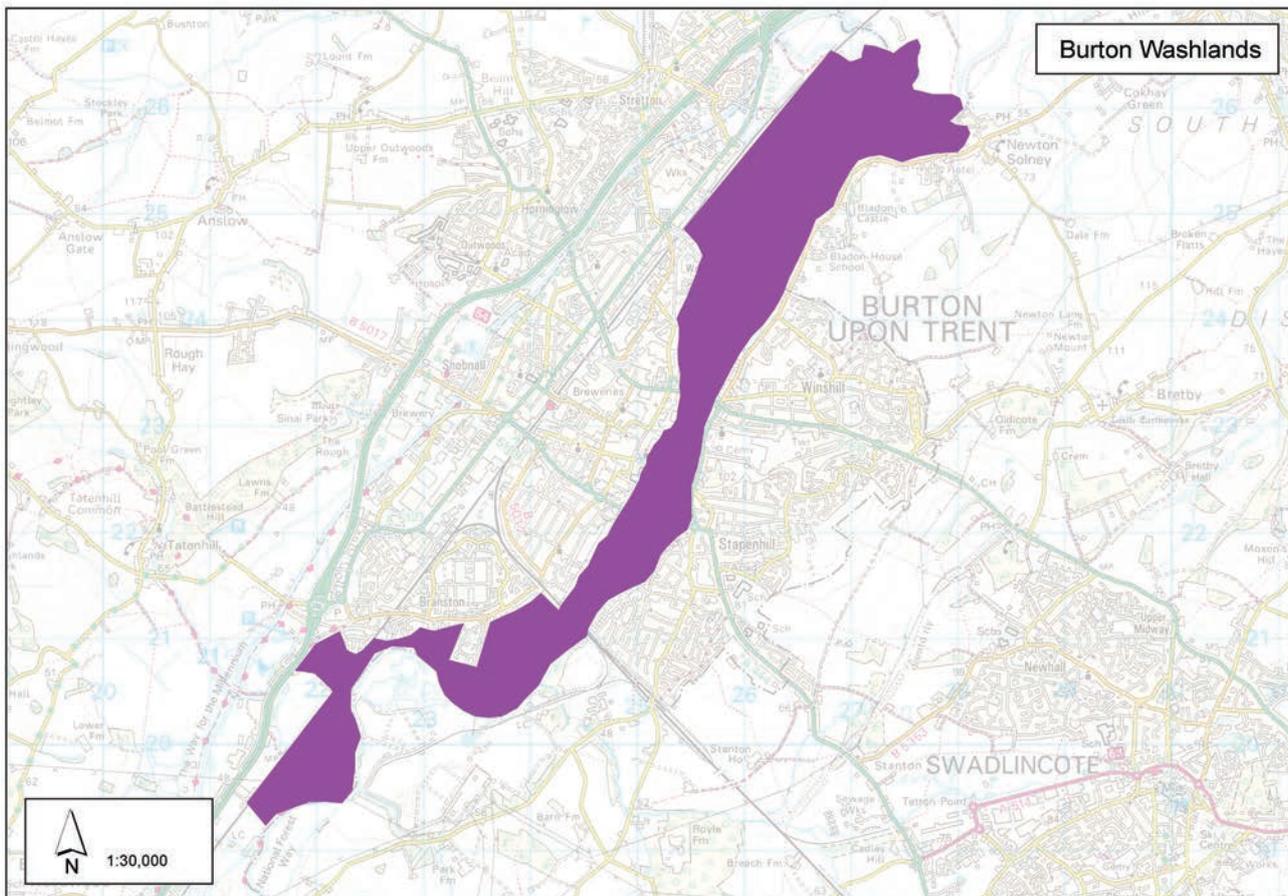
As Brook Hollows is a small, local site it would not easily accommodate significantly increased visiting. Similarly, the ambience would be damaged by increased visitor facilities beyond the benches and walks already present (The Landscape Partnership, 2018). This location is therefore viewed as a local asset and activities and interpretation on the site will cater for a local audience. The water quality improvements will be wider-reaching and will have impact downstream of the village. The project is an excellent example of what can be achieved by a passionate community driven to improve their local asset and preserve their cultural heritage. It is due to the petitioning of this community that the site has been recognised for its need of immediate attention by the local authority. It will be a case study of how change can be brought about by individuals using their voices.



Views across the lake and the waterfall in Brook Hollows
(East Staffordshire Borough Council)

Burton Washlands

Map 19 Location map of the Burton Washlands



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Burton Washlands (Aimee L. Booth)

The Washlands is a large area on the floodplain of the River Trent which separates Burton-upon-Trent from its eastern suburbs of Stapenhill and Winshill. They were a key resource for Burton's Medieval Benedictine Abbey and a significant pilgrimage destination, with a shrine dedicated to the seventh-century St. Modwen. The Washlands are today partially designated as a Local Wildlife Site and are managed in by East Staffordshire Borough Council as a recreational open space, including sports facilities (The Landscape Partnership, 2018).

The Washlands offer significant potential for change to offer better benefits for people and wildlife. The flood defences of Burton are due to be upgraded by the Environment Agency in 2019 and as part of these works the Agency has worked with East Staffordshire Borough Council to develop a visioning plan for the wider Washlands area. Known as the Burton Washlands Landscape Vision, the vision has identified a number of practical solutions that aim to connect people with the river, wildlife, heritage, land and water. The scheme has been developed in partnership with Transforming the Trent Valley and has developed many of the proposals from community feedback provided by our Community Conversations.

Proposals include high-quality entrance gateways to the Washlands, a flagship play area including natural play principals,

a boardwalk to improve accessibility during flooding and allow people to get close to wetland habitats, and new river crossings to connect new communities. Proposals have been developed to link with the aspirations and vision of Transforming the Trent Valley, enabling our partnership to expand on our own anticipated outputs. Examples of how the two schemes will work together include:

Creation of the Trent Valley Way:

provision will be made for the route within the earthworks for the flood defences with the Trent Rivers Trust consulting on the route.

Spaces for wildlife: a number of opportunities have been identified for habitat restoration and the Environment Agency is providing match funding to the Living Floodplains project to deliver a set of agreed schemes based on detailed opportunity mapping.

Heritage information: our scheme has collated a wealth of information about the natural and cultural heritage of the area and the two schemes will coordinate an approach to providing information to visitors.

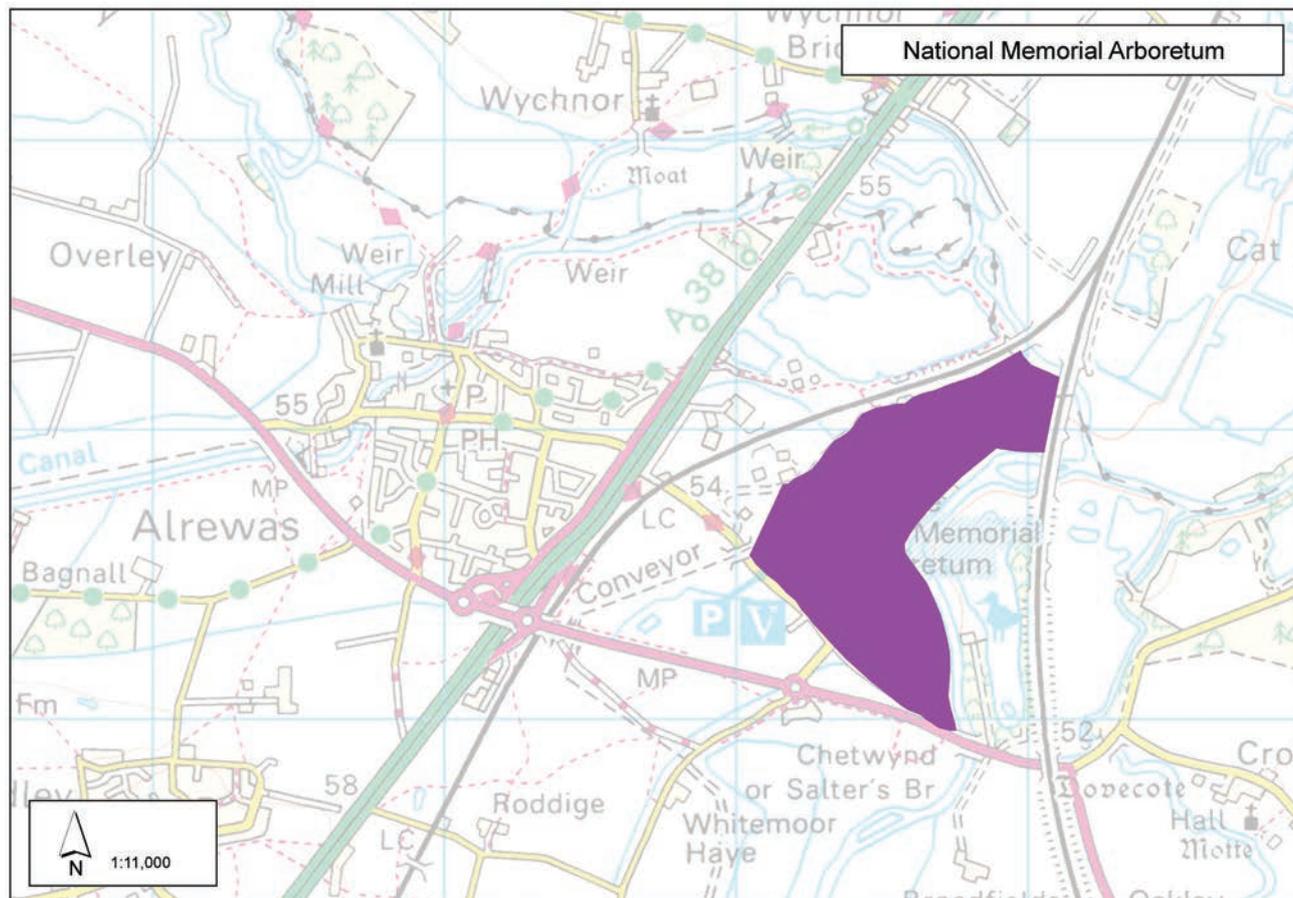
River habitats: together the two schemes will naturalise channel edges, undertake marginal planting, create backwaters and introduce woody material to provide shelter for fish and invertebrates.



View across the Washlands in Burton during high water (Aimee L. Booth)

The National Memorial Arboretum (NMA)

Map 20 Location map of the National Memorial Arboretum



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The NMA is major remembrance installation, opened by the Royal British Legion in 2001, with nearly 300 memorials and 30,000 trees. It is a multinational and multi-faith space attracting visitors from across the country and overseas to a location close to the confluences of the Trent, Tame and Mease that was of ceremonial significance from the Neolithic until the Anglo-Saxon period (Buteux and Chapman, 2009) as attributed by the round barrows found near the River Tame, today designated as a scheduled monument.

Although the scheme is not working directly with the NMA, the memorial is an important visitor destination on our doorstep. There is scope to work with them throughout the scheme and an aspiration to engage with them over the longer term. A number of the projects intersect with the NMA including the

Gateway to the Trent Valley cycleway, the Trent Valley Way and it is close to our plans for waymarked cycle routes and community circular walks. There is scope to link with the NMA through our interpretation plans and incorporating it in with waymarking and signage across the valley.

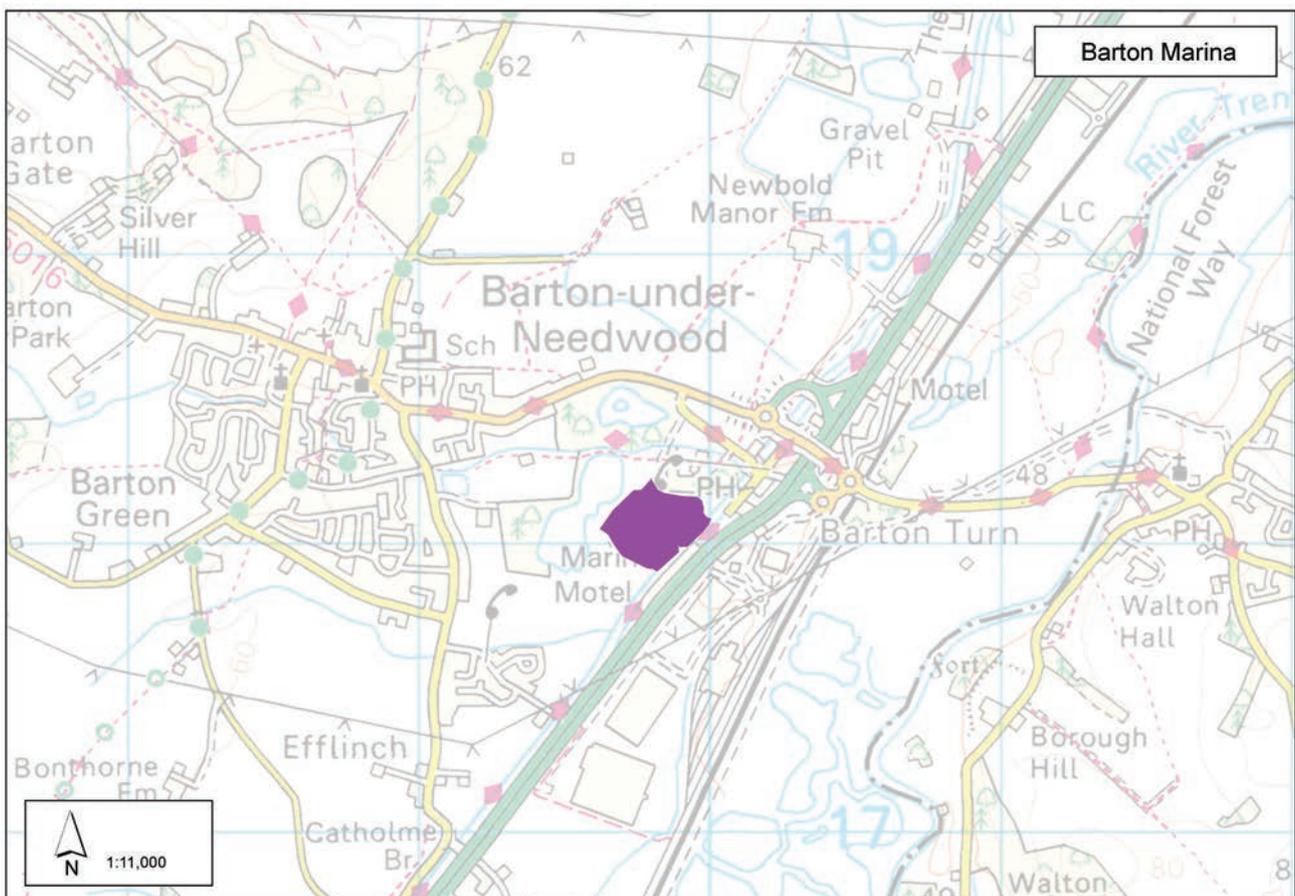
There are future opportunities that may be afforded by proposed developments in the area. Off-road paths on 'green bridges' over the A38 and A513 could link Fradley, Brookhay Garden Village, the National Memorial Arboretum, Brookhay Waterside and Alrewas. This would help to solve what is currently a significant east-west divide created by the A38 (The Landscape Partnership, 2018).



The National Memorial Arboretum memorial (*Nick Mott*)

Barton Marina

Map 21 Location map of Barton Marina



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Barton Marina is a popular marina off the Trent and Mersey Canal. It is surrounded by a cluster of cafes, restaurants, bars and shops, and also has some attractive walks around three small lakes (The Landscape Partnership, 2018). Although the marina is not directly involved in the scheme at present, there are aspirations

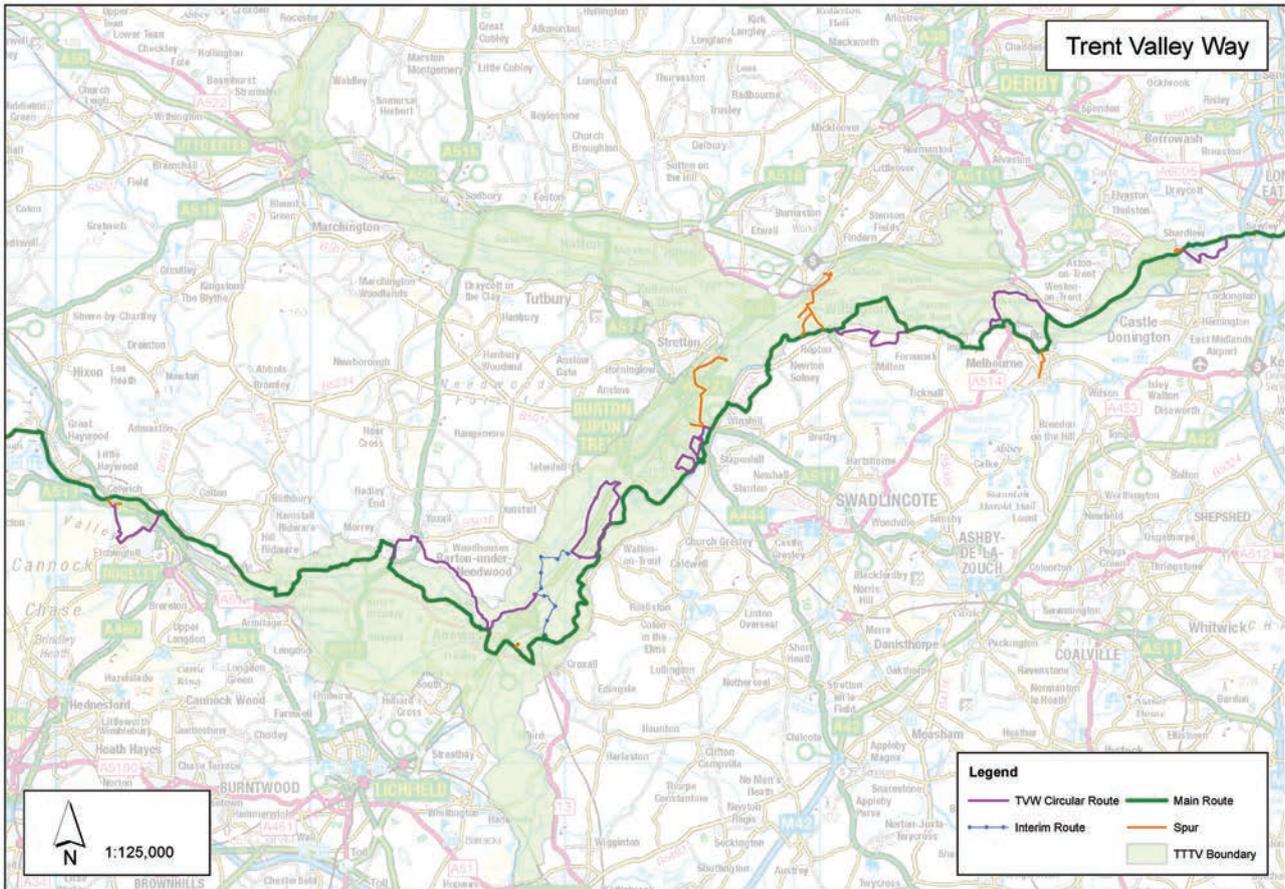
to engage with this visitor destination through the life of the scheme. It will be important to include information about the marina in literature and waymarking and there may be scope in the future to liaise with regards to improving pedestrian access to the marina from the towpath.



Barton Marina (Staffordshire Wildlife Trust)

The Trent Valley Way

Map 22 Trent Valley Way and the associated circular walks and spurs crossing the Trent Valley.



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Walking along the Trent Valley Way where the canal and river meet (Aimee L. Booth)

The Trent Valley Way (TVW) is a developing long-distance footpath, already established on the ground in its eastern section, from Long Eaton to the Humber. Work is in progress to realise the western part, from the river's source on Biddulph Moor, through the TTTV Landscape to Long Eaton (The Landscape Partnership, 2018).

The section of the TVW that runs through our landscape is conceptual: there is no way marking or infrastructure on the ground. The route predominantly follows rights of way, although this is not possible for its complete length, but relies in places on permissive access. There is also an interim path whilst restoration works are completed at Barton Quarry and the right of way is reinstated. The Trent Valley Way project will formalise the route on the ground, providing waymarkers and a new leaflet, as well as improving and upgrading some of the infrastructure

(such as bridges, gates and stiles) and providing information and interpretation as part of the wider landscape vision. The project will link in with the cultural heritage projects to utilise existing structures and points of interest. For example, part of the preservation of pillboxes will include the creation of walkers' refuges. Two suitable pillboxes have been identified close to the confluence of the River Tame with the River Trent.

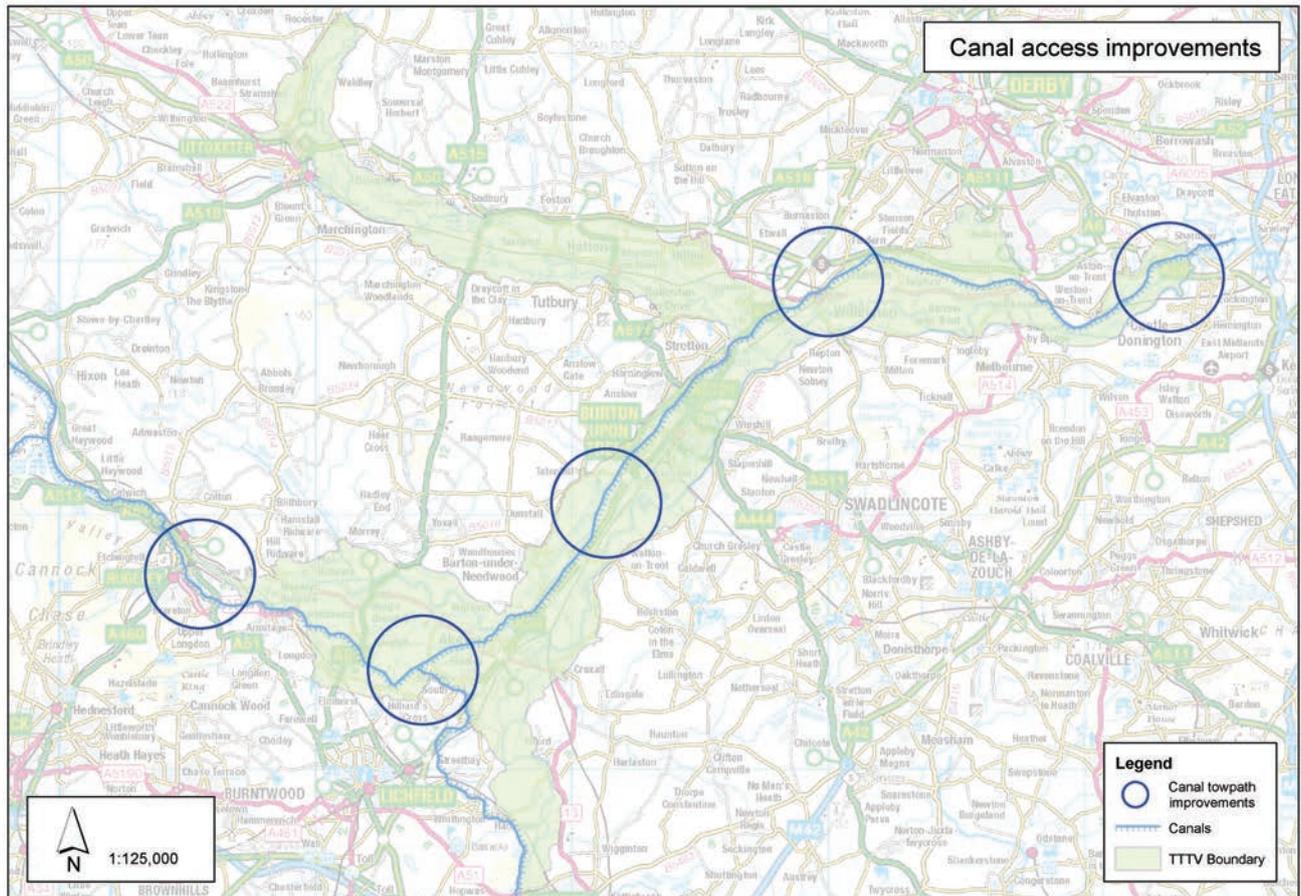
The short term aspirations are to create, alongside the main route, a number of spurs and circular walks to connect communities to the river and provide accessible routes to encourage short walks and visits. The A38 remains a difficult barrier across the landscape and long term aspirations are to create new bridging points to ease the transit of pedestrians and cyclists across this barrier.



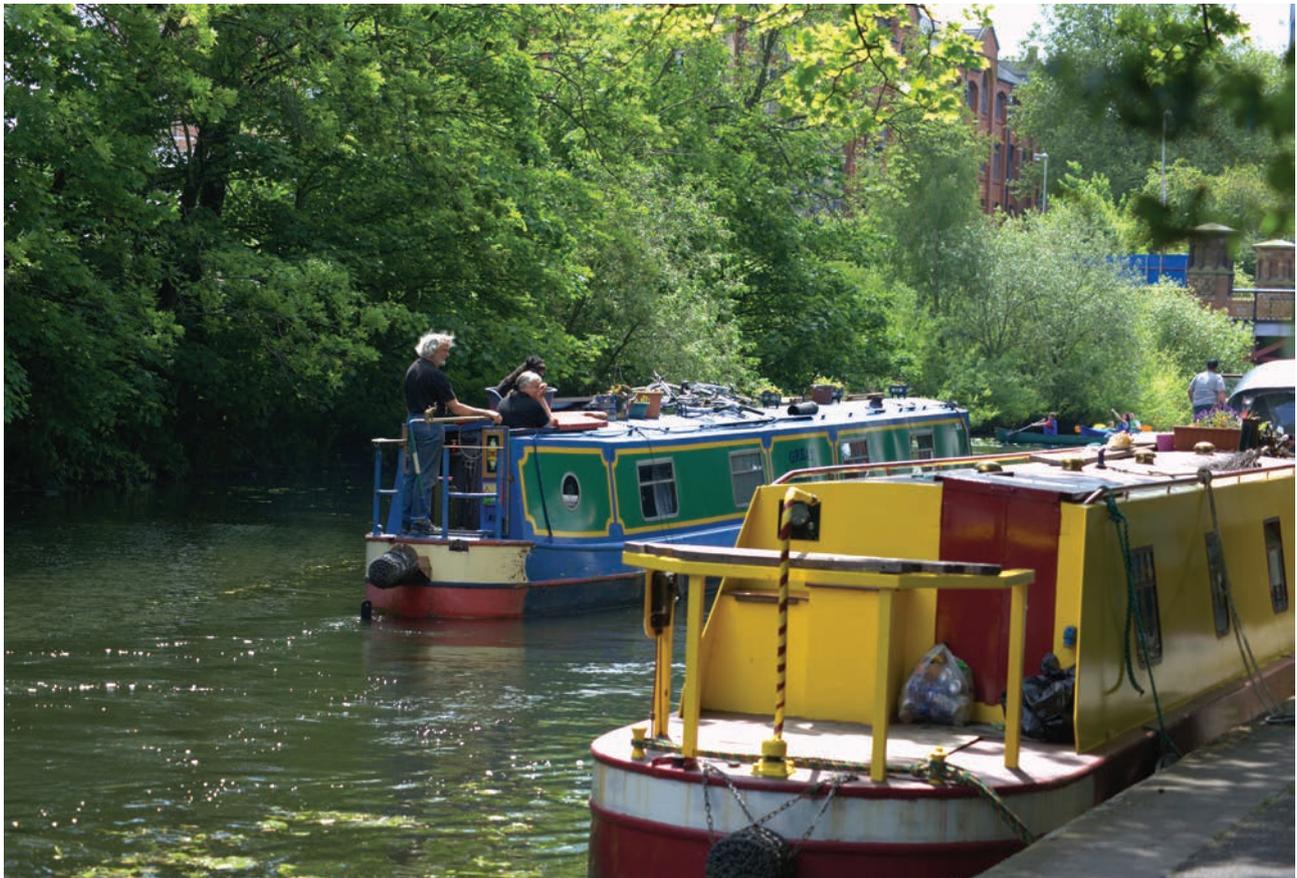
Walks along the River Trent (Aimee L. Booth)

The Canal Network

Map 23. Canals crossing the Trent Valley landscape with the five key improvement locations.



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Boats on the canal (Canal and River Trust)

The canal network local to our landscape consists of the Trent and Mersey Canal, Staffordshire and Worcestershire Canal, Coventry Canal, Birmingham and Fazeley Canal, Erewash Canal, and the River Soar Navigation.

The canals represent an important means of access to the landscape by boat-owners and those on boating holidays. There is an extensive network of moorings and towpath access points along the canals, allowing ready access to most attractions and to the Public Rights of Way network.

The canal network remains a hidden gem in the landscape, appearing briefly under a bridge or as a line of narrow boats across the valley. To come upon a ramp or steps down to the towpath on a busy road in Burton or Rugeley, or even at Wolseley Bridge, is like catching a glimpse into another world. This 'magical' aspect of the canals is a key part of their charm and will be built on by careful marketing and signage, without ruining the effect.

Many of the historic villages in our landscape have attractive buildings and settings that would appeal to visitors. Wychnor, the site of a deserted medieval

village, and Alrewas, a village with interesting medieval to post medieval buildings (ArcHeritage, 2017) are both easily accessible from the canal towpath and offering pleasant walks. The canal itself is steeped in a rich industrial past. A walk along the towpath introduces the visitor to waterways built in the late 18th Century by rich landowners and manufacturers and the associated bridges, warehouses and mills that can still be found along its length.

On the other hand, there are increasing uses of the towpath. Boat moorings, angling, walking and cycling do not always mix well in a narrow space. Angling in particular can cause trip hazards and obstructions for walkers and cyclists. Several currently non-navigable sections of canal are proposed for restoration (The Landscape Partnership, 2018). This restoration will take place in five key locations where the towpath is identified as insufficient for multi-purpose use, being too narrow or poorly surfaced. The aspiration is to improve the towpath at sections that are most in need of upgrade with a long term aspiration of improving the entire towpath network.

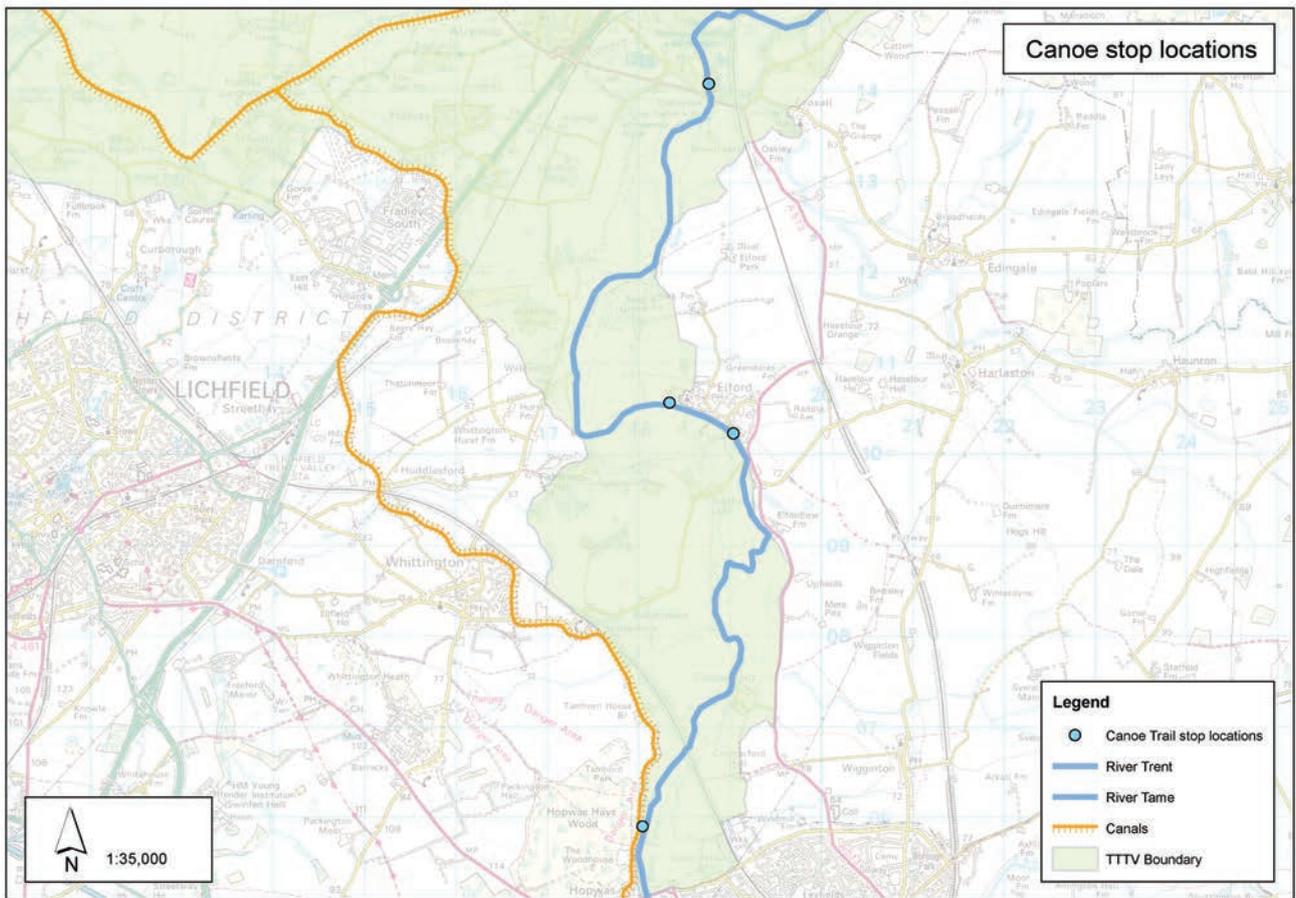


**" Varied, beautiful,
surprising hidden gems"
Community consultee**

Boats on the canal (Canal and River Trust)

The Canoe Access Network

Map 24. Portage and access points for canoeists on the River Tame.



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Canoeing along the river (British Canoeing)

Canoeing is not well developed in the landscape and even the facilities not requiring the canoeist to bring their own canoe are poorly located in relation to public transport (The Landscape Partnership, 2018). On the river, it is not always clear what routes are available and where the portage points are located. The Canoe Discovery project aspires to formalise a route on the River Tame connecting canoeists from Tamworth with the River Trent and the wider landscape. This will connect with a trail currently being formalised by our sister Landscape Partnership Scheme 'Tame Valley Wetlands'. This will provide connectivity to the Trent Valley from a large landscape area. As well as improved canoe portage,

information will be provided about the landscape, conscientious canoeing and respecting the heritage. Additional canoe trails will be created in partnership with Canal River Trust, providing alternative routes along the historical canals.

In the long-term, there are a number of points where canoe access could be developed in partnership with others, linking in with campsites and pubs along the river (The Landscape Partnership, 2018). There are a number of proactive and supportive canoe clubs within the landscape who are willing to offer support and advice to secure a long-term use of the river network for canoeists.



Families enjoying the water (British Canoeing)

2.3.8 Access to the Landscape

One of the key challenges we face in our landscape is that of access. The current access opportunities are the result of generations of influence and change and as such do not necessarily provide a well-connected landscape. Whilst access by road is fairly good, access through public transport or via sustainable travel is poorly provisioned, fragmented and uncoordinated. The following section provides a summary appraisal of access and infrastructure across the Trent Valley.



Cycling in Alrewas (Aimee L. Booth)

Road access



Busy traffic on the A38 trunk road (Aimee L. Booth)

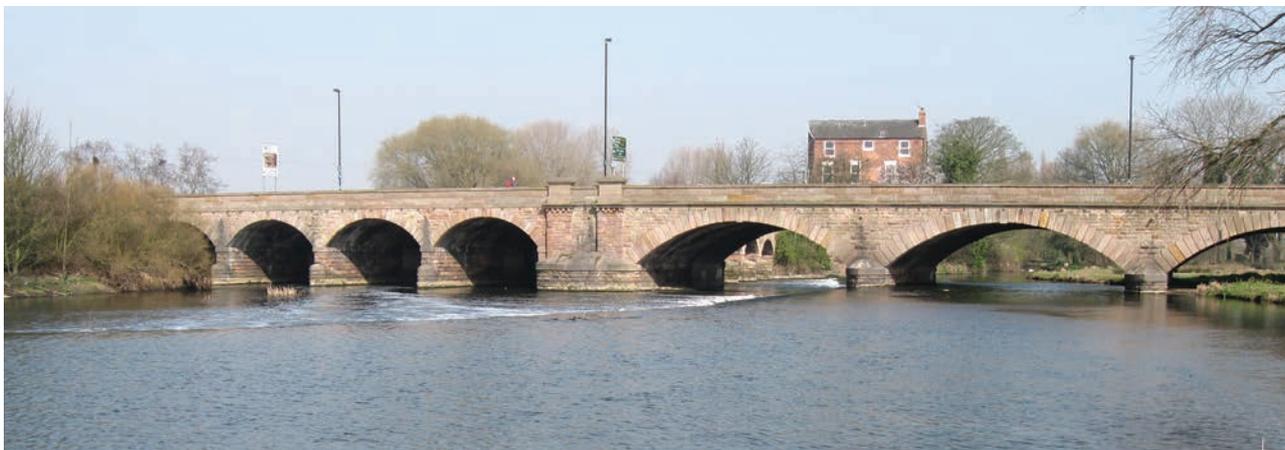
Road access is in general very good across the landscape, with main roads following the river valleys, so much so that roads actually form a significant intrusion in the landscape and a major barrier to access by other means, especially in the A38 and A50 corridors. Car parking provision is not a major problem, and further provision would not be in keeping with the aesthetics or habitats of the landscape

that visitors wish to see. Increased visiting by car would also create congestion in parts of the landscape and have a wider environmental cost. The development and promotion of alternative, sustainable access would enhance the environment of the landscape, reduce the environmental footprint of tourism in the region, and make access more inclusive.

River crossings

The river is a barrier to access as well as a landscape focus. The lack of river crossings is most pronounced for those on foot, pedal cycle or horseback, and is a significant factor limiting access within the landscape. Some crossing points have

even been lost, although National Cycle Network Route 6 (the Cloud Trail) now crosses the river on a disused railway line, and some proposed developments could lead to new bridges, such as the planned housing at Drakelow, opposite Branston (south-west Burton).



Bridge over the River Trent (Nick Mott)

Railway access

The railway network also largely follows the river valleys, but has lower connectivity, in that services are focussed on major urban centres rather than providing local connections. Journeys within the landscape often require interchange outside the area and create protracted journeys.

into the landscape and then onward by other means, whether bus, cycle, foot or taxi. The quality of this interchange varies considerably.

Most stations in or close to the landscape are therefore interchange points for travel

The proposed HS2 route will cut through the south-western section of the landscape for around 6km, but will not result in the development of any new train stations within the vicinity of the landscape.



Railway network that crosses the landscape (Aimee L. Booth)

Bus access

Bus services are sparse given the density of towns and villages in the area. In particular, places in the Needwood area, between the Trent and Dove valleys, are connected to Uttoxeter and Burton by a regular bus service, but not the Trent Valley Landscape closer to them, nor indeed their nearest railway stations.

Sunday is the day of the week with the poorest service; the network is smaller and services are less frequent. A bus every hour is a reasonable rural service, but Sunday services are frequently no better than every two hours, where they exist.



Buses serving the towns and villages of the Trent Valley (*The Landscape Partnership*)



Busy Sunday at Fradley (*Waterway Images*)

Cycle access

There are National Cycle Network and other promoted routes in the area, which provide a degree of strategic access and in some cases penetration of the landscape, but access to the river, canal and attractions depends upon local links and the availability of cycle parking.

Parking for cycles is sparsely provided in the landscape and, whilst informal parking

may be available (e.g. fences and railings), this is not knowable in advance and may not be appropriate.

The canal towpath is available to cyclists in part, but not consistently. The towpath tends to be narrow, difficult to negotiate under bridges, for many disconcertingly close to the water, and potentially impeded by boat-related and angling activities.



Cycling along the canal (*Canal and River Trust*)

Pedestrian access

Walking is the essential form of transport for exploring the landscape, even if only from a car park. Informal access to the landscape on foot, and access to specific attractions, is limited by the relatively sparse Public Rights of Way (PRoW) network in the landscape itself. This is doubtless a result of the landscape being

essentially the floodplain of meandering rivers, with guaranteed dry routes rare. The lack of river crossing also means that the smaller roads in the landscape are more heavily trafficked than they might otherwise be, further limiting foot access. PRoW signage in the landscape also appears to be highly variable (The Landscape Partnership, 2018).



Finger posts showing the way in Alrewas (Aimee L. Booth)

Access from main urban centres

The main transport routes through the landscape are designed to carry people quickly through to other destinations; this landscape is not the intended destination. Map 25 shows the location of key infrastructure routes through the landscape. This leaves people with the option of either choosing the easiest route into the landscape and exploring from there, or taking a roundabout route to reach their desired destination.

A response to this could also be twofold:

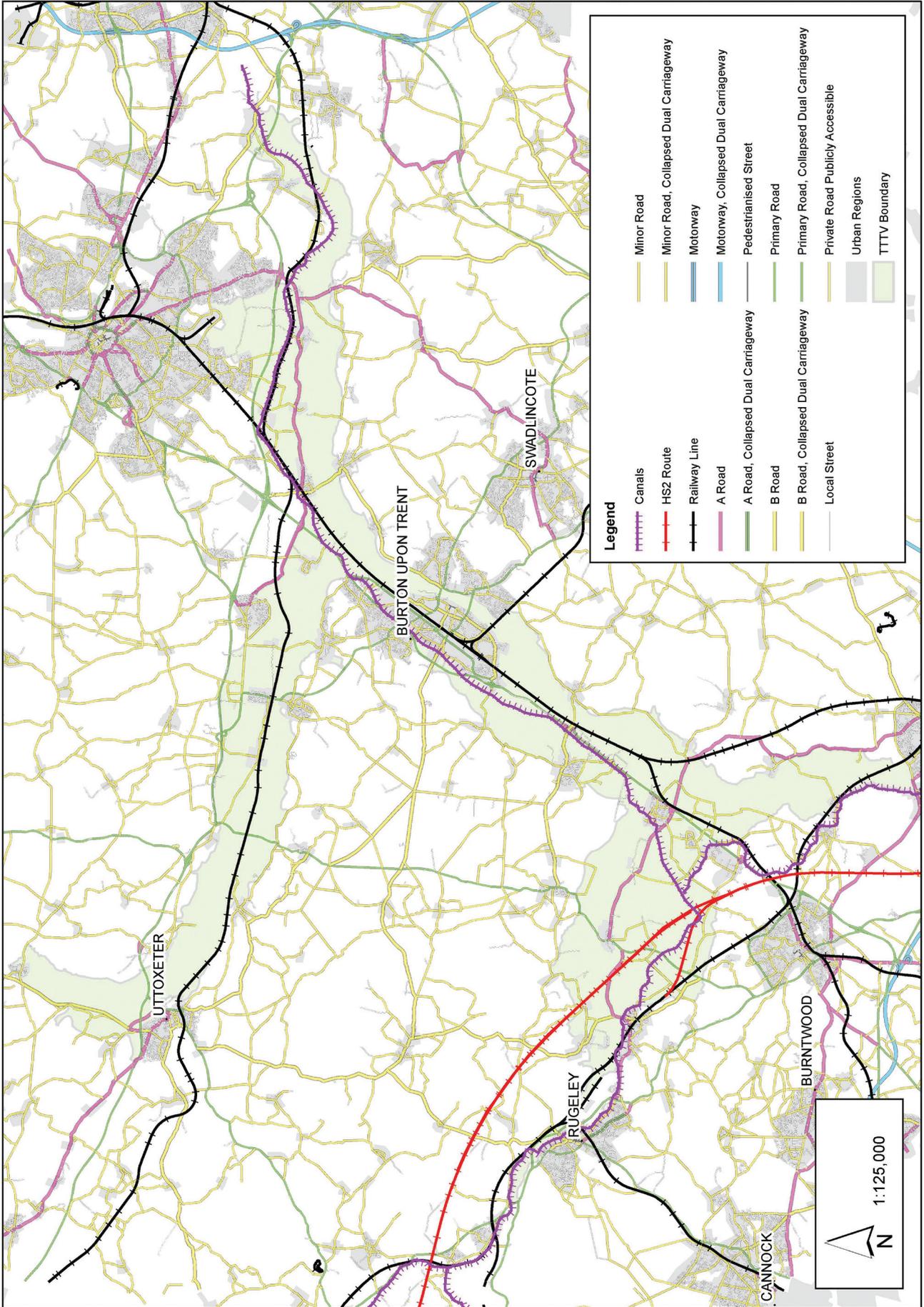
- exploit well-connected points of access as honeypots; and
- develop better links around and within the landscape.

The latter would logically prioritise foot, cycle and bus links (as the landscape is already dominated by motor traffic), but also seek to develop better rail connectivity where appropriate and where opportunities arise (The Landscape Partnership, 2018). The priority of our partnership is to improve connectivity to the landscape via sustainable travel with a particular focus on walking and cycling. Improved signage and infrastructure for cycles will improve some of the gaps

in the cycle network connecting the landscape. The creation of a long-distance footpath, with associated circular routes and spurs, provides an opportunity to connect visitors sustainably with the landscape over a significant distance, thereby reducing the impact of poor road and rail connections. This will improve access for local residents but will also increase access for visitors, especially those using the canal as a route into the landscape due to the close ties between the two.

However, whilst improving access to the landscape is important and is a recurring theme, it must be acknowledged that improved access to sensitive sites can have a detrimental effect. Increased visitor numbers to a site of cultural or natural significance can result in degradation of that site, whilst other sites can be sensitive to changes in access, even if visitor numbers are not high, for example ground nesting birds can be disturbed by dog walkers. It is therefore essential to ensure that access is given for the right reasons and carefully managed to ensure that the heritage we most wish to preserve is not lost in our efforts to showcase our landscape.

Map 25. Key infrastructure routes across the Transforming the Trent Valley landscape



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2.3.9 Our Audience

Our landscape is home to diverse communities and a diverse population which enriches our landscape on a human level. By better understanding the mix of people that make up our population, we can ensure that we reach a broad range of backgrounds, cultures, beliefs and interests.

Background

The landscape is not aligned to any one community; rather it spans a number of different local communities who are connected by a river valley but are rich in their diversity of background and outlook. The area includes urban, urban fringe and rural areas. Much of

the landscape, as highlighted above, is physically cut off by major roads and rail infrastructure, but is connected by the historical canals, the scenic rivers and the network of walking and cycle routes. The valley offers many opportunities for locals and visitors, despite being well developed by industry and housing, and with many more developments in the pipeline. Furthermore, there are large-scale mineral extraction operations on-going. Understanding our communities is therefore essential when planning projects that will connect them with accessible green open space to enjoy peace and tranquillity (Waymark, 2018).

Target Audiences

Table 2. Primary audiences that the projects will aim to reach throughout the delivery of the scheme

Audience	Details
Visitors	Both local visitors and people who have travelled from further afield.
Young people	Particularly those not currently in education or training.
Families with young children	Particularly those not currently engaging with the landscape
Schools	Principally primary schools, but looking at the curriculum requirements of all age groups.
Special Educational Needs and Disability (SEND) children and vulnerable adults	Working with specialist groups and schools
Elderly	Including retired individuals.
Black, Asian and Minority Ethnic (BAME)	Particularly those not currently engaging with the landscape.
Social Deprivation groups	With a particular focus on inner Burton areas.
Individuals with restricted mobility	To be found throughout the area
Health disadvantaged	With a focus on mental health and well-being.
Socially and economically deprived	Including those with limited access to transport; those with lower income.

Additional beneficiaries

Table 3. Further audiences who will benefit from the projects throughout the delivery of the scheme

Audience	Details
Community groups and local interest groups	There has been a lot of interest from local community groups in becoming involved in the projects. The groups are diverse in reach and interest.
Local tourism businesses	An economic assessment of the Trent Valley Way has determined a likely positive impact on local tourism businesses along its route.
Academics/specialists	Research will inform academic institutions and there has been interest from local students.

User groups, origins and needs

The 2011 Census data, for the TTTV area and roughly 10 km around it, reveal a number of points of relevance to visitor demographics and access, including wards of particular interest for specialist outreach work. Information relating to the scheme area extracted from the Census information can be found in the Access and Visitor Audit undertaken by The Landscape Partnership in February 2018.

Age

Age distribution is fairly uniform across the Census sample area, with an overall average age of 39.9 years. The data does show an above average proportion of people in the 20-30 age groups in wards in Burton-upon-Trent, which will now be registering in the 30-44 age group, assuming no significant demographic changes since 2011. Younger age groups in those wards do not stand out (The Landscape Partnership, 2018).

Car ownership

The percentage of households with no cars or vans is a proxy for effective car ownership levels, of more use than the number of cars per household or per head of population. Cars may be shared by drivers within households, other household members are frequently driven by the driver(s), and the availability

of a car can be expected to be a very strong influence on its use for leisure trips in particular. Those without cars are excluded from access to many leisure destinations and, furthermore, areas with low car ownership are therefore likely to be more productive in terms of promoting non-car access to a visitor attraction, other things being equal (The Landscape Partnership, 2018).

Within the landscape area, wards within Burton-upon-Trent feature strongly as locations with a high percentage of households without cars. Burton, Shobnall and Eton Park in particular with 38.6%, 38% and 32.1% respectively.

Employment levels and social grade (disposable income)

Levels of employment and “approximated social grade” can serve as a proxy for disposable income, which could be used in leisure pursuits, tourism, eating out, etc. Areas with low and high numbers of households in the top socio-economic grades, A and B, can therefore stand as rough proxies for low and high levels of disposable income respectively. This is useful in targeting areas with 1) low levels of disposable income (low A and B), for social inclusion outreach, and 2) those with high levels of disposable income (high A and B), for higher-end tourism

audience development (The Landscape Partnership, 2018).

Within the landscape, the Burton-upon-Trent ward of Shobnall has low levels of socio-economic grades A and B with only 9.7% of persons in that grade, compared to Rolleston-on-Dove (37.6%) to the north and Needwood (36%) to the south.

Ethnicity, language and religion

People's ethnic background can affect their propensity for leisure travel in a variety of ways. The following general points can be made (Natural England, 2005; Black Environment Network, 2003):

- Immigrant communities have tended to be concentrated in urban areas and can feel that the countryside is distant, expensive to reach and in general not for them.
- In a connected fashion, there may be a perception that people from ethnic minorities would be made less welcome in the countryside, with a real fear of discrimination.
- Without a habit of visiting the countryside, practical barriers are also present, including cost and a lack of knowledge of the countryside itself, what clothing is appropriate, about what to expect there, and about transport links (including Public Rights of Way).
- Further barriers exist in terms of language (both for those whose knowledge of English is not developed and in terms of language not encountered in urban contexts) and a lack of culturally-appropriate facilities.
- Some groups have particular expectations in relation to travel and activities undertaken by women, such that unaccompanied travel becomes difficult and modes of dress appropriate to countryside and other leisure activities are difficult to reconcile with modesty needs.

- People of some backgrounds are more likely to wish to visit the countryside in groups rather than as individuals, couples or small families, whether because of a need for male accompaniment or a cultural preference for more social gatherings rather than the more 'Western' idea of 'getting away from it all'.
- Some immigrant groups have social attitudes that privilege having achieved certain socio-economic status, marked by such things as car ownership, which has a double impact: a lower propensity to use public transport and a lower desire to undertake one of the commonest countryside activities: walking (The Landscape Partnership, 2018).

Within the landscape, Burton-upon-Trent wards have lower levels of white ethnicity compared to elsewhere in the landscape with Eton Park (74.2% white ethnicity) Shobnall (66.4% white ethnicity) and Anglesey (64.5% white ethnicity) being of particular note.

The Census data allow some analysis of ethnic and cultural background in the landscape area. Overall levels of ethnic minority populations can be gauged by identifying wards with relatively low levels of white ethnicity (as illustrated above). The largest ethnic minority group per se is people of Asian background, principally the Indian sub-continent, with an emphasis on Pakistan. People of black ethnicity are in much lower numbers, but follow closely the distribution of Asian populations in this landscape.

Similarly, the largest professed non-Christian religion in the Census sample is Islam, which has specific (although variable) modesty requirements and expectations of women. Similar can be true of Sikh culture, the next largest religious affiliation given in the landscape (The Landscape Partnership, 2018).

Gender and sexuality

Whilst there are particular things to consider in welcoming women visitors from some cultures, particularly their being alone in the presence of unrelated men, there is also the issue of the perception of risk and fear of discrimination. Different people experience different places and situations as threatening, and the differences are not necessarily gender-specific.

It can be the attitudes of staff that are a source of discomfort, perhaps especially for LGBT people. Diversity awareness training for staff is valuable in overcoming difficulties, which may be to do with unfamiliarity rather than malice (The Landscape Partnership, 2018).



Access routes for all (Ade Clarke @ClarkePictures)

Disability

People with long-term illness or disability which limits their day-to-day activities show fairly evenly spread around the scheme area, averaging 18.6% of the population.

Disabilities affect access in a variety of ways:

- Ambulatory disabilities are perhaps the most obvious, ranging from difficulty walking very far and managing steps, to use of a wheelchair.
- Visual disabilities are a spectrum; relatively few people are completely blind.
- Auditory disabilities are subtler, in that they are less easy to spot in visitors and affect the visitor's experience in different ways.
- Learning or cognitive disabilities are also diverse. It is perhaps here that staff awareness training can pay most dividends.

It is clear that there are a number of factors that influence the makeup of user groups across the landscape. It will be a challenge to the scheme to ensure that there is a representative audience engaged in our activities. Clearly, whilst a large part of this is creating interesting, informative and appropriate projects that are welcomed by the communities, it is also incumbent on the partnership to ensure communication reaches those communities in the correct way that addresses the variety of barriers that otherwise prevent access to the Trent Valley landscape.

2.3.10 Engaging our Audience

Our communities are diverse and as such our approach should match this diversity. Clearly, people care about the landscape: the river, the open space and the built heritage; but they feel disempowered and disconnected. Over time this risks leading to a general disinterest in a landscape they have little connection to. We need to encourage the interest that exists and build upon existing initiatives. Many local residents have an interest in the history as demonstrated by the number of local historians and local history groups. Individuals have expressed interest in active participation and volunteering-opportunity and encouragement is only required. Whilst very few people stated an out-right disinterest in their local environment, people have started to turn their backs on the river by focusing on negative aspects. We cannot tackle every problem, but we can celebrate what is good and help people to help themselves.

The shape of the landscape area and type of region is the obvious starting point when considering interpretation and community engagement.

The landscape suits the work proposed at landscape level and ties in perfectly with the work of neighbouring landscape scale projects including the Churnet Valley Living Landscape, The Tame Valley Wetlands and South West Peak.

Much of the landscape is physically cut off by major roads and rail infrastructure. The valley is well used and developed by industry and housing, and many more developments are in the pipeline. Furthermore, there are large-scale mineral extraction operations on-going. This all means that people have to work harder to find accessible green open space to enjoy peace and tranquillity (Waymark, 2018).

Community

The Transforming the Trent Valley landscape does not align itself to any one community; rather it spans a number of different local communities. The area includes urban, urban fringe and rural areas. There are a few very keen volunteers who are active on their local patch. The strength and coverage of these types of local groups should be assessed and identify how best they could be supported, and possibly be better interconnected (Waymark, 2018).

The outputs from the Community Conversations, facilitated by Icarus, highlight the high level of interest in cultural and natural heritage, and access to it, at a local level. There has been a consistent desire, across the six conversations, for greater community involvement. Of particular interest is the creation of volunteering opportunities to be directly involved in projects, the establishment of local 'friends of' groups and for existing community groups (with a notable bias towards local history groups) to be consulted and involved in decision making. It is clear that there is a wealth of knowledge across the landscape; the challenge will be to utilise this resource in an effort to create connections and ties between the partnership and the communities and avoid the common pitfalls of 'reinventing the wheel'.

Existing interpretation

Much of the installed interpretation in the project area, with the exception of the National Forest, and to some degree the Burton Washlands, is inconsistent in its message, outdated and, in many instances, poorly maintained.

Signage

The Access and Visitor Audit undertaken by The Landscape Partnership (2018) has highlighted a number of issues with the signage across the landscape and suggested where improvements can be made.

Sites across the Landscape are often poorly sign-posted, unless in very close proximity. For example, the Washlands are ideally located for informal recreation for people across Burton, but also from further afield, given its proximity to bus routes, the National Cycle Network and car parking. However, signage to the Washlands is almost non-existent and, unless someone has come in from across the river (or from the Burton Bridge access

route), the Washlands are effectively hidden. Similarly, the Willington Gravel Pits, a beautiful reserve overlooking former gravel workings with stunning natural heritage and an appeal to walkers, nature enthusiasts or those looking for peace and tranquillity, is virtually invisible, despite walking access from the villages of Repton and Willington.

The canal network remains a hidden gem in the Landscape, appearing briefly under a bridge or as a line of narrow boats across the valley. To come upon a ramp or steps down to the towpath on a busy road in Burton or Rugeley, or even at Wolseley Bridge, is like catching a glimpse into another world. This 'magical' aspect of the canals is a key part of their charm and could be built on by careful marketing and signage, without ruining the effect.

Signage needs to be clear and unambiguous; learning or cognitive disabilities are diverse and clear, legible routes help, as does clear language in signage and interpretation.



Waymarking walks near the River Trent (Aimee L. Booth)

2.3.11 Interpretative Themes

A set of three interpretative 'narratives' have emerged to help us to share our knowledge of the landscape, disseminate information about the scheme and be consistent with our messages to communities about the Transforming the Trent Valley landscape. These three narratives have been developed in partnership with Waymark and enable us to reach our different audiences.

Landscape Evolution

This narrative explores the heritage of the river both culturally and naturally. This is not a static river landscape but one that has changed and will continue to change. We can speculate on what the landscape looked like in the past and what it may look like in the future.

Stories will be based on geology, pre-history, industrial heritage, land use and the evolving landscape. The importance of sustainability and ecosystem services will be incorporated.



Alrewas Church (Aimee L. Booth)

The Role of the River

This narrative looks at the river's ability to both connect and divide:

The River as a Connecting Corridor: the growth of industry, its use in transport and how that has influenced the landscape today.

River Crossings and Divides: the importance of settlement locations, the influence on place names and the World War II stop line.

RandR

Recovery, restoration, rest, recuperation, regeneration.

There will be a focus on what we are doing to benefit the landscape and what the landscape can do for us. We are helping the river and its floodplain to recover, we are restoring features and assets that have suffered neglect, we are allowing the river valley to recuperate and regenerate. In return the landscape can help individuals mentally and physically to recover, rest, recuperate and regenerate.

This narrative explores the vision for the restoration and recovery of this wetland landscape, vital for wildlife, habitats, recreation and enjoyment.

The three interpretative narratives allow flexibility to explore what are often seen as contradicting messages and demonstrate how people, industry, wildlife and culture can coexist side-by-side.

2.4 Consultation

Understanding how people perceive and use our landscape, who they are and who they are not, will enable us to develop projects that fulfil a need, create positive change and reach a wide audience. By engaging with individuals, schools and community groups, we are encouraging people to have a voice and to be directly involved in the development of our scheme.

Consultation and engagement has been undertaken in three distinct strategies:

1. Information about the scheme has been disseminated to provide interested parties with detail about the scheme and the proposed projects that will be taken forward. There has been opportunity for the interested parties to then comment or seek further information. Audiences have been actively engaged to support or endorse the scheme.
2. Consultation activities have been undertaken to directly seek the ideas and opinions of various audiences. This information is then used to inform projects of the needs and to provide direction for development.
3. High quality consultation has been undertaken through a facilitated public dialogue project. The emphasis was on a qualitative approach involving a participatory dialogue with key individuals and communities to determine options, choices and preferences. The approach steered away from traditional consultation by taking a bottom-up approach without seeking endorsement for a pre-determined position.

2.4.1 Public dialogue

The Communities of Burton-upon-Trent, Dove Valley, Repton and Willington, the A38 Corridor, Alrewas and Kings Bromley, and Tamworth were engaged in local discussions to gain different perspectives formed by the varied challenges and opportunities presented by these varied locations across the Trent Valley. In total 103 individuals and 15 'technical experts' (those involved or with knowledge of the scheme) participated.

These representative locations incorporated large towns, villages and hamlets, areas affected by quarrying, large infrastructure challenges or development, places distinctly rural in character and areas marked by industry; all locations linked by their connection to the Trent Valley and the Washlands.

Local people have a unique insight into their area, their green and blue spaces, their cultural heritage and the open spaces, buildings and sites that they use. The Community Conversations process was designed to harness this insight and knowledge, with local people working alongside professionals from the partnership organisations in a way that brought their areas of knowledge together and gave scope for creative thinking about the issues that exist (Icarus, 2018).

Three key objectives of the Community Conversations were achieved during four, two-hour sessions held at two weekly intervals during the evening. Participants were required to attend all four sessions in the series. The objectives were: identify a vision for the area, examine the current situation, and identify key projects that will move the current situation forward towards achieving the vision.

Local Visions for Local Communities

Following the process, five vision statements were created by communities in each location (with the exception of Tamworth). This was a highly considered activity and consequently has given rise to five statements that demonstrate the most significant attributes best valued by that community. These incorporated a number of common themes including a space for everyone (communities, visitors, people); ability to enjoy the outdoors (recreation, relaxation and culture); preserving the history and the heritage; wildlife and nature rich; a healthy natural environment; and accessible to all.

Current situation

Participants were asked to think about the current situation for the river and the valley. Across the variety of comments there was some clear 'common ground'.

Wildlife conservation – recognition of the value of the natural environment; protecting and enhancing it; interpreting it and promoting wider understanding.

Access and recreation – a desire for improved access, and maintaining what exists, for local people and visitors, especially those with disabilities or limited mobility; promoting access and amenities.

Cultural heritage – valuing and respecting our heritage; recognising the knowledge and expertise of individuals; retaining the rural character of the area in the face of development pressures.

Productive use of the landscape – recognising the flood management role of the landscape; water quality improvements and associated habitat benefits; the importance of agriculture for the landscape.

Follow up

Following the conclusion of the six Community Conversations, a final event was held in Burton-upon-Trent, due to its central location in the landscape, to bring participants from across the landscape together to feedback on the outcomes of the conversations and how they had informed the scheme. Twenty individuals attended this event.

Support for the scheme has remained enthusiastic, although there remain topics of discussion that are beyond the scope of this landscape partnership scheme. For instance, the issue of road traffic management and maintenance of roadside verges is important to a number of the communities. However, we are keen to engage with the local community and emphasise that this scheme should be seen as an initial step and that, whilst many issues are beyond the scope of this scheme, we are represented by key decision makers in the landscape who can feed comments back to their respective organisations. Additionally, the wealth of information that has been gathered through the development phase will be made available to communities intending to expand on the work started by Transforming the Trent Valley. This is all part of strengthening the scheme in the landscape and securing a legacy for the future.

At the conclusion of this event we asked the participants to complete a postcard stating why they supported the scheme and what the main change they would like the scheme to bring about was. Table 4 below shows the responses that were given.

Table 4. Responses given by participants of the final Community Conversation event providing feedback on their views about the scheme.

Community Conversation attended	I support TTTV because...	The main change I would like TTTV to bring about is...
Burton	It is an excellent opportunity to create change in the area	An awareness of wider issues that can be addressed by key decision makers.
Burton	I'm a local councillor	Regeneration of Burton via projects linking the town centre to the community and the Washlands.
Burton	It provides so many benefits for so many different sections of the local community	Greater awareness of all that the local river environment has to offer.
Burton	The landscape and habitat linking will have a tremendous positive effect on the area	A lot of talk about access but all car focused (A38 corridor title did not help) – the scheme could help to integrate, improve bus / train links as well as walking / cycling.
Branston	It has the possibility to improve the management and development of both wild and man-made environment	Better cohesive management and co-ordination of funding and voluntary bodies in the interests of all.
A38 corridor	This is such an important landscape – it needs to be known about and loved more!	More community engagement in the valley in future – get people involved!
Final meeting	I would like to improve the quality of the TTTV area for both communities and the environment	Increased community engagement in the area, with greater use.
A38 corridor	I care about the environment, nature and my community	True, safe access to the whole of the Trent Valley Way and its beauty.
Branston	It will be good for the local environment	Wildlife development and community involvement.
Repton / Willington	I recognise their enthusiasm to deliver the project	Improved pathways (pedestrian and cycle) in Repton / Willington area around the Trent.
A38 corridor	There are environmental and nature conservation issues that need addressing	Wilding and protecting the nature of the area.
Dove Valley	I live in, work in and play in the Trent Valley and enjoy the natural environment and care about its future	An improvement in natural heritage locally by tackling invasive species and preserving native black poplar trees.

Barton / Walton	It is fantastic project to be part of	More and better access.
	More and better access	Please don't just consider bikers, remember the disabled.
Alrewas	Of the potential to improve an area devastated by quarrying	A continuous walking and cycling route along the Trent Valley
Burton	Aiming to improve river area	More leisure use of regatta field area of Washlands, Burton
Burton	Partnership working to support better access to wildlife and cultural heritage, ensuring that our environment is safeguarded for the future	More diverse wildlife in an area easy to access. Burton specifically, Washlands needs to be heart of Burton
Dove and Willington	I want to see the Trent Valley thrive and be an asset, a re-wilded landscape	The river to be a wildlife wonderland
Branston	I see the Trent Valley as under threat	Further protection for the natural and cultural heritage of the Trent Valley
Branston	I want funded projects to improve accessibility	Improve accessibility particularly cycling and walking – separated from other traffic



Postcards completed by participants of the final Community Conversation event in Burton-upon-Trent (*Icarus*)

2.4.2 Wider Consultation

Wider consultation was undertaken of the general public who live, work and visit in the landscape. This was undertaken as an open survey on both Survey Monkey and Facebook, promoted via social media outlets, news releases, a newsletter and an existing network of contacts; and through face-to-face activities at a shopping centre in Burton-upon-Trent and at a Makers Market in Mercia Marina. A total of 136 people were engaged.

The results show that 36% of respondents visit the river daily or weekly, whilst 17% stated that they visited hardly ever or never. More than half of the people questioned responded that they felt the river was extremely important to them, whilst only 9% felt that it was unimportant to them.

However, when asked how confident they felt exploring the river and its surrounding landscape the response was very mixed with 22% of people feeling unconfident exploring the landscape and only 28% stating that they felt very confident.

The majority of people (76%) expressed that they would like to become involved with improving their river and

surrounding landscape, with only 8% indicating that they were not interested and 11% saying they were unsure.

The survey also highlighted how people most commonly found out what was happening in their local area, with most people relying on social media, whilst the more traditional forms (newspapers and noticeboards) are falling out of favour.

It is clear that communities feel a connection to their river and their landscape, but there is a mixed response to how confident individuals feel about exploring their environment. There is a drive to be involved and take ownership, and it can be argued that it is opportunity that is lacking in providing people with the ability to become custodians of their local areas. The scheme will provide the means for inspiring individuals to volunteer time and an aim to create sustainable communities that will continue the good work once the funding has expired. Engaging these communities will require time and effort, utilising a variety of tactics to reach a varied audience. Social media is clearly an important tool, enabling us to provide succinct information to a wide audience.



Community Consultation in Burton (Staffordshire Wildlife Trust)

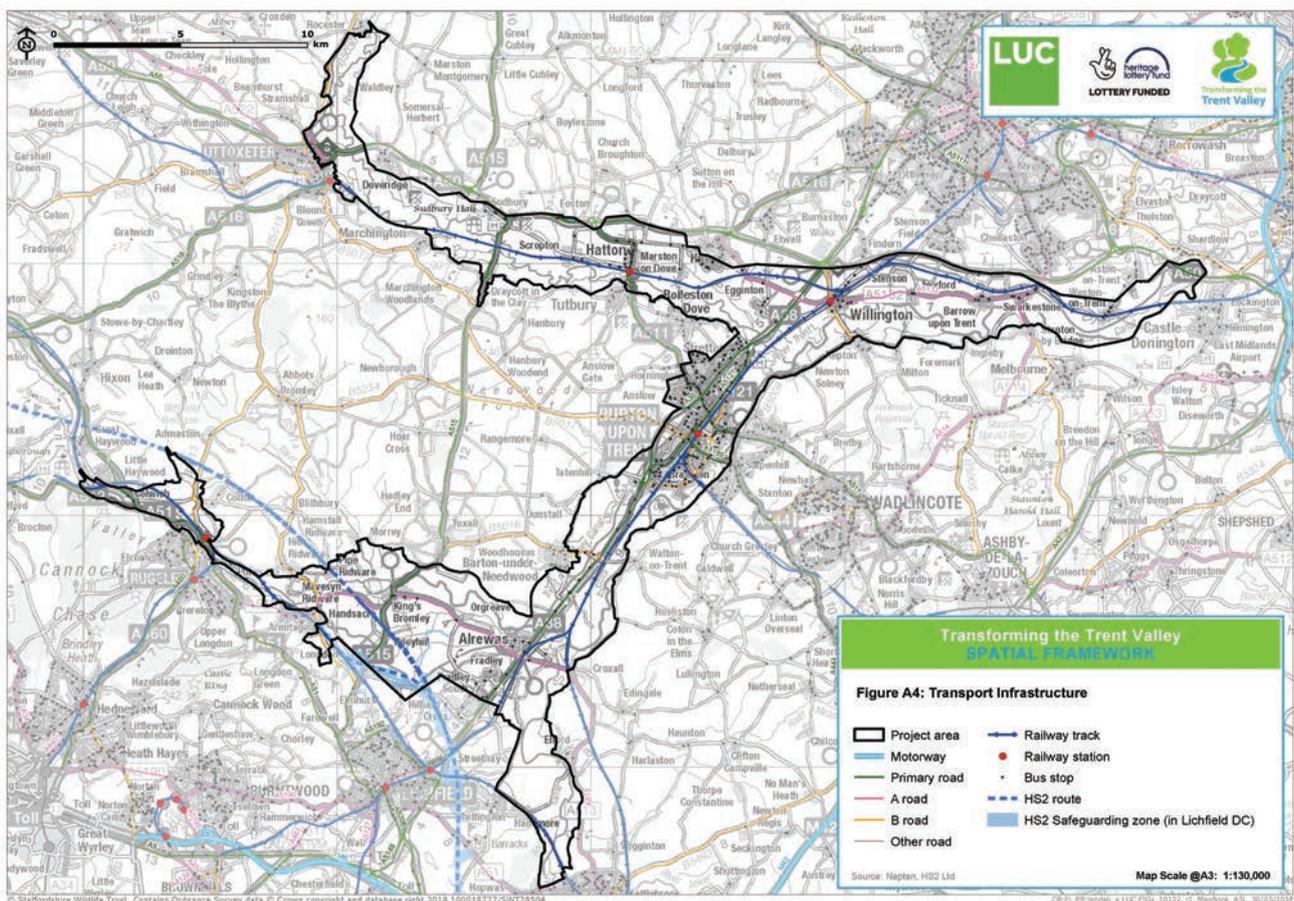
2.5 Strategies, Policies and Local Initiatives

There are a number of proposals that are of national significance that will have a major impact on our landscape. These range from large housing developments to significant travel infrastructure proposals such as HS2, through to quarry expansion and potential new quarry sites. There are also a number of initiatives and projects that overlap with our landscape and complement the work we are doing. This offers opportunity to work together where we share common goals to add value and extend our influence. Understanding the scale and effect of anticipated change is essential to perceiving the potential risks it has on altering the character, heritage and

economy of our landscape. With a strong vision for our landscape and its future, we can work to influence change, which whilst inevitable, does not need to be the death of our landscape.

There are a number of planned and proposed developments that will have significant impact on our landscape. These developments will influence how the landscape is used in the future and provide a number of varying opportunities. There are also external partnerships that we have connections with and can link into initiatives that complement our vision for this landscape.

Map 26. Transport infrastructure highlighted as having a spatial influence on the landscape (LUC)



2.5.1 High Speed 2 (HS2)

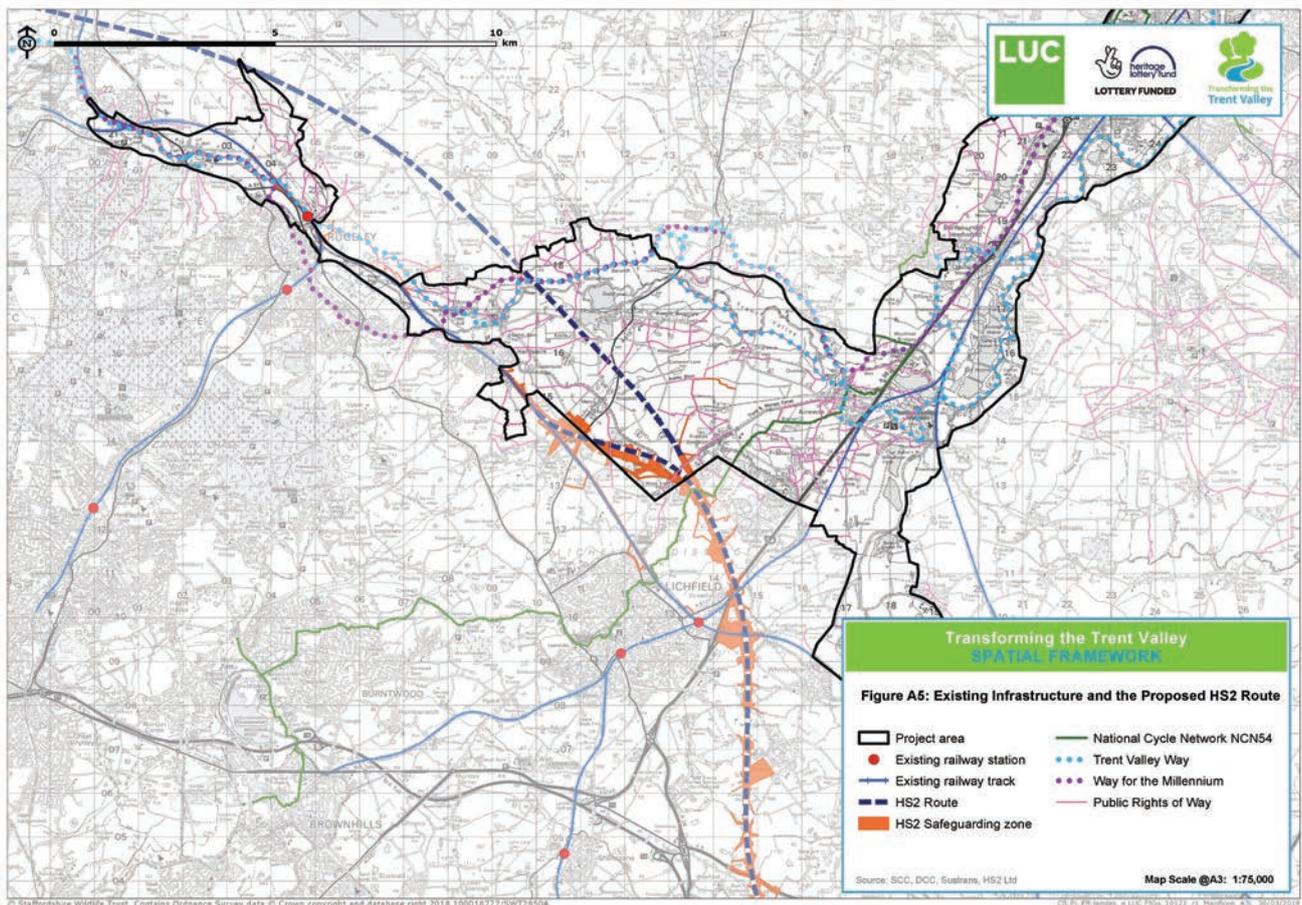
The planned route of HS2 cuts across the landscape from Hilliard’s Cross, running north-west across the project area for around 6.1km and exiting it at Pipe Ridware. It also runs close to the landscape from Great Haywood to Tamworth. Detailed work has been done on its impact on transport during construction and in its finished state.

The route affects numerous roads and Public Rights of Way (PRoW) within the landscape and which provide access to it. The majority are proposed for diversion, some for closure, and this audit is not

at a level of detail sufficient to assess the actual impact of what is proposed, depending as that impact does on the quality, safety and convenience of both the existing and diverted roads and PRoW (The Landscape Partnership, 2018; LUC, 2018).

Mitigation from the proposals offer some potential opportunity in the landscape for improvements to be made. Funds are available that could be used to deliver habitat restoration, access improvements or projects for community benefit.

Map 27. Existing Infrastructure and the proposed HS2 Route (LUC)



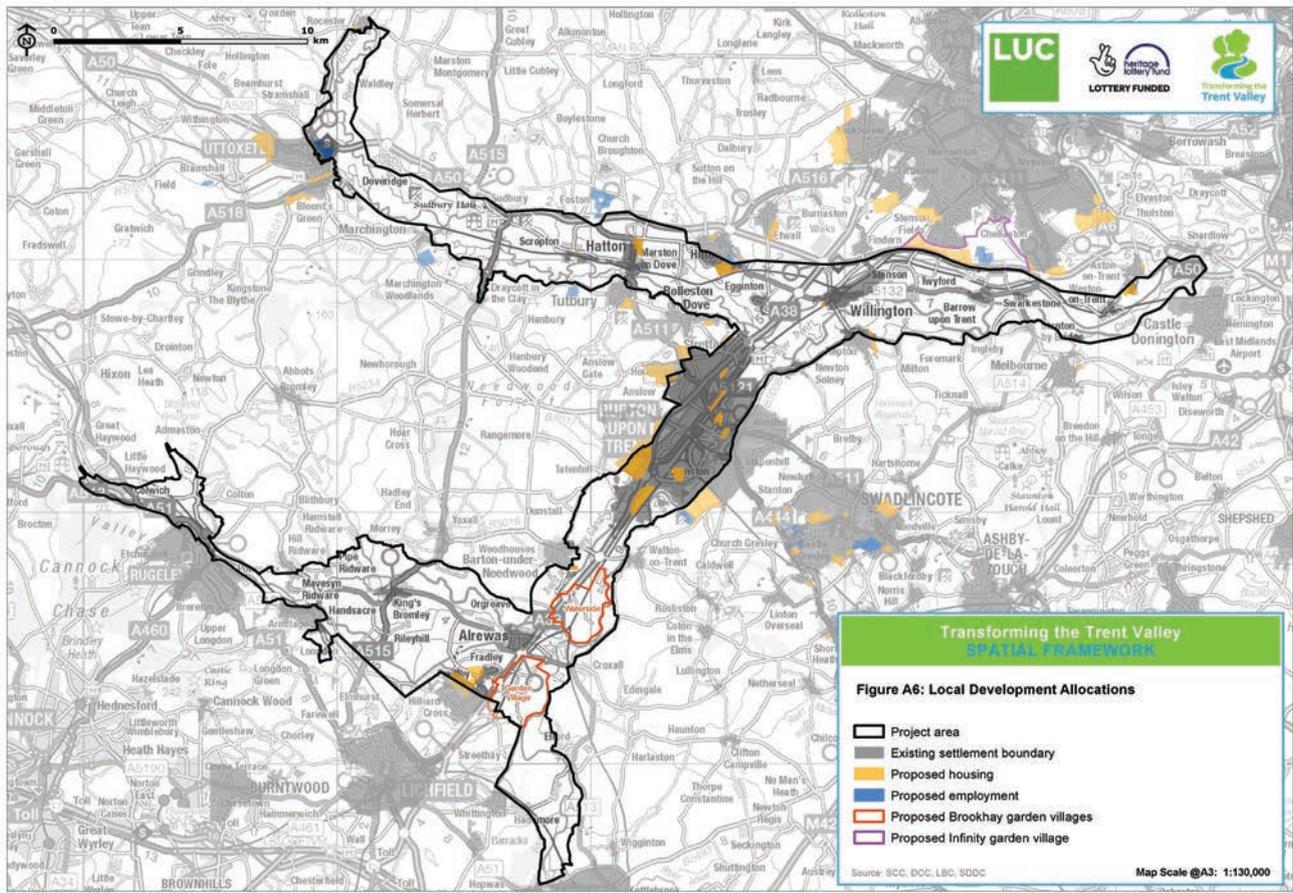
2.5.2 Burton-Leicester railway reopening

This is a long-standing proposal for reopening the freight-only line from Burton to Leicester to passenger traffic, which could provide stations at Swadlincote, Ashby-de-la-Zouch and Coalville, but the economic case for reopening has not yet proven attractive (AECOM, 2016). Were this proposal to come about, it would improve strategic access by rail from the east and be a major asset for developing the tourist potential of the landscape. However, the route ends at Burton upon Trent station, which has very poor facilities for interchange with bus routes serving the landscape, and poor wayfinding to the canal and river. There is opportunity for the Landscape Partnership to work with the promoters of the scheme and, should it come to fruition, with train operating companies, bus companies and local authorities to improve interchange and onward travel at Burton station in particular (The Landscape Partnership, 2018).

2.5.3 Housing

Significant housing developments are planned in and around the landscape, adding further pressure upon it. There are thirteen housing proposals totalling 4.5km² in area and adding a further 8,298 dwellings to the landscape. The most significant of these urban expansions will take place around Burton-upon-Trent adding a total of 3,630 new dwellings within the East Staffordshire local authority and 2,239 new dwellings within the South Derbyshire local authority. East Staffordshire has been identified as a growth area and proportionally more housing is planned for this local authority than for most parts of the UK (LUC, 2018). In general, however, access to the landscape could benefit from this new audience and the additional population represent a new audience for the appreciation of this landscape and its sustainable development (The Landscape Partnership, 2018). Map 28 shows the distribution of proposed and existing development in the landscape area.

Map 28. The distribution of proposed housing development in the Trent Valley landscape (LUC)



2.5.4 Garden Villages

There are two new garden villages proposed within the project area (Brookhay Garden Village and Brookhay Waterside). A further garden village (Infinity Garden Village) has been approved just outside its northern boundary, south of Derby (LUC, 2018). Whilst still in early stages of development and consultation, if they do come to fruition they will have a significant impact on the landscape.

The Brookhay mixed-use proposals are for a 7500-home, two-centre complex (Barratt Developments PLC and Urbed, 2015). Brookhay Garden Village would be situated east of the A38, opposite Fradley. Brookhay Waterside, a residential, business and leisure complex, would be 2 km away, north-east of Alrewas, again east of the A38 (The Landscape Partnership, 2018). The Infinity Garden Village is for the development of 2000 homes, with the aim

to alleviate the housing demand in Derby City and South Derbyshire (LUC, 2018).

The development of these garden villages will impact on a number of existing long distance walking trails and cycling routes. However, with the implementation of suitable measures these developments can also contribute to the enhancements of existing, and development of new, access links through the affected area.

Around half of the Waterside proposal is within the Barton active sand and gravel quarry run by Hanson Aggregates Ltd, scheduled to cease operation in 2030; and just over half of the Garden Village proposal is within the Whitemoor Haye / Alrewas sand and gravel quarry, operated by Lafarge Aggregates and Concrete Limited, scheduled for closure in 2027 (LUC, 2018).



Kings Bromley signs to Alrewas and the NMA (Aimee L. Booth)

2.5.5 Quarrying

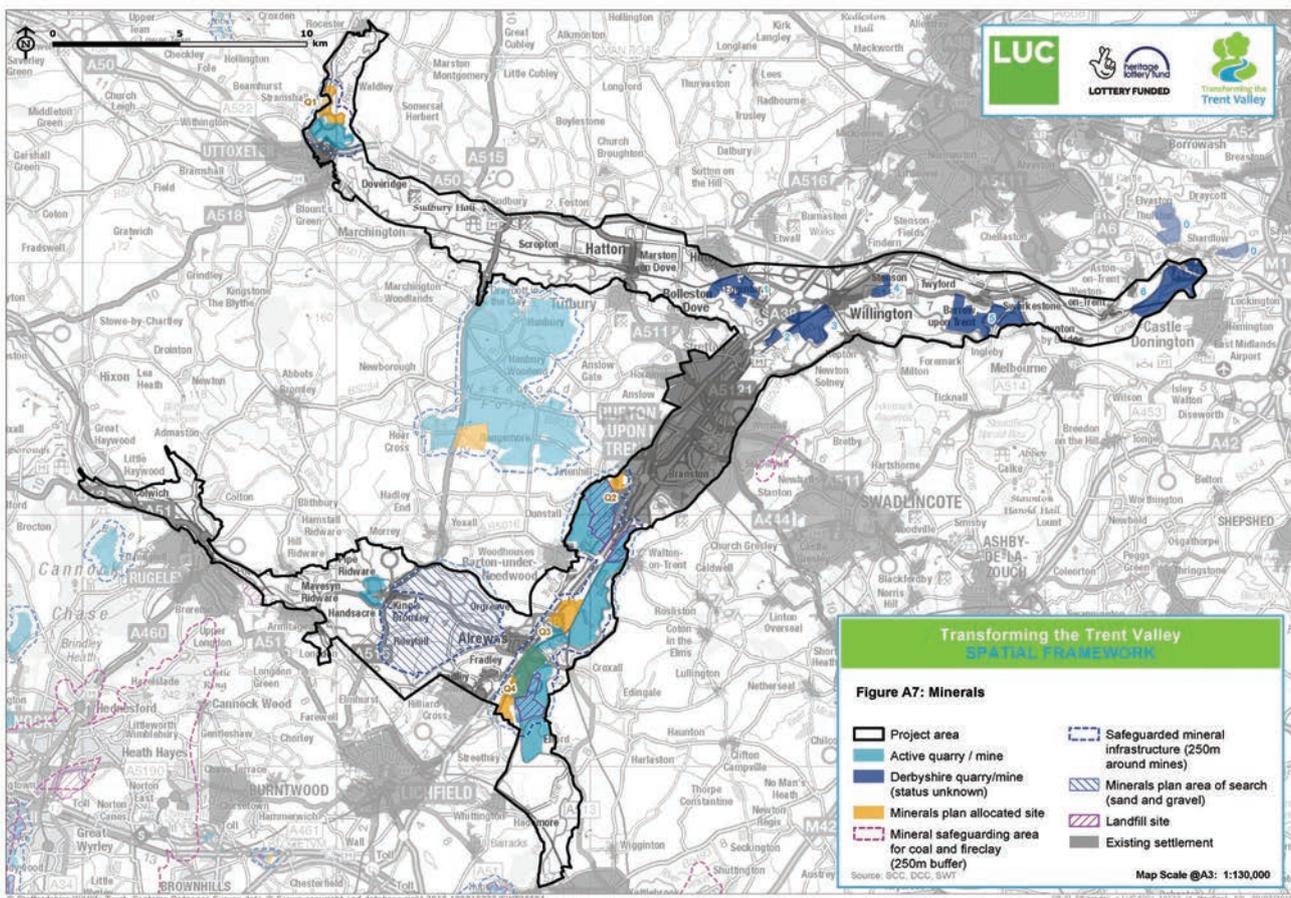
The aggregates industry has a large presence throughout the project area, especially along the River Trent from Kings Bromley all the way to Shardlow in the north-eastern tip of the project area. There are currently 12 active quarries identified within the project area, all of which are sand and gravel. The total extent of these quarries is 14.55km², which represents around 7.3% of the project area (LUC, 2018)

A large proportion of the available aggregate has already been quarried, with significant quarrying in progress (The Landscape Partnership, 2018). There are

four further sites within the project area identified for mineral extraction in the Staffordshire Minerals Local Plan, with a total area of 3.69km². A further 15km², between King's Bromley and Alrewas, is identified as a Search Area for sand and gravel in the same Minerals Local Plan (LUC, 2018).

Surface extraction of sand and gravel inevitably erases the existing, traditional landscape and access routes. However, upon restoration, former quarry sites can become important nature reserves and wildlife sites.

Map 29. Plan showing the extent of active and planned mineral developments across the landscape highlighting the significant pressure this landscape is under (LUC)



2.5.6 Economic Value

In the Final Report on the future economic value of the Trent Valley (RPA and the Planning Cooperative, 2016) prepared for Derbyshire County Council, it was emphasised that the Trent Valley within Derbyshire is becoming increasingly fragmented as a result of mineral extraction, urban development, transport infrastructure and agriculture, both arable and pastoral.

The report suggests two possible options for the way forward: an uncoordinated approach, which would lead to disjointed, piecemeal change and a potentially degraded natural environment; or a coordinated approach involving all sectors working together to effect positive long-term change.

The scenarios for each way forward were worked through, comparing the economic benefits and ecosystem service benefits of each. The results showed substantial benefits could be achieved through a coordinated approach, significantly above an uncoordinated approach. It was noted that to achieve the benefits the actions would need to be fully supported and resourced. These were summarised as:

Vision and approach: a master plan is required establishing key principals, direction of travel and spatial iteration.

Personnel: Large scale projects can only be implemented with staff.

Resources and funding: to enact a fully coordinated approach, financial resources are required.

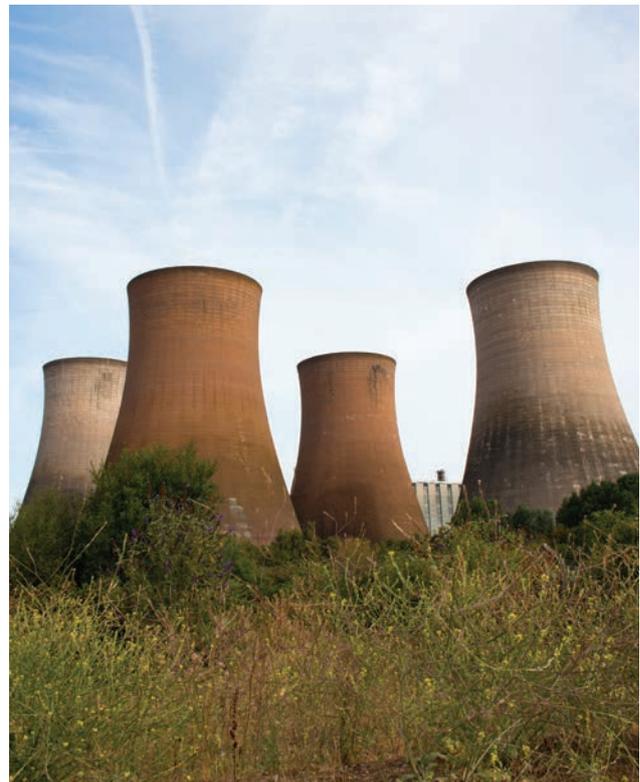
Partnership development: a functional partnership requires a breadth of support from a wide range of stakeholders.

Business case, operational structure and governance: to enact the coordinated approach in the longer term. (This could be a not-for-profit business or charitable trust).

The approach analysed data in the form of reports, strategies, plans and datasets from across a wide range of sectors including the aggregate industry, energy generation, manufacturing, tourism and retail, water, and wildlife and biodiversity. Baseline data was analysed using an ecosystem services approach. Population change was extrapolated from census data provided by the Office of National Statistics.

The coordinated approach was based on a 'vision for the coordinated scenario', which focussed on directing mineral extraction towards the least sensitive areas, whilst restoration schemes would create interlocking waterbodies and robust areas of woodland. These will integrate with the best of the existing landscape, including historic and natural assets, to provide a range of recreation and leisure opportunities.

This vision was then broken down by sector for a bespoke approach that enabled an integrated contribution towards the whole.



Industry in the valley (Aimee L. Booth)

2.5.7 Local Enterprise Partnerships

Our landscape is incorporated within two Local Enterprise Partnerships (LEP): the Stoke-on-Trent and Staffordshire LEP; and the Greater Birmingham and Solihull LEP. Both partnerships focus on providing housing and leisure space for urban areas around the Trent Valley. The Trent Valley, already home to many large industries, is not seen as an area for expanding industry, but will see growing pressure for transport infrastructure serving an expanding population.

Stoke-on-Trent and Staffordshire Enterprise Partnership aims to grow the local economy by 50% and generate 50,000 new jobs in the next 10 years. Staffordshire is set to become a more connected county by securing strategic and local links, leading to 'super connectivity'. This will be achieved through maximising opportunities presented by strategic infrastructure investments like HS2, and developing the 'growth triangle' presented by the M6/West Coast Mainline, A5/M6 toll and A38/A50 eastern links, an area that intersects with the Trent Valley.



Rugby power station (Aimee L. Booth)

Long-term (to 2030) aspirations are committed to rapid, planned growth of urban centres, such as Burton-upon-Trent and creating right conditions for industries of tomorrow.

Burton-upon-Trent is a key Strategic Centre in the Strategic Economic Plan for the Stoke-on-Trent and Staffordshire LEP.

The vision: *'We will sustain economic growth in our town centres by encouraging sustainable economic development which meet local needs, achieves balanced communities and attracts new people to invest in, live in, work in and enjoy our urban centres.'*

The plan gives projections of 31,000 new households in the LEP area over the next 10 years. Growth should be accommodated in attractive urban centres which are well-connected to employment opportunities (GBSLEP, 2016).

Greater Birmingham and Solihull Local Enterprise Partnership aims to generate 50,000 new jobs and 14,315 new houses over the next 10 years. Burton-upon-Trent is a Strategic Growth Site and falls within the East Staffordshire Growth and Regeneration Programme with a total spend of £5.7m creating 707 new job and 306 new homes (SOTSEP 2014).

Our partnership has existing ties with the LEPs, with many of our partners individually represented on these Partnership Boards. There is scope to influence planned growth in Burton and capitalise on opportunities such as biodiversity offsetting, green infrastructure, and sustainable access that will arise from new development plans.

2.5.8 The Catchment Based Approach and the Transforming the Trent Valley

The Catchment Based Approach (CABA) is a community-led approach that engages people and groups from across society to help improve our precious water environments. Promoted by Defra and the Environment Agency since 2015 this initiative seeks to encourage organisations to work in partnership to deliver improvements to rivers at a catchment scale. The Catchment Based Approach encourages organisations to manage land and water in a balanced way, by identifying the pressures on the water environment, by working together to agree common objectives and by implementing solutions.

The CABA aim is to provide a clear understanding of the issues in the catchment, engage with stakeholders, users of the river and communities to begin to create an achievable, holistic vision for the future of these rivers and waterways. A partnership and ways of working has been established for each CABA catchment. The ethos is very much about working with existing mechanisms to deliver greater benefit for the river.

CABA encourages working with a range of organisations and partnership to deliver benefits for our water environment.

There are overlaps between the CABA approach and our Landscape Partnership in that they are both partnership initiatives and both aiming to improve the awareness and management of wetlands and rivers within the Trent catchment.

England and Wales has been divided up into over 100 Catchments.

The TTTV LPS overlap with four CABA catchments.

- Staffordshire Trent Valley
- Tame Anker Mease
- Dove
- Derbyshire Derwent

It is important that our partnership works alongside each of the CABA partnerships, as additional value can be generated by the two initiatives sharing information and potentially supporting the delivery of projects and identifying opportunities for the future.



A View across the Landscape (Aimee L. Booth)

2.5.9 The Water Framework Directive

The area covered by our landscape sits within the Humber River Basin Management Plan (RBMP). The latest edition of the RBMP is 2015 and sets out the current state of the water environment, the pressures and environmental objectives for improving and protecting waters. The RBMP is written to inform and deliver obligations of the Water Framework Directive (WFD).

The WFD breaks down catchments into individual waterbodies which are classified as to their ecological and chemical 'status'. Various elements make up reporting and classification of the waterbodies' status, e.g. fish and phosphate. Waterbody action plans are put in place to address identified pressures on elements and the assigned 'reasons for failure' of waterbody WFD status.

Currently over two thirds of UK rivers fail to reach Good Ecological Status against requirements of WFD.

Our landscape overlaps with 24 separate WFD waterbodies. More details of each one can be found using the 'Catchment Data Explorer'. This website shows the current status of each waterbody, lists the reasons for failure and shows the quality of a range of environmental parameters recorded by the EA. It provides a useful reference point for organisations to identify measures needed to help these waterbodies to reach good ecological status.

The CABA Partnerships are key to driving forward the agreement and delivery of catchment management plans, including individual waterbody action plans to improve WFD status and at the very least secure 'no deterioration' of status.



River Trent at Wychnor (*Nick Mott*)

2.5.10 The Trent and Tame River Valleys Futurescape

Our landscape sits within the RSPB's Trent and Tame River Valleys Futurescape – one of the Society's priority landscapes into which they are focussing their efforts on a landscape-scale, to work with partners and local communities to give nature a home.

This vision is to create a wetland corridor from Birmingham to the Humber that is rich in nature and an inspirational place to live, work and visit. By working together, we can provide a haven for birds and other wildlife in the face of a changing climate. Marsh harriers, bitterns and avocets will breed once again, and salmon and eels will thrive in our rivers. All kinds of amphibians, bats, water voles and wetland plants will also benefit from restored habitats.

But people will benefit too. Increased recreational resources will improve the health and well-being of residents and visitors alike. Local communities will be able to take a more active role in their natural surroundings through local decision-making and volunteering.

The parallels between the RSPB's vision for the Futurescape as a whole, and those of our partnership, are clear.

Throughout the Futurescape, current and planned sand and gravel quarrying is the most important single driver of landscape change. The current and proposed mineral sites cover approximately 8,000 hectares – roughly equivalent to the City of Nottingham in area. The Nature After Minerals partnership between the RSPB, Natural England and the Mineral Products Association has responded to this by producing "Bigger and Better", an advocacy document promoting joined-up strategic planning across the six mineral planning authorities involved (including Staffordshire and Derbyshire) to realise the vision for nature and people. "Bigger and Better" has been endorsed by the CRI, Trent Rivers Trust and both Wildlife Trusts involved in our scheme, and has been widely acclaimed and praised as a great example of partnership working and policy advocacy by mineral operators, statutory agencies, and other partnerships in England.



Croxall Lakes Nature Reserve (C Wilkinson)

2.5.11 The National Forest

Over twenty years ago, visionary leaders made the decision to create a new, large, forested area in England, to show all the many benefits that come from woodland near where people live and work. The area in the Midlands, which came to be known as The National Forest, was chosen in part because the woodland cover was very low (about 6%). There was also a great need for regeneration after the end of mining and, importantly, incredible public support for the idea.

Since then, the 200 square miles of The National Forest have been transformed through the planting of millions of trees (8 million by October 2012) and the creation of many other valuable habitats. It boasts many new attractions and forest-based activities and has stimulated many woodland-linked businesses. Whilst more than 200,000 people live in the Forest, it is also within just 90 minutes' journey time for about 10 million people and is open to all, with an increasing network of trails and recreational opportunities.

The creation of The National Forest is forming new areas for wildlife every year. As these new habitats mature over

time, the plants and animals they support become more varied and important. These newly-created habitats link with existing natural havens to create a landscape that is not only richer in wildlife, but more robust and better able to meet the challenge of climate change (The National Forest Company, 2018).

Around 41km² of our landscape intersects with The National Forest. There are currently 112 National Forest schemes running within the project area and grants are available for tree planting, creation of wildlife habitats and implementation of innovative woodland management initiatives. The ethos of the two schemes complement one another and it can be expected that the extent of the woodland within the National Forest will increase due to our scheme (LUC 2018).

The National Forest Way is a long distance walk (approximately 75 miles) that crosses the National Forest from the National Memorial Arboretum in Alrewas to the west to Beacon Hill Country Park in Leicestershire in the east. Sections of the walk intersect with the Trent Valley Way and offer opportunities to unite efforts between the two landscapes (LUC, 2018).

2.5.12 Glimpses of change

Large-scale change is inevitable, but by working in partnership we have the potential to influence this change in a way that can result in some positive benefits for our landscape. There are already glimpses that the changes that will make a Living Landscape possible are already happening. Tucklesholme, just outside Burton, was a vast agricultural monoculture that will soon be transformed into the county's biggest reed bed, with aspirations to attract species that have not bred in the area for almost 100 years. Partnership working by the quarry company, developers, economists, public sector and the wildlife

trust has led to a unique situation where the working quarry is actually owned by Staffordshire Wildlife Trust.

Rather than simply extracting as much gravel as possible and leaving a big hole to be filled with water, the restoration approach is based on purposefully removing material in a way that will leave features that are essential for biodiversity. There is just as much focus on creating a nature reserve as there is on minerals extraction. This is illustrative of how a partnership can achieve what at the outset can often be perceived as contradictory aims.

3.0 Statement of Significance

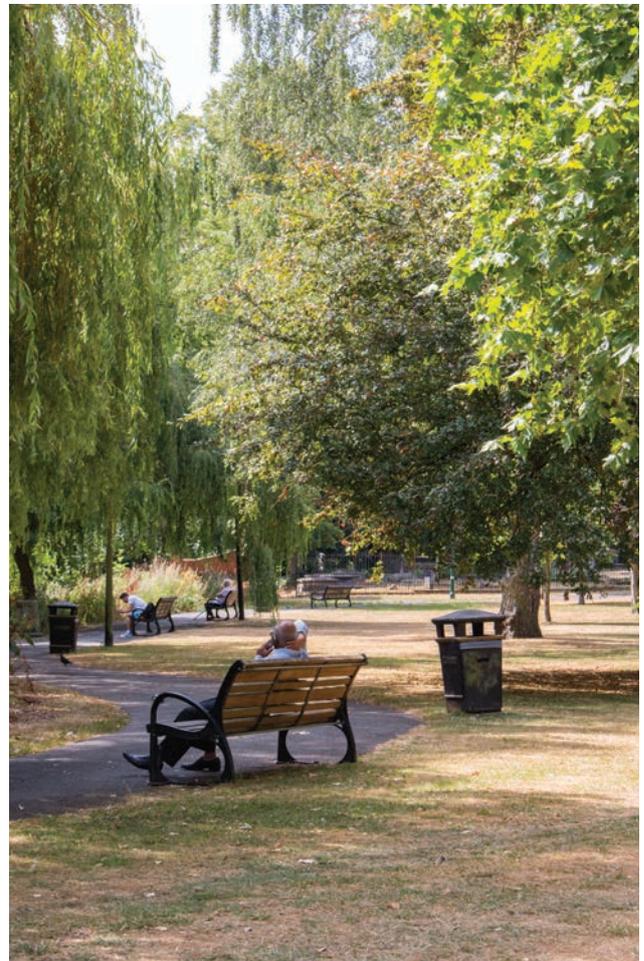


Architecturally interesting brewery in Burton (*Aimee L. Booth*)

Ethnosphere (n)
the trail of dreams, ideas,
inspirations and experiences
brought into being by the
human imagination



Creating micro-topography along newly re-profiled shorelines (*Nick Mott*)



Washlands Benches (*Aimee L. Booth*)

3.1 The value of our landscape

The Trent Valley in Staffordshire and Derbyshire is a landscape that has been a hive of activity from time immemorial. Many landscapes have had “their time”, when events conspired to create the conditions for a short lived “boom” often followed by a long decline as demands or technology moves on. Ironbridge, the Churnet Valley, the coalfields of Derbyshire and Nottinghamshire are all local examples. But the Trent Valley is different. This is a landscape that has changed continually and provided what is needed when it is needed without fuss or sudden change. As a result of this evolution the landscape is peppered with a richness of cultural and natural heritage that doesn’t just tell one story, it offers an eclectic and interwoven narrative of a landscape in continual flux.

The River Trent is central to the story. Early settlers found rich agricultural land, materials for building, clean water and safety from seaborne marauders.

Later on it was the qualities of the water that created a thriving economy based around brewing and the landscape once again was altered to provide the transport links by river and canal.

Today the landscape provides the UK’s building industry with aggregates and raw materials that drive economic growth. In years to come, once these quarries have been worked out and naturalised the landscape will change again, this time providing habitat for wildlife and leisure space for the rapidly growing population.

Some landscapes are archetypal. They are significant because they represent one “type”, better than the rest. The Trent Valley is different; it doesn’t have a single focus. Instead it is a landscape of variety, where chocolate box villages steeped in history and tradition exist within earshot of ultra-modern logistics and quarrying industry. The river is a constant in a landscape that is still changing.



Alrewas Village (Aimee L. Booth)

3.1.1 Our Natural Heritage

The Trent Valley contains some excellent natural heritage already, but the real significance on a regional and even international scale is what is planned over the coming years. If we go back a few hundred years, the Trent Valley was very different. The Trent was untamed and allowed to meander across the valley floor. The landscape back then would have been much wetter and wilder and the wildlife would have been very different. Fast forward to more recent times and land drainage and industrialised agriculture led to a situation in the late 20th Century where wildlife had been marginalised and much of the river badly polluted and contained within steep sided channels.

In recent years much of this has changed. The river is much cleaner; upstream, within the city limits of Stoke, trout are now found and surely it will not be long before salmon run once again, but the best is yet to come.

Within the next 20 years there is a real opportunity for the Trent Valley to become an internationally important wetland area. The quarries are key to this. As the sand and gravels are worked out the flat, featureless monoculture fields are being replaced with a diversity of wetland habitats. This is not happening just by chance, it is through a concerted effort between public, private and voluntary sector partners working together with a common aim. The Trent Valley is the trailblazer for this approach at Tucklesholme Quarry.

At Tucklesholme a revolutionary approach was taken whereby the quarry was bought by Staffordshire Wildlife Trust while it was still being actively quarried. This is significant because the traditional method of extraction is to take out as much material as possible

and then undertake the minimal amount of restoration works to comply with planning consent. Instead, the ethos at Tucklesholme has been to extract material in a way that creates the best possible features for wildlife. Instead of a deep hole with a bit of landscaping around the edges we are left with a rich diversity of hydrologically dynamic habitat above and below the water. We are just a few months away from works being completed and already the wildlife is thriving. Within the lifetime of the HLF funded programme this site will have begun to mature and many other sites will be coming on stream throughout the landscape.

This potential is not just restricted to the quarries. In recent years there has been a complete 180-degree turnaround in the way we think about flood management. Again we are poised on the cusp of significant positive change within our landscape. Throughout the 20th Century the conventional approach to flood management was to try to control nature. As a result, our rivers were made into deep straight channels with steep banks that would act as huge drainpipes to quickly move water downstream and out to sea. This was bad for wildlife; imagine being a juvenile fish caught in this torrent. Ultimately, this policy has been proved not to be an effective way of controlling flooding. We have all seen the results of flash floods caused by rapidly rising rivers that are not designed to cope with our weather, which has become even more variable due to climate change.

Within the lifetime of our programme we will see significant changes to flood management within Burton, the largest town in our landscape. This will see stretches of the river being re-naturalised with meanders and channels widened, islands introduced, and steep banks levelled off. The result will be a multiple “win” with improved wildlife habitats, increased flood storage and slower and more controlled flows.

Significant positive changes to the natural heritage will also be happening elsewhere within the landscape too. Although picturesque and natural looking, the River Dove and its tributaries are actually heavily engineered with several weirs along their length. These weirs are a form of flood prevention as they allow flows to be regulated. Unfortunately, they also act as physical barriers for the movement of migratory fish such as salmon. During the lifetime of this programme, plans are in place to create fish passes on these weirs, or remove them altogether, to allow free movement of wildlife.

It is also worth noting that ‘Transforming the Trent Valley’ is not working in isolation. Our landscape connects directly with two other priority landscapes that have been

supported through HLF. To the south our landscape connects directly with the Tame Valley Wetlands. Significant improvements have been made to wildlife habitat by the scheme. Our landscape will directly benefit from this investment as we are immediately downstream. To the north west our landscape connects to the Churnet Valley Landscape. Again, we will benefit directly from this investment as the Churnet is the main tributary of the Dove. Likewise, the Churnet will benefit from our work, especially if we can create a clear passage for migratory fish through the River Dove.

The next 20 years will be a very exciting period for the natural environment of the Trent Valley. The opening paragraph to this section talks about a landscape of continual change and flux. This is exactly what is happening now, but for once we are going to end up with a huge net-gain for wildlife. When future generations write about the history of the Trent Valley they will note how the early 21st Century was a time when the landscape changed significantly and how the wildlife that had been lost since the industrial revolution made a welcome return thanks to the forethought of the people around at that time.



Engineered river channel at Burton Mill (Nick Mott)

3.1.2 Our Cultural Heritage

Rivers have always played a significant role in human culture. Since pre-history they have provided water, food, protection and transport and still do today. It is therefore not wholly surprising that within our landscape evidence has been found of human habitation as far back as between 250,000 and 150,000 years. We can only speculate what the earliest residents would have thought about today’s landscape. Conditions then were precarious with sparse vegetation, but it seems there was a healthy population of mammoth, evidence of which has also been found within our landscape. While we are obviously unable to consult with these communities to ask them what was significant in their Trent Valley landscape,

we can pick up clues from what they have left behind. Although the exact details are contentious and vague, there is suggestion of a Mesolithic (10,000 to 4,000 years ago) burial on the banks, or possibly in a structure built over the water, which certainly hints at the cultural significance of the river.

Skip forward to the Neolithic (4,000 BC to 43 AD) and the evidence of the cultural significance of the river becomes stronger. Now we find evidence of enclosures, burials, monuments, and elaborate post settings that suggest the river had ceremonial significance as well as being a major landscape feature. There is even evidence of offerings of bronze weapons and axes being thrown into the river as sacrifices. The fact that many artefacts are associated with raised ground hints at frequent flooding events, so the river would have been central to the lives of these early residents. If we could look out at our landscape as it existed then the view would be very different, but perhaps with some similarities. The river would be largely untamed, with multiple braids, but we would see dwellings and field boundaries, some of which may still exist under the hedgerows of today!

The Roman period (AD 43 to 450) left a very significant legacy in our landscape and some of the features we have now owe their existence to this period, in particular the roads. In many ways the A38 is a more significant feature in today's landscape than the river. This dual carriageway cuts right through the modern landscape following the route of the Roman Rykniel Street, which ran from the West Country to Yorkshire. During the Roman period other roads would have spurred off and been used for carrying goods and moving troops across the countryside. If a Roman time traveller heading for the ford at Alrewas landed in our landscape today perhaps he may be able to get his bearings?

The collapse of the Roman Empire was followed by hundreds of years of upheaval within our landscape. The river

that once gave protection now provided a route way for Viking longships. The "Great Heathen Army of the Vikings" commanded Repton in the North of our landscape and who knows what terror and carnage this brought to the Trent Valley. Records also show that this was a time when the climate deteriorated too so our landscape would have been a difficult and dangerous place to be.

After the Norman Conquest, during the medieval period (1066 to 1485) we get a sense of calmer times. We have evidence of wealth in the valley with the establishment of manor houses, churches and fishponds. Arable farming has become much more prevalent through ridge and furrow field systems which can occasionally be seen in the fields to this day. We also see the river starting to be tamed, with weir pools constructed to power corn mills for making flour and numerous bridges built, some of which are still standing. But this is still an untamed environment with frequent outbreaks of plague. The landscape continues to be changed and adapted by the people who live and work within it and that change continues as we move towards more modern times.

A visitor from the post medieval period (1485 to 1750) would recognise quite a few places within our landscape. Many timber-framed houses and farms that were constructed in this period are still with us. The river at this time continues as a dominant feature, but is becoming tamed by bridges, and farming practices are taking advantage of the river's floodplain through the establishment of water meadows. Industry is still small scale, but quarries are opening up. The river crossing at Burton is now a significant structure and is fiercely fought over by Royalists and Parliamentarians as the town repeatedly passed between sides during the Civil War.

The Industrial Period (1750 to 1900) was a boom time for our landscape. Canals and railways become a major feature and overtake the river as the main route

for transporting goods. Areas that we now think of as rural idylls were hives of industrial activity, particularly cotton mills. Burton, already a centre for brewing for hundreds of years becomes "Beeropolis" the City of Beer and gains international recognition for the quality of its beer, with shipments going around the world including to the Tsars of Russia. Industrialists recognised that that their wealth was associated with the quality and quantities of the water drawn from wells on the Trent's banks and were forward thinking enough to protect the washlands from development. Instead the Washlands became a place for the folk of Burton to enjoy their leisure time, just like today.

In more modern times (1901 – present) our landscape still retains many features from the past, but the last century has left its mark. The Trent Valley has always offered good land for agriculture, but the mechanisation of farming, especially since the war, has seen fields grow larger and an end to traditional subsistence smallholdings. The Trent Valley could have played a significant part in the war, but thankfully the dozens of pill boxes that made up England's "Stop Line", intended to slow down the Nazi invasion never had to be used in anger. These defences were very well made and can still be found silently guarding the valleys canals and rivers.

The latter half of the 20th Century saw a very new and very large feature in our landscape - cooling towers. It seems that these leviathans that feed on the cool waters of the Trent to power our electricity demands may not be around much longer as new technologies take up the strain, but from the 1950s onwards they have dominated the skyline and added their own character and significance to our landscape.

Less imposing from ground level, but just as dramatic, has been the massive

expansion in aggregate extraction. The weathering action of the river over millennia has resulted in deep deposits of sand and gravel very close to the surface of the ground. These beds are found throughout the Trent Valley, but are particularly rich a few miles south of Burton. Viewed from the air our landscape has changed dramatically over the last 30 years and will continue to do so for at least the next 30. To the ill-informed the massive holes scraped into the earth's surface could be viewed as terrible destruction, but the truth is very different. Within a handful of years, nature will have taken over and these lakes, ponds and reed beds will be teeming with wildlife on a scale not seen since the valley's earliest settlers made camp on Trent's bankside.

Modern Burton is a large town with an eclectic mix of architecture from across the ages. The proud brick built grain houses and breweries of the Victorian era stand cheek by jowl with ultra-modern distribution warehouses attracted by Trent Valley's central location and great transport links. The multi-cultural residents of today still have the magnificent washlands on their doorstep, but it has been said more than once that the town stands with its back to the Trent. Outside the main town many of the small villages and settlements have swelled in size through housebuilding, and significantly more houses are planned to meet the demand. This will increase pressure on the landscape, but as we have seen this is simply another chapter in story of our landscape.

What is significant about this landscape? Our landscape tells the story of the River Trent. The Trent has provided the essentials for life, prosperity, terror and stability to the people and wildlife that live here for millennia. Just like the River, our landscape is not static, it has changed and flowed over time and will continue to do so into the future.

3.1.3 Our Communities

It is the people and their communities that form the beating heart of this landscape. This is a landscape in which people have always lived, worked and relaxed. Whilst some people can trace their connections back through numerous generations there are many others who are new to the area, or even the country that have been attracted by the jobs and growing economy.

The Trent Valley has changed a great deal over time and there will be significant changes over the coming 20 years. The funding from HLF is coming just at the right time and will enable the partnership to engage and involve communities to make sure the future story of the Trent Valley is one where the river is welcomed back and embraced into the lives of individuals and communities. The projects that HLF will help to fund have been developed with community support and designed to do this.

People want to feel safe in their homes. The threat of flooding in the Trent Valley is a genuine concern. On a national scale, this threat is assessed in terms of its economic impact: insurance pay outs, damage to infrastructure, losses to industry; but our communities view it on a personal level: the emotional distress, the upheaval, the inconvenience. It is clear why many people have turned their backs on the river in recent years.

But with support from HLF and by working in partnership we will start address these issues within our communities. The project will work on a landscape scale with agencies to address flood risk, through engineered solutions, such as the flood defence scheme in Burton, and soft engineering, such as river reprofiling and restoring the natural function of the floodplain. At a community level, we will engage with people and encourage them to learn more about their river and become involved in its management. We'll change opinions so the river becomes a

positive asset that enriches their life in the valley.

People enjoy spending leisure time outdoors. Although accidental, this can lead to a conflict of use that puts significant pressure on our precious natural heritage resources. Areas that benefit wildlife and conservation can suffer detrimental effects from increased visitor numbers, intrusion from dogs, or sporting activities. Other areas may find that different users come into conflict, such as walkers and cyclists, or anglers and canoeists.

This project has already helped us to understand the landscape, identify the areas of greatest sensitivity, and better appreciate the needs of the local communities. Going forward we will be able to work together to address conflicts and strike a balance across the landscape. At a landscape-scale we have identified where our natural, cultural and built assets need to be protected, and at a local-scale we will work with partners to provide the infrastructure and the information required to enable communities to access and enjoy their landscape with minimal impact.

Modern living is a high-pressured, fast-paced existence that can have a significant impact on the physical and mental wellbeing of individuals. It is acknowledged that access to natural spaces can have a positive impact on mental health and opportunities for an active lifestyle can improve physical wellbeing. In our towns and cities, we find that people are becoming less active and this is having a major impact on our overall quality of life.

Through this project we will create opportunities for people to become more active: to be fitter, healthier and happier. We'll do this by making it much easier to access and explore the countryside throughout the valley and by encouraging

people to become more active through walking, cycling and paddling. People with limited mobility or those who traditionally do not visit the countryside will be encouraged to take those first tentative steps into our wild spaces, whilst those with mental health issues will be supported through initiatives that will reconnect them with their environment. Innovative interpretation will capture and enthral new audiences, instilling a sense of pride and ownership over the landscape.

We are the custodians of the landscape for the next generation. By engaging children with nature from an early age we will ensure that the next generation understands, enjoys and looks after the rich natural heritage of the Trent Valley for future generations. We want this responsibility for stewardship to become ingrained as a way of life. By offering training to young adults, we are educating

the next generation of influencers and providing them with the skills and practical experience to make a significant difference in their local communities. Volunteering opportunities will reach a wide audience, allowing people of different ages and backgrounds to have direct involvement in the process of change, giving communities not only a voice, but the power to act out their part in Transforming the Trent Valley.

The Trent Valley is a significant landscape that has been shaped over time by natural forces and human activity. Just like the river that runs through it, it is not a static landscape. Through HLF funding the Transforming the Trent Valley partnership has already begun to learn much more about the significance of the landscape and its rich natural and cultural heritage. With HLF funding the next five years will leave a long lasting legacy for wildlife and future generations.



Children connecting with nature (Staffordshire Wildlife Trust)

3.2 What is a River Worth?

Natural Capital can be defined as the world's stocks of natural assets which include geology, soil, air, water and all living things. It is from this Natural Capital that humans derive a wide range of services, often called ecosystem services, which make human life possible. The most obvious ecosystem services include the food we eat, the water we drink and the plant materials we use for fuel, building materials and medicines.

There are also many less visible ecosystem services such as the climate regulation and natural flood defences provided by forests, the billions of tonnes of carbon stored by peatlands, or the pollination of crops by insects. Even less visible are cultural ecosystem services such as the inspiration we take from wildlife and the natural environment (World Forum on Natural Capital, 2018).

Ecosystem services are typically divided into four broad categories (Ecosystem Services, 2011):

- **Supporting services:** these are the core services upon which other ecosystem services rely, such as soil formation, photosynthesis and biodiversity.
- **Provisioning services:** these are services that provide products that provide material benefit, such as food, wood, fresh water and fuels.
- **Regulating services:** these are services that provide benefits through regulating processes, such as water purification, pest control, and pollution.
- **Cultural services:** these are services that provide non-material benefits through recreation, education, spiritual enrichment and well-being.



Wychnor Meadows floodplain edge (Nick Mott)

3.2.1 Ecosystem Services of the Trent Valley

Figure 2. Ecosystem services wheel



Our natural assets such as water, soil, air, biodiversity and geology form the natural capital needed to provide many ecosystem services that we rely on (Staffordshire Wildlife Trust, 2018).

The Trent Valley is a landscape offering a wealth of ecosystem services. Those identified as most important in Transforming the Trent Valley are:

Photograph Credits

Clean Water: Ross Hoddinott/2020VISION, **Fish:** Alexander Mustard/2020VISION, **Wood:** Mark Hamblin/2020VISION, **Pollination:** Ross Hoddinott/2020VISION, **Cool Temperatures:** Chris Maguire, **Control Flooding:** Bruce Shortland, **Purify Water:** Ed Marshall, **Store Carbon:** Katrina Martin/2020VISION, **Clean Air:** Ed Marshall, **Education:** Ross Hoddinott/2020VISION, **Recreation:** Peter Cairns/2020VISION, **Aesthetic:** Guy Edwardes/2020VISION, **Stewardship:** Philip Precey, **Habitat:** Andy Rouse/2020VISION, **Biodiversity:** Amy Lewis, **Photosynthesis:** Katrina Martin/2020VISION, **Soil Formation:** Mark Hamblin/2020VISION, **Food:** Matthew Roberts

Supporting services

- Biodiversity
- Habitat
- Floodplain

Provisioning services

- Clean water
- Fish
- Genetic diversity

Regulating services

- Flooding control
- Pollination
- Regulating water quality

Cultural Services

- Education
- Heritage
- Health and wellbeing
- Recreation

Work has been undertaken to determine the value of certain ecosystem services and this information has been extrapolated to determine the natural capital value of priority habitats within the landscape. The work undertaken in the Natural Heritage Audit (2018), using the calculations developed in the Staffordshire Ecosystem Assessment by Hölzinger and Everard (2014) demonstrated a restoration value of £108,690.04 per annum and a creation value of £64,382.25 per annum of six Biodiversity Action Plan habitats that are found within the Trent Valley.

A similar exercise was undertaken in the Economic Assessment of the Trent Valley Way by Clark for Walk Unlimited in 2017. It was found that, by the number of different categories of user, the footpath will generate £208,598 as direct new income, £310,881 as indirect and direct income and will create or safeguard 6 FTE jobs.

The Access and Visitor Audit took a broad-brush look at the Great Britain Day Visitor survey that showed the annual

day-visits in the East Midlands alongside annual spend.

A previous assessment undertaken in 2013 by the Central Rivers Initiative for part of the Transforming the Trent Valley landscape area examined the opportunities to promote economic activity and enhance our greenspaces. The focus was on the economic impact that a coordinated and well thought-out approach could have on the region. There is scope to utilise and expand upon this research.

It is clear that the landscape holds many natural capital assets and provides a number of ecosystem services, however the value of these services are currently, largely, unknown. The biggest gap in our knowledge base is determining the monetary value of the ecosystem services, and how the work undertaken through the Transforming the Trent Valley Landscape Partnership Scheme will contribute economically to the landscape.



Wychnor Meadows (Nick Mott)

3.2.2 An Ecosystem Approach

The Landscape Partnership Scheme is being delivered for the benefit of people and nature and therefore can be seen to have adopted an 'ecosystem approach'. The Ecosystem Approach is a concept that integrates the management of land, water and living resources and aims to reach a balance between three objectives: conservation of biodiversity; its sustainable use; and equitable sharing of benefits arising from the utilisation of natural resources (JNCC, 2014). More simply, it can be seen as:

- **Valuing nature's services** - how people value nature and what monetary and non-monetary value it has;
- **Understanding how nature works** - looking at the system as a whole and the benefits ecosystems provide;
- **Involving people** - putting people at the centre of ecosystem management (Porter *et al.* 2014).

3.2.3 Valuing Nature's Services

Some headway has begun on assigning a monetary value to the landscape as demonstrated above. Further work will be undertaken to determine what the current value is of the 13 identified ecosystem services. Once a value has been placed on these services we will be able to monitor and identify the impact of the projects delivered across the landscape.

3.2.4 Understanding how nature works

Places are constantly changing as a result of natural and human-made drivers for change. Change occurs regardless of intervention but intervention can guide the direction of change (Porter *et al.*, 2014).

Detailed research has been undertaken through auditing our existing information and datasets to gain an in-depth understanding of the landscape and its processes. The Spatial Strategy (LUC, 2018) has enabled us to determine the principal 'forces for change'. These forces put pressure on ecosystems and



Juxtaposition of man and nature (Nick Mott)

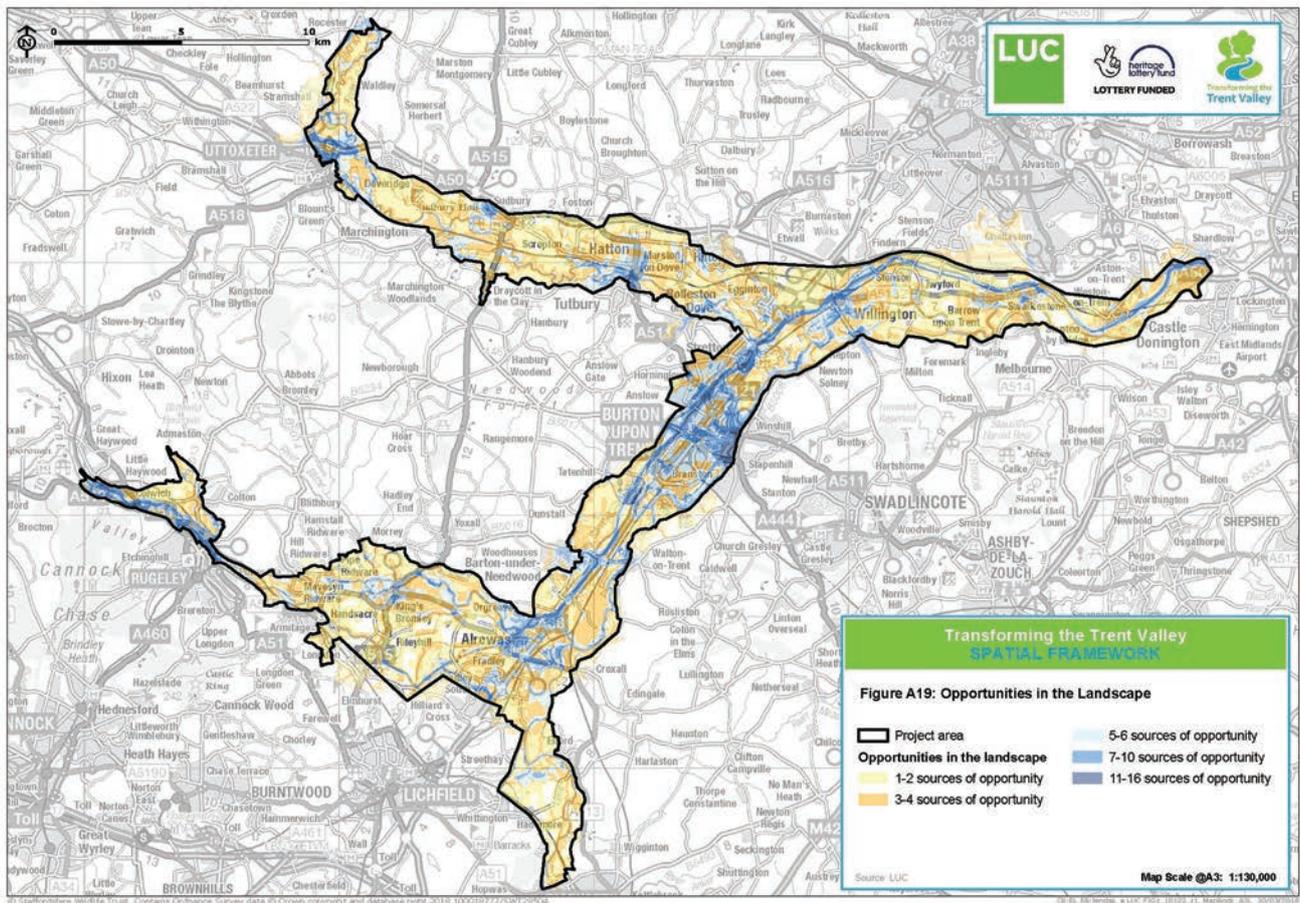
ecosystem services, but also present opportunities and create positive changes (Porter *et al.*, 2014).

The principal forces for change within Transforming the Trent Valley are large-scale infrastructure, specifically road upgrades and HS2; mineral extraction and the changing character of the landscape; hydrology and flood mitigation; recreation and tourism; climate change; and planning, particularly through the Development Plans for new settlements in and around the Trent Valley.

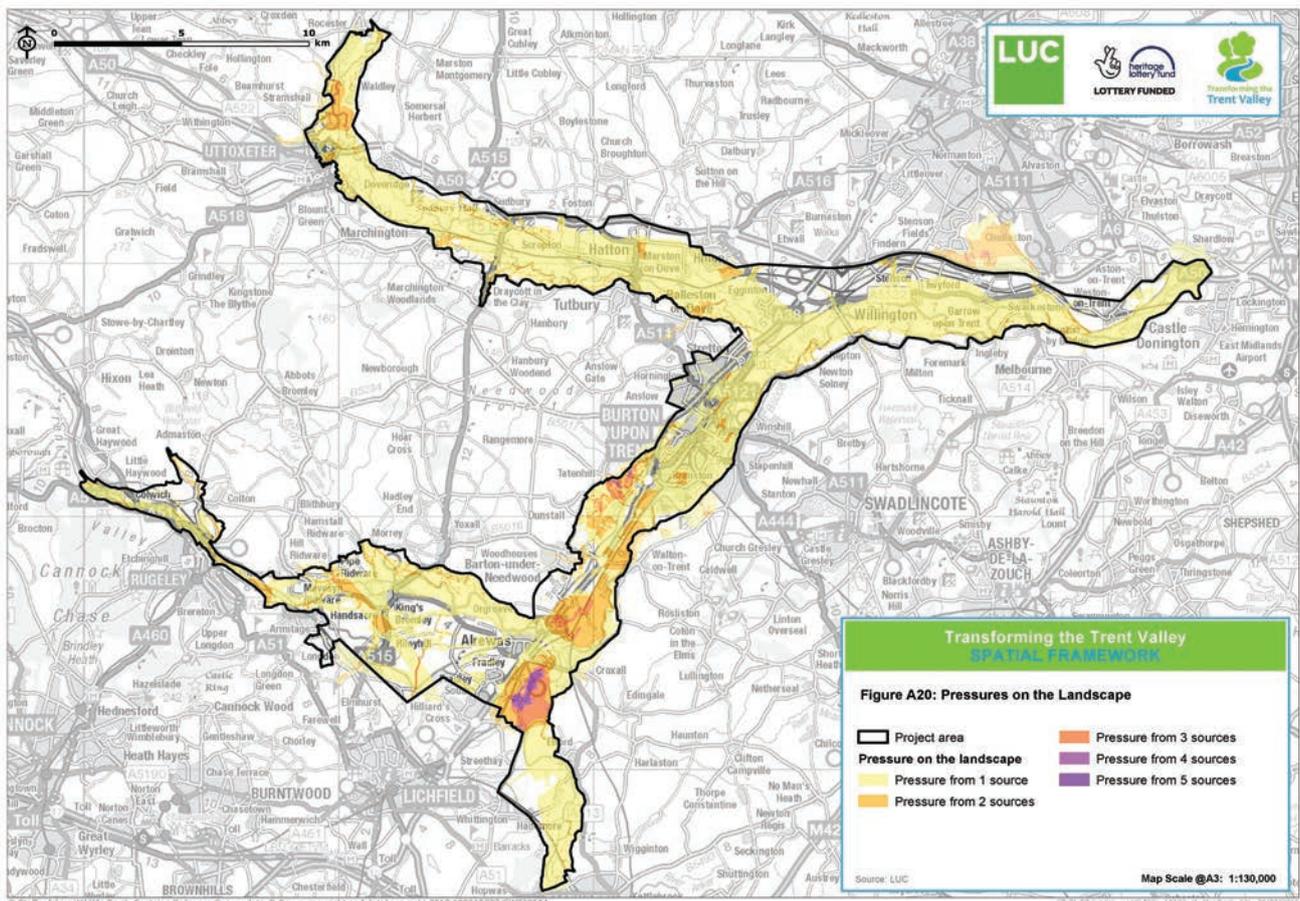
In order to further establish the interaction of different processes within the project area, and establish the extent and distribution of their impact on the landscape, a high level assessment of key opportunities and pressures has been undertaken. These have been mapped to represent spatially where the highest concentrations can be found. Opportunities include waterbodies, transport infrastructure, recreation space and the natural and cultural environment; pressures arise from these opportunities and include flood risk, new infrastructure routes, and settlement expansion (LUC, 2018). Maps 29 and 30 demonstrate the distribution and concentration of these opportunities and pressures across the landscape.

Generally, it can be observed that there is a good spread across the landscape, however, the greatest concentrations are typically found within urban areas (LUC, 2018). Identified within the report were 27 key opportunities and 7 key pressures.

Map 30. Opportunity concentrations in the Transforming the Trent Valley landscape (LUC)



Map 31. Pressure concentrations in the Transforming the Trent Valley landscape (LUC)



3.2.5 The Value of our Landscape to our Communities

Important throughout the development of the scheme, people have been involved in helping us to develop our ideas and understanding. This has taken two principal approaches: community consultation and community conversations. The first approach is a low input and high output strategy engaging a wide audience for general feedback. The second approach is a high quality output from a smaller, but more greatly engaged audience. More information on the two approaches can be found in the supporting literature.

Give 5 words

Communities were asked to give five words that summed the Trent Valley up for them. This resulted in responses such as:

“Beauty, peace, tranquillity, wildlife, walks”; “Urban, Rural, Opportunities, People, Access”; “A hidden treasure”; “Natural environment that needs protection”; “It's my home”

The word cloud below has been generated by using the most frequently selected words by the community.

Figure 3. Word cloud showing the most frequently used words that sum up the Trent Valley selected by the community



Magic wand

People were also asked about the issues in the landscape posed as the question: “if you had a magic wand, what one thing would you change about the River Trent (in 3 words)?” This generated a wealth of responses including:

“Improve for wildlife”; “Better paddlesport access”; “Re-wild re-wet repair”; “Greater accessibility”; “River walks”

Responses were then summarised into themes to enable the creation of a word cloud that demonstrates the main opportunities for change as perceived by the local community.

Figure 4. Word cloud summarising the themes for change as perceived by the community



A Community Vision

Through the process of the Community Conversations, the participants in each location were asked to develop their own vision. A number of common threads are woven through the five statements focussing particularly on creating a space that is for everyone, creating a landscape accessible for all, enabling people to enjoy their outdoor space, preserving history and heritage, and creating a space rich in wildlife.

The following statements were developed which demonstrate the most significant attributes best valued by that community:

Burton-upon-Trent

“In 2035 the Washlands is the heart of Burton, attractive and accessible to all. It allows people to enjoy outdoor space as well as the local history and diverse wildlife of the River Trent, the canal and the valley as a whole, whilst functioning as a flood plain.”

Alrewas and Kings Bromley

“In 2035 the Alrewas and Kings Bromley area of the Trent Valley is a place where the rural character has been maintained; natural sites, open spaces, heritage features and landscapes are well managed and wildlife rich. Local people and visitors enjoy good access to the countryside, including an A38 pedestrian and cycle crossing point. Community members are actively involved in decision-making to shape change and there are measures in place to maximise the potential opportunities from developments such as HS2, quarrying and house building.”

A38 Corridor (Branston, Barton and Walton)

“By 2035 this part of the Trent Valley will allow for everyone to enjoy and experience an enhanced landscape that is varied and rich in nature and promotes understanding of local history. It will include good viewpoints, footpaths, rest areas and cycle paths and have great links, giving a range of accessible recreation opportunities. It will have development that is sympathetic to the landscape and environmentally appropriate transport links, including by rail.”

Villages of the Dove Valley

"In 2035 our River Dove is a healthier, more accessible and more natural place; rich in wildlife and enjoyed and valued by people."

Repton and Willington

"In 2035, this will be a river landscape that is accessible for all, attractive, thriving and connected, which creates a healthy natural environment that communities can enjoy and benefit from and that celebrates its rich history, nature and culture."

The communities of the Trent Valley have identified a list of projects that they believe are essential to enabling them to reach their vision. From this detailed list emerged a set of top priorities that have been developed and 'owned' by our local communities. These priorities have enabled us to shape and evolve our own ambitions as a partnership to ensure a suite of projects that will address the tangible issues in the landscape.

Sonnet I. To the River Trent

*Once more, O Trent! along thy pebbly marge
A pensive invalid, reduced and pale,
From the close sick-room newly let at large,
Wooes to his wan-worn cheek the pleasant gale.
O! to his ear how musical the tale
Which fills with joy the throstle's little throat:
And all the sounds which on the fresh breeze sail,*

*How wildly novel on his senses float!
It was on this that many a sleepless night,
As lone, he watch'd the taper's sickly gleam,
And at his casement heard, with wild affright,
The owl's dull wing and melancholy scream,
On this he thought, this, this his sole desire,
Thus once again to hear the warbling woodland choir.*

Henry Kirke White

(Sonnet 1. Written on recovery from sickness)

4.0 Threats and Opportunities



Coddiwomple (v)
to travel in a purposeful manner
towards a vague destination

4.1 Threats and Opportunities

Table 5. Threats to our landscape and the challenges and opportunities they present to our scheme.

Threat	Causes or issues	Opportunity
Environmental		
Changing character of the landscape	Mineral extraction, changes in agricultural practices, large-scale development, HS2	Although the character of the landscape will be altered by large-scale mineral extraction (and will continue to do so) the opportunities presented through restoration originally incorporated recreation (water sports) and are currently focussed on wildlife-rich spaces with diverse habitats (water, woodland, meadow) incorporated with low-level recreation (walking, cycling). We have the opportunity to create tranquil spaces that benefit people and wildlife. There are opportunities to work with landowners to consider wildlife-friendly farming practices; protect heritage features; and alter how land with hidden archaeology is managed to preserve the asset in the future. Urban development and transport infrastructure (e.g. HS2) may provide additional funding streams for local projects, for example, through Section 106 obligations and the HS2 Community Environment Fund.
Climate Change	Long-term change and extreme weather events	Consider new ways of managing the landscape; development of the Washlands for water-retention during high rainfall and water levels will be undertaken through Living Floodplains. Extreme flood events will become more frequent so the use of the floodplain must be considered. Flood mitigation presents a variety of opportunities.
Loss of Habitat	Through climate change, development, changing management etc.	There are opportunities to identify and restore or recreate new habitats through Biodiversity Offsetting as compensation for development in the landscape. Fragmentation is a major threat to long-term viability as connected habitats allow for the movement of species between sites. Natural heritage improvements will be essential in halting the loss of habitat and reinstating habitat in strategic locations.

Uncertainty over future management	Need for long-term management, coordinated approach, biodiversity offsetting.	A coordinated landscape approach, coupled with a long-term vision for the area, provides the basis for a coordinated approach to management. With key decision-makers and influencers involved in the partnership there is scope to arrive at a common agreement over long-term management.
Pollution	An increasing population brings higher emissions; growing industry impacts pollution levels	As development in the landscape and surrounding area increases, and with it the transport infrastructure that serves this development, pollution from increased road traffic, residential housing and industry will also increase. There is opportunity to link into sustainable transport initiatives to encourage alternative forms of transport. The scheme is improving the existing footpath and cyclepath network with the vision that infrastructure changes must happen first to enable a cultural change in travel choices. Education will also play a part in changing hearts and minds.
Flooding	The Trent Valley is a floodplain landscape and therefore large areas are at risk of flooding. High-level flood risk events are becoming more frequent	The Environment Agency is currently reviewing the flood defences along large sections of the Trent Valley and there is opportunity to work alongside this statutory work to influence the scope and the mitigation. Transforming the Trent Valley is currently linked into the Burton+ scheme with the EA and ESBC to develop an approach to flood mitigation that acknowledges the role played by different habitats in flood management and recognises the needs of the local communities.

Plant and animal diseases and non-native Species	In particular Himalayan Balsam, Floating Pennywort and mink	There is an opportunity to work with volunteers to identify the location and extent of non-native species and record this information, and engage communities directly on removing some non-native species (e.g. Himalayan balsam). Working to create healthy and supported habitats builds resilience across the landscape. Spreading information allows communities to become champions for their area, encouraged through the community engagement projects. Similarly, messages like 'check, clean and dry' for canoeists are important for preventing further contamination.
Economic		
Large-scale development	Large-scale housing, A38 expansion, Garden Town and Twin Rivers	Large-scale development will alter the economy of the landscape bringing a larger population and more business opportunities. There is scope for development to attract investment if carefully planned and a long-term vision for the landscape will be key to this. Additionally, informing the planning system to ensure appropriate foot and cycle links are provisioned giving access to the wider countryside opens opportunities for local spending and supporting of small businesses. It is shown in the TVW Economic Assessment that walkers spend locally and small local shops and cafes have scope to benefit.
Active quarries / future mineral extraction	There are a number of active quarry sites across the landscape and restoration needs to be undertaken as part of a wider vision. Future mineral extraction is also planned	There remain large areas of unexploited mineral in the Tame and Trent Valleys and a potential to open up mineral extraction along the largely unexploited Dove Valley. With a landscape scale vision there is opportunity to influence mineral plans and planning decisions on areas that should be protected due to their natural or cultural heritage, or due to their value in preserving the character and integrity of the landscape, and to realise the collective potential of many restoration proposals to create a more connected landscape for people and nature. The audit information supplied by the development of this scheme will provide part of the evidence base to inform and influence future decisions.

Landfill sites	A number of sites have been allocated for landfill and will impact on the environment and local communities	The location of landfill sites will impact the restoration time for quarries, will impact local villages due to higher levels of large vehicles, and will put strain on local infrastructure. There will be an impact on the nature of site restoration. There is possibility to embrace a restored site with varied habitat opportunities. The landscape is pock-scarred by quarry lakes and landfill provides an alternative restoration closer to the original landscape character.
High Speed 2	This will provide a short-term impact during the construction phase and a long-term impact upon completion	This new rail link has the potential to alter the character of the landscape by making nearby locations (Lichfield, Stafford) part of the London commuter belt. There is a risk that property prices will rise, pricing out local residents, and demographics will alter as a result of changing job opportunities. Liaison with local rail and bus operators is needed to improve connectivity within the landscape as well as into the landscape.
Cultural		
Social Changes	Demographic changes, development pressures, economic changes	External pressures will lead to an inevitable, but uncertain, social change in attitudes, priorities and expectations. The scheme has the opportunity to influence this change through directly engaging communities, providing training and skills, inspiring community champions, improving infrastructure and relaying key messages. Working with young adults trains the new generation of deliverers and influencers; whilst providing formal and informal education for young children will help to guide and educate the decision makers of the future.
Local issues and attitudes	Feeling alienated from the river or the landscape; feeling unheard; local issues not addressed	It is clear that there are issues related to the scheme that go beyond the scope of a heritage project. With key decision makers and influencers involved in the partnership, there is opportunity to share the audit information, consultation responses and community feedback to highlight issues that need to be addressed. Community engagement and education needs to tackle feelings of alienation and effective communication should ensure that the correct messages are heard.

<p>Attitudes and understanding</p>	<p>Illegal activities e.g. flytipping and graffiti; habits and expectations</p>	<p>Lack of understanding, or sometimes a lack of sympathy, leads individuals to undertake illegal activities. The scheme presents an opportunity to tackle anti-social issues through education and awareness raising, whilst attempting to address a lack of sympathy through a sense of community pride and ownership. Breaking habits is difficult, however people will often choose the easy option and so new habits can be created by careful planning. This is particularly important in footpath creation and cycle infrastructure.</p>
<p>Competing priorities</p>	<p>Conservation, tourism, agriculture, industry</p>	<p>For a landscape that works for wildlife, culture, communities and industry there will be inevitable competing priorities. Increasing numbers of tourists and visitors puts pressure on sensitive heritage sites. Careful management is required and there is opportunity to view sites within a landscape context to prioritise or divert resources as required, based on a spatial strategy.</p>

Overuse	Either through intensification or high footfall	Increased housing development will lead to a population increase in the landscape. Encouraging access to new sites will lead to high numbers of visitors. A careful balance is needed to ensure that delicate sites are preserved and protected and that destinations and the infrastructure that serve them can sufficiently meet the demand. A landscape scale vision is essential to ensuring appropriate management.
Neglect	Lack of management or miss-management leading to issues like soil erosion, scrub encroachment, decay and vandalism	Working with volunteers there is scope to identify sites that are suffering from neglect, principally natural heritage and cultural heritage sites. By working with and supporting landowners, we can identify the causes of neglect and work to reverse the situation. This could be due to lack of knowledge, lack of skills, economic pressures, disinterest etc. The projects allow us to tackle these issues to bring about change. Supporting landowners will have a direct influence; training and supporting volunteers will ensure a legacy.
Political		
Political and Policy Changes	Brexit, changes in local government, changing political priorities	As the United Kingdom begins negotiations to leave the European Union, the impact on policy remains uncertain. This is likely to have impact on a local as well as a regional level. Additionally, changes in local government can alter political will and is likely to have an impact on a scheme exceeding 5 years.
Agricultural Policy	Changes in policy, priorities and subsidies.	Changes to the Single Market as a result of Brexit are likely to impact agriculture through changes in subsidies, legislation in care or movement of stock, or differing priorities in outputs. This will impact how the landscape is farmed and managed.

5.0 Aims and Objectives



Solivagant (n)
a solitary wanderer

5.1 Vision

5.1.1 Purpose

'Transforming the Trent Valley' celebrates the waterways, industries and the communities that are the life-force of this rapidly evolving river valley landscape and which have shaped and continue to influence its form and use. Wildlife-rich rivers, waterways and wetlands are at the heart of a revitalised, resilient and beautiful landscape that is connected and accessible for local communities and visitors to enjoy and explore as well as providing many opportunities to inspire and re-connect people to the river valley by revealing its cultural, industrial and natural heritage.

5.1.2 Vision

Wildlife-rich waterways and wetlands at the heart of a resilient, accessible, beautiful and culturally rich landscape. Creating a brighter future for people, business and wildlife in the Trent Valley.

5.1.3 Statement of Intent

This Landscape Partnership Scheme is composed of 16 projects; no one project is completely dependent on another, but there are close connections and links between them all. This is a scheme that relies on effective communication between all partners, efficient management of all projects, and links with local communities, beneficiaries and key audiences.

Projects are divided into three themes, however the projects are interconnected and the success of the scheme relies on successful delivery of all the elements.

The three themes are:

Connecting Communities through Action

The projects under this theme focus on community engagement through volunteering, education, training, participation activities and community action.

River Valley Connections

The projects under this theme provide access improvements across the River Valley for a variety of users including walkers, cyclists, boaters and canoeists.

Transforming the Landscape

The projects under this theme deliver improvements to cultural and natural heritage across the river valley helping us to protect and enhance our heritage assets into the future.

In addition to the themed projects, there are two scheme-wide programmes that encompass the individual projects: The Interpretation Programme will capitalise on opportunities across the landscape through traditional and modern interpretation techniques, utilising modern technology and low-key approaches to engage and enthral a wide and varied audience; the Management and Delivery of the scheme includes communications to publicise the projects and the work that is being delivered in the valley. This will include the use of social media, websites, newsletters, media activities and celebration events to reach the audience in and around the landscape.

Table 6. Projects that will be delivered through our scheme 2019-2024

Project Code	Project Title	Delivery Lead
TTTV1	Scheme Management and Delivery	Staffordshire Wildlife Trust
TTTV2	Interpretation Programme	Staffordshire Wildlife Trust
Connecting Communities through Action		
CCA01	Community Engagement	Support Staffordshire
CCA02	Wildchild	Staffordshire Wildlife Trust
CCA03	Big Washlands Watch	Support Staffordshire/ Staffordshire Wildlife Trust
CCA04	Transforming Lives	Derbyshire Wildlife Trust
CCA05	Connecting with Nature	Derbyshire Wildlife Trust
CCA06	Tales from the River Bank	Support Staffordshire/ Staffordshire Wildlife Trust
River Valley Connections		
RVC01	Trent Valley Way	Trent Rivers Trust
RVC02	Canal Access	Canal and River Trust
RVC03	Canoe Discovery	British Canoeing
RVC04	Gateway to the Trent Valley cycleway	Staffordshire County Council
RVC05	Way Marking of Cycle Routes	East Staffordshire Borough Council
Transforming the Landscape		
TL01	Living Floodplains	Staffordshire Wildlife Trust
TL02	Rolleston Brook Hollows	East Staffordshire Borough Council
TL03	Transforming the Trent Valley's Heritage	Staffordshire County Council/ Staffordshire Wildlife Trust
TL04	Stop! The Military Heritage of the Trent Valley	Staffordshire County Council/ Staffordshire Wildlife Trust

5.1.4 Project connections

The projects that have been developed as part of this scheme all work together to enable us to realise our vision for the landscape. As well as developing some very well integrated projects that drive forward our vision internally, we have also worked to ensure that our ideas are integrated with external initiatives and schemes that help us to broaden our impact and add value to our ambitions.

Some of these projects are undertaken by our partners outside or alongside this scheme, others are undertaken by other organisations or partnerships associated with our landscape.

Figure 5 illustrates how the projects interconnect whilst table 7 provides a summary of each project and how it connects to internal and external projects.

Figure 5. Overview showing how the delivery projects interconnect.

	Interpretation Programme	Community Engagement	Wildchild	Big Washlands Watch	Transforming Lives	Connecting with Nature	Tales from the River Bank	Trent Valley Way	Canal Access	Canoe Discovery	Gateway to the Trent Valley cycleway	Way Marking of Cycle Routes	Living Floodplains	Rolleston Brook Hollows	Transforming the Trent Valley's Heritage	Stop! The Military Heritage of the Trent Valley
Interpretation Programme		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Community Engagement	■		■	■	■	■	■	■	■	■	■	■	■	■	■	■
Wildchild	■	■		■			■						■			
Big Washlands Watch	■	■	■										■		■	■
Transforming Lives	■	■		■		■		■	■	■			■	■	■	■
Connecting with Nature	■	■			■								■	■		
Tales from the River Bank	■	■	■													
Trent Valley Way	■	■			■				■	■	■	■				■
Canal Access	■	■			■			■		■	■	■			■	
Canoe Discovery	■	■			■			■	■		■	■	■			
Gateway to the Trent Valley cycleway	■	■						■	■	■		■				
Way Marking of Cycle Routes	■	■						■	■	■	■					
Living Floodplains	■	■	■	■	■	■				■				■	■	■
Rolleston Brook Hollows	■	■			■	■							■		■	
Transforming the Trent Valley's Heritage	■	■		■	■				■				■	■		■
Stop! The Military Heritage of the Trent Valley	■	■		■	■			■					■		■	

Table 7. Summary of the 16 delivery projects and how they interconnect to embed the scheme in the landscape and local initiatives.

Audience	Details
TTTV2 Interpretation Programme	This is an overarching programme and will work with all projects in the scheme. It is also anticipated that we will work alongside external projects to share and influence interpretative themes and to ensure a join-up approach across the landscape. In particular Burton Washlands Vision Plan, Tucklesholme restoration, The National Forest, Claymills Pumping Station. There will also be efforts to link in with our adjoining landscape 'Tame Valley Wetlands'.
CCA01 Community Engagement	This community project will work alongside all the scheme projects through encouraging volunteers and participation. Our reach for communications will be broadened by this project. We will work with and support a number of community groups through the Grant Scheme.
CCA02 Wildchild	This family engagement project will work alongside Community Engagement and will support Big Washlands Watch and Tales from the River Bank. It will also utilise some of the sites identified in Living Floodplains.
CCA03 Big Washlands Watch	This participation project will provide training opportunities for young people enrolled in the Transforming Lives project and will utilise volunteers and participants identified by Community Engagement. Families and young children will be fed through from Wildchild. Outputs from surveys will benefit the natural heritage project Living Floodplains, and the cultural heritage project Stop! and Transforming the Trent Valley's Heritage.
CCA04 Transforming Lives	Young people will be introduced to the scheme via the Community Engagement project and will provide a delivery labour force that will support Trent Valley Way, Canoe Discovery, Canal Access, Living Floodplains and the cultural heritage projects. Externally the project will work with YMCA Derbyshire and Support Staffordshire.
CCA05 Connecting with Nature	This wellbeing project will work with communities across the Trent Valley and will link in with key locations identified through Living Floodplains. Easy access will be utilised from the Trent Valley Way project and Interpretation Programme. Externally the project will work with Derby University and Care Commissioning Groups.

CCA06 Tales from the River Bank	This oral history project will link in with the Interpretation Programme and also Community Engagement and Transforming Lives. Externally the project will work with a National Citizenship Scheme group.
RVC01 Trent Valley Way	This access project is interconnected with the other access projects, particularly the easy access routes that will be delivered through the Interpretation Programme, the two cycle route projects and the Canal Access project. Added value will be achieved through working with the Stop! project by converting pill boxes into walker's refuges. Added interest will be given by linking into the overarching Interpretation Programme. Externally the project will link in with the ongoing development of the Trent Valley Way from source to estuary.
RVC02 Canal Access	This access project will connect with Canoe Discovery by providing portage points at key locations on the canal. The upgrade of the towpath links in with the Trent Valley Way. Externally this project will link in with local canal groups and heritage groups with specialist interest in the waterways.
RVC03 Canoe Discovery	This recreation and access project will connect with Canal Access to create a number of canoe trails. Information will be provided by the natural heritage project Living Floodplains and the cultural heritage projects to inform users of the waterways. Externally the project will work with local canoe clubs and will link in with campaigns like Check Clean Dry.
RVC04 Gateway to the Trent Valley	This new cycle access project will link in with the other access projects, being closely associated with the Trent Valley Way route and the nearby Cycle Routes. Information will be provided via the Interpretation Programme. Externally the project will work with organisations like Sustrans and ongoing liaison with the National Memorial Arboretum and Tarmac.
RVC05 Way Marking of Cycle Routes	This cycle access project will link in with the other access projects, particularly the new cycle route project and also the Trent Valley Way. Routes coincide with the Washlands and will connect with the easy access walks planned through the Interpretation Programme, the spurs and circular walks off the Trent Valley Way and will also gain added interest from the Interpretation Programme.
TL01 Living Floodplains	This natural heritage project will link directly with Living Floodplains and will also provide some cross-over with the cultural heritage projects. Community Engagement will also link in with this project and there is scope for some involvement with Transforming Lives. Externally the project will link with Rolleston Parish Council, Rolleston Civic Trust and Burton Conservation Volunteers.

TL02 Rolleston Brook Hollows

This natural heritage project will link directly with Living Floodplains and will also provide some cross-over with the cultural heritage projects. Community Engagement will also link in with this project and there is scope for some involvement with Transforming Lives. Externally the project will link with Rolleston Parish Council, Rolleston Civic Trust and Burton Conservation Volunteers.

TL03 Transforming the Trent Valley's Heritage

This cultural heritage project will link with the Interpretation Programme both by providing information and by presenting information. It will link in with training opportunities offered by Transforming Lives and volunteering opportunities presented by Community Engagement and Big Washlands Watch. The Community Grants will also link here as cultural heritage interest of local groups is high. Externally this project will link in with Historic England.

TL04 Stop! The Military Heritage of the Trent Valley

This cultural heritage project will link with the Interpretation Programme both by providing information and by presenting information. It will link in with training opportunities offered by Transforming Lives and volunteering opportunities presented by Community Engagement and Big Washlands Watch. The pillboxes will work with Living Floodplains as hibernacula and hides, and with the Trent Valley Way as walkers' refuges. Externally this project will link in with Historic England.



Children and families learning about wildlife and nature (Staffordshire Wildlife Trust)

5.2 Aims and Objectives

5.2.1 Aims

1. Conserving, enhancing and restoring the built, historic and natural heritage features of the Trent Valley Landscape.
2. Reconnecting and engaging communities with the Trent Valley landscape and its natural and cultural heritage.
3. Increase access to landscape heritage, creating better links and opportunities for learning and enjoyment.
4. Increasing training opportunities for local people in heritage skills to empower the local population, reconnect them with their landscape and provide a lasting legacy.



Curlew (Terry Whittaker 2020VISION)

5.2.2 Objectives

1. Directly address the current threats and opportunities to improve the landscape of the Trent Valley. These threats are:
 - Physical loss of landscape features, built heritage and habitats.
 - Decline in quality of landscape features, built heritage and habitats.
2. Contribute to the restoration of habitat features on a landscape scale, supporting the flora and fauna of the Trent Valley.
3. Contribute to the preservation and protection of key heritage features of the landscape including industrial and canal heritage for future generations.
4. Provide considerably enhanced public access to both the natural and cultural heritage through the provision of new access routes and access infrastructure for diverse user groups.
5. Raise awareness and involvement of local communities in the historic, natural and cultural features of the Trent Valley for leisure, work health and well-being.
6. Develop and deliver awareness raising activities including volunteering and skills development opportunities; talks and events, publications and projects themed around the landscape, oral history, geology, rivers and healthy use of the landscape.
7. Enable active community participation in heritage through volunteering, skills development, interpretation and events.
8. Provide new heritage training opportunities in relation to both built heritage and natural heritage, enabling the acquisition of new heritage skills and learning of future benefit to people and the area.
9. Significantly improve and coordinate information provision throughout the Trent Valley, to provide consistent and high quality interpretation materials for learning about the landscape.

5.2.3 Outcomes

HLF outcomes

Outcomes for heritage

Heritage will be:

- Better managed
- In better condition
- Identified/recorded

Outcomes for people

People will have:

- Developed skills
- Learnt about heritage
- Volunteered time

Outcomes for communities

- Negative environmental impacts will be reduced.
- More people and a wider range of people will have engaged with heritage.
- Your local area/community will be a better place to live, work or visit.

Table 8 summaries the outcomes and how they will be delivered through the projects. Table 9 provides an overview of the nine HLF outcomes and where the 16 projects will deliver against these outcomes.

Table 8. Detail of the 16 delivery projects and how they deliver against the HLF Outcomes.

Project Reference - TTTV2 **Interpretation Programme**

People will have learnt about heritage: People will interact with interpretative experiences of the natural, cultural and built heritage.

People will have volunteered time: Volunteers will help with creating interpretative materials, leading walks and events, and sharing knowledge.

More people and a wider range of people will have engaged with heritage: People will use new access paths to engage with heritage. New audiences will be reached by providing new and diverse opportunities.

Your local area/community will be a better place to live, work or visit: New access routes will be suitable for a range of activities. Interpretation will reach a diverse audience and people will feel a greater connection with their landscape.

Transforming the Landscape

Project Reference - TL01 **Living Floodplains**

Heritage will be better managed: Sites will have been improved or are in favourable management.

Heritage will be in better condition: Restored and conserved historical water meadows, palaeochannels and floodplains to a natural functioning state. Removing man-made structures such as weirs. Increasing floodplain woodland and riparian planting of trees, which would naturally be more prevalent without human intervention.

Heritage will be identified and recorded: New records will be generated.

People will have developed skills: People will have learnt survey skills.

People will have learnt about heritage: Through participating in restoration and conservation activities people will learn about the natural heritage of the Trent Valley.

People will have volunteered time: People will have undertaken practical heritage tasks.

Other project outcomes:

- Reduced likelihood of flooding.
- Improved water quality.
- A more connected floodplain landscape.
- Increase in priority habitat coverage in the project area.
- Increase in sustainable funding of ongoing management through biodiversity offsetting.
- Improved natural flood management solutions.

Project Reference - TL02

Brook Hollows

Heritage will be better managed: The possibility of a new community-led management structure will be explored.

Heritage will be in better condition: Bring the area up to a standard that will combine the natural and the designed elements of a landscape. This will provide a focal point for the heritage, wildlife, and flora and fauna of the village that creates a peaceful place for people from the local community and wider community to enjoy and to learn.

Heritage will be identified and recorded: Cataloguing of trees and other natural assets of the site will be completed.

People will have developed skills: Volunteers will increase skill around landscape management, wildlife and its habitats including habitat creation and heritage.

People will have learnt about heritage: Through volunteering, school visits and heritage boards people will learn about the natural and built heritage of the area.

People will have volunteered time: Though participating in volunteer events, such as collating records and restoring and conserving the area, people will volunteer time.

Your local area/community will be a better place to live, work or visit: This local community asset will be improved for local residents and for visitors to engage with and enjoy.

Project Reference - TL03

Transforming the Trent Valley's Heritage

Heritage will be better managed: Landowners and communities understand and are actively engaged in the management of the historic environment.

Heritage will be in better condition: Heritage assets no longer classed as 'at risk' or 'vulnerable'.

Heritage will be identified and recorded: Better information on heritage assets and their condition available to inform designation and management.

People will have developed skills: Volunteers and communities trained in survey, monitoring and conservation works.

People will have learnt about heritage: Local communities will be more aware of heritage assets within their area.

People will have volunteered time: Local communities actively engaged in the sustainable heritage management.

Negative environmental impacts will be reduced: Local communities working to improve the condition of heritage assets.

More people and a wider range of people will have engaged with heritage: New audiences aware of and involved in the understanding, curation, and interpretation of the historic environment.

Your local area/community will be a better place to live, work or visit: Improved opportunities for local communities and visitors alike to engage with heritage.

Other project outcomes:

- A greater understanding of heritage assets and their condition within the Trent Valley.
- Heritage assets within the Trent Valley in better condition being monitored, managed and conserved for future generations.
- Engaged local communities with the knowledge and skills to act as custodians of the historic environment.
- Responsible landowners actively involved in the management of heritage assets in their care.

Project Reference - TL04

Stop! The Military Legacy of the Trent Valley

Heritage will be better managed:

- Landowners and communities understand and are actively engaged in the management of the historic environment.
- A programme of monitoring the condition of military heritage assets will be developed.

Heritage will be in better condition: A selection of military heritage assets (chiefly pillboxes) will be reversibly converted for use as bat roosts, interpretation locations, geocache locations, and bird hides. This work will include vegetation clearance and remedial repairs and will improve the condition of each of the selected heritage assets.

Heritage will be identified and recorded: A programme of long term monitoring and reporting by volunteers on the reuse of sample converted pillboxes by protected species. Better information on heritage assets and their condition available to inform management.

People will have developed skills: Volunteers and community groups trained in condition survey, building recording, bat survey and monitoring, research, oral history capture, and construction skills.

People will have learnt about heritage: Local communities will be more aware of the military heritage assets in their area. The military heritage of the area will be more visible and better understood by local communities and visitors.

People will have volunteered time: Local communities actively engaged in the sustainable management of heritage.

Negative environmental impacts will be reduced:

- Local communities working to improve the condition of heritage assets.
- Improved opportunities for local communities to learn about and to assist with the creation of new facilities for species experiencing habitat loss.

More people and a wider range of people will have engaged with heritage: New audiences aware of and involved in the understanding, curation, and interpretation of the historic environment.

Your local area/community will be a better place to live, work or visit: Improved opportunities for local communities and visitors alike to engage with heritage. Improved opportunities for local communities and visitors alike to engage.

Other project outcomes:

- A greater understanding of the military heritage assets and their condition within the TTTV project area.
- Military heritage assets in the TTTV project area in better condition being monitored and conserved for future generations.
- Engaged local communities with the knowledge and skills to act as custodians of the historic environment.
- Better understanding of the suitability of military heritage assets (in particular pillboxes) to be reversibly and sensitively converted for alternative use.
- Conversion works carried out by the projects will inform future conversion works

within the TTTV area and elsewhere.

- Military heritage assets in the TTTV project area will be better interpreted and understood by locals and visitors.
- Responsible landowners actively involved in the management of military heritage assets in their care.

River Valley Connections

Project Reference - RVC01

Trent Valley Way

People will have developed skills: People will have learnt about heritage. An increase in awareness in heritage will be generated through the Interpretation boards, the walking leaflets, the View Ranger App and the Geocaching trail.

People will have learnt about heritage: Walkers and local people have engaged with and benefited from the range of tools made available to increase their knowledge of heritage.

People will have volunteered time: Local people will have helped to develop the circular routes and to carry out visit counts.

More people and a wider range of people will have engaged with heritage: Local people will have accessed the range of information and interpretation along the main route and the circular routes.

Your local area/community will be a better place to live, work or visit: The walking routes will be safe, well-marked on the ground, with information and interpretation to local heritage and nearby places of interest easily accessible.

Project Reference - RVC02

Canal Access

Heritage will be better managed: Improvements will ensure that the CRT are more able to manage the asset.

Heritage will be in better condition: Improvements to surfacing, signage and access for walkers, cyclists, canoeists and boaters will reconnect communities with both this historic environment and the wider landscape.

More people and a wider range of people will have engaged with heritage: The improvements will be to the benefit of multiple users including those with disabilities, as well as new and existing walkers, cyclists and anglers.

Your local area/community will be a better place to live, work or visit: Access to the towpath will also be improved to provide key locations, communities and attractions with new or upgraded access to areas currently identified as poorly accessible.

Project Reference - RVC03

Canoe Discovery

People will have developed skills: Local canoe clubs will be able to report member development.

People will have learnt about heritage: Users of the trail will be educated about the heritage in the local area.

People will have volunteered time: Volunteers will be undertaking much of the works, so partners will be able to report on numbers involved.

Negative environmental impacts will be reduced: Erosion of paths and other access related negative impacts will be reduced.

More people and a wider range of people will have engaged with heritage: Canoe trails will enable communities to enjoy the natural and built up environments including experiencing the native wildlife in the area as well as the historical heritage on offer.

Your local area/community will be a better place to live, work or visit: Increased access to the canal and improvements for use by existing and new canoers.

Other project outcomes: More people will be aware of the trails through online and hard copy publications of the canoe trails.

Project Reference - RVC04

Gateway to the Trent Valley Cycleway

Negative environmental impacts will be reduced: Existing cyclists using the cycleway to cycle more and an increase in the proportion of visitors cycling to the NMA and a reduction in the percentage arriving by car.

More people and a wider range of people will have engaged with heritage: People new to cycling using the cycleway and reporting any wellbeing gains.

Your local area/community will be a better place to live, work or visit: Outcomes relating to developing the infrastructure:

- Expansion of the cycle network, linking to NCN54 and encouragement to cycle.
- Increased connectivity to the NMA.
- Increased accessibility of the NMA and NCN54.
- Improved links between Lichfield, Alrewas and the NMA.

Project Reference - RVC05
Way Marking of Cycle Routes

Negative environmental impacts will be reduced: Allow people to follow signage on a predetermined route.

More people and a wider range of people will have engaged with heritage: More people visiting areas of the Borough that are only accessible on foot or bike.

Your local area/community will be a better place to live, work or visit: More leisure opportunities for people visiting the Trent Valley.

Connecting Communities Through Action

Project Reference - CCA01
Community Engagement

People will have volunteered time: Volunteers within the grant panel and through promotion of other projects.

More people and a wider range of people will have engaged with heritage: Community grants will enable new audiences to engage with heritage.

Your local area/community will be a better place to live, work or visit: The grant funded community projects will provide opportunities for people to get involved in a local project, will enhance community spirit and help the local area to be a better place to live.

Project Reference - CCA02
Wildchild

People will have developed skills: Educating younger generations about wildlife and heritage, including how to behave in the countryside. Volunteers will gain experience in leading sessions and working with children and young people.

People will have learnt about heritage: Combatting apathy about conservation and building a connection to nature and encouraging a sense of place.

People will have volunteered time: Volunteers will be recruited and supported to lead Wildchild activities.

Negative environmental impacts will be reduced: Families will use the landscape more – for recreation and learning. Communities will be nicer places to live, families will make friends and join together to take part in activities.

More people and a wider range of people will have engaged with heritage: Providing opportunities with people to interact with nature in a sensitive way.

Other project outcomes: Children and families will be more connected to nature as a result of attending Wildchild sessions.

Project Reference - CCA03

Big Washland Watch

Heritage will be identified and recorded: Generate records for Staffordshire Ecological Record and Derbyshire Biological Records Centre and give a better picture of species distribution. To generate more records from under-represented species groups (mainly fish). To pull together recorders in different groups and share information.

People will have developed skills: To provide opportunities for beginners to observe and record the wildlife that uses the valley.

People will have learnt about heritage: To make recording and identifying wildlife accessible to a wider audience through training with a focus on specific outcome measures.

People will have volunteered time: Volunteers will attend events and activities. Volunteers will support the project as citizen scientists. Volunteers will visit a natural heritage site for the first time.

More people and a wider range of people will have engaged with heritage: Engaging for use with a wide spectrum of people.

Other project outcomes: The community around the Trent Valley Washlands will have more identification skills, submit more ecological records and will take part in more citizen science projects.

Project Reference - CCA04

Transforming Lives

People will have developed skills: People will have developed skills in natural river management, river habitat surveying, plant identification, Phase 1 habitat survey training, practical habitat restoration skills, and visitor experience on nature reserves.

People will have learnt about heritage: Increased knowledge of existing local, natural, built and cultural heritage.

People will have volunteered time: Volunteers will record and improve the condition of vulnerable heritage assets across the project area and achieve sustainable management of them.

Negative environmental impacts will be reduced: Habitats managed for biodiversity.

More people and a wider range of people will have engaged with heritage: Increased awareness of the environmental value of individual and connected sites.

Your local area/community will be a better place to live, work or visit: Improved access to natural and built heritage for local and wider communities.

Project Reference - CCA05

Connecting with Nature

People will have developed skills: Local residents gain skills applicable to maintenance of natural and built heritage. People in the community will have the skills and knowledge to protect and support natural and cultural heritage for the future.

People will have learnt about heritage: Increased knowledge of existing local natural, built and cultural heritage.

Negative environmental impacts will be reduced: Increased awareness of the environmental value of individual and connected sites.

More people and a wider range of people will have engaged with heritage: Opportunities provided for participants from hard to reach groups.

Your local area/community will be a better place to live, work or visit: Improved access to natural and built heritage for local and wider communities. People from the community will benefit from the five ways to wellbeing through connecting with the heritage of the landscapes.

Other project outcomes: The project gains a reputation for high quality training opportunities.

Project Reference - CCA06

Tales from the Riverbank

Heritage will be identified and recorded: The stories shared will form part of other projects within the bid and ensure they are captured beyond the lifetime of the project.

People will have developed skills: Volunteers and school children will have developed inter-generational communication skills and skills in oral history and storytelling.

People will have learnt about heritage: Through participating in oral history projects and through sharing the outputs of the projects people will learn about the heritage of the rivers.

People will have volunteered time: Volunteers will give time to developing an oral historic record of the Trent Valley.

More people and a wider range of people will have engaged with heritage: The project will make contact with people who may not otherwise have been engaged with the LPS and who can subsequently be signposted to be involved in further projects if they wish (e.g. school groups involved with the citizen science project).

Your local area/community will be a better place to live, work or visit: People will feel a stronger connection with the landscape of the LPS.

5.2.4 Project outcomes

Table 9. Summary of where the projects within our scheme are delivering against the nine HLF outcomes.

	Heritage			People			Communities		
	Better managed	In better condition	Identified/recorded	Developed skills	Learnt about heritage	Volunteered time	Negative environmental impacts will be reduced	More people and a wider range of people will have engaged with heritage	Your local area/community will be a better place to live, work or visit
TTTV2 Interpretation Programme					✓	✓		✓	✓
CCA01 Community Engagement						✓		✓	✓
CCA02 Wildchild				✓	✓	✓	✓	✓	
CCA03 Big Washlands Watch			✓	✓	✓	✓		✓	
CCA04 Transforming Lives				✓	✓	✓	✓	✓	✓
CCA05 Connecting with Nature				✓	✓		✓	✓	✓
CCA06 Tales from the River Bank			✓	✓	✓	✓		✓	✓
RVC01 Trent Valley Way				✓	✓	✓		✓	✓
RVC02 Canal Access	✓	✓						✓	✓
RVC03 Canoe Discovery				✓	✓	✓	✓	✓	✓
RVC04 Gateway to the Trent Valley cycleway							✓	✓	✓
RVC05 River Valley Connections							✓	✓	✓
TL01 Living Floodplains	✓	✓	✓	✓	✓	✓	✓		
TL02 Rolleston Brook Hollows	✓	✓	✓	✓	✓	✓			✓
TL03 Transforming the Trent Valley's Heritage	✓	✓	✓	✓	✓	✓	✓	✓	✓
TL04 Stop! The Military Legacy	✓	✓	✓	✓	✓	✓	✓	✓	✓
TOTALS	5	5	6	11	12	12	9	14	13

We are satisfied that our scheme represents a good spread across the nine HLF outcomes. People will be engaged in the majority of our projects and communities will see an array of benefits as a result of the scheme. Although, at first, it appears that the scheme is not reaching the outcomes for heritage to the same degree as the other outcomes, it should be recognised that no weighting

has been given and therefore do not make account for the scope or reach of individual projects. Our heritage projects, although fewer in number, represent 31% of the scheme budget. Our access projects represent 28% and our community engagement projects represent 22% of the budget. The overarching Interpretation Programme represents 5% of the total scheme budget.

5.2.5 Outputs and targets

The outputs and targets of our scheme focus on a number of broad themes. Table 10 provides a definition for these broad themes. Each project will deliver

and achieve a number of outputs and targets that fit within these broad themes and will be used to evaluate the success of each project.

Table 10. Broad themes under which our 16 projects will deliver a wider range of outputs and targets that will benefit the landscape and our communities.

Audience	Details
Restoration	Hectares of land restored or put into positive management, numbers of heritage assets restored, and lengths of access routes upgraded or improved.
Groups engaged	Number of groups engaged, including dog walkers, specialist groups, existing groups and community groups. Also percentage of individuals reached, for example those experiencing mental health issues.
Learning sessions	Number of educational sessions with schools, number of surveys, and number of sessions delivered. Counts of individuals engaged.
Increased use	Percentage increase by existing users, percentage change in interest.
Volunteers	Counts of volunteers engaged in different activities and counts of volunteer hours/days.
Skills developed	Number of training courses or sessions delivered, number of skills events.
Tools, booklets etc.	Number of online resources, number of leaflets created, number of trail guides created.
Collated records	Number of heritage records archived.
New records	Number of records created, number of heritage assets monitored, number of ecological records generated.
New reports	Review of scheduling in specified locations, guidance documents created.
Participation	Number of events, number of conservation activities undertaken, number of family opportunities.
Interpretation	Number of waymarkers, number of travelling resources, number of totem poles, number of interpretation boards, number of interpretative resources.
Other	Number of young people recruited, number of people taking part annually, number of grants awarded.

6.0 Scheme Management



Apricity (n)
the warmth of the sun

6.1 The Partnership

6.1.1 The Lead Partner

Staffordshire Wildlife Trust protects and enhances the wildlife and wild places of Staffordshire. The charity was established in 1969 and currently has over 15,000 members. The Trust is one of 46 Wildlife Trusts operating across the UK. The Transforming the Trent Valley Landscape Partnership Board does not exist as a legal entity and so Staffordshire Wildlife Trust is acting as the accountable body for the project.

The Trust is a medium sized charity with the governance structure, staff capacity, expertise and back office systems that are needed to run a programme of this scale. The Trust acted as the accountable body for the Churnet Valley Living Landscape Partnership scheme which ran from 2012 to 2017 and operated on a very similar scale and complexity to this scheme.

Role of the Lead Partner (Accountable Body)

- Deliver the Scheme in accordance with the Mission Statement and Outcomes directed and agreed by the Board.
- Manage the financial and contractual administration of the Scheme including the drawdown of funds from HLF.
- Support the delivery of Projects by Delivery Partners.
- Keep accurate records of income and expenditure of the Scheme to meet the needs of HLF.
- Keep accurate records of the achievements of the Scheme.
- Ensure that the Delivery Partners deliver the Projects and that the overall Scheme meets and fulfils the grant conditions of HLF.
- Maintain the overall records and ensure that it complies with its contractual obligations pursuant to the Grant Agreement and the Standard Terms of Grant.

6.1.2 The Partnership Chair

Garry Jones has held a long standing interest in the natural world, especially of his home county of Staffordshire, born in Burton-upon-Trent, growing up in Tamworth and now working across the county. He spent ten years volunteering and working in nature conservation at three Wildlife Trusts and the RSPB, as well as the environmental education enterprise CONKERS in the National Forest. His work included community engagement, volunteering and education, most notably at RSPB Middleton Lakes from 2007-2010.

He has been Chief Executive of Support Staffordshire since 2014, has taken the organisation through a 7-way merger into a countywide organisation with a £1.6M turnover, and more recently established Support Staffordshire as the VCSE strategic partner to Staffordshire County Council, securing a £350k per annum investment. At Support Staffordshire he leads a team of 63 staff and 250 volunteers, supporting a network of over 600 member organisations. In this capacity Garry chairs the partnership Board for Talent Match Staffordshire (a national Lottery funded programme on employability) and Team Staffordshire, a local bidding consortia (which recently secured £2.4M from the Big Lottery Building Better Opportunities programme). He also chairs the Staffordshire VCSE Strategy and Policy Forum which is convened by Support Staffordshire and aims to bring together sector leaders to engage with others, especially the statutory sector; and is a Partner Governor of Burton Hospitals NHS Foundation Trust.

6.1.3 The Partnership Board

The Partnership Board will meet quarterly in line with the submission of quarterly reports to HLF. A summary of progress of the projects against the original timeline and budget will be provided for review. The Chair will be present at all meetings with an elected vice-chair as stand-in if required. Working groups will be appointed by the Board as required to oversee specific operational elements such as monitoring and evaluation.

The Partnership Board is represented by members from the following organisations:

- Aggregate Industries
- British Canoeing
- Canal River Trust
- Derbyshire Wildlife Trust
- East Staffordshire Borough Council
- Environment Agency
- GeoConservation Staffordshire
- Hanson UK
- Lichfield District Council
- National Forest Company
- RSPB
- Sport Across Staffordshire and Stoke-on-Trent
- Staffordshire County Council
- Staffordshire Wildlife Trust
- Support Staffordshire
- Tamworth Borough Council
- Tarmac Aggregates Ltd
- Trent Rivers Trust

Role of the Partnership Board

- Guiding and supporting the overall delivery of the Scheme and the Scheme's staff team.
- Representing the views of national, regional, local and community partners. Members will ensure a balanced approach is followed and that a good cross-section of projects is included, addressing (as equally as possible) all key outcomes of the Scheme.
- Decision-making and setting the strategy and direction for the Scheme.
- Acting as ambassadors for the Scheme and Partnership.

6.1.4 Delivery Partners

Table 11. The partners who are responsible for the delivery, or overview of the delivery, of the 16 projects within our scheme.

Main contact	Organisation
Lead Partner	
Julian Woolford	Staffordshire Wildlife Trust
Delivery Partners	
Chantelle Grundy	British Canoeing
Simon Papprell	Canal River Trust
Angela Mayson	Derbyshire Wildlife Trust
Julia Baker	East Staffordshire Borough Council
Neil Brown	East Staffordshire Borough Council
Shane Kelleher	Staffordshire County Council
Suzy Blake	Staffordshire County Council
Will Spencer	Staffordshire County Council
Sally Groves	Support Staffordshire
Dave Cadman	Staffordshire Wildlife Trust
Jeff Sim	Staffordshire Wildlife Trust
Jo Olivant	Staffordshire Wildlife Trust
Ruth Needham	Trent Rivers Trust

Supporting Partners

Claymills Victorian Pumping Station
Historic England
National Memorial Arboretum

Role of the Delivery Partners

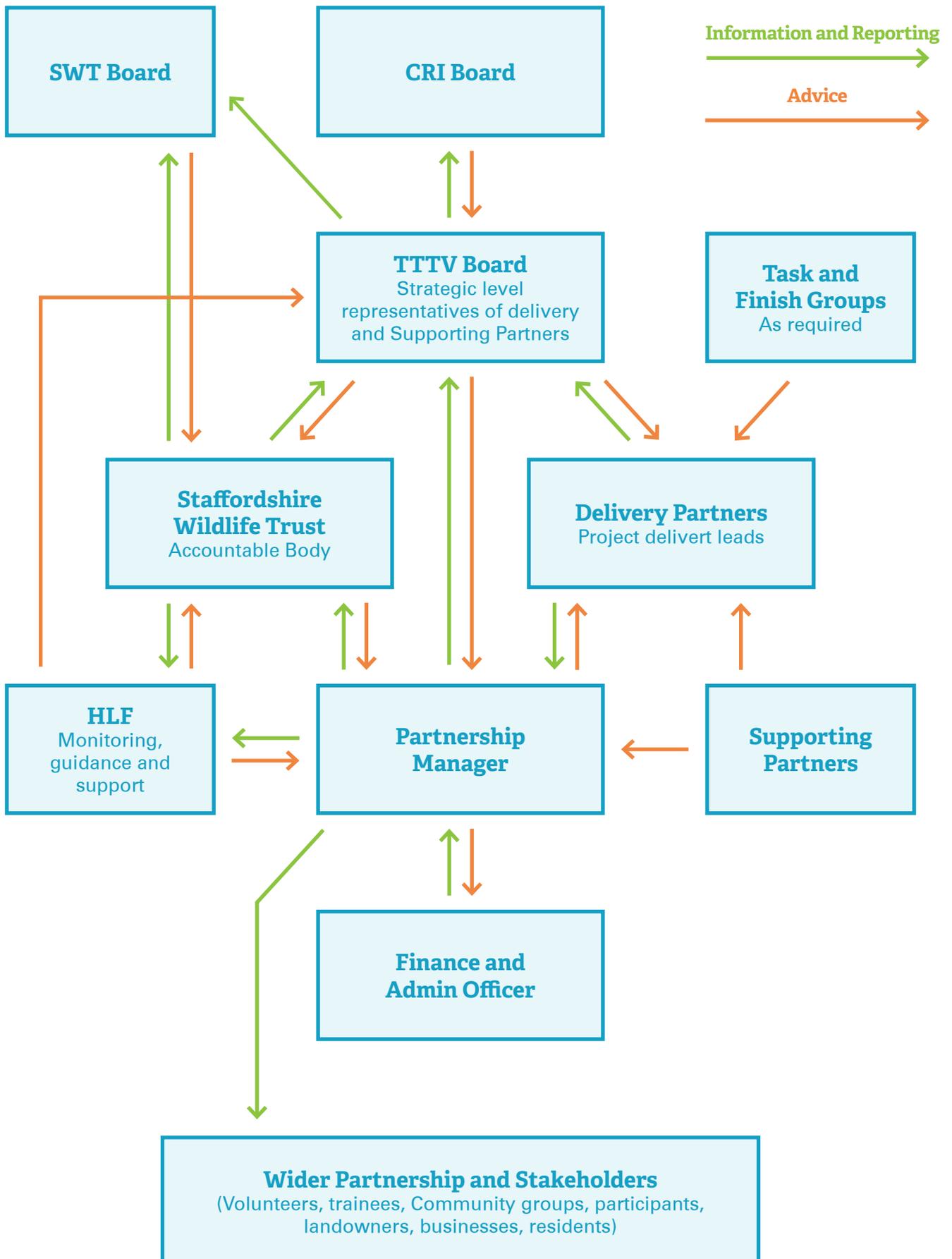
- Implement their individual Projects according to the terms of the Project Plans and in accordance with the Standard Terms of Grant.
- Ensure that the relevant Project conforms to the Project Plans and ensure that any anticipated or actual variance in the cost, timescale or quality of agreed Project outputs is reported to the Accountable Body immediately.
- Ensure all claims for payment against eligible Project expenditure should be submitted to the Accountable Body by specified quarterly deadlines, supported by the prescribed documentation.
- Work collaboratively to achieve the actions set out in the LCAP and properly and diligently manage its Project Plan in accordance with the LCAP, (including any variations to the LCAP agreed by the Board).
- Be responsible for procuring and securing Match Funding for their Project as set out in their Project Plan.
- Ensure Safeguarding policies and procedures are in place covering good practice with working with children and vulnerable adults.

Partnership Agreements

The partnership is formalised through formally signed agreements. All members of the Partnership Board are required to sign a Board Agreement and all delivery partners are required to sign an additional Delivery Agreement.

6.1.5 Organisational Structure

Figure 6. Organisational structure for the delivery of the scheme showing the principal parties, levels of hierarchy, and how information and advice will be disseminated across all relevant parties



6.2 Delivery of the Scheme

The scheme will be delivered by four core members of staff who will manage the overarching aspects of delivering a landscape scheme. These staff are: Scheme Manager, Finance and Admin Officer, Interpretation Officer and Communications Officer.

In addition to the core staff, there will be additional new roles created to support

the delivery of some of the larger projects. These roles, whilst having responsibility for a small number of projects and outcomes, will be expected to contribute to the delivery of the wider aims of the scheme and capitalise on opportunities for cross-project working whilst also maintaining the flexibility to exploit new opportunities as they arise.

CORE ROLES employed by the Accountable Body

Scheme Manager

Our Scheme Manager will manage the five-year delivery phase of the 'Transforming the Trent Valley' Landscape Partnership Scheme. The role will oversee the delivery of the Scheme to ensure we meet our aims, objectives and outcomes and that the projects are delivered efficiently within time and to budget. The role will include management of the partnership, liaison with key stakeholders and responsibility for providing reports and updates.

Finance and Admin Officer

Our Finance and Admin Officer will provide financial and administrative support to the Scheme Manager, maintaining an overview of the overall finances of the scheme and managing payments and cashflow. The role will include administration of the Community Grants Scheme, in partnership with the Community Engagement Officer.

Interpretation Officer

Our Interpretation Officer will be responsible for delivering a number of interpretive projects on behalf of the partnership and, working with other project staff and partners, ensuring consistency of the interpretive message and style across the project area.

Communications Officer

Our Communications Officer will be the main contact for PR and communications across the scheme and will manage the external and internal communications to raise profile of the partnership and maximise positive media coverage.

PROJECT BASED ROLES employed by Project Leads

Wildchild Officer – Staffordshire Wildlife Trust

Our Wildchild Officer will focus on delivering our family engagement activities across the scheme area with a particular focus on Nature Tots, Wildfamilies events and Wildlings.

Cultural Heritage Officer – Staffordshire Wildlife Trust

Our Cultural Heritage Officer will plan and co-ordinate multiple heritage projects in Staffordshire and Derbyshire which form part of the Scheme. The post-holder will contribute to other related projects within the scheme and will be expected to work with a range of partners, stakeholders, volunteers and landowners.

Living Floodplains Officer – Staffordshire Wildlife Trust

Our Living Floodplains Officer will be responsible for the co-ordination and supervision of on the ground delivery of a number of projects on sites across the scheme area throughout Staffordshire and Derbyshire, working closely with the Scheme Manager and project partners to deliver biodiversity enhancements throughout the project area focussing on the creation and restoration of Biodiversity Action Plan (BAP) habitats and Habitats of Principal Importance.

Community Engagement Officer – Support Staffordshire

Our Community Engagement Officer will act as ambassador for the scheme and work with the local communities across Staffordshire and Derbyshire in the landscape area, encouraging them to engage with the range of partnership projects, with a specific focus on volunteering and citizen science; and supporting communities to identify and set up their own projects and groups, with a specific focus on the Community Grant Scheme.

Trent Valley Way Officer – Trent Rivers Trust

Our Trent Valley Way Officer will work with partners, volunteers and contractors to deliver the Trent Valley Way on the ground and promote the route to communities. They will support a range of volunteers to help to survey then fit interpretation materials where possible.

Training and Wellbeing Officer – Derbyshire Wildlife Trust

Our Training and Wellbeing Officer will lead the engagement of new groups and individuals in two new community engagement projects, to be delivered along the River Trent corridor. They will creatively engage participants who may have low confidence levels in connecting with nature and effectively coordinate a training programme for young adults in the valley.

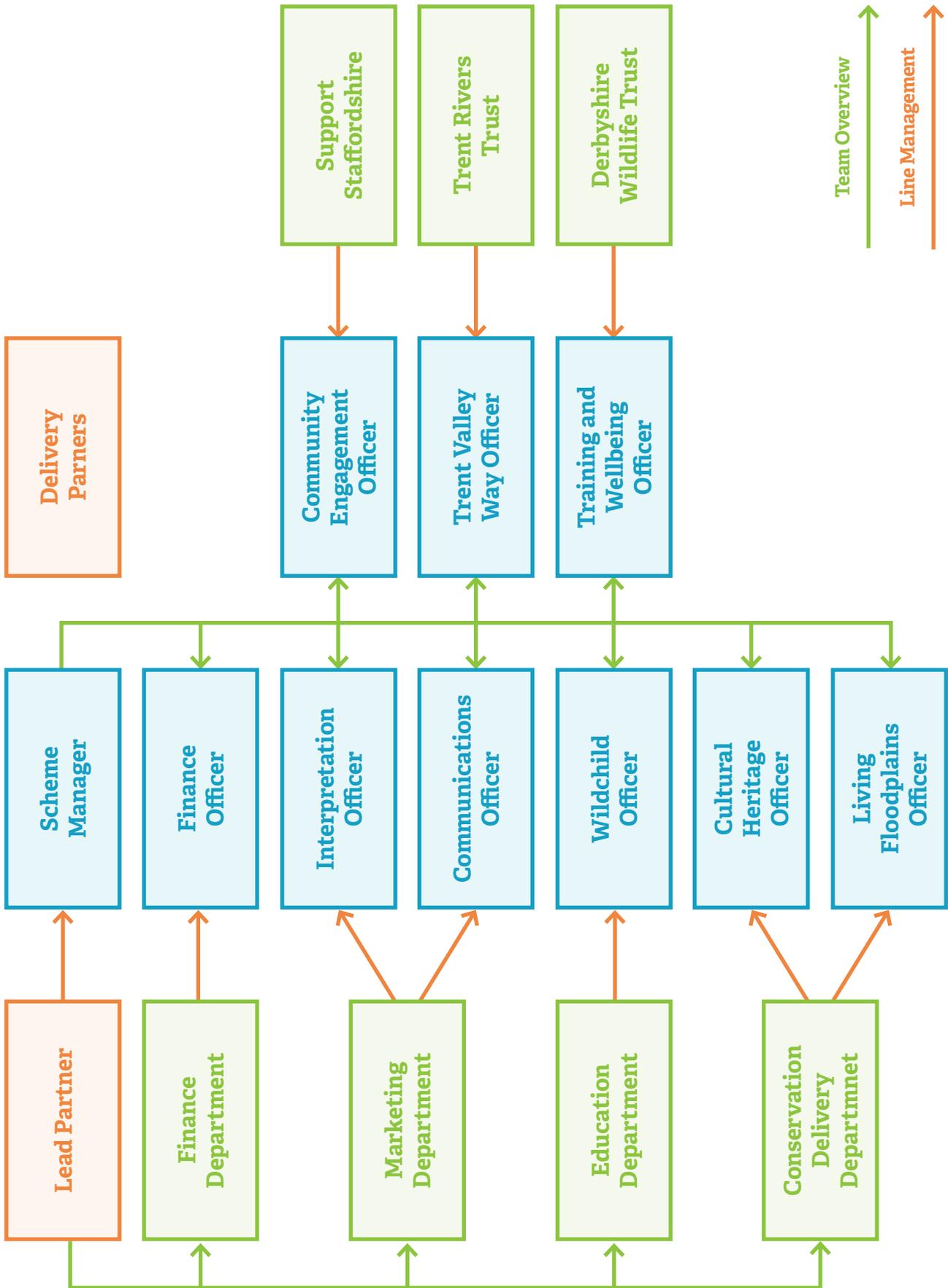
6.2.1 The Staff Team

Table 12. New posts created by the scheme, the projects that will be managed by each role and the duration of these roles.

Post	Projects	Starting salary	Years	FTE
Scheme Manager	Scheme management	£29,530	5	1
Finance and Admin Officer	Scheme finances and administration of the Community Grants Scheme	£21,402	5	0.6
Communications Officer	Scheme communications and public relations	£19,033	5	0.2
Interpretation Officer	Interpretation Programme and engagement with the landscape	£22,561	4	0.6
Senior Cultural Heritage Officer	Cultural heritage projects	£22,561	4	0.8
Living Floodplains Officer	Living Floodplains and natural heritage projects	£22,561	4	1
Community Engagement Officer	Community engagement projects	£23,000	4.5	1
Wildchild Officer	Wildchild and community participation projects	£21,900	4	1
Training and Wellbeing Officer	Training, engagement and community participation projects	£25,000	3.5	1
Trent Valley Way Project Officer	Trent Valley Way and access projects	£22,000	1	0.6

6.2.2 Staff Structure Chart

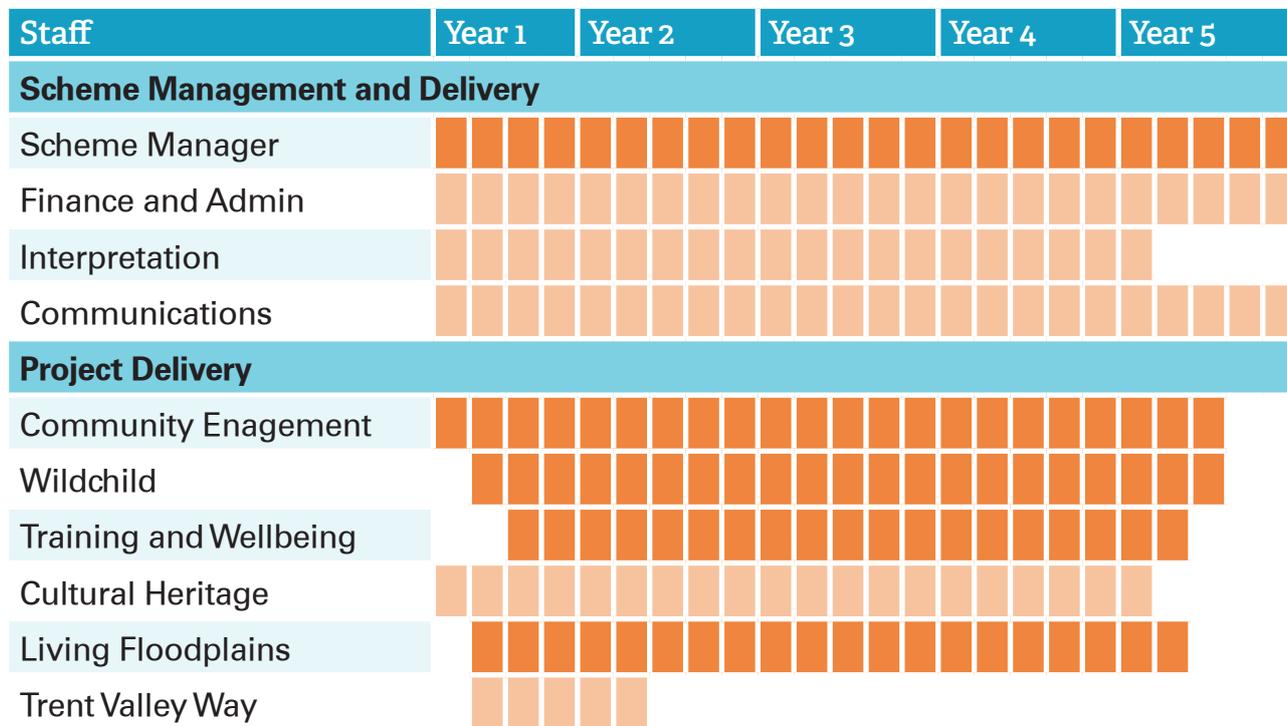
Figure 7. Staff structure showing the new roles that will be created by the scheme and how reporting and line management will be organised.



The table below shows the timetable for new staff employed to support the delivery of the scheme. Of the ten new

posts created, five are full-time and five are part-time (equivalent of 2.8 full-time roles).

Figure 8. Timeline showing the duration of the new staff roles over the 5 years of the scheme. The darker lines represent full-time staff and the pale lines represent part-time staff.

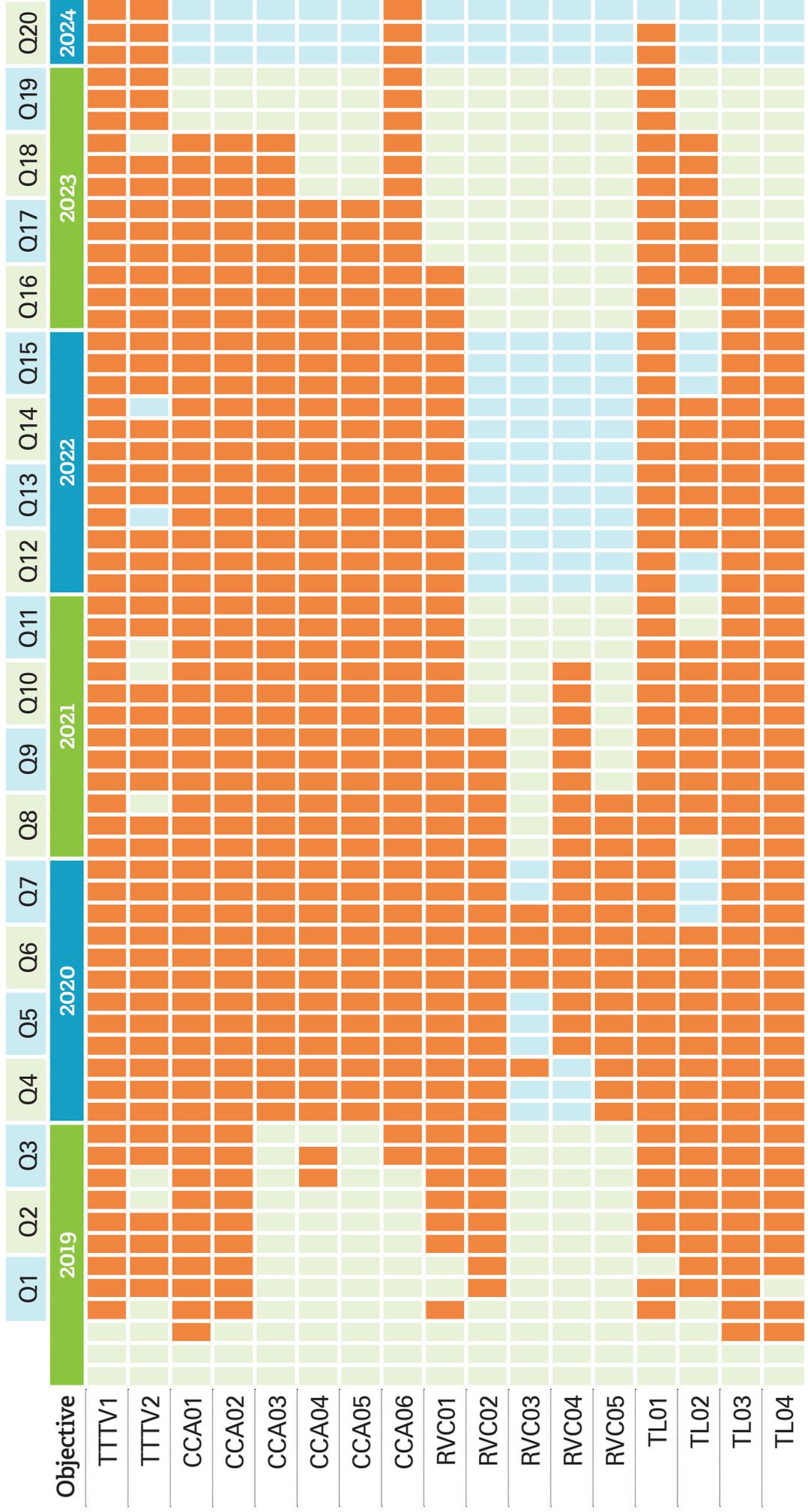


Teams delivering a Bioblitz (Staffordshire Wildlife Trust)

6.2.3 Timetable of Delivery

The table below provides an overview of the scheme delivery timetable broken down by project.

Figure 9. Timetable of delivery for the individual projects during the 5 years of the scheme.



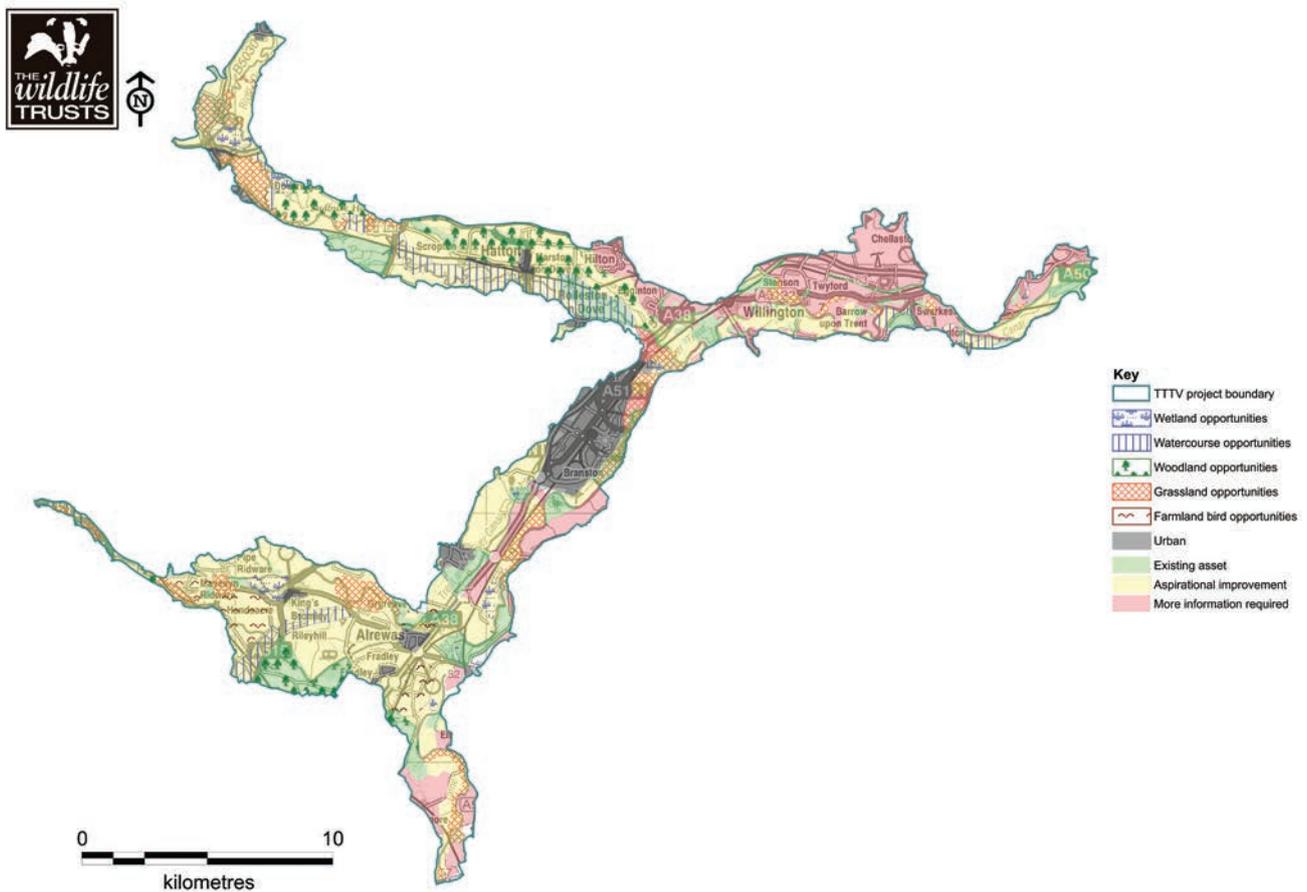
6.2.4 Project Locations Map

The 16 projects that we are leading in the landscape extend across the entire area. Community engagement projects will engage an audience from across the entire landscape and surrounding areas. The Natural Heritage projects delivered through Living Floodplains are based upon opportunities in the landscape and the opportunities map (map 31) is shown below. The cultural heritage projects focus on our heritage assets which are located across the landscape. Map 32 shows the

extent of the heritage assets that we intend to incorporate into our scheme.

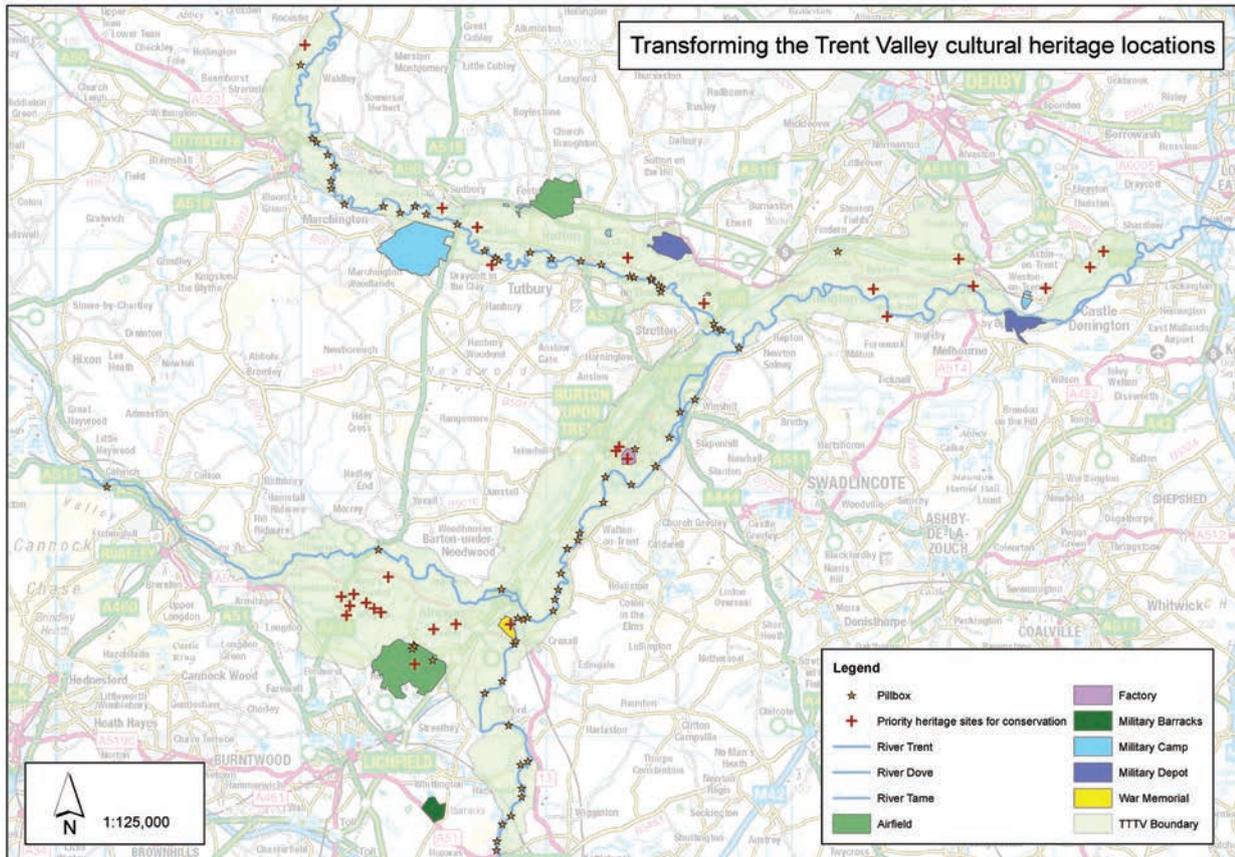
Access and infrastructure projects extend along the length of the river networks and are shown in map 33. The interpretation programme is closely aligned with the access projects, but will incorporate sites, as well as learning, from the natural and cultural heritage projects. Map 34 shows the known locations for interpretation installations.

Map 32. Habitat Opportunities across the landscape



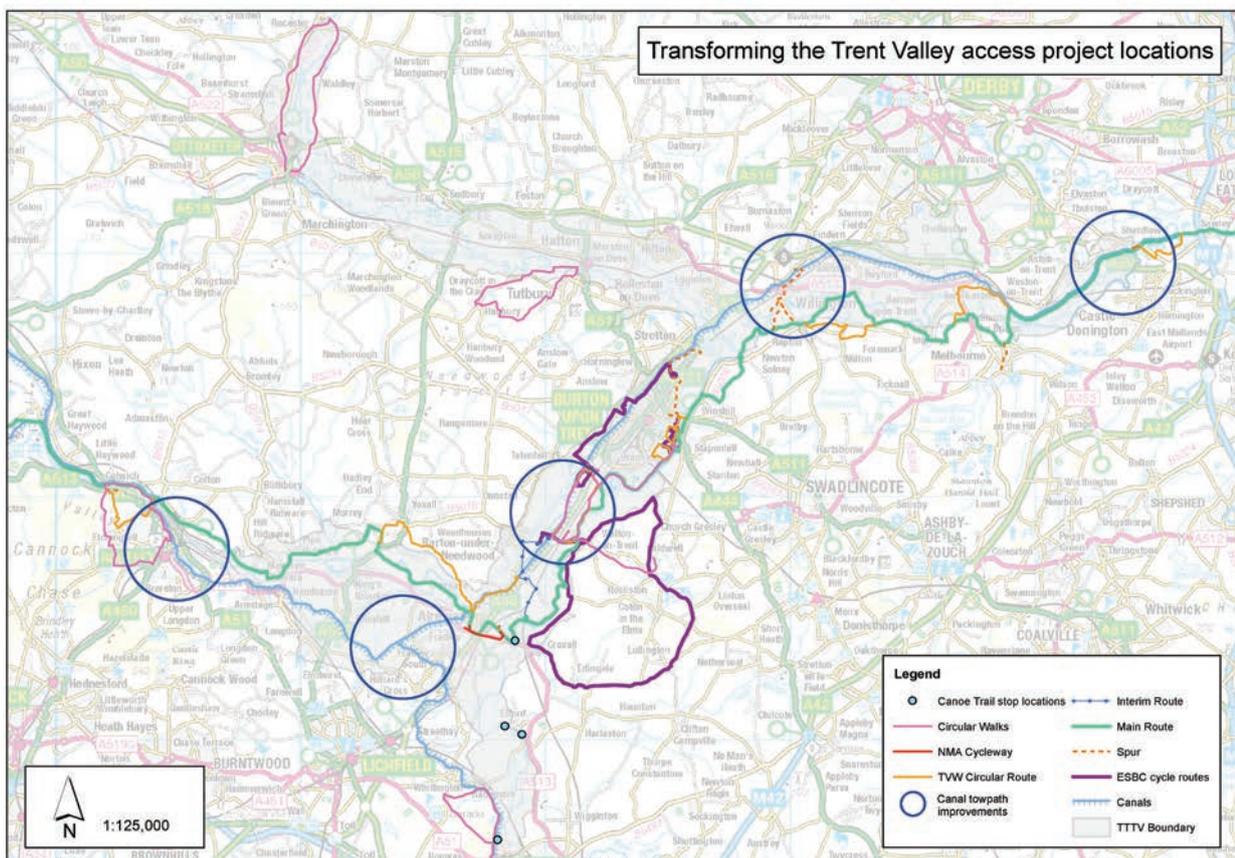
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Map 33. Distribution of Cultural Heritage Assets across the landscape including priority sites for conservation and historical sites associated with the World War 2 Stop Line.



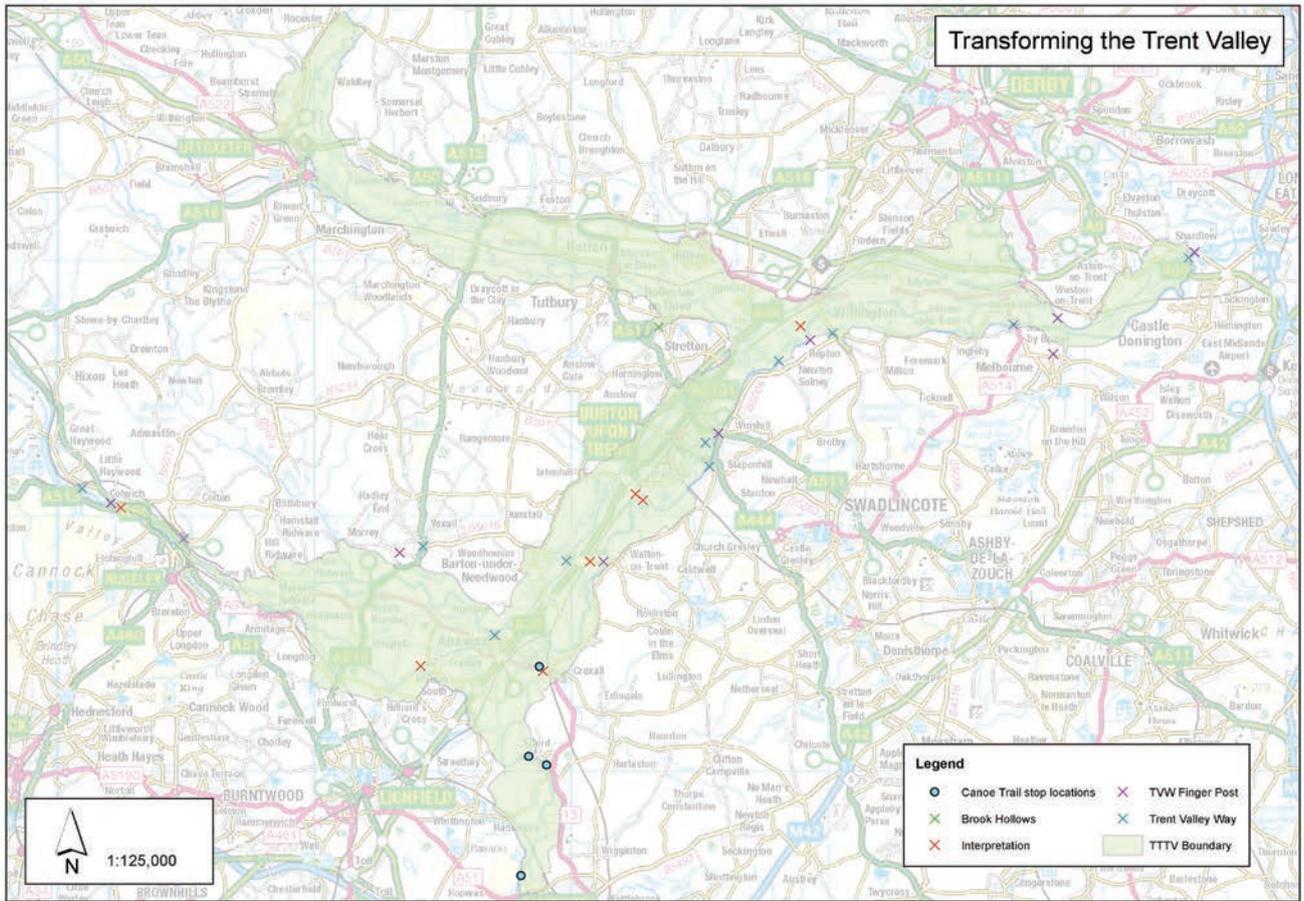
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Map 34. Access and Infrastructure projects across the Trent Valley landscape.



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Map 35. Key interpretation sites across the Trent Valley landscape.



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Exploring nature (Staffordshire Wildlife Trust)

6.3 Financial Arrangements

6.3.1 How the common fund will be managed

Staffordshire Wildlife Trust is the accountable body for this landscape partnership scheme and will be responsible for collating evidence to support the partner's financial claims to HLF and for drawing down the grant.

Claims will be made on a quarterly basis. The delivery partners are responsible for securing match funding as required by their project(s) and providing evidence to support their financial claims.

Staffordshire Wildlife Trust will employ a Scheme Manager who will retain responsibility for ensuring appropriate procurement processes are followed, maintaining a risk register, reporting to the Partnership Board, monitoring progress of the scheme, collating evidence and reporting to HLF. This will include the creation of grant literature to ensure that partners are providing accurate and complete records, meeting HLF conditions and reporting against outputs, outcomes and targets.

Staffordshire Wildlife Trust will also employ a Finance Officer who will be responsible for collating financial information, reporting income and expenditure to HLF and maintaining records on behalf of the accountable body.

The finances for this project will be managed through Exchequer, a computer finance system. Accounts will be audited externally on an annual basis.

Delivery partners and the Scheme Manager will be expected to provide on a quarterly basis:

- Progress updates
- Volunteer timesheets
- In kind records
- Evidence of income
- Evidence of Expenditure
- Financial claim
- Monitoring forms against outputs, outcomes and targets.

Partners will also be expected to submit any changes to the project delivery or budget for approval as required.

Delivery partners and the Scheme Manager will be expected to provide on an annual basis:

- Project change record
- Monitoring record to contribute to the evaluation of the scheme
- Updated project plan

Payment of the HLF grant will be made on a quarterly basis to partners depending on adequate evidence of progress. Payments will be made against the individual project payment percentage.

6.3.2 Budget summary

Table 13. Summary budget for the Transforming the Trent Valley Landscape Partnership Scheme including projected spend over the 5-year scheme.

	Total project cost inc VAT (HLF cash plus cash contribution plus in-kind & volunteer)	Project % of all projects costs	Cash contribution	In-kind contribution (partners)	In-kind contribution (volunteers)	Cash request from HLF	HLF Award %age	HLF Payme nt %	Costs Year 1	Costs Year 2	Costs Year 3	Costs Year 4	Costs Year 5
Scheme-wide Programme													
TTTV1	£614,352.48	13%	£75,000.00	£0.00	£0.00	£539,352.48	88%	88%	£135,016.22	£124,293.79	£118,450.92	£120,388.18	£116,203.38
TTTV2	238,110.00	5%	£10,000.00	£0.00	£9,000.00	£219,110.00	92%	95%	£2,830.00	£98,920.00	£103,420.00	£21,020.00	£11,920.00
Connecting Communities through Action													
CCA01	£397,949.98	8%	£100,000.00	£3,750.00	£5,400.00	£288,799.98	73%	74%	£62,423.36	£124,478.00	£124,508.92	£64,016.40	£22,523.30
CCA02	£194,878.02	4%	£23,400.00	£38,522.00	£12,000.00	£120,956.02	62%	84%	£22,010.00	£47,915.60	£48,375.71	£48,794.55	£27,782.16
CCA03	£95,700.00	2%	£3,900.00	£20,000.00	£45,000.00	£26,800.00	28%	87%	£0.00	£27,000.00	£22,900.00	£22,900.00	£22,900.00
CCA04	£198,893.69	4%	£40,000.00	£21,182.20	£24,000.00	£113,711.49	57%	74%	£8,339.89	£62,203.60	£63,115.60	£59,085.60	£6,149.00
CCA05	£135,738.28	3%	£30,000.00	£4,620.00	£13,500.00	£87,618.28	65%	74%	£6,736.49	£39,586.80	£35,611.54	£40,180.23	£13,623.22
CCA06	£28,464.00	1%	£2,280.00	£4,704.00	£9,600.00	£11,880.00	42%	84%	£0.00	£28,464.00	£0.00	£0.00	£0.00
River Valley Connections													
RVC01	£124,780.10	3%	£56,660.10	£340.00	£5,550.00	£62,230.00	50%	52%	£85,389.52	£32,406.67	£4,655.94	£2,327.97	£0.00
RVC02	£767,500.00	16%	£361,500.00	£10,000.00	£5,000.00	£391,000.00	51%	52%	£236,000.00	£531,500.00	£0.00	£0.00	£0.00
RVC03	£33,119.74	1%	£1,993.92	£9,800.00	£1,625.00	£19,700.82	59%	91%	£1,400.00	£31,719.74	£0.00	£0.00	£0.00
RVC04	£400,000.00	8%	£200,000.00	£0.00	£0.00	£200,000.00	50%	50%	£0.00	£394,250.00	£5,750.00	£0.00	£0.00
RVC05	£22,000.00	0%	£0.00	£0.00	£0.00	£22,000.00	100%	100%	£0.00	£22,000.00	£0.00	£0.00	£0.00
Transforming the Landscape													
TL01	£1,122,551.03	24%	£275,000.00	£511,926.10	£0.00	£335,624.93	30%	55%	£394,003.30	£404,589.03	£156,196.38	£155,415.08	£12,347.24
TL02	£206,226.66	4%	£25,000.00	£19,426.66	£12,000.00	£149,800.00	73%	86%	£129,644.76	£52,305.66	£9,167.77	£9,231.12	£5,877.35
TL03	£77,930.65	2%	£31,572.60	£10,403.16	£7,500.00	£28,454.89	37%	47%	£22,824.21	£25,266.97	£17,042.31	£12,797.16	£0.00
TL04	£86,330.65	2%	£25,072.77	£9,903.16	£9,500.00	£41,854.72	48%	63%	£18,578.21	£18,673.97	£27,399.31	£21,679.16	£0.00
TOTAL NEW BUDGET	£4,744,525.28		£1,261,379.39	£664,577.28	£159,675.00	£2,658,893.61	56%						

6.3.3 Comparison Budget

Table 14. Comparison table showing the original round 1 budget compared to the current round 2 budget for the Transforming the Trent Valley Landscape Partnership Scheme including projected spend over the 5-year scheme.

		Total project cost inc VAT (HLF cash plus cash contribution plus in-kind & volunteer)	Project % of all projects costs	Cash contribution	In-kind contribution (partners)	In-kind contribution (volunteers)	Cash request from HLF	HLF Award %age	HLF Payment %
Scheme-wide Programme									
1	TTTV Core team	£989,966.28	21%	£75,000.00	£0.00	£0.00	£914,966.28	92%	
20	Project Evaluation	£10,800.00	0%	£0.00	£0.00	£0.00	£10,800.00	100%	
	Contingency	£14,841.00	0%	£0.00	£0.00	£0.00	£14,841.00	100%	
	SUB TOTAL	£1,015,607.28	21%	£75,000.00	£0.00	£0.00	£940,607.28	93%	
TTTV1	Scheme Management and Delivery	£614,352.48	13%	£75,000.00	£0.00	£0.00	£539,352.48	88%	88%
	Variance b/(w)	£401,254.80		£0.00	£0.00	£0.00	£401,254.80		
13	Wetland Wonderland (Interpretation)	£155,000.00	3%	£10,000.00	£0.00	£5,000.00	£140,000.00	90%	
15	Forgotten River	£73,600.00	2%	£0.00	£4,000.00	£0.00	£69,600.00	95%	
19	History of the Washlands	£20,300.00	0%	£0.00	£7,500.00	£2,000.00	£10,800.00	53%	
	SUB TOTAL	£248,900.00	5%	£10,000.00	£11,500.00	£7,000.00	£220,400.00	89%	
TTTV2	Interpretation Programme	£238,110.00	5%	£10,000.00	£0.00	£9,000.00	£219,110.00	92%	96%
	Variance b/(w)	£10,790.00		£0.00	£11,500.00	£2,000.00	£1,290.00		
Connecting Communities through Action									
7	Community Grants Scheme	£170,000.00	4%	£50,000.00	£0.00	£50,000.00	£70,000.00	41%	
CCA01	Community Engagement	£397,949.98	8%	£100,000.00	£3,750.00	£5,400.00	£288,799.98	73%	74%
	Variance b/(w)	£227,949.98	-5%	£50,000.00	£3,750.00	£44,600.00	£218,799.98		
4	Wildchild	£164,464.00	3%	£10,000.00	£31,580.00	£12,000.00	£110,884.00	67%	
CCA02	Wildchild	£194,878.02	4%	£23,400.00	£38,522.00	£12,000.00	£120,956.02	62%	84%
	Variance b/(w)	£30,414.02		£13,400.00	£6,942.00	£0.00	£10,072.02		
5	Citizen Scientists	£90,100.00	2%	£0.00	£20,000.00	£45,000.00	£25,100.00	28%	
CCA03	Big Washlands Watch	£95,700.00	2%	£3,900.00	£20,000.00	£45,000.00	£26,800.00	28%	87%
	Variance b/(w)	£5,600.00	0%	£3,900.00	£0.00	£0.00	£1,700.00		
2	Transforming Lives	£197,507.00	4%	£56,907.00	£0.00	£90,000.00	£50,600.00	26%	
CCA04	Transforming Lives	£198,893.69	4%	£40,000.00	£21,182.20	£24,000.00	£113,711.49	57%	74%
	Variance b/(w)	£1,386.69	0%	£16,907.00	£21,182.20	£66,000.00	£63,111.49		
3	Connecting with Nature	£145,716.00	3%	£0.00	£0.00	£51,000.00	£94,716.00	65%	
CCA05	Connecting with Nature	£135,738.28	3%	£30,000.00	£4,620.00	£13,500.00	£87,618.28	65%	74%
	Variance b/(w)	£9,977.72	0%	£30,000.00	£4,620.00	£37,500.00	£7,097.72		
6	Tales from the Riverbank	£11,880.00	0%	£0.00	£0.00	£0.00	£11,880.00	100%	
CCA06	Tales from the Riverbank	£28,464.00	1%	£2,280.00	£4,704.00	£9,600.00	£11,880.00	42%	84%
	Variance b/(w)	£16,584.00	0%	£2,280.00	£4,704.00	£9,600.00	£0.00		

River Valley Connections										
14	Trent Valley Way	£82,230.00	2%	£20,000.00	£0.00	£2,000.00	£60,230.00			73%
RVC01	Trent Valley Way	£124,780.10	3%	£56,660.10	£340.00	£5,550.00	£62,230.00			50%
	Variance b/(w)	-£42,550.10	-1%	-£36,660.10	-£340.00	-£3,550.00	-£2,000.00			
12	Canal Access	£552,500.00	12%	£150,000.00	£10,000.00	£5,000.00	£387,500.00			70%
RVC02	Canal Access	£767,500.00	16%	£361,500.00	£10,000.00	£5,000.00	£391,000.00			51%
	Variance b/(w)	-£215,000.00	-5%	-£211,500.00	£0.00	£0.00	-£3,500.00			
18	Hidden River (Canoe trail)	£25,644.00	1%	£0.00	£11,244.00	£0.00	£14,400.00			56%
RVC03	Canoe Discovery	£33,119.74	1%	£1,993.92	£9,800.00	£1,625.00	£19,700.82			59%
	Variance b/(w)	-£7,475.74	0%	-£1,993.92	£1,444.00	-£1,625.00	-£5,300.82			
16	National Memorial Arboretum (NMA) cycleway	£400,800.00	8%	£300,000.00	£0.00	£0.00	£100,800.00			25%
RVC04	Gateway to the Trent Valley	£400,000.00	8%	£200,000.00	£0.00	£0.00	£200,000.00			50%
	Variance b/(w)	£800.00	0%	£100,000.00	£0.00	£0.00	-£99,200.00			
17	Way Marking Cycle Routes	£41,502.00	1%	£5,000.00	£3,000.00	£0.00	£33,502.00			81%
RVC05	Way Marking Cycle Routes	£22,000.00	0%	£0.00	£0.00	£0.00	£22,000.00			100%
	Variance b/(w)	£19,502.00	0%	£5,000.00	£3,000.00	£0.00	£11,502.00			
	Transforming the Landscape									
8	Working Together for Wetlands and Woodlands	£99,576.00	2%	£15,000.00	£17,976.00	£0.00	£66,600.00			67%
9	Rivers of Life	£921,432.00	19%	£600,000.00	£7,416.00	£0.00	£314,016.00			34%
SUB TOTAL		£1,021,008.00	22%	£615,000.00	£25,392.00	£0.00	£380,616.00			37%
TL01	Living Floodplains	£1,122,551.03	24%	£275,000.00	£511,926.10	£0.00	£335,624.93			30%
	Variance b/(w)	-£101,543.03	-2%	£340,000.00	-£486,534.10	£0.00	£44,991.07			55%
9A	Brook Hollows	£322,600.00	7%	£25,000.00	£17,500.00	£80,100.00	£200,000.00			62%
TL02	Brook Hollows Restoration	£206,226.66	4%	£25,000.00	£19,426.66	£12,000.00	£149,800.00			73%
	Variance b/(w)	£116,373.34	2%	£0.00	-£1,926.66	£68,100.00	£50,200.00			86%
11	Heritage at Risk	£5,250.00	0%	£0.00	£5,250.00	£0.00	£0.00			0%
TL03	Transforming the Trent Valley's Heritage	£77,930.65	2%	£31,572.60	£10,403.16	£7,500.00	£28,454.89			37%
	Variance b/(w)	-£72,680.65	-2%	-£31,572.60	-£5,153.16	-£7,500.00	-£28,454.89			47%
10	Stop! The Military Legacy of the Trent Valley	£23,620.00	0%	£0.00	£4,900.00	£0.00	£18,720.00			79%
TL04	Stop! The Military Legacy of the Trent Valley	£86,330.65	2%	£25,072.77	£9,903.16	£9,500.00	£41,854.72			48%
	Variance b/(w)	-£62,710.65	-1%	-£25,072.77	-£5,003.16	-£9,500.00	-£23,134.72			63%
	TOTAL ORIGINAL BUDGET	£4,519,328.28		£1,316,907.00	£140,366.00	£342,100.00	£2,719,955.28			60%
	TOTAL NEW BUDGET	£4,744,525.28		£1,261,379.39	£664,577.28	£159,675.00	£2,658,893.61			56%

	New %	Old %
Project %	56%	60%
Payment %	68%	67%
Cash match %	27%	29%

6.4 Strengths, weaknesses and risks

6.4.1 Strengths and weaknesses

Table 15. Strengths and weaknesses of the scheme

Strengths	Weaknesses
<p>The partnership has a number of organisations that have a history of working together. The CRI partnership has been established since the 1990s and the additional partners to the scheme have many pre-existing ties.</p>	<p>The partnership is under represented by the farming community and health sectors, although our community engagement projects, natural heritage projects and well-being project will be working with partners from these fields and should help us to identify suitable partners to address the balance.</p>
<p>Staffordshire Wildlife Trust is a strong partner with a long experience of managing partnership projects, working with diverse partners across different sectors, and prior experience of managing a Landscape Partnership Scheme.</p>	<p>Local authorities are a key sector within the partnership but are not all equally engaged, with some taking an active lead, and others proving more difficult to engage.</p>
<p>Many of the partners are involved in other landscape partnership schemes and understand the requirements of delivering comprehensive projects to time and budget.</p>	<p>There is an under-representation of Derbyshire-based partners, despite 40% of the landscape being in this county. Whilst efforts have been made by all partners to ensure representative delivery in both counties, further efforts to engage Derbyshire partners will be required.</p>
<p>A diverse range of organisations provides a broad-spectrum of knowledge and experience enabling the partnership to effectively deal with issues as they arise.</p>	<p>Not all the match funding for the scheme has been secured and this poses a potential risk to projects. Where projects are outstanding match funding partners have agreed to underwrite this and help each other with funding bids.</p>
<p>Projects are shared across eight delivery partners, all with experience in managing large and complex projects.</p>	<p>Identifying a clear role for the mineral operators in helping to develop and deliver projects has not proved to be easy (over and above fulfilling their normal operational and legal commitments required through the planning process).</p>
<p>A partnership board of 18 partners provides a support network for the delivery partners.</p>	
<p>A large proportion of the match funding for the scheme is secured providing us with a strong financial footing.</p>	
<p>Three of the largest mineral operators are represented in the partnership and provide a unique private sector perspective on the challenges and opportunities linked to the single largest driver of landscape change in the LPS area.</p>	

6.4.2 Risk Management

Table 16. Register of risks that could impact the delivery of the scheme, and the mitigation of these risks

Risk	Likelihood (H/M/L)	Impact (H/M/L)	Mitigation	Risk Owner
Reputational risk – damage to the reputation of the scheme, partner organisations or HLF	L	H	Adopt a position of openness and transparency in all project and scheme undertaking. Maintain a dialogue with local communities, businesses and within the partnership. Address legitimate concerns raised in a timely and professional manner.	Lead partner All partners
Negative publicity from the scheme or individual projects	L	M	Undertake projects following an agreed strategy and process and maintain dialogue with partners and interested parties.	Lead partner All partners Comms Officer
Difficulty in engaging communities	M	H	Good communication with community groups; consultation and community engagement during development stage.	All partners Community Engagement Officer
Failure to gain support for the scheme	M	M	Good communications with external partners; transparency in working practices; deliver the scheme according to the aims and activities defined in the LCAP.	Scheme Manager Lead Partner Partnership Board
Partnership relationships – damaged relationship between one or more partners	L	H	Maintain good communication with external partners throughout the life of the scheme and individual projects. Address legitimate concerns raised in a timely and professional manner.	Scheme Manager Lead Partner All partners

Failure to secure match funding	M	H	Year one funding is secure; working with funders to develop acceptable funding bids; partnership is working on securing cross-project funds; risk has been spread over 5 year scheme.	Lead Partner Delivery Leads
Loss of core or critical funding	M	H	Maintain relationships with potential funders and grant providers. Where match funding cannot be confirmed ensure that there are back up options in place. Limit risk to projects by approaching multiple funders or reducing the match funding requirement. Avoid projects with large cash match requirements from uncertain sources.	Partnership Board Delivery Leads
Failure to maintain control over budget	L	M	Robust financial systems to be put in place; quarterly reviews of spend and forecast.	Scheme Manager All partners
Unable to secure necessary permissions or consents	L	M	Work with project leads to determine level of certainty and relationship with consent providers. All consents necessary are at a local level only so the impact of any one will not have wider implications. Partners engaged in the scheme are consent providers including local planning authorities and Environment Agency.	Scheme Manager Lead Partner Delivery Leads
Extreme weather delays/prohibits projects or events	L	M	Projects planned to allow for slippage and delays; outputs to be transferred to alternative sites/dates if necessary.	All partners Delivery Leads

Project(s) unable to be delivered in time or to budget	L	M	Detailed development phase has given a high degree of cost certainty and contingency is built into the budget and timeline. Projects that are undeliverable for external reasons have potential to be replaced with similar endeavours due to the scope and opportunities across the landscape.	Scheme Manager Lead Partner Partnership Board Delivery Leads
Loss of key personnel	M	L	Key delivery staff will be provided with detailed job descriptions from the outset so that the roles are fully understood. Contracts will allow for certainty within the duration of the role. All projects are full documented so changes in key personnel should result in minimal impact to delivery.	Lead Partner All partners
Reliance on a small delivery team: issues with recruitment, extended sickness, or absence of key staff/volunteers	L	M	Use of existing personnel time to meet deficit; utilise team, partners and consultants to increase capacity.	Scheme Manager Lead Partner All partners Delivery Leads
Lack of skill or capacity in consultants/contractors/volunteers to deliver required activities	L	M	Good planning and research during development phase will identify potential issues. Training to be provided as required. Market research will identify suitable specialists.	Scheme Manager All partners

Loss of a key partner	M	M	Partners are required to sign a Partnership Agreement and delivery partners will be required to commit to delivery of their projects. Unforeseen challenges that require a key partner to withdraw will be managed through the requirements of the partnership agreement and the diverse yet complimentary skill sets across the partnership allow for projects to be reallocated as required.	Lead Partner Partnership Board
Project delivery partners withdraw or fail to sign delivery agreement	L	M	Liaison and support during the development phase; new partners or commissions can be identified to replace if necessary.	Lead Partner Partnership Board
Ineffective management and attendance at Partnership Board	L	M	Board Agreement sets out the obligation of the Board; a strong Chair will ensure representative attendance and address issues as they arrive	Partnership Board
Failure to integrate projects and coordinate activity across the scheme	L	M	Regular management meetings with the Scheme Manager reporting to the Lead Partner and the Partnership Board. Scheme Management to liaise regularly with all project staff.	Scheme Manager Lead Partner
Political changes and changes to local, regional or national policy.	M	M	Ensure that match funding is fully committed as far as possible and that there are various options for unconfirmed funds. Changes in policy will give rise to new opportunities as well as potential problems.	Lead Partner Partnership Board
European Commission rules that the scheme, or part of the scheme, is in breach of the State Aid regulations.	L	H	The State Aid guidance has been researched and it is understood that the scheme is exempt from the regulations. Partners are asked to review the regulations and indicate their agreement that their projects are exempt.	Lead Partner Partnership Board Delivery Partners

7.0 Evaluation And Monitoring



Susurration (n)
Whispering or rustling, as of a river or trees

7.1 Evaluation Framework

In order to ensure that the scheme is delivering against the plan, ongoing monitoring and evaluation is required. The Partnership understands that there are many different approaches to evaluation and define it thus:

- Evaluation is the analysis of information in order to inform decision-making.
- Monitoring provides the information needed for that analysis to be done.

In summary the evaluation will include:

- Commissioning an independent and impartial evaluator, who will bring in a different viewpoint, offer knowledge and ideas about technique, constructively challenge the staff and partners, and carry out information-gathering tasks that an 'insider' would be unable to do effectively.
- A mid-term and a final evaluation exercise to be undertaken by the evaluator, using monitoring and monitoring data collected by the scheme, as well as information that the evaluator collects themselves.



Learning about the scheme (Susan Freeman)

- Structure the evaluation around a set of 'key topics', which will provide a framework and a focus for all monitoring and evaluation activities.
- Include a 'toolbox' of monitoring techniques and data collation tools relating directly to these 'key topics', to ensure that all Scheme monitoring can contribute effectively to evaluation analysis, from which project leads and staff can choose which techniques to use.
- Make use of the quantitative data collected and reported to HLF, but also additional monitoring data collected by the scheme staff and projects.
- Include descriptions of the baseline situation at a project level.
- Require the partners and staff team to carry out internal evaluation quarterly. These will be fed into a scheme-wide self-evaluation exercise to inform on-going scheme management, as well as informing the interim and final evaluations carried out by the independent evaluator.
- Equip the staff and project leads with responsibilities for monitoring and evaluation with the knowledge, skills and support to carry out these responsibilities.
- Recognise the limitations of this evaluation to record those impacts which are likely to be felt after the end of the HLF funded period, and therefore this evaluation will seek to understand the extent to which intended impacts are being achieved so far.
- Make the most of the mid-term evaluation to provide direction and a source of evidence to inform discussions about the scheme's legacy and wider area legacy direction.

7.1.1 Key Topics

Key Topics will guide what information is gathered and used for the evaluation (and by implication, what information is not gathered or used).

Table 17. Key topics for evaluation and examples of how success could be measured.

Key topic	Example measure of success	How to measure
DELIVERY		
Informing the LPS management and project development	<ul style="list-style-type: none"> ■ Board and Partnership meetings well attended and running smoothly. ■ Staff and participants reporting positive experiences of Board and PAG meetings and collaborative working within the LPS. ■ Better networking, information-sharing and learning. ■ Well integrated with TTTV Partnership. ■ Smooth hand over of legacy to organisations taking actions forward. ■ A sense of an integrated Scheme. ■ Other benefits identified by partners. 	<p>Qualitative:</p> <ul style="list-style-type: none"> ■ Observation ■ Partner interviews ■ Staff interviews
Efficiency, including against timetable and budget	<ul style="list-style-type: none"> ■ Project activities delivered on budget, on time and meeting targets. ■ Actual spend profile matches plan. ■ Appropriate mitigation measures instigated when problems are encountered. 	<p>Quantitative:</p> <ul style="list-style-type: none"> ■ Desk review of quarterly monitoring returns <p>Qualitative:</p> <ul style="list-style-type: none"> ■ Partner interviews ■ Stakeholder interviews ■ Staff interviews

Achievement

- To monitor progress towards legacy and inform planning for decision making about post funding sustainability;
- To demonstrate achievements in terms of outputs and outcomes;
- To learn and share lessons about practice and what works, when, why and how;
- To celebrate success.

- Features restored and conserved.
- More information and interpretation available and in use, e.g. new access links, new teaching materials.
- More events/activities available, e.g. arts events, village wildlife projects.
- Trainees moving into paid work.
- Local residents and businesses speaking positively about the Scheme.
- Heritage incorporated into relevant business promotion.
- Increasing numbers of people getting involved in project activities, including young people and people from hard to reach groups.
- Measures against intended outputs.
- Tracking legacy planning.

Quantitative:

- Desk review of quarterly monitoring returns.
- Numbers features restored, of what type and where.
- Desk review of activity/ event monitoring records.
- Desk review of records of use of information, e.g. app downloads, nos. of leaflets taken.

Qualitative:

- Staff interviews
- Partner interviews
- Trainee interviews
- Stakeholder interviews e.g. what is known, what difference involvement has made.
- Local resident consultation/survey, e.g. street stalls.



Engaging with volunteers across the landscape (Staffordshire Wildlife Trust)

7.1.2 The Monitoring and Evaluation Toolkit

The intention is to create an opportunity for standardisation of data across our scheme, so that it is possible to build up a picture relating to the whole scheme, as well as its individual projects. Also, it is recognised that collecting data can be burdensome, but this burden can be reduced if there are information-gathering tools ready to use, together with the systems for recording and collating the data. At this framework stage, it

is not possible to be definitive about the contents of the toolbox. The nature of the Key Topics will require a mix of quantitative and qualitative data. Also, the intention is to have a variety of options, from which project leads can choose tools that they believe will work for them, in their situation and with their particular target audiences.

Table 18. Potential tools for monitoring and evaluation

Tool	Notes
Surveys and questionnaires	Online questionnaires, e.g. SurveyMonkey, can offer good out reach to audiences. An incentive may help to increase response rates. Face to face questionnaires need to be short. Not everyone feels comfortable to use this technique.
Conversations	Need to be structured around agreed questions to ensure useable information. Responses can be recorded 'on the spot' or immediately after. The person collecting the information and respondent may feel more comfortable with this informal form of survey.
Short phone interviews	Can be very effective in getting responses. Work particularly well when conducted by an independent person.
Images and videos	A picture tells a thousand words. At an event/activity, ask people to opt out rather than opt in; using a sticker or badge to identify those who opt out works well.
Inter-active tools	For use in a variety of situations, e.g. consultation event, project activities. A very wide variety of tools can be developed, e.g. comments tree, graffiti wall, smiley faces responses, pinboards.

7.1.3 Evaluation Plan

At the outset of the Delivery Phase, external specialists will be commissioned to review and further develop the existing monitoring and evaluation framework. The consultants will be required to review all the outputs and targets for the scheme and confirm them with the Strategic Board. They will also be required to review the intended outcomes, confirm baselines and establish methods to measure the difference achieved.

This process will result in a robust monitoring and evaluation framework for the Scheme which will inform the monitoring requirements within project funding agreements, the interim evaluation as part of the mid-term review and the final evaluation report. This work will be captured within an Evaluation Framework for the scheme, which will supersede this section of the LCAP once it is available.

8.0 Sustainability And Legacy



Nemophilist (n)
A love for the beauty of forests
and woodland

8.1 Legacy

The Partnership is working towards ensuring a number of legacies from the scheme. The legacies will build on the measures of success in our Monitoring and Evaluation Framework.

Central to the success of the Partnership and the Scheme will be building better

relationships. Only if we can improve relationships between recreationists and conservationists, between residents and visitors and between landscape users and landscape managers can we deliver successful projects and achieve a lasting legacy.

Table 19. Legacy of the scheme by project

Legacy of Transforming the Trent Valley

TTTV1 - Transforming the Trent Valley

The Partnership intends to exist beyond the life of the HLF grant. Having existed as the Central Rivers Initiative (CRI) since the late 1990s as a subscription based partnership with common interest in the Trent Valley, the ethos has survived expansion and contraction as political and financial constraints see partners join and resign. The funding has enabled the partnership to expand the original CRI boundary to include more of the Trent Valley and as such has been able to welcome new partners. Many of these partners have expressed interest in joining CRI and, through welcoming a new Chairman, we are in a position to examine the future of CRI, the new boundary, and the governance of the partnership.

TTTV2 - Interpretation Programme

The display materials will be made available to local museums beyond the end of the project. It is our intention that the display materials will be used by partners beyond the end of the project.

The newly-formed volunteer groups will continue to meet and care for the area beyond the end of this project. The host organisations will continue running some of the volunteer groups and other groups will be self-sustaining. This will also be a legacy of the community engagement and volunteer training as individuals will have a sense of ownership and empowerment.

The Augmented Reality deliverable will be maintained as part of the Staffordshire Wildlife Trust's 25-year vision for the TTTV wetlands area. This will be maintained through web-based technology.

Physical infrastructure will be maintained by the landowners into the future.

CCA01 - Community Engagement

The aim of the community engagement project is to involve people from all communities living in the Trent Valley so that they have gained a better understanding of the cultural and natural heritage by the end of the programme that they can carry into the future. Those who volunteer for projects during the programme may well continue to make a difference, either by continuing to volunteer for one of the partner organisations, or for a local community group, or by continuing on an individual basis e.g. as a citizen scientist. Community groups which receive a TTTVLP community grant will continue to develop activities and projects that further the aims of the TTTVLP beyond the life of the programme. The TTTVLP can be seen as a starting point for lifelong appreciation of and involvement in the cultural and natural heritage of the Trent Valley.

CCA02 Wildchild

Families engaged will have a greater knowledge of accessible sites and strategies for engaging with nature. They will have learned about appropriate use of wildlife and heritage sites and their use will continue past the life of this funded project.

Some elements of this project will be able to continue past its initial funded term, Wildlings, Wildfamilies and Nature Tots all run in other parts of the county on a charged-for sustainable basis. Often we find that when something has been offered for free for many years, introducing a charge is almost a death blow. This project will be offering greatly subsidised fees for sessions, with attendees clear that they are being subsidised via HLF support.

The school engagement will also be able to continue on a paid for basis, as we do elsewhere in the county.

The level of delivery will no doubt reduce as the need to cover staff time may divert the focus away from this area, unless we find a new source of funding to continue subsidising the role.

CCA03 Big Washlands Watch

Families engaged will have a greater knowledge of habitats and ecology. They will have learnt about species present in the landscape, how to identify them, record them and provide data to both biological recording centres to assist with mapping and planning requests in future. Understanding how different species fit together in a complex ecosystem will make sure that they know how disruptive man's influence can be – e.g. pollution incidents and how it can have far reaching effects on a healthy ecosystem.

Leave behind a network of experienced recorders with wide knowledge of sites and species of the valley area.

CCA04 Transforming Lives

Local young adults will have become engaged with the local natural heritage of the Trent Valley corridor and have the desire, knowledge and skills to protect and conserve it into the future.

An Alumni of people who have had nature conservation embedded in their thinking and their actions. These individuals will take this learning through with them into future careers wherever they end up. They will be connected to key organisations which are responsible for nature conservation.

The knowledge and experience of working with these groups through the partner organisations will help shape the Trent Valley in the future making sure it is relevant to a wider audience. This information can be maintained electronically on organisation websites.

CCA05 - Connecting with Nature

A key legacy for this project will be to link participating groups with partnership organisations who have historically not engaged with hard to reach groups.

By evidencing the link between mental wellbeing and connecting to nature, other organisations, such as NHS Clinical Commissioning Groups, may be inspired to prescribe nature based activities for adults.

It will support partner organisations in making a step change in their key audiences, improving diversity and breadth of the communities we all work within. It will provide a robust intervention model for working with adult 'hard to reach' groups which other organisations can build upon / recycle within their own contexts.

CCA06 - Tales from the Riverbank

There will be a lasting legacy through the collection of memories which will be shared on the internet through partners' websites, YouTube etc.

The use of the information through various forms of interpretation within the project area will also ensure that the memories are used in other media.

RVC01 - Trent Valley Way

The TVW follows Rights of Way. The long term maintenance will be the responsibility of the landowner under the guidance of the Rights of Way departments at Staffordshire and Derbyshire County Councils.

Trent Rivers Trust remains committed to promoting the entire Trent Valley Way including the area within the TTTV LPS area and upstream and downstream of it. Funding will be sought to continue to look for opportunities to further develop and promote it.

As part of the delivery stage there is the potential to bring forward the improvement of the path separate to the HLF funding. For example, one site that has been identified through the volunteer surveys is 'Anchor Church', a heritage site by the Trent in Derbyshire that is in need of some investment. It is beyond the scope of this project to include it at the moment, but is a definitive possibility that funding and capacity to enhance it could be secured as a long term output from the TTTV activity.

One final potential piece of legacy from this project will be to provide a safe pedestrian access across the A38 at Alrewas. This has been a long term objective of TRT to achieve, but has unfortunately been out of the budget of this project. An A38 crossing was also mentioned in the 'Community Conversations' report from Alrewas and Kings Bromley. It is hoped that by raising the profile of the TVW, and by communities and organisations working together throughout the TTTV, that funding can be secured for this major piece of investment that would provide a significant improvement to the route in this area in the long term.

RVC02 - Canal Access

The Trent and Mersey Canal is over 250 years old and is an important part of the heritage of the Trent Valley. The towpath improvements will be maintained in the future by CRT and will be enjoyed by a large and diverse range of canal users including walkers, cyclists, canoeists and boaters. The improvements ensure that the length of the canal in the landscape remains safe, open and accessible into the future and provides an excellent access route to other parts of the Trent Valley.

The key legacy is the improvement to 5km of towpath in the Trent valley and improved access points for visitors and canoeists. The new sections will fall under the maintenance regime of the Canal and River Trust.

There will be publicity and literature produced by our partners at TRT and BC over the improved access on the Trent and Mersey Canal and in the Trent Valley. The Trust and its partners will update these publications on their respective websites.

RVC03 - Canoe Discovery

The legacy will be a canoe trail that can be used and promoted for many years, with minimal maintenance and upkeep costs being primarily managed by volunteers. The legacy will be more people accessing the Trent Valley waterways for recreation health and wellbeing, whilst linking rural communities together.

Both trails will form the basis from which future trails can be extended along the waterways within not only the project area, but neighbouring counties too. The success of the project will showcase how canoe trails inspire more people to get active and engage in their environment, to enable future funding to be secured to extend along the River Trent.

The new trails will be available online.

RVC04 - National Memorial Arboretum Cycleway

When the route has been completed the highway based element will be maintained by SCC whilst the element within Tarmac's land will be maintained by Tarmac. The highway based route will be included in SCC's routine inspection programme and maintained as necessary from SCC's maintenance budget. Tarmac will routinely inspect the section within their land and undertake reparation works as necessary.

The project will provide a designated sustainable connection between the National Cycle Network, Alrewas Village, the National Memorial Arboretum and the wider Trent Valley. This connection will be maintained by SCC and partners Tarmac. As part of the route runs across land owned by Tarmac they have demonstrated their intention to maintain a route to the NMA when the site is fully reinstated after extraction works in the area have been completed over the next 10 years.

Adult and child cycle training and led rides will continue beyond the physical delivery of this project.

RVC05 - Waymarking Cycle Routes

East Staffordshire Borough Council will be responsible for the upkeep and maintenance of waymarking posts, including repair and replacement costs.

The off road areas where posts are to be installed are managed by East Staffordshire Borough Council. Areas on road are managed by Staffordshire County Council, and a conversation about the installation and future management will happen during the project phase.

The Borough Council also has responsibility of managing the grass verges at the roadside. We will develop a system to ensure any ongoing maintenance is reported by the council's contractor.

The cycle routes are available in digital format on the Council website and will be maintained for future use.

TL01 - Living Floodplains

The project will aim to leave a legacy of sustainable funding to continue the work started with the LPS via quarry restoration, agri-environment schemes and biodiversity offsetting. Biodiversity offsetting has the potential to fund 10 – 25-year management programmes depending on the conditions of the development. This will support landowners in the long-term management of created projects.

The Catchment Partnerships that covers this area will support ongoing work on river restoration through the River Basin Management Plans and Flood Risk Management Plans.

TL02 - Brook Hollows Restoration

ESBC will be the responsible authority for maintaining the site through a regular inspection regime and an ongoing maintenance schedule. It is intended that local groups and partners will continue to contribute to the activities and maintenance of the site.

The history and what can be found on the site will be maintained electronically on village website.



Kayak near the River Trent (Aimee L. Booth)

TL03 - Transforming the Trent Valley's Heritage

The aim of the project is to empower local communities and landowners to take responsibility for their heritage. Through training it will provide them with the skills to understand, record, monitor, manage and maintain heritage assets within the landscape partnership scheme area.

It will provide a framework to facilitate the longer-term curation of the historic environment, including the establishment of ongoing monitoring regimes and access to training materials to give landowners and local communities the confidence to be involved in the management and improvement of their local historic environment.

The condition of heritage assets and their principal threats and vulnerabilities will also be better understood, enabling strategies for longer-term designation and management to be developed.

Training materials for survey, monitoring and conservation managed and maintained electronically on Staffordshire County Council's website.

Up to date information on heritage asset condition generated through an ongoing survey and monitoring regime. Information, as generated, will be incorporated into the HER and disseminated via direct data supply and more widely via the Heritage Gateway.

Heritage assets will be in better condition; ongoing monitoring regime(s) will be established and run by local communities and volunteers. Securing longer term management of heritage assets will be achieved through, for example, 5 or 10-year countryside stewardship schemes or management agreements.

TL04 - Stop! The Military Legacy of the Trent Valley

The Stop! Project will ensure that the military heritage assets, and in particular the pillboxes of the Stop Line, in the TTTV area are better understood, better managed, better monitored, and better used for a variety of complementary purposes.

The Stop! project will have shown that, when done sensitively and when properly considered, military heritage assets such as pillboxes can be provided with a new purpose such as bat roosts, bird hides etc. which can ensure their longevity and upkeep.

The Stopline will be better known and interpreted through the interpretive outputs of the project.

Local communities, local groups and landowners will have taken responsibility for and engaged with their heritage. Through training the project will provide them with the skills to understand, record, monitor, manage and maintain heritage assets within the landscape partnership scheme area.

The project will provide a framework to facilitate the longer-term curation of the historic environment (in this case the military heritage assets of the area), including the establishment of ongoing monitoring regimes and access to training materials to give landowners and local communities the confidence to be involved in the management and improvement of their local historic environment. The condition of heritage assets and their principal threats and vulnerabilities will also be better understood, enabling strategies for longer-term designation and management to be developed.

Much needed amenities such as bird hides, geocache locations, and walkers' refuges will be provided for both locals and visitors alike will be created as part of the project, and as such new audiences will be engaging with the military heritage of the area in new and diverse ways.

8.2 Summary of the report

8.2.1 Lead Author, Contributors and Consultees

Staffordshire Wildlife Trust is the lead partner for the landscape partnership and has taken on the role of lead author for this report.

Contributors to this report include:

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Consultees engaged in the development of this report include:

Staffordshire County Council
Derbyshire County Council
Communities of the Trent Valley
The Transforming the Trent Valley
Landscape Partners



8.2.2 Status of the report and duration of delivery

This document provides an overview of the Transforming the Trent Valley Landscape and incorporates a summary of the research and auditing that has taken place during an 18-month development period. This document will accompany the final application to the Heritage Lottery Fund in August 2018 in the expectation of securing a delivery grant for 5 years. We anticipate the scheme lasting this duration due to the size and complexity of the area, the variety of projects which we will deliver, and the recognised challenges in improving physical and intellectual access for diverse communities across a fragmented landscape.

This is a three-part document that sets out:

Part one: Background to the scheme

Part two: Project plan summaries

Part three: Full project plans

This report is accompanied by a number of appendices. These appendices include final copies of the reports, audits and strategies that were undertaken in the development stage and other supporting documents.



The Burton Washlands (Aimee L. Booth)

Gaps in the plan

As discussed in the chapters below, there are gaps in our knowledge for the following reasons:

- Modification of the landscape boundary during the later stages of development have meant that some areas newly included in the landscape are omitted from the audits. This information, where required at a later stage will be retrofitted to the reports. This has not limited our development of the scheme as our evidence base is taken from a wider locality as we have acknowledged that communities residing close to the Trent Valley landscape are a significant audience.
- Due to differences data collection, collation, and priority between the authorities in each part of our landscape, this has highlighted inconsistencies in the available datasets. This has, on occasion, given a fragmented picture of the current situation. These gaps have been identified and an on-going process will be to fill the gaps in data and knowledge. This will be partly an outcome of this scheme and partly an obligation of authorities and partners working in the landscape.
- We are aware that the partnership is biased towards Staffordshire-based organisations, although we are supported by a number of organisations located within and representing Derbyshire, and we will continue to work with Derbyshire-based organisations to ensure we embody a fair representation across our landscape.
- Working with people from culturally and linguistically diverse backgrounds can add value to our scheme, create an inclusive environment, strengthen positive relationships with the local community, bring new perspectives and encourage people from different backgrounds to engage with your scheme. However, this is a long process, especially if we want the engagement to be meaningful and sustainable.

It is important to find out the various demographics within our community, understand their needs and consult with community leaders. We have undertaken a large amount of research but acknowledge more needs to be done. Furthermore, our partnership is under represented by these groups, which is a balance we need to address. Doing proper research means you can give the community what they actually need.

- Our scheme reflects the need to work closely with landowners and land managers and acknowledges that agriculture is a dominant land use across our landscape. Whilst organisations within our partnership have long experience of working with members of the farming community, we do not currently have members from this community represented in our partnership. This is a gap we intend to rectify through setting up working groups that engage supporting partners with our scheme.
- There is a gap in our understanding of the economic benefits of ecosystem services and natural capital. It is clear that a landscape-specific approach is required to further our understanding of the ecosystem services that can be provided using existing examples and case studies to guide the process.

We have identified a need to undertake an Ecosystem Services assessment, with a focus on the economic benefit, for the Transforming the Trent Valley landscape. This should be undertaken as a scheme-wide approach due to its broad reach across multiple projects. This will help to quantify the benefits of the project which will be demonstrable to a wide range of audiences.

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Acronym Decoder

AI	Aggregate Industries
BC	British Canoeing
CAP	Common Agricultural Policy
CHA	Cultural Heritage Audit
CRI	Central Rivers Initiative
CRT	Canal River Trust
DCC	Derbyshire County Council
DWT	Derbyshire Wildlife Trust
EA	Environment Agency
ESBC	East Staffordshire District Council
EU	European Union
FRMS	Flood Risk Management Scheme
GCS	GeoConservation Staffordshire
GIS	Geographic Information System
HER	Historical Environment Records
HPI	Habitats of Principal Importance
HS2	High Speed Two
HU	Hanson UK
LCA	Landscape Character Assessment
LCAP	Landscape Conservation Action Plan
LDC	Lichfield District Council
LPS	Landscape Partnership Scheme
LWS	Local Wildlife Site
NCA	National Character Assessment
NERC	Natural Environment and Rural Communities
NFC	National Forest Company
NHA	Natural Heritage Audit
OE	Old English
OS	Old Scandinavian
PFA	Pulverised Fuel Ash
RIGS	Regionally Important Geological/Geomorphological Sites
RSPB	Royal Society for the Protection of Birds
SAC	Special Area of Conservation
SASSOT	Sport Across Staffordshire and Stoke-on-Trent
SCC	Staffordshire County Council
SDDC	South Derbyshire District Council
SSSI	Site of Special Scientific Interest
SuDS	Sustainable Drainage Systems
SuS	Support Staffordshire
SWT	Staffordshire Wildlife Trust
TA	Tarmac Aggregates Ltd
TBC	Tamworth Borough Council
TRT	Trent Rivers Trust
TTTV	Transforming the Trent Valley
TVW	Trent Valley Way
WFD	Water Framework Directive

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